HUNTER RESEARCH

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June 7, 2019

Lane Addonizio, AICP
Vice President for Planning
Central Park Conservancy
14 East 60th Street
New York, NY 10022

Re: Archaeological Investigation and Assessment
Lasker Rink Reconstruction Project, Central Park, New York
Report of Findings

Dear Ms. Addonizio:

Please accept this letter as a report on the recently completed archaeological investigation conducted adjacent to the north side of the East Drive in Central Park in connection with the proposed reconstruction of the Lasker Rink (Figures 1 and 2). The proposed reconstruction project will entail the removal and rebuilding of the Lasker ice skating rink/pool and related facilities a short distance to the south of their current location to allow for the daylighting of the downstream segment of Montayne's Rivulet, a natural stream, now much channelized, that feeds into the Harlem Meer (Figure 3). Central Park Conservancy staff expressed concern that moving the facilities in this manner might impact historic and archaeological resources previously identified in the immediate vicinity, most notably elements of the War of 1812 fortifications. Archaeological investigation in this instance involved preliminary analysis of cartographic, historical and previously gathered archaeological data followed by the excavation of a single five-foot-square excavation unit in a location within the likely project impact area that was considered potentially archaeologically sensitive.

1. Background Research and Cartographic Analysis – As a first step in this investigation, the results of earlier historical and archaeological studies carried out by our firm were reviewed. The most pertinent of these studies are the original historical and archaeological assessment of the portion of the park extending north of the 97th Street Transverse, conducted in 1990 (Hunter Research, Inc. 1990), an archaeological assessment performed for the Forts Landscape Reconstruction Project, performed in 2012-13 (Hunter Research, Inc. 2013) and an archival research and resource mapping exercise completed for the portion of the park north of 103rd Street, completed in 2014 (Hunter Research, Inc. 2014).

A section of the archaeological sensitivity map from the third and most recent of these studies is appended here as Figure 4. This shows that the principal archaeological concern is the fortification line [identified as Resources 591-8 and 592-9] that linked Nutter's Battery [592-6] with Fort Fish [590-13], two key components in the War of 1812 defensive system that protected McGowan's Pass. Another, lesser line of defense [692-1] also lies within the area of likely project impact in the loop of the East Drive just west of the Lasker Rink. This extended northwest from Fort Fish downslope to Montayne's Rivulet. The sites of two other late 19th-century structures, each referred to as the Wilkins shanty or an outbuilding [694-1, 694-2], are also located in close proximity to the projected new rink facilities.

One in the series of watercolors of the War of 1812 defenses at McGowan's Pass, painted by John Joseph Holland in August or September of 1814, shows a portion of the fortifications very close to where the Lasker Rink reconstruction is slated to take place (Figure 5). This is a view looking northeast from Fort Fish across Nutter's Battery and Fort Clinton toward Harlem. The fortifications are visible as a group of redoubts constructed in timber and earth. At the far left side of this painting an earthen rampart can be seen extending southwest toward the area of Lasker Rink.

2. Archaeological Fieldwork – Following a field visit in early March 2019 a decision was made to place a five-foot-square excavation unit on the projected line of fortifications linking Nutter's Battery and Fort Fish immediately adjacent to the southeast corner of the proposed footprint of the reconstructed rink facility. This unit was positioned to avoid a nearby lamp base and utility lines and to sample a location where an appreciable depth of soil could be anticipated. The projected line of the fortifications is chiefly evident in the landscape today as an irregular, roughly linear series of bedrock outcrops upon which it is presumed earthworks and timber ramparts were constructed.

Archaeological fieldwork was conducted on March 21 and March 22, 2019 and involved the manual excavation of a single five-foot-square excavation unit (Excavation Unit 1) (Figure 6; Photographs 1-6). Excavation commenced with the removal of a sandy loam upper deposit between 0.5 to 1 foot thick [Context 1]. This soil layer was considered to be a modern topsoil and overlay two distinct soil types: a mottled sand and pebble deposit [2] which was present across most of the unit; and a roughly circular, darker soil stain [3, 4] in the unit's southeastern corner [3] and [4] (Photograph 3). Upon further excavation, Context 3 was recognized as a probable cut for the planting (or removal) of a tree, while Context 4 represented the gray white sand fill of this cut. The portion of this tree planting hole that extended into Excavation Unit 1 measured roughly two feet across and was between 0.2 to 0.75 feet thick (Photograph 4).

