

PHASE IB ARCHEOLOGICAL INVESTIGATION Bloomingdale Park Athletic Field Improvements

Ramona Avenue and Lenevar Avenue Borough of Staten Island Richmond County, New Yor

HAA # 5238-11

Submitted to: NYC Department of Parks and Recreation The Olmsted Center, Flushing Meadows-Corona Park 117-02 Roosevelt Avenue Flushing, NY 11368

Prepared by: Hartgen Archeological Associates, Inc.

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MANAGEMENT SUMMARY

Phase of Survey: Phase IB

LOCATION INFORMATION

Municipality: *Staten Island* County: *Richmond*

SURVEY AREA

Northern Area (synthetic turf field): Length: 330 feet Width: 220 feet Acres: 1.67 acres

Southern Area (natural turf field): Length: 300 feet Width: 215 feet Acres: 1.48

RESULTS OF ARCHEOLOGICAL SURVEY

Number and Interval of Shovel Tests: *15 tests at 15-meter intervals* Number and Name of Precontact Sites Identified: *None* Number and Name of Historic Sites Identified: *None* Number and Name of Sites Recommended for Phase II or Avoidance: *None*

RECOMMENDATIONS

Hartgen recommends that the Project will have no impact upon historic properties. No further archeological investigation is warranted.

Report Authors: Justin DiVirgilio, Matthew J. Kirk Date of Report: May 14, 2018

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Photo 2. View northeast of shovel tests being excavated along the top of the eroding slope. The soils were undisturbed in this area. However, no artifacts were encountered.

Photo 3. View southwest along the alignment of a proposed drainage system. The pink flags in the ground mark test locations. Tests revealed that the soils in this area were extensively disturbed when the field was constructured.

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PHASE IB ARCHEOLOGICAL INVESTIGATION

1 Introduction

Hartgen Archeological Associates, Inc. (Hartgen) conducted a Phase IB archeological investigation for proposed athletic field improvements at Bloomingdale Park (Project) located in the Borough of Staten Island, Richmond County, New York. The New York City Landmarks Preservation Commission (LPC) will review the project as part of the City Environmental Quality Review (CEQR) process. The investigation was conducted according to the New York Archaeological Council's *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections* (1994) and the Landmarks Preservation Commissions *Guidelines for Archaeological Work in New York City* (2002).

2 Project Information

2.1 Project Location

The Project is located within the eastern half of Bloomingdale Park in the area bounded by Ramona Avenue, Lenevar Avenue, Drumgoole Road West, and Maguire Avenue. This area presently contains one synthetic turf soccer field, and two natural turf baseball fields surrounded by forested area (Map 1).

2.2 Description of the Project

The Project entails the in-kind replacement of the existing synthetic turf soccer field with a new synthetic turf soccer field (Map 2). Along the northwestern edge of this field, a retaining wall will be constructed where there is currently an eroding slope (approximately 275 linear feet).

The Project also entails the construction of a new synthetic turf multi-use field at the location of one of the existing natural turf baseball fields (Map 2). This field will receive a new drainage system consisting of an array of Advanedge field drains connected to 310 linear feet of collector drain pipes and a 110x20-foot storm chamber. The grade of this field is being raised such that the Advanedge field drains will be within the depth of existing disturbance. Appendix 1 contains site plans for the existing fields and the proposed Project.

2.3 Description of the Area of Potential Effects (APE)

The area of potential effects (APE) encompasses the two aforementioned athletic fields. The synthetic turf field is clearly within an area where the landform has been cut. The natural turf baseball field is nearer to the elevation of the adjacent wooded areas, but does contrast with the surrounding topography which is gently sloped.

3 Environmental Background

3.1 Present Land Use and Current Conditions

The Project Area is presently occupied by synthetic and natural turf athletic fields which were constructed circa 2006.

3.2 Soils

Soil surveys provide a general characterization of the types and depth of soils that are found in an area. The Boonton loam is likely representative of the soils that existed throughout the Project Area prior to construction of the existing athletic fields. The Greenbelt loam unit reflects modifications to the natural soil column caused by construction of the athletic fields.

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Symbol	Name	Depth	Textures	Slope	Drainage	Landform	
BtC	Boonton loam	0-20 cm (Ap) 20-38 cm (BA) 38-76 cm (Bt)	Br Si Lo Dk Y Br Fi Sa Lo Br Gv Lo	8-15%	Moderately to well drained	Uplands, till	
GbA	Greenbelt loam	0-13 cm (A) 13-76 (Bw)	Dk Re Br Lo	0-3%	Well drained	Anthropogenic	

Table 1. Soils in Project Area

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

4 Documentary Research

Hartgen conducted research using the New York State Cultural Resource Information System (CRIS), which is maintained by the New York SHPO and the Division for Historic Preservation DHP within OPRHP. CRIS contains a comprehensive inventory of archeological sites, State and National Register (NR) properties, properties determined eligible for the NR (NRE), and previous cultural resource surveys.

