

PHASE IA LITERATURE REVIEW AND SENSITIVITY ASSESSMENT

**James J. Peters, Veterans Affairs Medical Center
Spinal Cord Injury/Disorder Center and Parking Structure**

130 West Kingsbridge Road
New York City, Borough of the Bronx
Bronx County, New York

HAA 4446-11

Submitted to:

The LA Group
40 Long Alley
Saratoga Springs, NY 12866

Prepared by:

Hartgen Archeological Associates, Inc.

1744 Washington Avenue Ext.
Rensselaer, New York 12144
p +1 518 283 0534
f +1 518 283 6276
e hartgen@hartgen.com

www.hartgen.com

An ACRA Member Firm
www.acra-crm.org

January 2012

MANAGEMENT SUMMARY

SHPO Project Review Number: not assigned yet

Involved State and Federal Agencies: United States Department of Veteran Affairs

Phase of Survey: IA

LOCATION INFORMATION

Location: 130 West Kingsbridge Road

Minor Civil Division: Borough of Bronx (00501)

County: Bronx County

SURVEY AREA

Spinal Cord Injury/Disorder (SCI/D) Center:

Approximate Length: 850 ft (260 m)

Approximate Width: 570 ft (174 m)

Approximate Number of Acres Surveyed: 8.6 acres (3.4 ha)

Parking Structure:

Approximate Length: 370 ft (113 m)

Approximate Width: 160 ft (49 m)

Approximate Number of Acres Surveyed: 1.5 acres (0.6 ha)

7.5 Minute Quadrangle Map: Central Park

RESULTS OF RESEARCH

Sites within one mile: 24

Surveys in adjacent vicinity: 0

NR/NRE properties in or adjacent: 2

OPRHP inventoried structures in or adjacent: 0

Precontact Sensitivity: high

Historic Sensitivity: high

RECOMMENDATIONS

In order to assess the presence or absence of archeological deposits and/or prior disturbance in the project APEs, limited Phase IB archeological testing is recommended for both the SCI/D Center and Parking Structure APEs.

Report Authors: Tracy Shaffer Miller, M.A.

Date of Report: January 20, 2012

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PHASE IA LITERATURE REVIEW AND ARCHEOLOGICAL SENSITIVITY ASSESSMENT

INTRODUCTION

The LA Group retained Hartgen Archeological Associates, Inc. (HAA, Inc.) on behalf of the United States Department of Veterans Affairs to conduct a Phase I archeological investigation for the proposed Spinal Cord Injury/Disorder Center and Parking Structure at the James J. Peters Veterans Affairs Medical Center located at 130 West Kingsbridge Road, Bronx, New York. The United States Veteran Affairs Department is funding this project. Therefore, this investigation was conducted to comply with Section 106 of the National Historic Preservation Act and will be reviewed by the New York State Office of Parks, Recreation and Historic Preservation (OPRHP). The investigation was conducted according to the New York Archaeological Council's *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections* (1994), which are endorsed by OPRHP. This report has been prepared according to OPRHP's *State Historic Preservation Office (SHPO) Phase I Archaeological Report Format Requirements* (2005).

PROJECT INFORMATION

A site visit was conducted by Tracy Shaffer Miller on August 22, 2011 to observe and photograph existing conditions within the project area. The information gathered during the site visit is included in the relevant sections of the report.

Project Location

James J. Peters Veterans Affairs Medical Center (VAMC) is located southwest of West Kingsbridge Road between Sedgwick Avenue to the north and west and Webb Avenue to the east and south.

Description of the Project Area

The existing hospital buildings are located along the western portion of the property. Parking lots currently occupy most of the eastern portion of the property. The existing main hospital building is located along the western side of the property. The hospital is a nine-story structure built in the late 1970s. The maximum elevation of the project area is about 180 feet (55 m) above the National Geodetic Vertical Datum (NGVD) of 1929. Southeast of the existing hospital building, the landscape gradually slopes towards Webb Avenue and West Kingsbridge Road. West and south of the hospital the landscape slopes steeply downward in these directions.

Description of the Area of Potential Effects (APE)

The area of potential effects (APE) includes all portions of the property that will be directly or indirectly altered by the proposed undertaking. There are two separate APEs for the two proposed developments within the VAMC property:

- Spinal Cord Injury/Disorder (SCI/D) Center northeast of the existing hospital
 - Encompasses approximately 8.6 acres (3.4 ha)
 - New free-standing multi-level building with connecting corridors to the main existing hospital building
 - Parking lot reconstruction and new basketball court and picnic area
- Parking Structure southeast of the hospital
 - Encompasses approximately 1.5 acres (0.6 ha)
 - Six-story parking garage with two levels below grade
 - Reconstruction of surrounding retaining walls and roadways

ENVIRONMENTAL BACKGROUND

The environment of an area is significant for determining the sensitivity of the APEs for archeological resources. Precontact and historic groups often favored level, well-drained areas near wetlands and waterways. Therefore, topography, proximity to wetlands, and soils are examined to determine if there are landforms in the project area that are more likely to contain archeological resources. In addition, bedrock formations may contain chert or other resources that may have been quarried by precontact groups. Soil conditions can provide a clue to past climatic conditions, as well as changes in local hydrology.

Present Land Use and Current Conditions

The two APEs encompass existing buildings, parking lots, roadways, wooded areas, and lawn areas (Map 2). The main hospital building is located along the eastern portion of the property (Photo 1). In addition, there is a nursing home built c. 1986 in the southwestern portion of the property (Photo 2). The nursing home lies about 1,000 ft (305 m) north of the c. 1899 chapel associated with the former orphanage on this site (Photos 3 and 4). A surface parking lot lies south of the chapel (Photo 5).

A c. 1946 three-story brick building now occupied by administrative offices is located in the southwest corner of the property (Photo 6). A recently-constructed building used for shipping and receiving is located immediately north of the hospital (Photo 7). A picnic pavilion and a basketball court are also located in the northwest corner of the property (Photo 8). Parking lots occupy most of the eastern portion of the property.

The SCI/D Center project area mostly consists of existing surface parking lots (Photo 9). The New Croton Aqueduct extends through the eastern edge of this area, although there is no surface indication of the conduit's location (Maps 7-10 and Photo 10). The Parking Structure project area is currently a parking lot perched at the top of an embankment that drops steeply to the south (Photo 11).

The portions of the project area not currently developed are the very northwest corner (Photos 8 and 12), the western edge along Sedgwick Avenue (Photo 13), the southern end (Photo 11), and the very southeastern corner (Photo 14), which are all partially wooded (Map 2).

Soils

Soil surveys provide a general characterization of the types and depths of soils that are found in an area. This information is an important factor in determining the appropriate methodology if and when a field study is recommended. The soil type also informs the degree of artifact visibility and likely recovery rates. For example, artifacts are more visible and more easily recovered in sand than in stiff glacial clay, which will not pass through a screen easily.

The *New York City Reconnaissance Soil Survey* shows that the VAMC property is comprised of pavement and buildings and the Charlton-Greenbelt complex (Map 3). Areas of this soil type are characterized as nearly level to gently sloping urbanized areas of till plains that have been substantially cut and filled, mostly for residential use. The soil is a mixture of gneissic till soils and anthropogenic soils, with up to 80 percent impervious pavement and buildings covering the surface. This soil type is mostly located in Manhattan and the Bronx (USDA NRCS 2005:13).

Table 1. Soils in VAMC property

Symbol & Name	Depth	Color	Textures	Slope	Drainage	Landform
204 Pavement & buildings/ Charlton-Greenbelt complex	Charlton Series: 0-5 inches (0-13 cm) 5-10 inches (13-25 cm) 10-14 inches (25-36 cm) 14-24 inches (36-61 cm) Greenbelt Series: 0-3 inches (0-8 cm) 3-13 inches (8-33 cm) 13-57 inches (33-145 cm)	Charlton: Vy Dk Gr Br Dk Br Dk Yw Br Strong Br Greenbelt: Br Re Br Re Br	Charlton: Lo Lo Lo Sa Lo Greenbelt: Lo Lo Gr Lo	0 to 8 percent slopes	Well drained	Till plains, hills, and anthropogenic fill areas on urbanized till plains

Key: Color: Br-Brown, Dk-Dark, Gr-Gray, Re-Red, Y-Yellow, Bk-Black, Ol-Olive
Texture: Co-Coarse, Fi-Fine, Gv-Gravelly, Lo-Loam, Sa-Sand, Si-Silt, Vy-Very

Bedrock Geology

The underlying bedrock consists of Inwood marble, a blend of dolomite marble, calc-schist, granulite, and quartzite overlying calcite marble. There are small areas of bedrock outcroppings along the western edge of the property (Photo 13). Information from the recent boring investigation found that the underlying bedrock is between

Although, the Inwood marble is not known to be chert-bearing, other nearby bedrock types are known to be cherty. Chert is one of the most common materials used by Native Americans to manufacture lithic tools.

Physiography and Hydrology

Steeply sloped areas are considered largely unsuitable for human occupation. As such, the standards for archeological fieldwork in New York State generally exclude areas with a slope in excess of 12% from archeological testing (NYAC 1994). Exceptions to this rule include steep areas with bedrock outcrops, overhangs, and large boulders that may have been used by precontact people as quarries or rock-shelters. Such areas may still warrant a systematic field examination.

The VAMC property is located on an elevated area about 760 feet (232 m) east of the Harlem River. The south end, western edge, and southeast corner of the property are steeply sloped. The center of the property is relatively level with the slope falling gradually towards the northeast.

DOCUMENTARY RESEARCH

Archeological Sites

Previously reported archeological sites provide an overview of both the types of sites that may be present in the project APEs and relation of sites throughout the surrounding region. The presence of few reported sites, however, may result from a lack of previous systematic survey and does not necessarily indicate a decreased archeological sensitivity within the project APEs.

An examination of the archeological site files at the Office of Parks, Recreation and Historic Preservation (OPRHP) and the New York State Museum (NYSM) identified 24 reported archeological sites within a one mile (1.6 km) radius of the project APEs (Table 2). Of these sites, seventeen were precontact Native American archeological sites or contained precontact components. Thirteen of the nearby precontact sites were located directly across the Harlem River from the project APEs in Inwood Hill Park area of Manhattan and along the Spuyten Duyvil and Harlem River. The remaining four precontact sites are located north of the project APEs.

Six previously reported historical archeological sites dating from the 18th and 19th centuries are located within one mile of the project APEs. Four of the historic sites were British forts associated with the Revolutionary War era. According to Jenkins' *The Story of the Bronx* (1912), the original source cited on the site inventory

form, Fort Number Six (00501.000054) was located 380 feet (116 m) northeast of the house on the Bailey Estate (Jenkins 1912:344), which is the 19th-century estate where the VAMC is now located (Map 12).

One site (OPRHP 06101.000114) is a multi-component site comprised of a Native American shell midden and extensive pottery deposit overlaid by an African-American burial ground. One site (NYSM 711) did not have enough information recorded in the site files to determine the culture or context.