Context 2, the layer of lightly mottled coarse sandy loam and pebbles, extended to a depth of 1.5 feet below the ground surface. This layer was composed of a mixture of redeposited B horizon subsoil and glacial till, and likely resulted from grading related to the construction of the East Drive. Context 2 was fully excavated and found to overlie a coarse sand and gravel deposit mottled with white sand and regolith [5]. This material appears to represent the uppermost layer of an undisturbed B horizon subsoil, which in this section of the park is composed of glacial till. It extended to a depth of two feet below the ground surface and was fully removed from the southern half of Excavation Unit 1. Beneath Context 5, a cleaner, less mottled deposit of glacial till [6] was exposed, surrounding a large slab of *in-situ* bedrock (Photographs 5 and 6). This bedrock slab dipped down toward the northeast conforming to the prevailing grain of the bedrock in this area.

Few artifacts were recovered, with items of material culture only being found in Contexts 1, 2 and 4. All three of these soil contexts contained a mix of modern and historic artifacts indicating that none of these contexts were true sealed historic deposits. Modern beer bottle glass, ceramic plumbing fixtures, pull tabs, and a battery were all discarded from Context 1. Context 1 also contained historic items such as terracotta flower pot sherds, as well as sherds of Rockingham ware (commonly dated to 1830-1900), yellowware (1830-1940), whiteware (1820 to the present day), ironstone china (1840 to the present day) and pearlware (1775-1830), pieces of window and bottle glass, and wire nail fragments. One button (classifiable as Stanley South Type 7, commonly dated from 1726-1776) was recovered from Context 1. Context 2 contained modern beer bottle glass as well as historic bottle and window glass fragments and sherds of pearlware, yellowware, and redware ceramics. Context 4 yielded both bottle and window glass fragments as well as brick and coal.

3. Analysis of Results – Archaeological testing along the projected line of the War of 1812 fortifications between Nutter's Battery and Fort Fish in the vicinity of the planned reconstruction of the Lasker Rink has found no below-ground structural or other material evidence of the earthworks and ramparts that are known to have existed in this area. The most meaningful expression of these fortifications lies in the irregular and discontinuous line of bedrock outcrops that runs west from Nutter's Battery toward the East Drive along the crest of the ridge overlooking the rink. A concentration of large boulders near the top of the slope roughly 75 feet northeast of the location of Excavation Unit 1 may be a part of the forward-projecting position in the fortifications (at the northern end of 591-8 [see Figure 4]).

Based on surface examination, it is considered extremely unlikely that any subsurface or above-ground traces will survive of the northwest-southeast fortification line to the southwest of the rink [692-1]. The construction of the East Drive almost certainly removed all evidence of the central section of this defensive line, although remnants could perhaps exist on the higher ground at its northwestern and southeastern ends, beyond the limits of any potential impact from the rink reconstruction (Figure 4).

The sites of the two Wilkins shanty/outbuildings [694-1, 694-2] were examined through shovel testing in 2013. At both sites, testing found fill directly overlying bedrock and no sign whatever of structural remains or intact cultural deposits. These sites have a very low probability of yielding archaeological remains of any interest (Hunter Research, Inc. 2013:33).

Summary and Recommendations

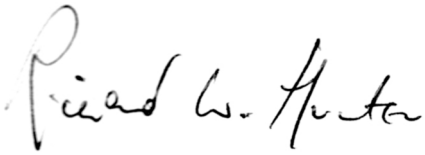
Archaeological investigations performed in connection with the proposed reconstruction of the Lasker Rink have been largely unrevealing. No intact pre-Park or Park-era archaeological deposits or features of interest were encountered during subsurface testing. No further archaeological study is considered necessary for the proposed reconstruction project.

In the event unexpected discoveries of an archaeological nature are made during the course of construction, consultation with a qualified historical archaeologist is recommended. Conservancy staff and contractors might also be instructed to keep an eye out for tell-tale traces of human alteration of the bedrock, in particular for drill holes which may have contained iron anchor rods used in earthwork and rampart construction. The locations of such features should be surveyed, thus allowing a more accurate sense of the fortifications' position to be obtained.

Finally, care should be taken during construction not to disturb the concentration of large boulders located some 75 feet northeast of the footprint of the proposed reconstructed rink facility, since these boulders may represent remains of the War of 1812 fortifications. Ideally, fencing should be placed to protect this location from contractor operations.

If you have any questions about this preliminary assessment of our findings, please feel to contact either me or Jim Lee.

Yours sincerely,



Richard W. Hunter, Ph.D.
Principal/President

copies: Marie Warsh, Central Park Conservancy
Steve Bopp, Central Park Conservancy
James Lee, Hunter Research

References

Hunter Research, Inc.

1990 A Preliminary Historical and Archaeological Assessment of Central Park to the North of the 97th Street Transverse, Borough of Manhattan, City of New York. Report on file, Central Park Conservancy, New York, New York.

2013 Preliminary Archaeological Assessment, Central Park Forts Landscape Reconstruction Project, Borough of Manhattan, New York City. Report on file, Central Park Conservancy, New York, New York.