4.1 Archeological Sites

CRIS was examined to identify archeological sites that have been reported within one mile of the project since 2001 when John Milner Associates conducted their Phase IA study. An examination of CRIS identified four reported archeological sites within one mile (1.6 km) of the Project (Table 2). Previously reported archeological sites provide an overview of both the types of sites that may be present in the Project Area and relation of sites throughout the surrounding region.

OPRHP Site No.	NYSM Site No.	Site Identifier	Description	Proximity to Project Area
08501.002767		Prehistoric Site A7- MCB-1	NRE; precontact workshop yielding debitage, hammerstones, fire-cracked rock, etc. and historical artifacts relating to a 19 th century occupation of the site.	4,800 feet west
08501.002925		BMP Lemon Creek-16 precontact site	Precontact camp; total artifact assemblage from the Phase IB, II, and III include 103 lithic artifacts and 10 pottery sherds associated with the Middle Woodland time period.	3,300 feet southeast
08501.002970		Staudt Family Farm Site	NRE; Within the NRL Sandy Ground Archaeological Historic District; brick shaft features, a cistern and a well were uncovered along with artifacts dating to the 1920s and 1930s.	3,000 feet northwest
08501.003662		Rossville A. M. E. Zion Church Cemetery	NRL; Within the NRL Sandy Ground Archaeological Historic District; African American cemetery constructed in 1852	3,200 feet northwest

Table 2. Archeological sites within one mile (1.6 km) of the Project reported since the 2001 Milner Phase IA report

4.2 Historic Properties

An examination of CRIS identified no NR properties, no NRE properties, no properties previously determined to be ineligible, and no properties of undetermined status within the Project Area. A review of the Landmark Preservation Commission website identified no individual landmarks or historic districts within the Project Area.

4.3 Previous Surveys

A review of CRIS identified one previous surveys within the immediate vicinity of the Project (Table 3).

Project/Phase	Summary	Citation
Bloomingdale Park, Phase IA	Recommended testing for developments within the park	(John Milner Associates
	based on the proximity of four known precontact	2001)
	archeological sites, and an inlet with a large wetland.	
	There are no historical map-documented structures	
	nearby, so the historic sensitivity was considered low.	

Table 3. Relevant previous surveys within or adjacent to the Project

5 Archeological Survey

While John Milner Associate had recommended testing in 2001, no Phase IB survey was conducted prior to construction of the athletic fields beginning in about 2004. While construction of the existing athletic fields reduced the potential for intact archeological deposits, the possibility existed that a buried topsoil horizon might exist within the natural turf baseball field. For this reason, the NYC Department of Parks and Recreation requested this Phase IB survey be conducted.

5.1 Methodology

5.1.1 Shovel Testing

Shovel tests were excavated at an interval of 15 meters (50 ft). Each shovel test was 40 centimeters (16 in) in diameter. All excavated soil from in situ soil strata was passed through 0.25-inch hardware mesh when feasible and examined for precontact (Native American) and historic artifacts. Fill soils were not screened. The stratigraphy of each test was recorded including the depth, soil description, and artifact content. The location of each shovel test was mapped using a Trimble R1 GPS unit. Representative test excavations were photographed.

5.1.2 Artifacts and Laboratory

As general procedure, all precontact (Native American) cultural material identified during fieldwork are collected. Significant historic artifacts such as glass, ceramics, food remains, hardware, and miscellaneous items are collected. Coal, ash, cinder, brick, and modern materials are noted. Any artifacts collected are placed in paper or plastic bags labeled by provenience and inventoried in a bag list. Bags are numbered in the field and transported to the Hartgen laboratory in the Town of North Greenbush, Rensselaer County, New York, for processing.

Shovel test records and other provenience information were entered into a Microsoft *Access* database (Appendix 1). Artifacts were cleaned and cataloged. Cataloging entailed entering artifact provenience information, counts, weights, and descriptive information into the database (Appendix 2).

5.2 Results

Fourteen shovel tests were excavated in two areas. Tests 1-5 were excavated along the northern edge of the existing synthetic turf field at the top of an eroding slope (Photos 1-2). These tests were placed in locations set back from the eroded edge where the potential to encounter intact soils appeared highest. The stratigraphy was natural and consisted of a shallow (6-12 cm), dark, loamy topsoil about a reddish brown, gravelly loam subsoil. There was no plowzone. No artifacts were encountered.