Table 2. OPRHP/NYSM archeological sites within one mile (1.6 km) of the VAMC

OPRHP Site No.	NYSM Site No.	Site Identifier	Description	Proximity to the VAMC
-	711	West 218 th Street (HAR 2-3)	No other information provided	4,500 ft (1372 m) west
-	2838	ACP BRNX 16	Precontact Native American village site covering large area at the mouth of Tibbit Brook	2,400 ft (732 m) to 1 mile (1.6 km)
-	2839	ACP BRNX 17	Precontact Native American village site covering large at the east end of Sedgwick Avenue along the west side of the reservoir	3,000 ft (914 m) to 1.25 miles (2 km) north
-	4068	ACP NYRK No#	Precontact Native American village site	1 mile (1.6 km) southwest
-	4069	ACP NYRK No#	Precontact Native American traces of occupation	3,000 ft (914 m) southwest
-	4056	ACP NYRK 6A	Precontact Native American trail	1,700 ft (518 m) northwest
-	5320	ACP BRNX No#	Precontact Native American traces of occupation covering a large area in the vicinity of the Spuyten Duyvil Creek	1 mile (1.6 km) northwest
-	5321	ACP BRNX No#	Precontact Native American traces of occupation covering a large area in the Kingsbridge neighborhood of the Bronx	2,600 ft (793 m) to 1.4 miles (2.3 km) north
-	5322	ACP BRNX No#	Precontact Native American traces of occupation in three locations near the south end of the Jerome Park Reservoir	2,000 to 3,000 ft (610 to 914 m) northeast
-	8369	ACP NYRK No#	Precontact Native American shell midden site	1,600 ft (489 m) west
-	8371	ACP NYRK No#	Precontact Native American camp site	2,700 ft (823 m) southwest
00501.000053	-	Kings Redoubt	Revolutionary War-era redoubt (May be a misreported location of Fort Number 6, which was also known as the "King's Battery" [Jenkins 1912:344])	600 ft (183 m) north
00501.000054	-	Fort Number Six	Revolutionary War-era fort located near the intersection of West Kingsbridge Road and Sedgwick Avenue	Within or immediately south of the SCI/D Center APE
00501.000055	-	Fort Number Eight	Revolutionary War-era fort located on the current Bronx Community College campus	2,700 ft (823 m) southwest
00501.000056	-	Fort Number Four	Revolutionary War-era fort located near the southwest corner of Jerome Reservoir and a "few rods east of Sedgwick Avenue"	2,500 ft (762 m) northeast
06101.000113	4052	Harlem Ship Canal	Precontact shell midden site	2,500 ft (762 m) northwest

OPRHP Site No.	NYSM Site No.	Site Identifier	Description	Proximity to the VAMC
06101.000114	4053, 4055	Harlem River Shellheap	Precontact Native American shell midden with extensive pottery deposit, Historic African-American cemetery overlies the Precontact deposits	2,500 ft (762 m) west
06101.000115 (two locations)	-	Negro Graveyard	Historic African-American cemeteries	2,500 and 2,800 ft (762 to 853 m) west
06101.000119	-	Seaman Avenue Indian Burial Ground/Village Site	Precontact Native American village site and burial grounds presumably associated with the Inwood Park rockshelters site.	5,000 ft (1524 m) west
06101.000121	-	Inwood Park Rockshelters	Precontact Native American rock shelters, shell heaps and village; 18 th -century British regiment encampment; and Revolutionary War-era Fort Cox	4,400 ft (1341 m) northwest
06101.000127	-	Nagle House (Century House)	c. 1736 farmhouse at the intersection of 9 th Avenue and 213 th Street demolished in 1907	1,700 ft (518 m) west
06101.000532	-	"Shorakapkok" (Cold Spring)	Precontact Native American rockshelter site and shell midden dating from the Archaic to Woodland periods	3,800 ft (1158 m) west
06101.000533	-	213 th Street Village Site	Precontact Archaic period village site	3,200 ft (975 m) northwest
06101.000534	4054	Isham's Garden	Precontact shell midden	4,000 ft (1219 m) northwest

State and National Register

A search of the computer files at OPRHP identified one property listed on the State/National Registers of Historic Places (NR) located in the general vicinity. Also, one property determined eligible (NRE) for listing on the registers is located within the immediate vicinity of the project APEs. The locations of and a brief description of both properties is provided below in Table 3.

Table 3. NR/NRE Properties and Inventoried Buildings within or Nearby (<1000ft) to the VAMC

NR/OPRHP Number	Property Name	Status	Description	Location and Proximity to the VAMC
90NR02435	Old Croton Aqueduct*	NR	40-mile long water conduit constructed between 1837 and 1842 running from a dam on the Croton River in Westchester County to central Manhattan.	Beneath University Avenue about 600 feet (183 m) east
00501.001485	Major Deegan Expressway	NRE	An initial 1.5-mile segment of this limited-access expressway was built in 1939. The entire 8.5-mile length of the expressway was opened in 1956.	600 feet (183 m) east

*The New Croton Aqueduct extends through the eastern edge of the VAMC property (Maps 2, 7-11). It was constructed in 1885 to extend from the Jerome Park Reservoir in the Bronx to carry water to the distribution plants in Bronx and Manhattan before joining with the Catskill Aqueduct in Manhattan. This is a separate conduit from the Old Croton Aqueduct under University Avenue. The New Croton Aqueduct is still an active part of the water supply system for New York City.

Previous Surveys

OPRHP files did not include any archeological surveys completed immediately adjacent (<200 feet [61 m]) to or within the VAMC property in the Borough of the Bronx.

New York City Landmarks Preservation Commission (NYCLPC)

There are no New York City designated landmarks or districts within or near the VAMC property. The nearest designated properties include the c. 1912-1917 Eighth Coastal Artillery Armory or the Kingsbridge Armory at 29 West Kingsbridge Road about 1,200 feet (366 m) northeast of the VAMC and the c. 1864-56 Saint James Episcopal Church at 2500 Jerome Avenue about 2,000 feet (610 m) southeast of the VAMC (NYCLPC 2004:313-4).

The NYCLPC was contacted by email in regards to the archeological sensitivity of the VAMC property. In a response dated August 29, 2011, the NYCLPC identified the VAMC property as having no archeological significance based on sensitivity models and historic maps.

BRIEF HISTORICAL OVERVIEW AND HISTORICAL MAP REVIEW

Eighteenth to 20th-century historical maps were examined to observe the pattern of development and identify historical structures in and around the project APEs.

The historic maps were scanned as jpgs from our collections and from collections at the New York State Library. All historic maps were georeferenced in Arc View 9.1 using orthoimagery as a base map; historic road intersections were matched to the location of the intersection on the orthoimagery. Historical maps are not as accurate as modern day maps. Therefore, the locations historical map-documented structures within the project APEs are approximate. The two separate project APEs for the SCI/D Center and the Parking Structure were located on each map.

Map-Documented and Existing Structures

Each past or current structure within the project APEs were assigned a unique Map-Documented Structures (MDS) number. The MDSs within the project APEs are listed in Table 4. Structures shown outside of the project APEs were not assigned an MDS number. Map 11 shows the approximate location of the MDSs overlaid on a current orthoimage of the site.

Table 4. Summary of map-documented and existing structures within the project APEs

MDS #	Map 4 (1851)	Map 5 (1872)	Map 6 (1891)	Map 7 (1900)	Map 8 (1950)	Map 9 (1977)	Map 10 (1986)
1	-	L. Valentine	-	-	-	-	-
2	-	-	-	Gate House	Gate House	Gate House	Gate House
3	-	-	-	Male Dormitory of the R.C. Orphan Asylum	Veteran's Hospital	Veteran's Hospital	-
4	-	-	-	Chapel	Warehouse	Warehouse	-
5	-	-	-	Female Dormitory of the R.C. Orphan Asylum	Veteran's Hospital	Veteran's Hospital	-
6	-	-	-	-	Administration Building	Administration Building	-

17th and 18th Century

The borough of the Bronx was named for a pioneer Swedish settler named Jonas Bronck who settled in the area in 1639 and established a farm (Shonnard and Spooner 1900:87). The earliest Bronx settlement was located in the vicinity of what is now Mott Haven in the South Bronx. Other European settlers followed and hostilities with the Native Americans ensued. The western portion of the Bronx in the vicinity of the Fordham was settled around 1667 when John Archer purchased a large tract of land from the Native Americans (Shonnard and Spooner 1900:139). However, there is no record of specific developments in the vicinity of the project area. In 1683, colonial New York was divided into counties and the Bronx became part of Westchester County (Shonnard and Spooner 1900:197).

The Bronx played an integral part in the Revolutionary War. The British landed at Throg's Neck on October 12, 1776 then withdrew to land on Pell's Point in Pelham Bay Park in the Bronx. There British troops were met by the Americans under Colonel John Glover. They fought to a standstill, enabling George Washington, with the main American army, to withdraw safely to White Plains. The British began an occupation of New York City and the Bronx that lasted until 1783 (Shonnard and Spooner 1900:365-379, Jenkins 1912:148).

Prior to the British invasion the American army had hastily built several forts in the area of the Spuyten Duyvil and throughout the Bronx. These forts were all taken by the British after the American evacuation to White Plains. The 1777 map surveyed by Claude Joseph Sauthier (Map 4) depicts the layout of the New York City and Bronx area at the time of the Revolutionary War. The American Fort Washington is shown southwest of the project vicinity in Manhattan. The area of the Bronx is described as "Very High and Broken Lands which were occupied and fortified by the Rebels when the Kings Troops landed at Frog's Point [Throg's Neck]." The red bars and dashed lines southeast of the project vicinity are likely depictions of troop movements and battle engagements.

According to historian Stephen Jenkins, the Revolutionary War-era Fort Number Six was located within the property of the VAMC (See Table 2). Fort Number Six was located upon the grounds of the 19th-century Bailey Estate, which became the Roman Catholic Orphan Asylum and later the VAMC. According to historian Stephen Jenkins, Fort Number Six, also called the "King's Battery" by the British, was located about 380 feet (116 m) northeast of the house on the Bailey Estate (Map 12). The 1872 Beers map (Map 6) shows the Bailey House. This places the fort location near the southwest corner of the SCI/D APE (Map 12).

Remains of the fort were uncovered in 1899 while excavating the foundations for the Orphan Asylum (Jenkins 1912:344). The location of Fort Number Six on the grounds of the VAMC was a strategic elevated vantage point. Fort Number Eight located on a high point south of the project APEs on the current grounds of the Bronx Community College south of the VAMC.

19th Century

Development in and around New York City grew rapidly following the American Revolution. Growth in the area of the Bronx increased throughout the 19th century. The construction of railroads through the Borough including the New York and Harlem River Railroad in 1841 (later the Harlem Division of Metro-North) helped encourage the spread of settlement in the western portion of the Bronx (Jenkins 1912:229).

The 1851 Sidney and Neff *Map of Westchester County, New York* (Map 5) shows the VAMC project area was undeveloped around the mid-19th century. The area along the Harlem River west of the project APEs was known as “Berrian’s (or Berrien’s) Landing” an early 19th-century stopping place for boats on the Harlem River (Jenkins 1912:346). A roadway and unlabeled structure are shown south of the Parking Structure APE. A structure labeled J. Valentine is located southeast of the project area. In general, development seems to be concentrated along the railroad tracks to the east.

The 1872 Beers map from the *County Atlas of Westchester, New York* shows three structures in the VAMC property (Map 6). A structure labeled L. Valentine (MDS 1) is located within the northern portion of the SCI/D Center APE. The N.P. Bailey structure is located immediately north of the Parking Structure APE. The H.B. Day structure is located near the present day location of the Webb Avenue entrance to the VAMC. Likely unpaved roadways connect the structures to West Kingsbridge Road and Sedgwick Avenue. Development density increased in the vicinity by the 1870s.

The 1891 United States Geological Survey quadrangle shows the New Croton Aqueduct extending through the eastern portion of the VAMC property (Map 7). Between 1837 and 1842 the Old Croton Aqueduct was constructed from the Croton River Dam in Westchester County, through the Bronx (along what would become University Avenue), and into the Croton Reservoir in central Manhattan. The aqueduct served to bring fresh water supply to New York City, which needed an unpolluted water source for its burgeoning population. Construction of the New Croton Aqueduct began in 1885 to meet the growing demands of the city. The new aqueduct extended from the New Croton reservoir in Westchester County to the Jerome Park Reservoir in the Bronx. A conduit for the New Croton Aqueduct extended from the Jerome Park Reservoir through the eastern edge of the VAMC property to carry water to the distribution plants in Bronx and Manhattan before joining with the Catskill Aqueduct in Manhattan (Maps 7-11). The New Croton Aqueduct is still an active part of the water supply system for New York City. According to the Draft New York City Department of Environmental Protection, the aqueduct lies about 80 to 100 feet (23 to 30 m) below the existing grade and there are no access shafts on the VAMC property.

On July 1, 1895, the areas of Westchester lying east of the Bronx River were annexed to New York City and were made part of the 24th Ward. In 1898, the city of Greater New York is created as a federation of five boroughs with the 23rd and 24th Wards of the city becoming the Borough of The Bronx (Jenkins 1912:7).