2014 Archival Research and Historic Resource Mapping, North End of Central Park Above 103rd Street, Borough of Manhattan, New York City. Summary Narrative. Report on File, Central Park Conservancy, New York, New York.

Attachments

Figure 1. Location of the Lasker Rink Reconstruction Project Site
Figure 2. Aerial Photograph of Lasker Rink Reconstruction Project Site
Figure 3. Location of Archaeological Excavation Unit 1
Figure 4. Detail of "Central Park – North Park Study Area Archaeological Sensitivity Map"
Figure 5. Holland, John Joseph, "View from Fort Fish at McGowan's Pass ….", 1814.
Figure 6. Plan View and East and South Profiles of Archaeological Excavation Unit 1.

Photograph 1. Excavation Unit 1 prior to excavation
Photograph 2. Excavation Unit 1 at an early stage of excavation
Photograph 3. Soil stain from a tree planting in Excavation Unit 1
Photograph 4. Excavation Unit 1 following removal of soils from tree planting hole
Photograph 5. South profile of Excavation Unit 1
Photograph 6. Outcropping bedrock in Excavation Unit 1

Artifact Inventory

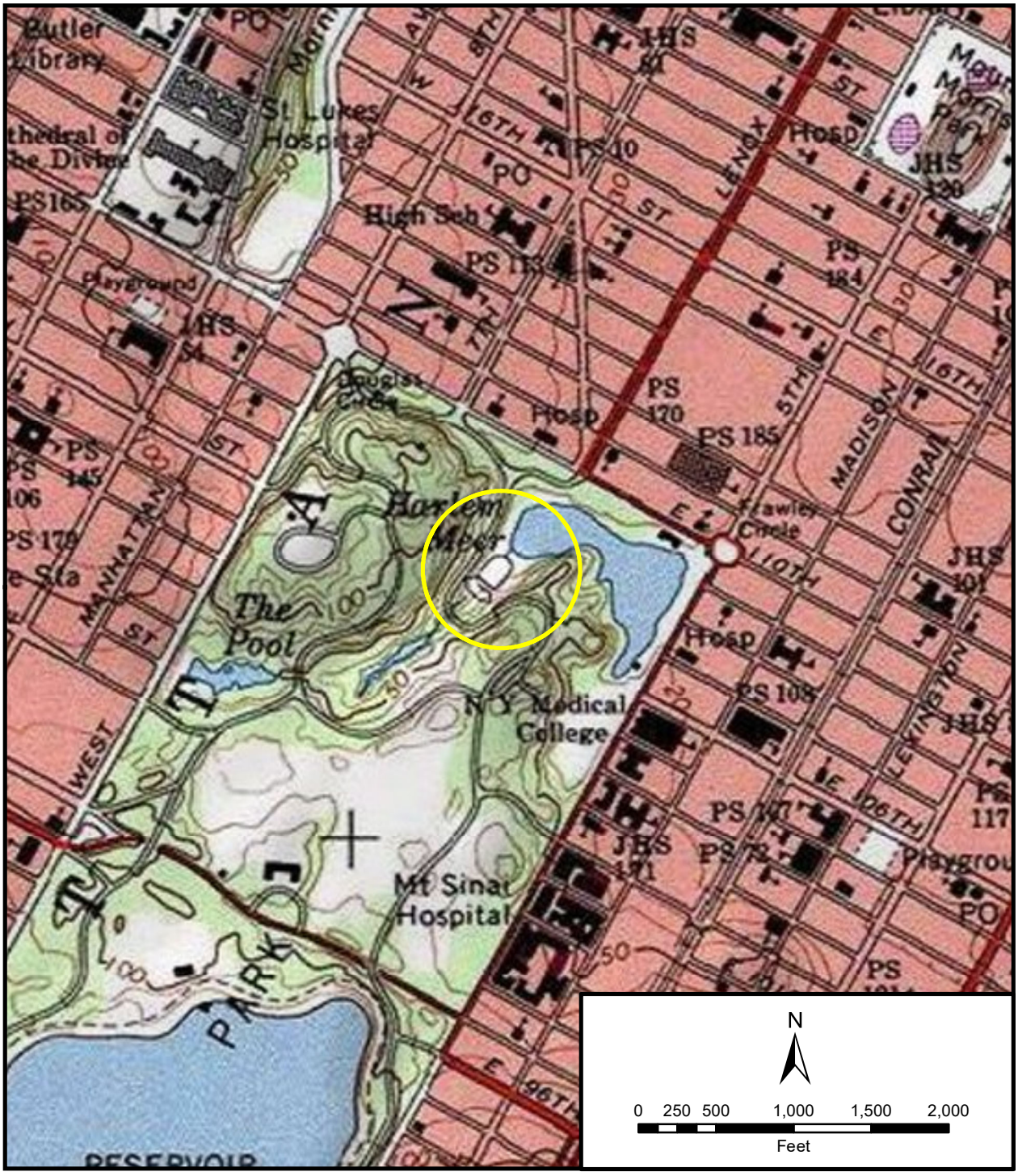


Figure 1. Location of the Lasker Rink Reconstruction Project Site (circled in yellow). Scale: 1 inch = 2,000 feet. Source: USGS 7.5' Topographic Series, Central Park, NY Quadrangle (1955, photorevised 1981).