Tests 6-14 were placed within an existing natural turf baseball field along the alignment of proposed collector lines (Photo 3). These tests encountered highly heterogeneous soil compositions. Tests 6, 7, 10, and 11 contained an upper level of dark brown fill bearing a mix of historic and modern artifacts. Tests 8 and 9 contained a deep sand fill selected to improve infield drainage. Tests 12 and 13 contained a pea gravel fill. The subsoil was similar to that found in Tests 1-5, a dark reddish brown, gravelly loam. No precontact artifacts were recovered. The only historic period artifacts were recovered from fill strata.

6 Recommendations

Hartgen recommends that the Project will have no impact upon historic properties. No further archeological investigation is warranted.

7 Bibliography

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- 2018 World Imagery. Esri, Inc., Redlands, California, http://services.arcgisonline.com/ArcGIS/rest/services/World_Topo_Map/MapServer.
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1994 Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State. NYAC, n.p.

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2015 USGS The National Map Topo Base Map - Large Scale. USGSTopo (MapServer), The National Map Seamless Server, USGS, Sioux Falls, South Dakota, http://services.nationalmap.gov/arcgis/rest/services/USGSTopoLarge/MapServer.

Maps



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			Feet	
12	0	12	24	
			Meters	

Photographs



Photo 1. View northeast along a cut slope which is eroding on to the synthetic turf field. This area has no archeological potential due to disturbance caused by the cut.



Photo 2. View northeast of shovel tests being excavated along the top of the eroding slope. The soils were undisturbed in this area. However, no artifacts were encountered.



Photo 3. View southwest along the alignment of a proposed drainage system. The pink flags in the ground mark test locations. Tests revealed that the soils in this area were extensively disturbed when the field was constructured.

Appendix 1: Shovel Test Records

_	<u>Ending</u> Depth (cm)	Level	<u>Soil Type</u>	Soil Inclusions	Mun	sell Color	<u>Termination</u> <u>Reason</u>
1	6	1	other (organic)		10yr 2/1	black	
	40	2	clay		5yr 4/4	reddish brown	subsoil
2	10	1	loam		10yr 3/2	very dark grayish brown	
	55	2	loam		5yr 4/6	yellowish red	subsoil
3	10	1	loam		10yr 3/2	very dark grayish brown	
	60	2	loam	gravel	5yr 4/6	yellowish red	subsoil
4	8	1	other (organic)		10yr 2/1	black	
	39	2	sand clay		5yr 4/4	reddish brown	subsoil
5	12	1	other (organic)		10yr 2/1	black	
	43	2	sand clay		5yr 4/4	reddish brown	subsoil
6	21	1	sand loam		10yr 3/4	dark yellowish brown	
	51	2	silt loam	gravel	2.5yr 4/8	dark red	subsoil
7	22	1	sand loam		7.5yr 2.5/2	very dark brown	
	62	2	silt clay		7.5yr 4/6	strong brown	
	75	3	sand clay		5yr 4/4	reddish brown	subsoil
8	15	1	sand		10yr 5/8	yellowish brown	
	20	2	loam clay	gravel	10yr 3/2	very dark grayish brown	
	54	3	loam clay		5yr 4/6	yellowish red	other (compaction)
9	29	1	sand		10yr 5/8	yellowish brown	
	52	2	loam clay	gravel	5yr 4/6	yellowish red	impasse (rocks)
					10YR 2/1	black	(IUCKS)
10	23	1	sand clay		7.5yr 3/3	dark brown	
	40	2	clay		7.5yr 4/6	strong brown	impasse (compact soil)
11	15	1	sand clay	gravel	5yr 3/3	dark reddish brown	
	55	2	clay		2.5yr 4/6	dark red	impasse (compact soil)

523821: Phase IB Archeological Investigation, Bloomingdale Park Athletic Fields Shovel Test Records

523821: Phase IB Archeological Investigation, Bloomingdale Park Athletic Fields Shovel Test Records

	<u>Ending</u> Depth (cm)	Level	Soil Type	Soil Inclusions	Munsell Color	<u>Termination</u> <u>Reason</u>
12	18	1	sand		10yr 5/6 yellowish brown	
	33	2	loam clay	gravel	7.5yr 3/4 dark brown	
	45	3	loam	gravel	5yr 3/4 dark reddish brown	subsoil
13	10	1	sand		10yr 5/6 yellowish brown	
	27	2	loam clay	gravel	7.5yr 3/4 dark brown	
	55	3	loam clay	gravel	5yr 3/4 dark reddish brown	subsoil
14	12	1	loam		10yr 3/2 very dark grayish brown	
	60	2	loam	gravel	5yr 4/6 yellowish red	subsoil