20th Century

In 1899, the Sisters of Charity purchased the N.P. Bailey estate containing twenty eight and a half acres for \$290,000. The erection of buildings began for a new Roman Catholic Orphan Asylum shortly thereafter. Two buildings, a male dormitory (MDS 3 and 4) and a female dormitory (MDS 5) were constructed east of the Bailey mansion house, which was located northwest of the Parking Structure APE. The 1900 Sanborn Map (Map 8) shows the layout of the grounds. Each structure was a five-stories-tall stone building with a basement. Each was about 385 feet (117 m) long 50 feet (15 m) deep with two wings 50 feet (15 m) by 125 feet (35 m) and a chapel at the center. The buildings could accommodate 800 children each (Jenkins 1912:344). A gate house (MDS 2) was located at the north end of the property along West Kingsbridge Road. The buildings were still under construction when they were depicted on the 1900 Sanborn map. The

orphanage was occupied by 1902. The Sisters of Charity, a congregation of Roman Catholic nuns who ministered to the needs of the poor, operated the orphanage until 1921.

In October 1921, the Archdiocese sold the property to the United States government, who planned to convert the facilities into a hospital for disabled veterans. The remaining orphans were transferred to other facilities and the buildings were converted to accommodate 1,000 to 1,200 patients (NYT 1921). The purchase was turned over to the newly formed U.S. Veterans' Bureau by Executive Order on April 20, 1922.

The Sanborn maps from the second half of the 20th century show the subsequent development of the modern day VAMC hospital grounds. The 1950 Sanborn map (Map 9) rendered two former orphanage structures attached to a central wing containing the hospital kitchen. An administrative building (MDS 6) was also added to the north end of the hospital. Additional buildings were added to the property, although none of the lie in the current APEs. A nurses' dormitory, laundry building, garage, and storage buildings were located in the eastern portion of the site. An apartment building was constructed in the southwest corner of the property.

The 1977 Sanborn map (Map 10) shows the beginning of the modern-day two to eight-story-tall hospital building in the western portion of the property. The c. 1899 former orphanage buildings (MDS 3, 4, and 5) and a gate house along West Kingsbridge Road (MDS 2) still existed in the western portion of the site.

The most recent Sanborn map from 1986 (Map 11) shows that all of the c. 1899 and c. 1950 buildings were demolished (MDS 3-6) except for the chapel that was formerly part of the female dormitory of the orphanage and the apartment building in the southwest corner of the property. The gatehouse along West Kingsbridge Road (MDS 2) is still extant. A new nursing home structure constructed between 1977 and 1986 is about 130 feet (40 m) north of the chapel.

Current Conditions

All of the structures depicted on the 1986 Sanborn map are currently extant except for the former gatehouse (MDS 2) near the northwest corner of the property (Photo 12). In addition, there is a new shipping and receiving building located north of the main hospital (Photo 7) and a picnic pavilion and a basketball court in the northwest corner of the property (Photo 8).

ARCHEOLOGICAL SENSITIVITY ASSESSMENT

The New York Archaeological Council provides the following description of archeological sensitivity:

Archaeologically sensitive areas contain one or more variables that make them likely locations for evidence of past human activities. Sensitive areas can include places near known prehistoric sites that share the same valley or that occupy a similar landform (e.g., terrace above a river), areas where historic maps or photographs show that a building once stood but is now gone as well as the areas within the former yards around such structures, an environmental setting similar to settings that tend to contain cultural resources, and locations where Native Americans and published sources note sacred places, such as cemeteries or spots of spiritual importance (NYAC 1994:9).

The archeological potential of an area consists of its sensitivity modified by modern disturbance and environmental factors such as alluvial scours and deposition. Recommendations for additional investigation are based on the archeological sensitivity and potential within the project APEs, and are discussed below.

Precontact Archeological Sensitivity

The project is located within an area designated on the OPRHP website as a known archeologically sensitive area. Generally, this designation is based on the proximity of reported archeological sites. The OPRHP and NYSM files contain seventeen archeological sites that are precontact or contain precontact components

located within one mile (1.6 km) of the VAMC. Thirteen of these sites are located directly across the Harlem River from the project in Inwood Hill Park area of Manhattan and along the Spuyten Duyvil and Harlem River. The other four precontact sites are located to the north in the Bronx on elevated terrain similar to the VAMC property terrain.

In addition to the previously reported sites in the vicinity, the project's location on an elevated overlook along the Harlem River would suggest a potential for occupation or use of the area by Native Americans. Therefore, the project APEs have a high sensitivity for the presence of precontact archeological deposits.

Historic Archeological Sensitivity

The historic sensitivity of an area is based largely on the examination of historical maps as well as the presence of documented historical archeological sites in the vicinity and other historical development within the VAMC property. Histories of the Bronx indicate that this area was first utilized during the Revolutionary War. Three forts originally built by the American army and overtaken by the British in 1776 were located in the immediate vicinity and within the property of the VAMC. Fort Number Six was located about 380 feet (116 m) northeast of the mansion house on the Bailey Estate, which is shown on the 1872 Beers map (Map 6). This places the fort at the south end of the SCI/D Center APE (Map 12). Remains and artifacts associated with the fort were uncovered in 1899 while excavating the foundations for the Orphan Asylum (Jenkins 1912:344).

In the 19th century, the 1951 map shows a structure labeled as L. Valentine (MDS 1) located on the northern edge of the SCI/D Center APE (Map 6). In 1899, a portion of the boys' dormitory and the boys' chapel (MDSs 3 and 4) were constructed in the southern portion of the SCI/D Center APE (Map 8). A gatehouse associated with orphanage (MDS 2) was also located along West Kingsbridge Road near the northwest corner of the APE. A portion of the girls' dormitory (MDS 5) was located in the Parking Structure APE.

By 1986, all of the c. 1899 former orphanage buildings and c. 1950 hospital buildings had been demolished except for the girls' chapel in the southern portion of the property, the gatehouse along West Kingsbridge Road (MDS 2), and the c. 1950 apartment building in the southwest corner of the property (Map 10). The construction of the modern-day VAMC hospital had commenced in the late 1970s and the building was dedicated in 1981 (U.S. Department of Veterans Affairs 2011).

Deposits associated with the 18th-century Fort Number Six within the SCI/D Center APE and the 19th-century developments including MDSs 1-5 could be encountered within the APEs. Therefore, the SCI/D Center APE has a high sensitivity for encountering 18th-century fort deposits and 19th-century deposits and features associated with the L. Valentine house (MDS 1) and the c. 1899 boys' dormitory orphanage structures (MDS 2-4). The Parking Structure APE has a high sensitivity for encountering deposits associated with the c. 1899 girls' dormitory (MDS 5).

ARCHEOLOGICAL POTENTIAL

The archeological potential is the likelihood of locating intact archeological remains within the project APEs. The combined site file and environmental data suggest the project APEs have a high sensitivity for both precontact and historic cultural resources. However, documentary research and modern conditions indicate that much of the project APEs have undergone substantial disturbance associated with construction and reconstruction of buildings at the site.

Spinal Cord Injury/Disorder (SCI/D) Center APE

According to historian Stephen Jenkins, the 18th-century Fort Number Six was encountered during the c. 1899 construction of the Orphan Asylum (Jenkins 1912:344), which may have impacted or destroyed the deposits. The 1970s razing of the orphanage buildings and regrading for parking lots may have impacted the deposits further.

A boring investigation completed by Lagan Engineering & Environmental Services in the winter of 2011 uncovered demolition debris associated with the orphanage buildings reaching to a depth of 5 to 15 ft (1.5 to 4.5 m) in some locations. Figure 2 shows the subsurface profile revealed by the soil boring investigation for a section of the proposed building footprint. The approximate boundary of the c. 1899-1977 orphanage/old hospital buildings was determined based on boring data and the approximate footprints of the former buildings.

Construction photos from the 1970 and 80s confirm that there was extensive land modification at the time of the demolition of the orphanage/old hospital and construction of the new (existing) hospital. Figure 3 shows a view south from near the south end of MDS 3 illustrating the disturbance caused by the demolition and construction activities. In addition, construction of the existing parking lots; walkways; curbs; roadways; and modern water, sewer, gas, electric, and phone lines have disturbed areas throughout the APE.

The investigation identified bedrock at 10 to 23 ft (3.0 to 7.0 m) below ground surface in the proposed SCI/D Center footprint. Bedrock lies as shallow as 3 feet (90 cm) below ground surface in areas west of the SCI/D footprint under the existing hospital (Figure 4).

Nonetheless, deposits related to Fort Number Six or yard deposits or features associated with MDSs 1-4 could have been preserved by filling after the demolition of the c. 1899 structures.

The northwestern portion of the SCI/D Center APE appears to have remained relatively undeveloped throughout most of the map-documented history of the parcel. This area has a greater potential for encountering any possible precontact deposits or perhaps deposits associated with earlier historical developments.

The New Croton Aqueduct extends through the eastern edge of the SCI/D Center APE. However, according to the New York City Department of Environmental Protection, the Aqueduct lies between 80 and 100 feet (24 and 30 m) below grade and there no access shafts located on the VAMC property. It is not anticipated that the proposed project will reach to the depth of the aqueduct. Therefore, there is little or no potential of impacting this historic feature.

Parking Structure APE

Demolition of c. 1899 structures in the Parking Structure APE and construction of the existing parking lot may have impacted deposits associated with any 19th-century buildings there. The 2011 soil boring investigation identified demolition debris related to the orphanage buildings between 9 and 15 feet (2.7 and 4.6 m) deep. Bedrock was encountered 12 to 25 feet (3.7 to 7.6 m) below ground surface.

Disturbance caused by the demolition of the old hospital and construction of the existing facilities has reduced the archeological potential of the Parking Structure APE. However, filling during demolition and construction in this area may have preserved archeological features and deposits in the APE.

RECOMMENDATIONS

In order to assess the presence of absence of archeological deposits and/or prior disturbance in the project APEs, limited Phase IB archeological testing is recommended. Backhoe-excavated trenches are the most appropriate means for testing the project area based on evidence for considerable depths of fill and construction debris in the project area and previous archeological investigations in comparable urban-industrial environments.

Appendix 1 includes the proposed Phase IB maps showing the proposed trench locations. The Phase IB will include excavating about 200 feet (61 m) of backhoe trench divided among four trenches. The literature review research and historical map overlays were utilized to place backhoe trenches in locations most likely to encounter archeological deposits or features. Proposed trench locations were strategically located to avoid the deep demolition debris associated with the orphanage/old hospital buildings that was encountered by the Lagan Engineering soil borings (Figure 2). Other factors including existing underground utilities, existing

trees, and maintaining access within the hospital grounds informed the trench locations. The final trench locations may be adjusted in the field in coordination with the client and VAMC after Dig Safely New York (UFPO) has been contacted and utilities marked.

The trench excavations will provide information concerning landscape development and modification. Large archeological features such as privies, cistern, and foundations can be located with archeological trenches. Trenches can also provide archeologists with the opportunity to locate sheet midden deposits, by screening the back dirt and soil columns within the trench. Trenches will be excavated to the depth of sterile soil or as deep as can practicably be achieved.

Spinal Cord Injury/Disorder (SCI/D) Center APE

Three backhoe-excavated trenches will be used to assess the presence of absence of archeological deposits associated with Fort Number Six and deposits related to the 19th-century MDSs in the APE.

- **Trench 1:** 50-ft long trench to assess the presence or absence of remains associated with the Revolutionary War-era Fort Number Six and/or yard deposits or other features related to the late 19th-century orphanage,
- **Trench 2:** 50-ft long trench to assess the presence of absence of remains related to c. 1872 MDS 1, and
- **Trench 3:** 50-ft long trench to assess the presence of absence of precontact archeological deposits or deposits associated with earlier historical developments.

Parking Structure APE

One backhoe-excavated trench will be placed in the existing parking lot at the Parking Structure APE to assess the presence or absence of archeological deposits related to c. 1899 orphanage.

- **Trench 4:** 50-ft long trench to assess the presence of absence of yard deposits or other features related to the orphanage.

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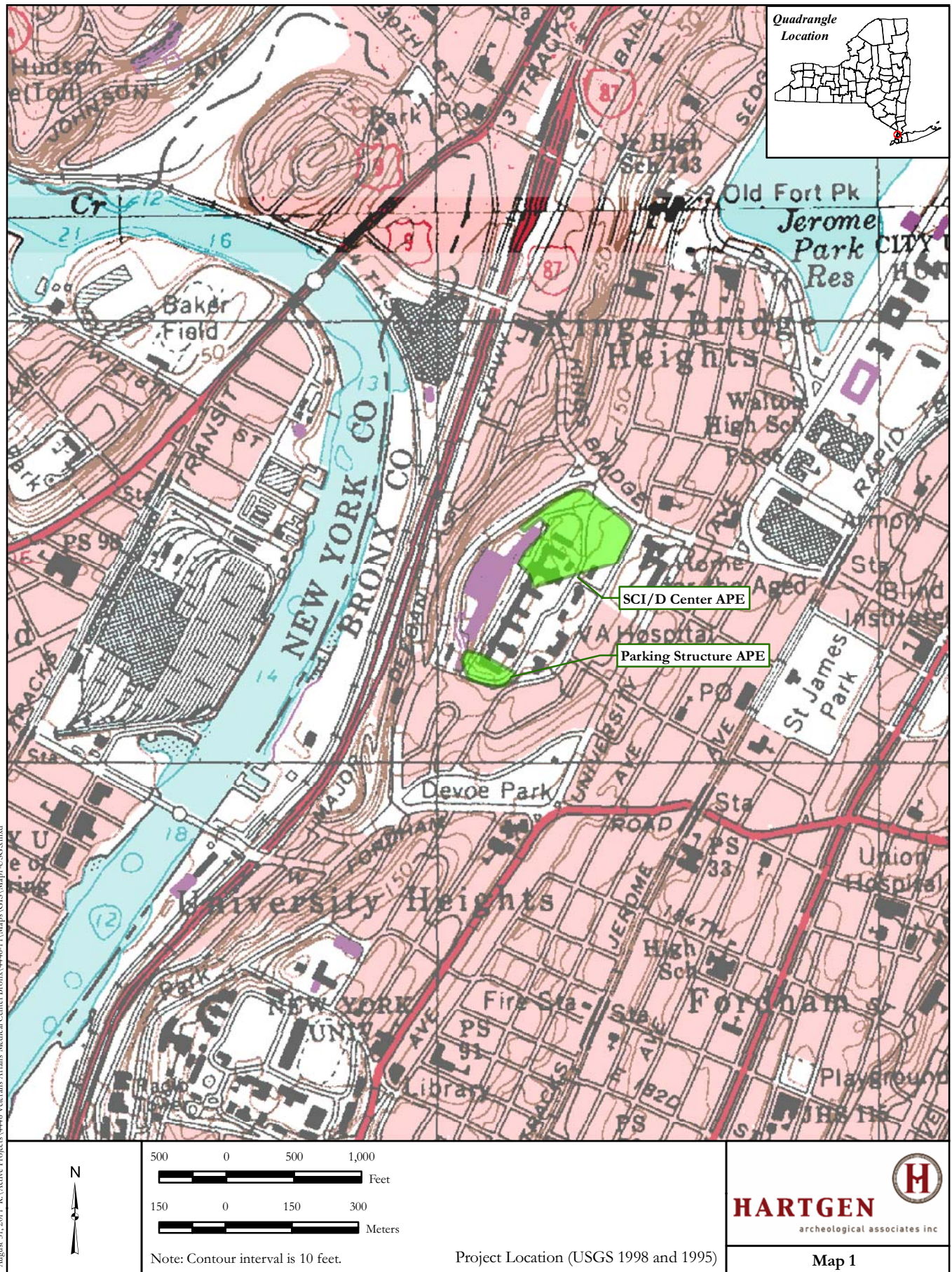
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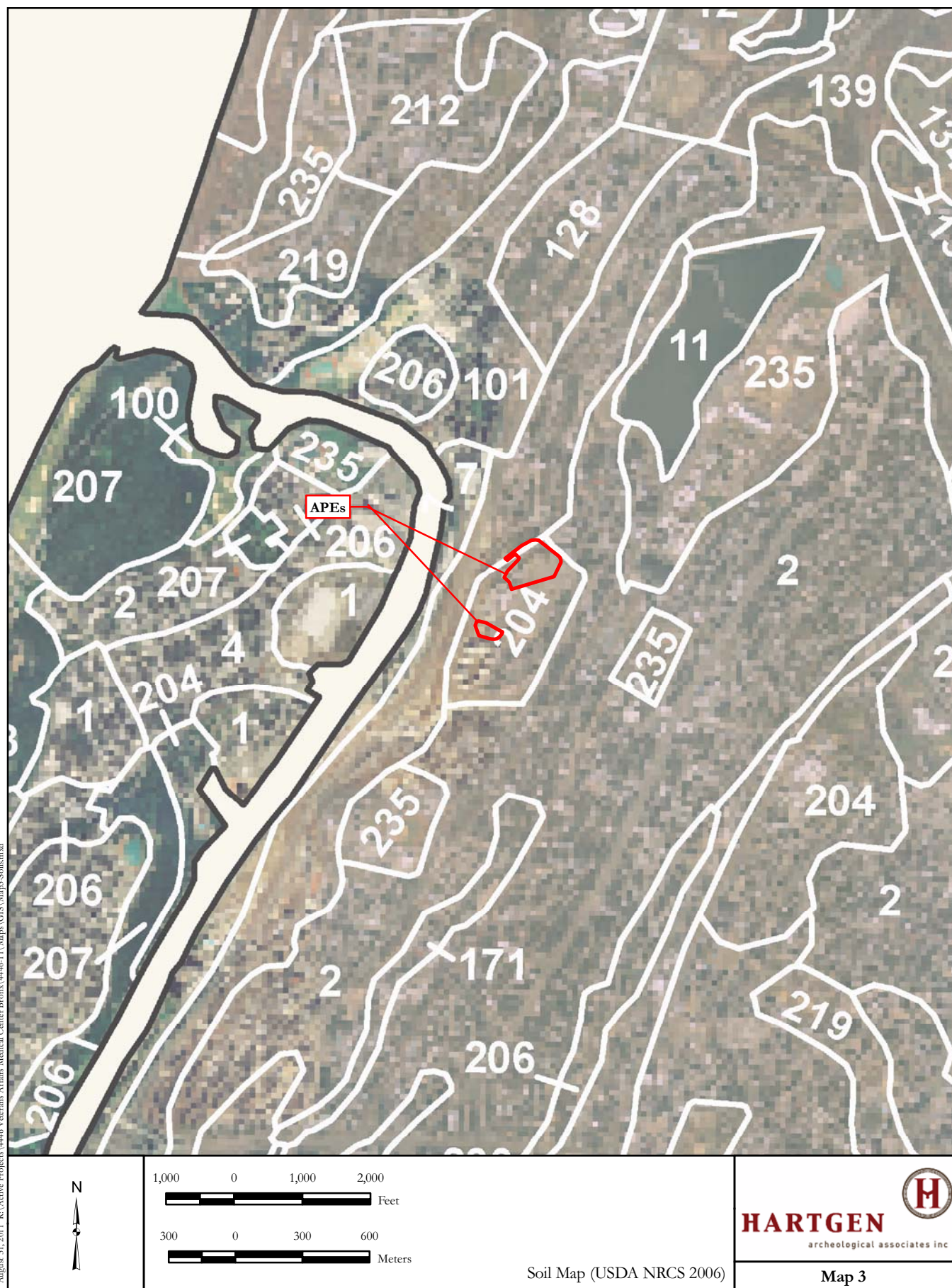
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MAPS