Appendix 2: Artifact Inventory

Phase IB Archeological Investigation, Bloomingdale Park Athletic Fields

Artifact Inventory, HAA# 5238-21

Provenience	<u>Level</u>	Feature	Bag	<u>ltem</u>	<u>Count</u>	Artifact Description	<u>Material</u>	<u>Weight (g)</u>
STP 6	1		1	1	1	vessel	glass	1.8
STP 6	1		1	2	2	window	glass	1.2
STP 6	1		1	3	2	mineral sample	quartz	2.6
STP 6	1		1	4	2	mineral sample	unidentified stone	0.6
STP 6	1		1	5	1	plastic	plastic	0.0
STP 7	1		2	1	5	bottle	glass	8.8
STP 10	1		3	1	1	buff bodied	coarse earthenware	1.2
STP 10	1		3	2	1	unidentified	glass	1.2
STP 10	1		3	3	1	slag	iron alloy	1.4
STP 10	2		4	1	1	black-glazed redware	refined earthenware	0.6

Appendix 3: Site Plans



OF THE SYNTHETIC TURF SOCCER FIELD AND JLTI-USE FIELD IN BLOOMINGDALE PARK , BOROUGH OF STATEN ISLAND					
DIAGRAM					
	CHECKED BY				
	DEFAULT				
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CITY OF NEW YORK PARKS & RECREATION

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DRAWING NO.	CONTRACT No.					
V101.00	R106-116M					
	SHEET No. 3 OF 30 SHEETS					

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 \geq O – DRAIN - FLAGPOLE

- UNKNOWN VALVE - SEWER CLEAN OUT VALVE ELECTRIC BOX TELECOMMUNICATION BOX TRAFFIC SIGNAL BOX - PUBLIC TELEPHONE MAILBOX - CATCH BASIN - FIRE HYDRANT - DRINKING FOUNTAIN - PARKING METER - UTILITY POLE - STREET LIGHT - SECURITY/PARK LIGHT - STREET LIGHT W/ SIGNAL - FLOOD LIGHT DIRECTIONAL - FLOOD LIGHT - PEDESTRIAN SIGNAL - PEDESTRIAN SIGNAL A BORTS LIGHTING - SIGN (DUAL & SINGLE) – TREE (W/ DBH) VEGETATED CLUMP – STUMP - TREE PIT - GAME TABLE - BENCH (VARIES) PLAQUE - SPRAY SHOWER - TRAFFIC INDICATOR - MONITORING WELL – SPRINKLER HEAD

- PICNIC TABLE

– JERSEY BARRIER

- PLAY STRUCTURE (VARIES)

– TRASH CAN

- MONUMENT

- ELECTRIC MANHOLE - SEWER MANHOLE - STEAM MANHOLE WATER MANHOLE - FIRE MANHOLE - TELEPHONE MANHOLE - TELEVISION MANHOLE - RAILROAD MANHOLE - GAS VALVE WATER VALVE QUICK COUPLER VALVE

LEGEND

- UNKNOWN MANHOLE

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Surveyors • Constructio	n Managers					
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	SHEET No. 26 OF 30 SHEETS					

ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCIPTION
D	SYNTHETIC TURF	SEE SPECIFICATION AND DETAILS 1,2 SHEET L501
С	BORROWED FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO THE BOTTOM OF THE SYNTHETIC TURF INFILL, CONCRETE STONE BASE COURSE FOR PADS TOPSOIL IN GRASS AREAS.	SEE SYNTHETIC TURF SPECIFICAION FO BASE STONE
В	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	BROKEN STONE # 3
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	BROKEN STONE # 3

- CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
- COMPACTOR, COMPACTED TO 6" (MAX) LIFT THICKNESSPER THE SPECIFICATIONS.
- REQUIREMENTS.
- APPURTENANCES.

STORM CHAMBER FIELD 2 - PLAN

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Surveyors • Construction Managers Street, 4th Floor Newark, N.J. 07102 3)623-2999, Fax: (973)623-2988			
EW YORK RECREATION			
VS CORONA PARK RK 11368			
F SOCCER FIELD AND ILTI-USE FIELD IN BLOOMINGDALE PARK BOROUGH OF STATEN ISLAND			
CHECKED BY G. BROBERG, P.E.			
DRAWING NO. CONTRACT NO. R106-116M			