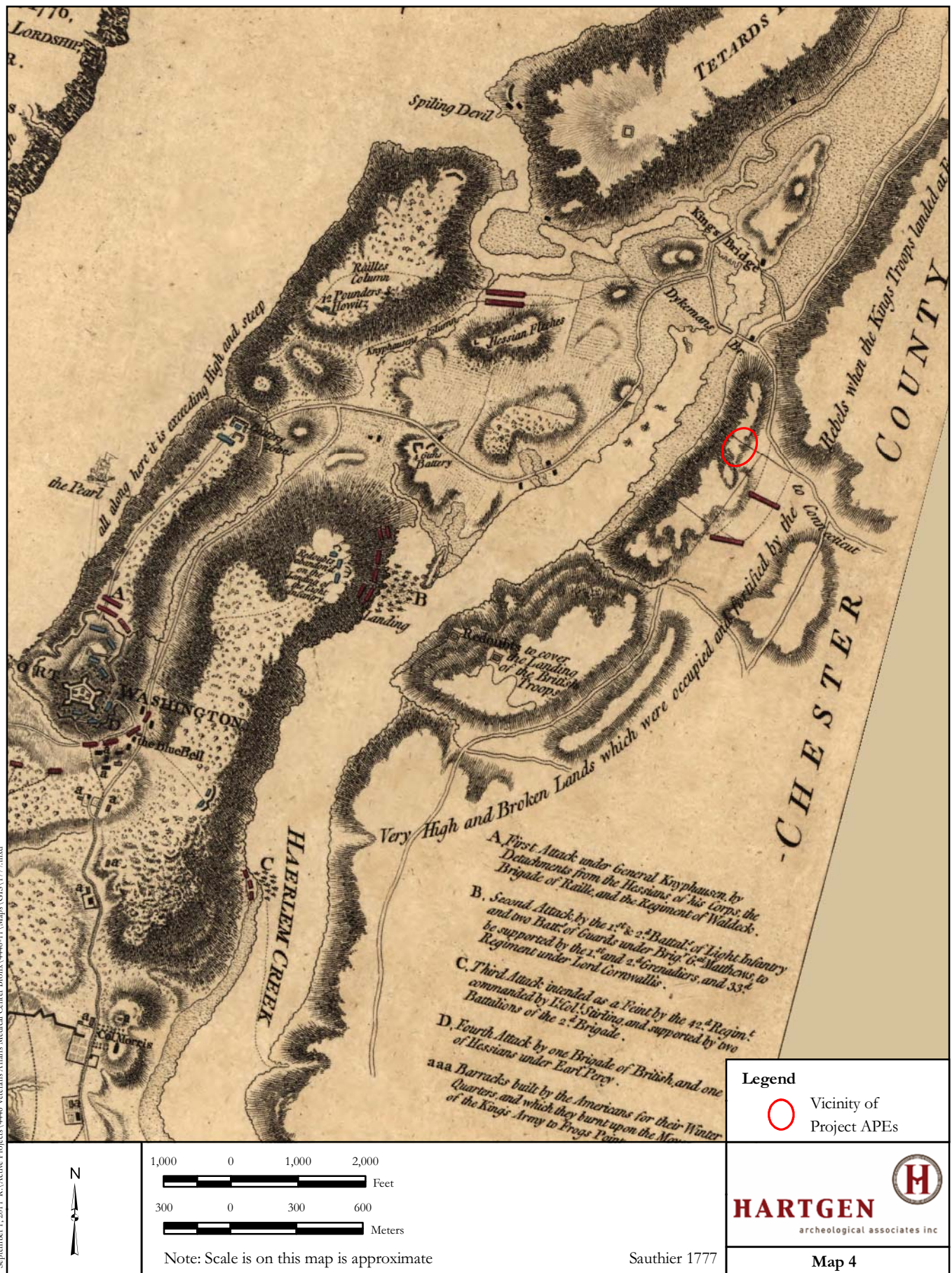


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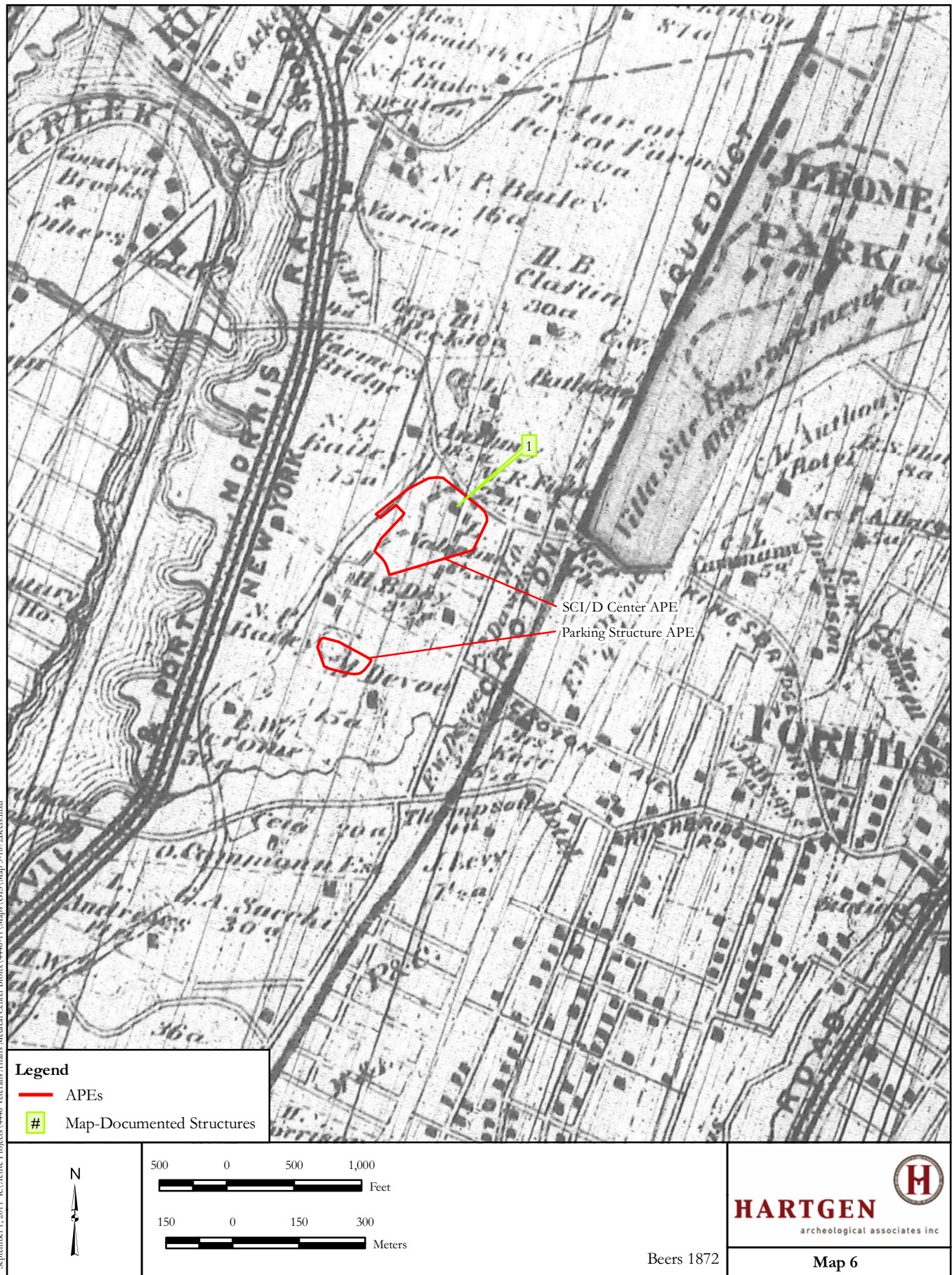
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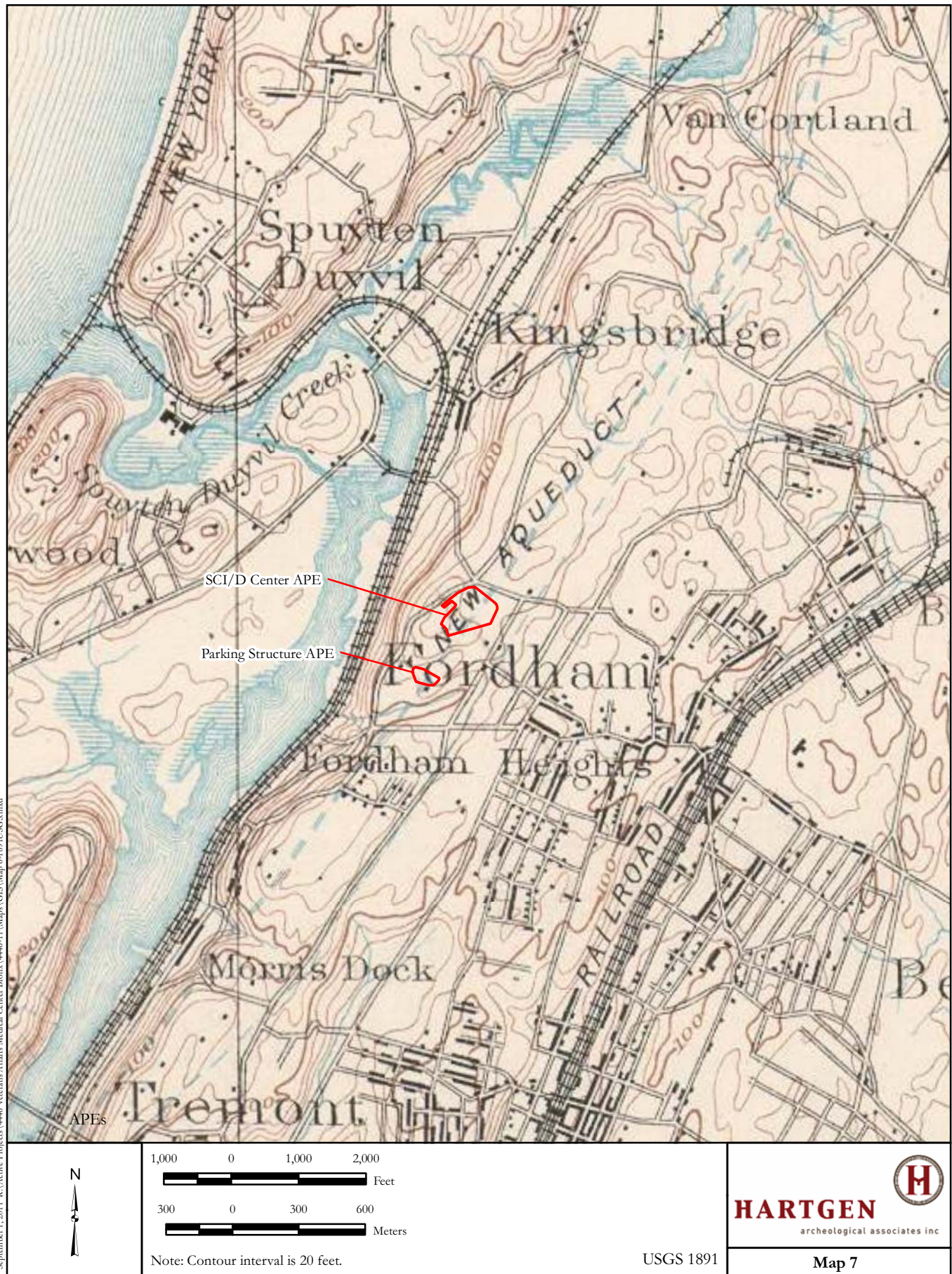
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archeological associates inc.

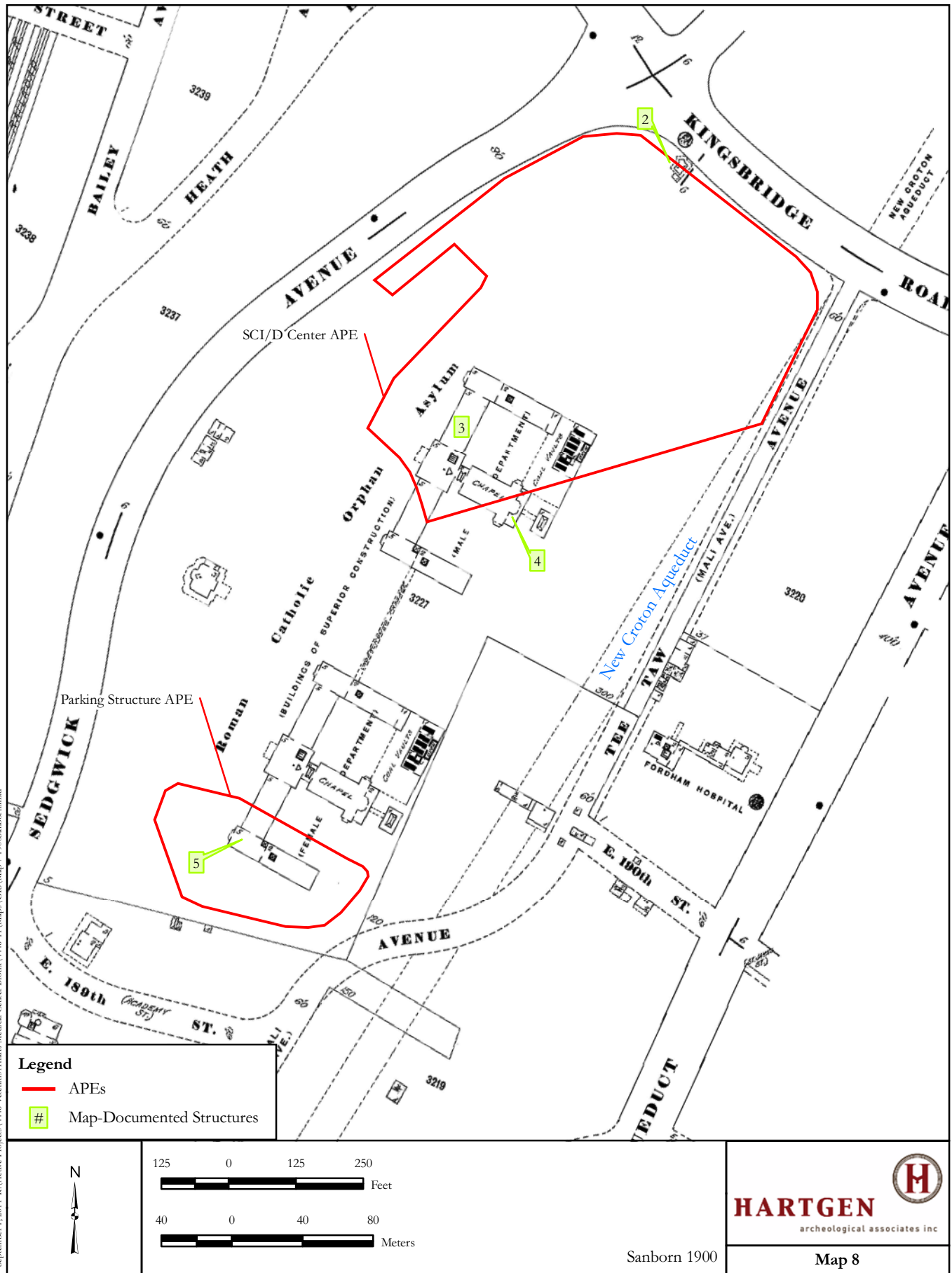
Map 3

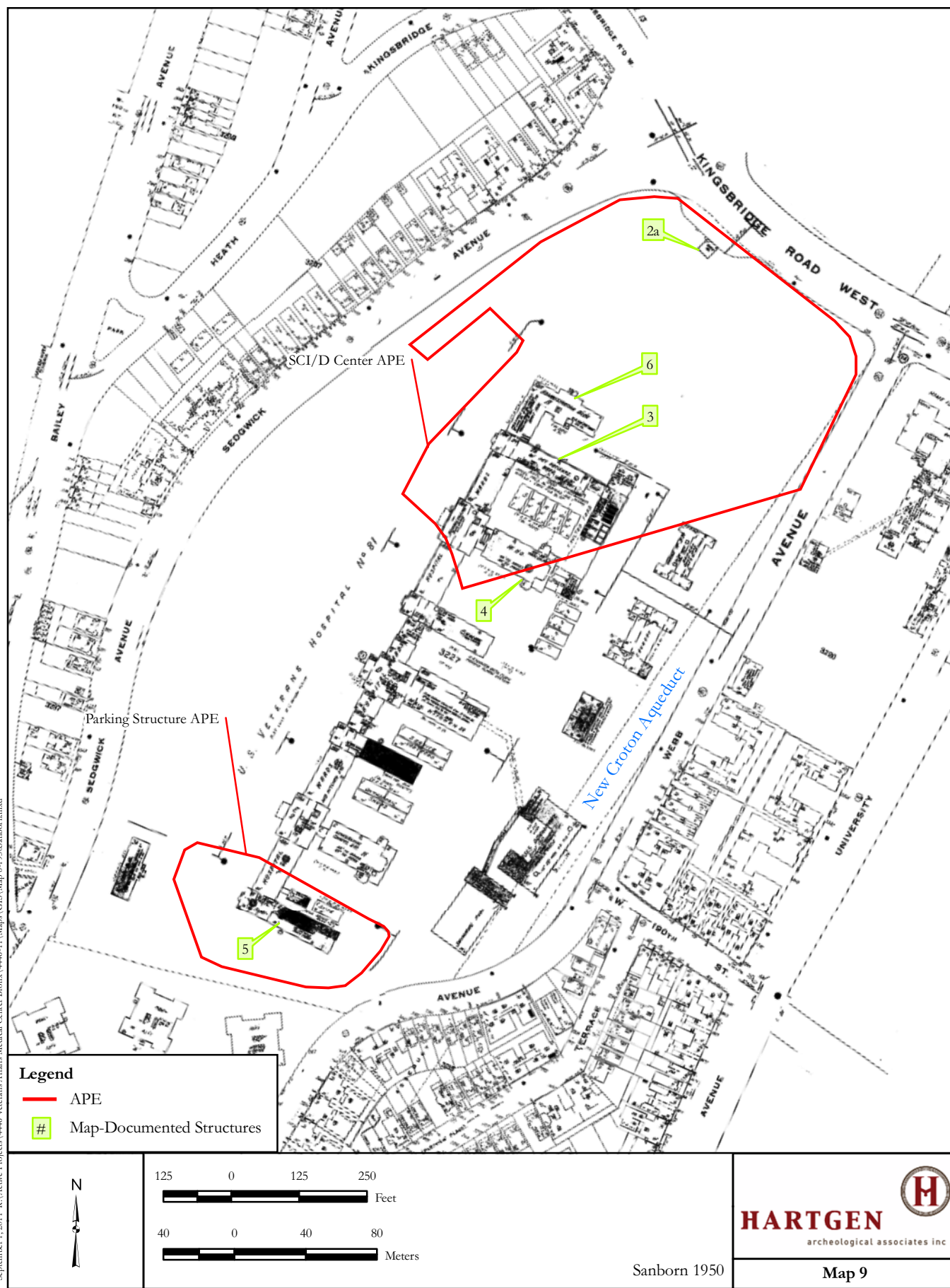


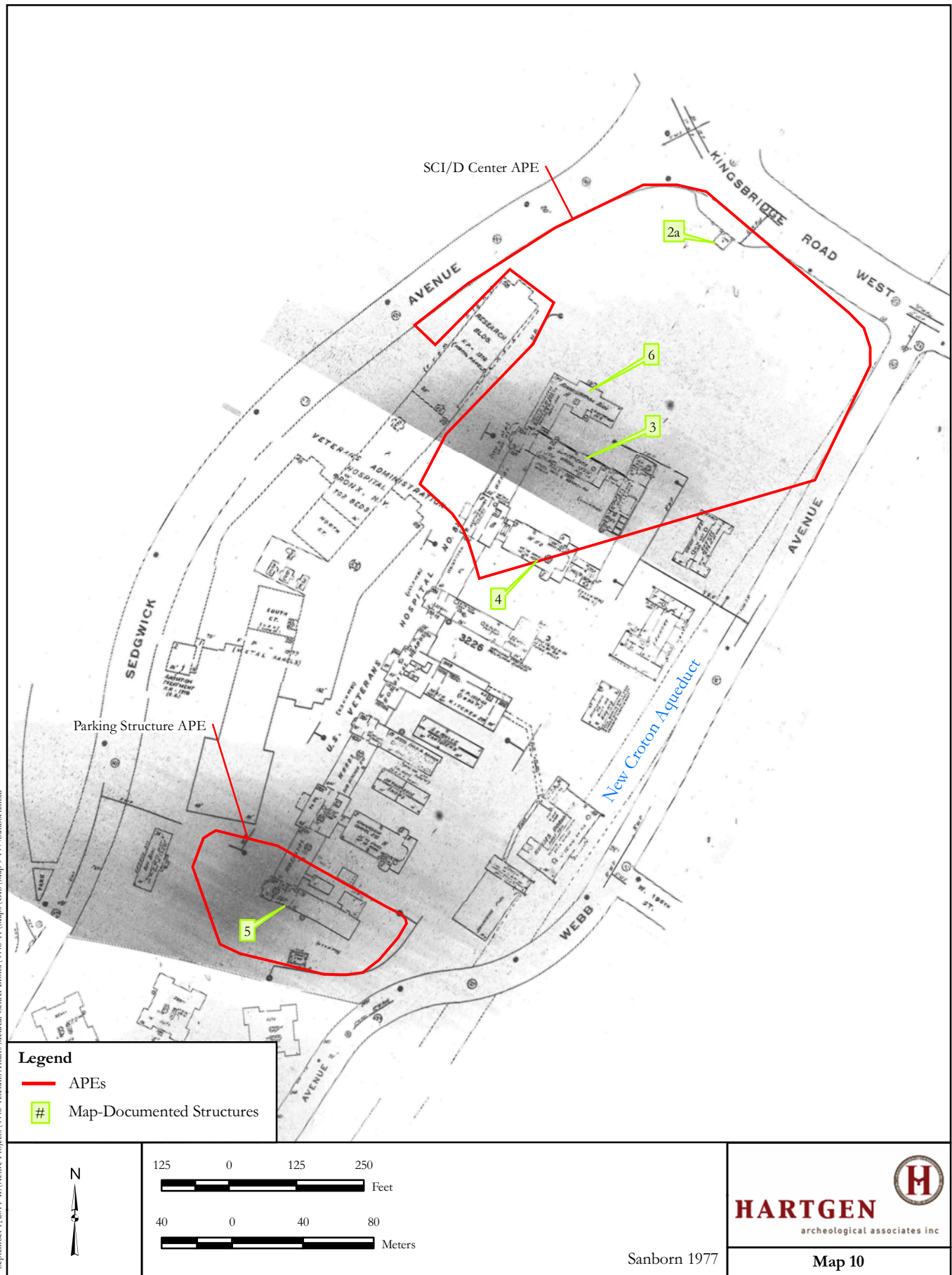


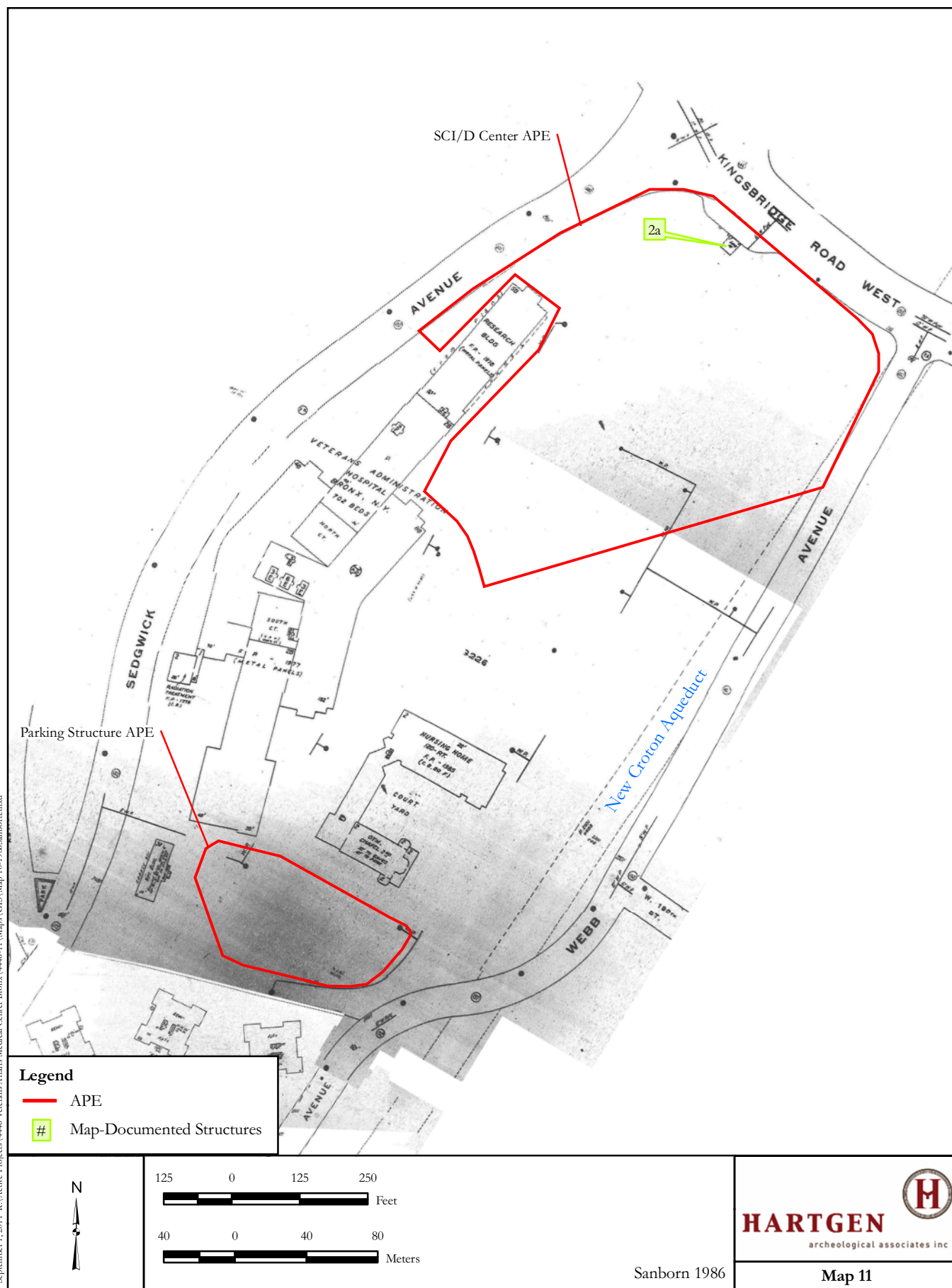














PHOTOGRAPHS



Photo 1. View west of the east side of the James J. Peters Veterans Affairs Medical Center hospital.

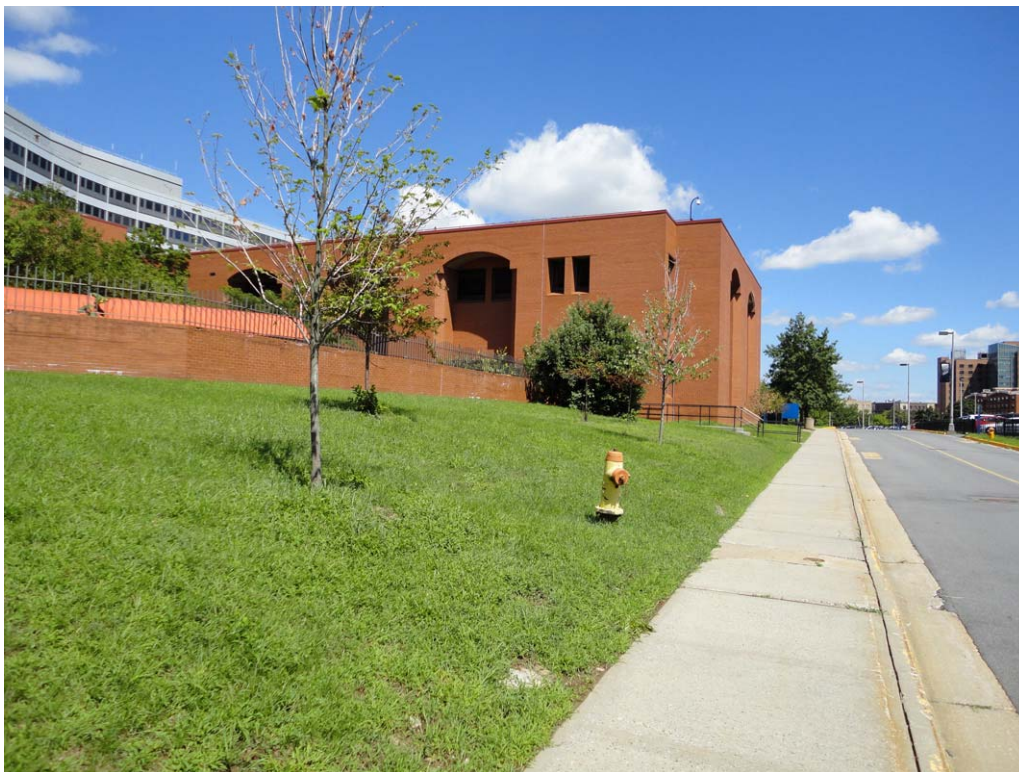


Photo 2. View north of the c. 1986 nursing home north of the c. 1899 orphanage chapel.



Photo 3. View west of the east side of the c. 1899 girls' dormitory chapel associated with the Roman Catholic Orphan Asylum formerly on the VAMC property.



Photo 4. View northeast of the c. 1899 chapel from the Parking Structure APE.



Photo 5. View north within the parking lot that occupies the proposed Parking Structure APE.



Photo 6. View southwest of the c. 1950 apartment building currently the VISN administration building at the VAMC.



Photo 7. View north of the recently constructed shipping and receiving building north of the hospital building.



Photo 8. View southwest of the picnic area in the northwest corner of the SCI/D Center APE.



Photo 9. View southwest from the northeast corner of the SCI/D Center APE. Most of the SCI/D Center APE is existing parking lots.



Photo 10. View north of the eastern edge of the SCI/D Center APE where the New Croton Aqueduct extends through the VAMC property.



Photo 11. View west of the slope along the southern edge of the Parking Structure APE.



Photo 12. View northwest of the northwest corner of the VAMC property where a gatehouse was located from about 1900 to 1977 (MDS 2 and 2a).

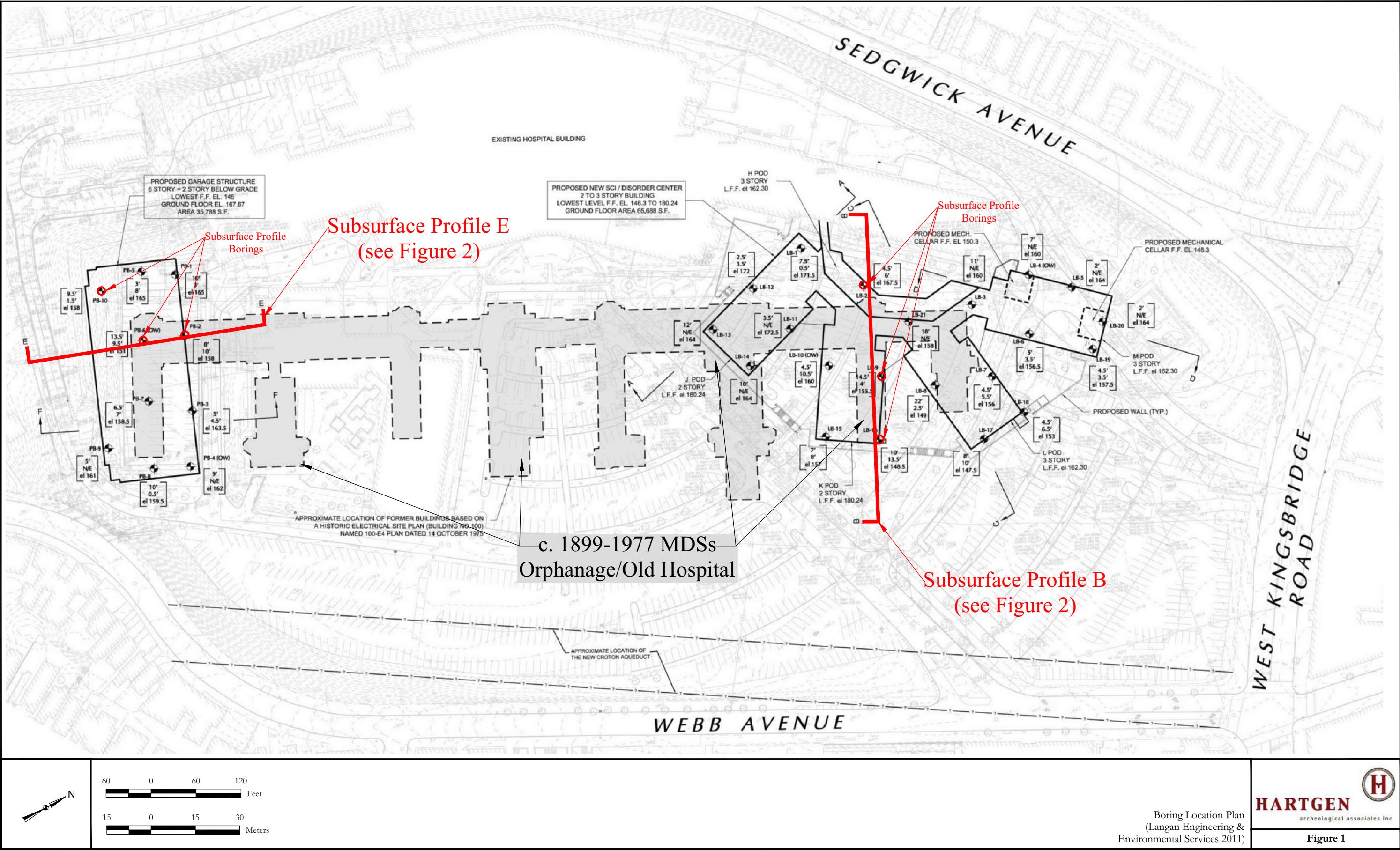


Photo 13. View southeast of the western edge of the VAMC property along Sedgwick Avenue. The area beyond the fence is a short steep slope of with exposed bedrock and vegetation up to the west side of the hospital.



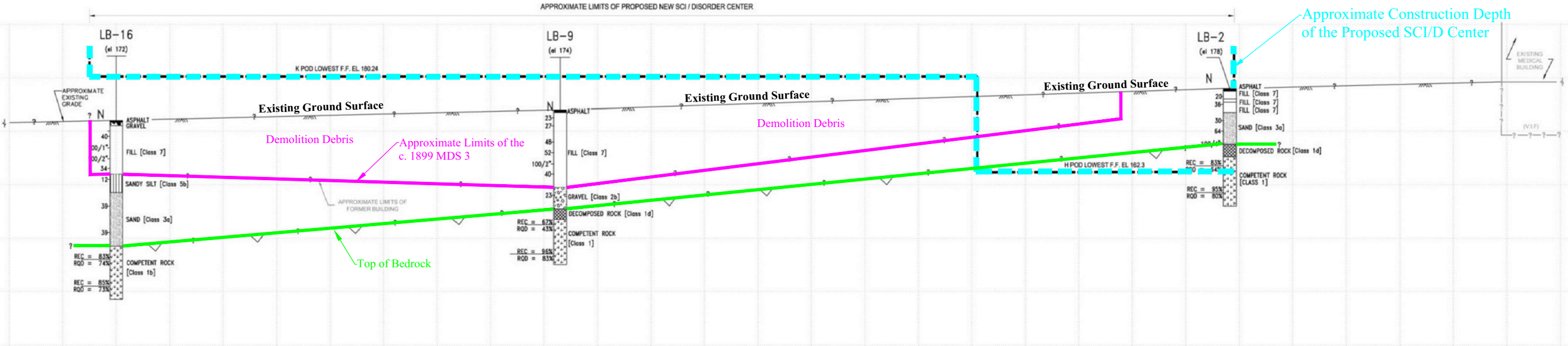
Photo 14. View west of the slope and wooded area along the south edge of the VAMC property.

FIGURES



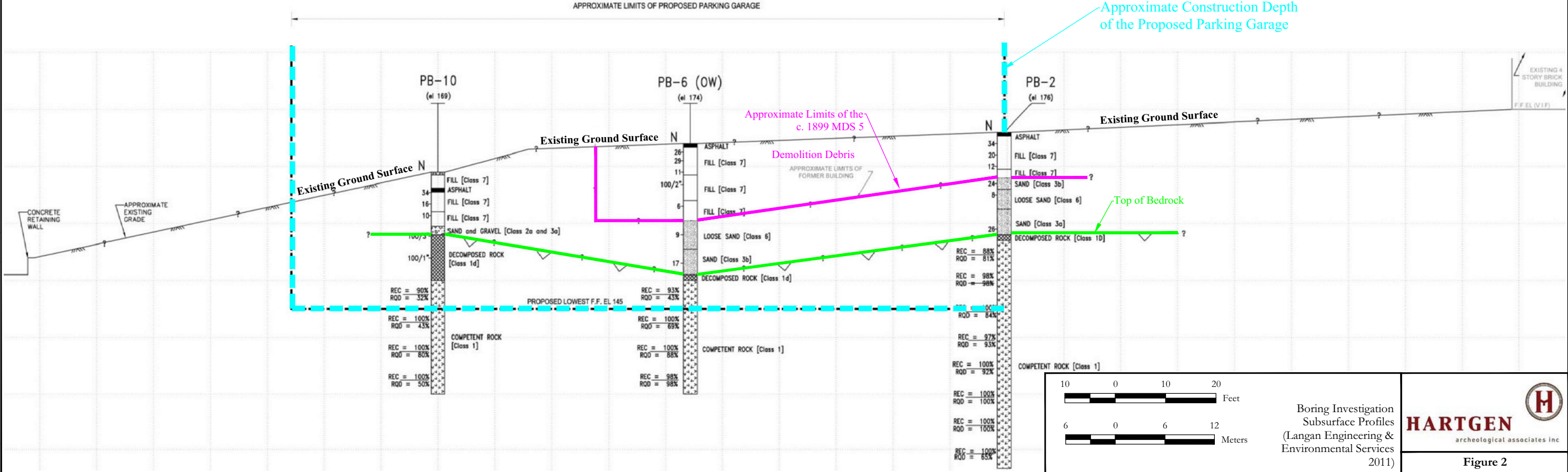
Profile B (Facing Southwest)

APPROXIMATE LIMITS OF PROPOSED NEW SCI / DISORDER CENTER



Profile E (Facing Northwest)

APPROXIMATE LIMITS OF PROPOSED PARKING GARAGE



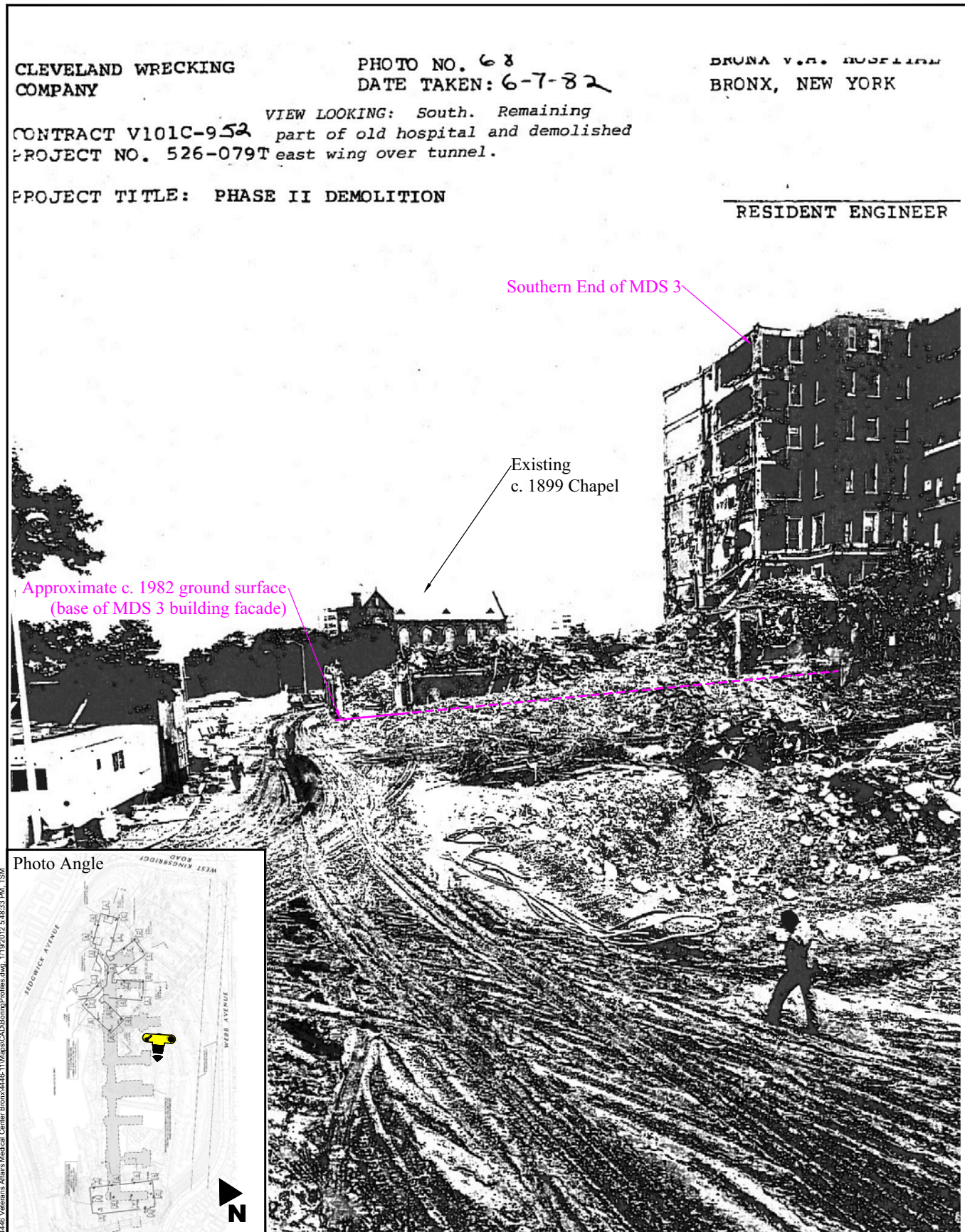


Figure 3. View south c. 1982 during the demolition of a portion of the old hospital building showing extensive landscape modification caused by the demolition and construction activities.

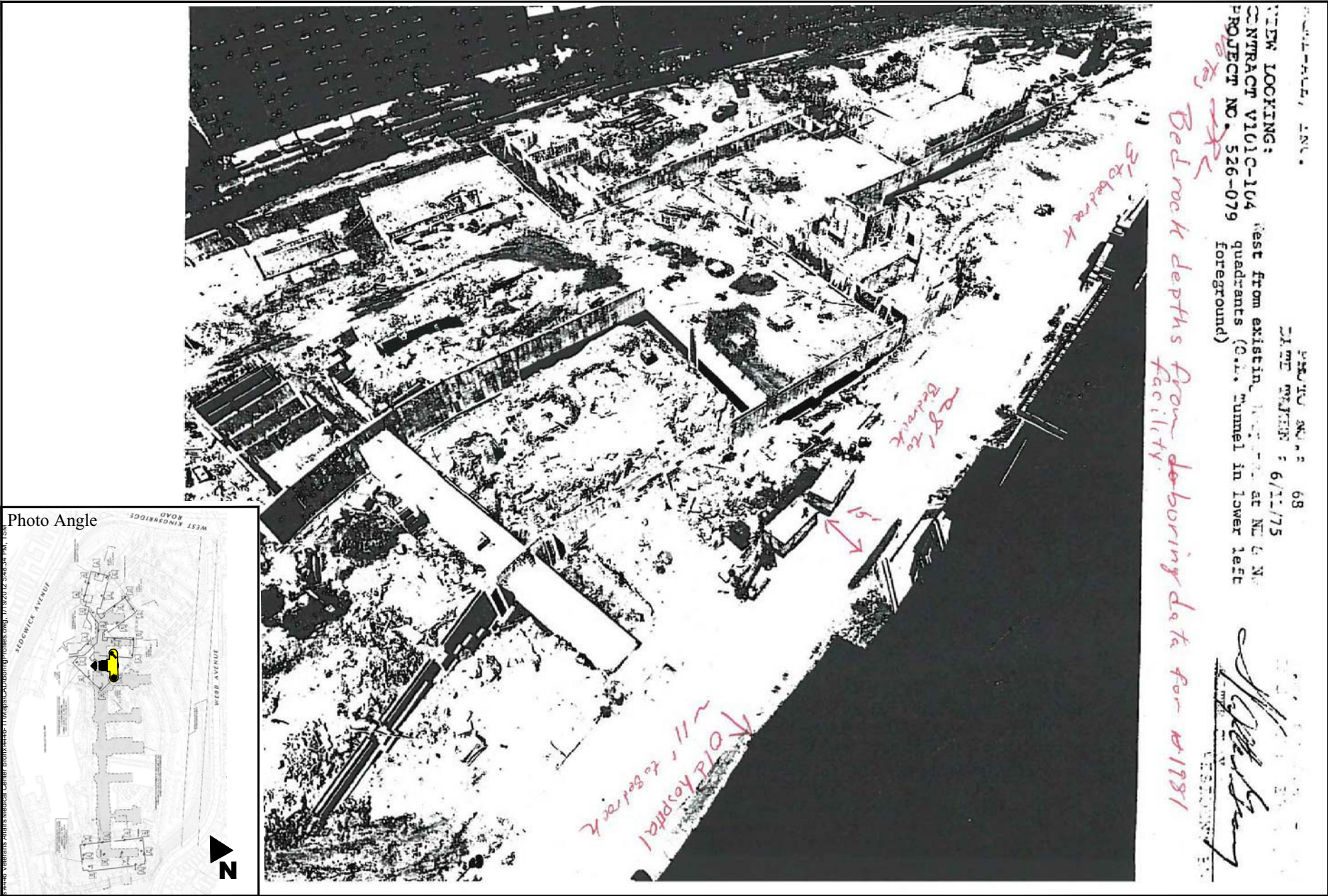
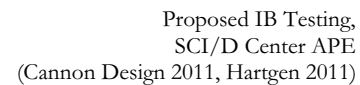


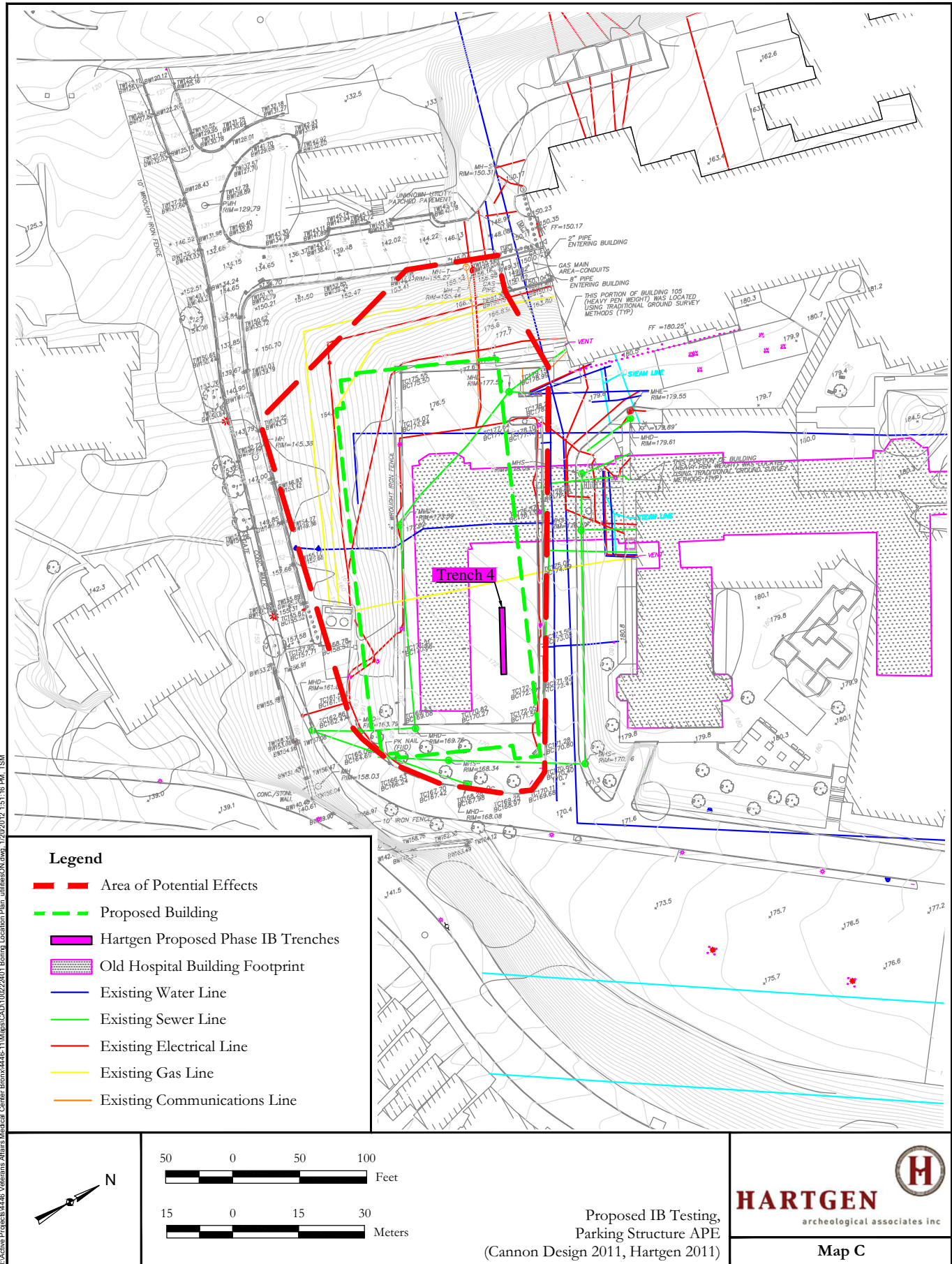
Figure 4. View west c. 1975 from the roof of the old hospital building (MDS 3) into the construction footprint for the new (existing) hospital building. Notes in red refer to data from the 1981 boring investigation for the existing facility.

APPENDIX 1: Proposed Phase IB Maps





VAMC Spinal Cord Injury/Disorder Center and Parking Structure, Bronx, New York
Phase IA Literature Review and Sensitivity Assessment



APPENDIX 2: OPRHP Project Review Cover Form

PROJECT REVIEW COVER FORM

Rev. 10-04

Please complete this form and attach it to the top of **any and all information submitted to this office** for review. Accurate and complete forms will assist this office in the timely processing and response to your request.

This information relates to a previously submitted project.

PROJECT NUMBER PR

COUNTY _____

2. This is a new project.



Project Name VA Medical Center, Spinal Cord Injury/Disorder Center and Parking Structure

Location 130 West Kingsbridge Road
You MUST include street number, street name and/or County, State or Interstate route number if applicable

City/Town/Village Bronx

List the correct municipality in which your project is being undertaken. If in a hamlet you must also provide the name of the town.

County Bronx

If your undertaking* covers multiple communities/counties please attach a list defining all municipalities/counties included.

TYPE OF REVIEW REQUIRED/REQUESTED (Please answer both questions)

A. Does this action involve a permit approval or funding, now or ultimately from any other governmental agency?

☒ No ☐ Yes

If Yes, list agency name(s) and permit(s)/approval(s)

Agency involved	Type of permit/approval	State	Federal
U.S. Dept. of Veteran Affairs	Funding	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

B. Have you consulted the NYSHPO web site at <http://www.nysparks.state.ny.us/shpo> to determine the preliminary presence or absence of previously identified cultural resources within or adjacent to the project area? If yes:

☒ Yes ☐ No

Was the project site wholly or partially included within an identified archeologically sensitive area? ☒ Yes ☐ No

Does the project site involve or is it substantially contiguous to a property listed or recommended for listing in the NY State or National Registers of Historic Places? ☐ Yes ☒ No

CONTACT PERSON FOR PROJECT

Name Dean Long **Title** Director of Environmental Planning

Firm/Agency The LA Group

Address 40 Long Alley **City** Saratoga Springs **STATE** NY **Zip** 12866

Phone (518) 587-8100 x250 **Fax** (518) 587-0180 **E-Mail** dlong@thelagroup.com