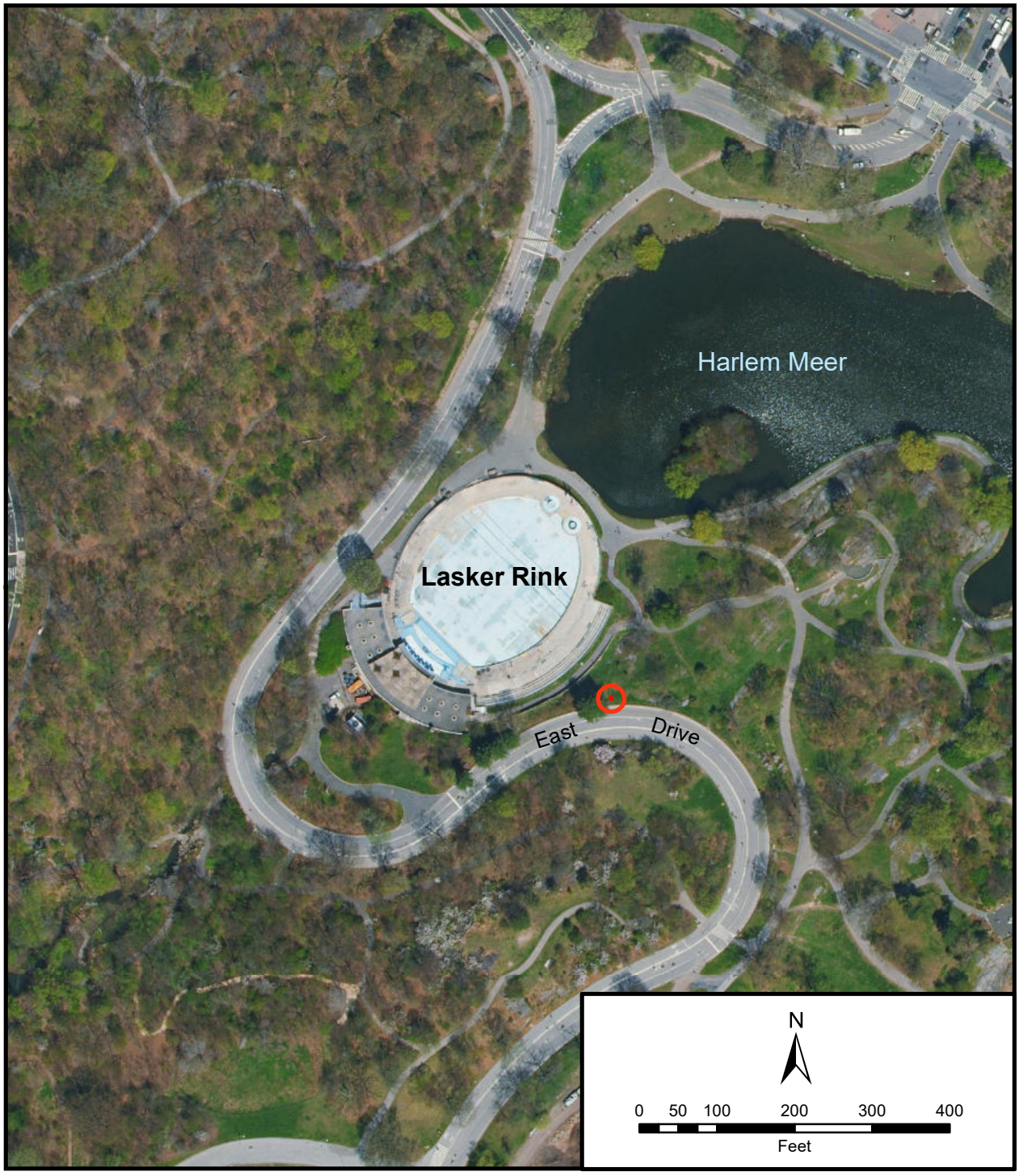


Figure 2. Aerial Photograph of the Lasker Rink Reconstruction Project Site. Approximate location of archaeological test is circled in red. Source: ESRI 2017.

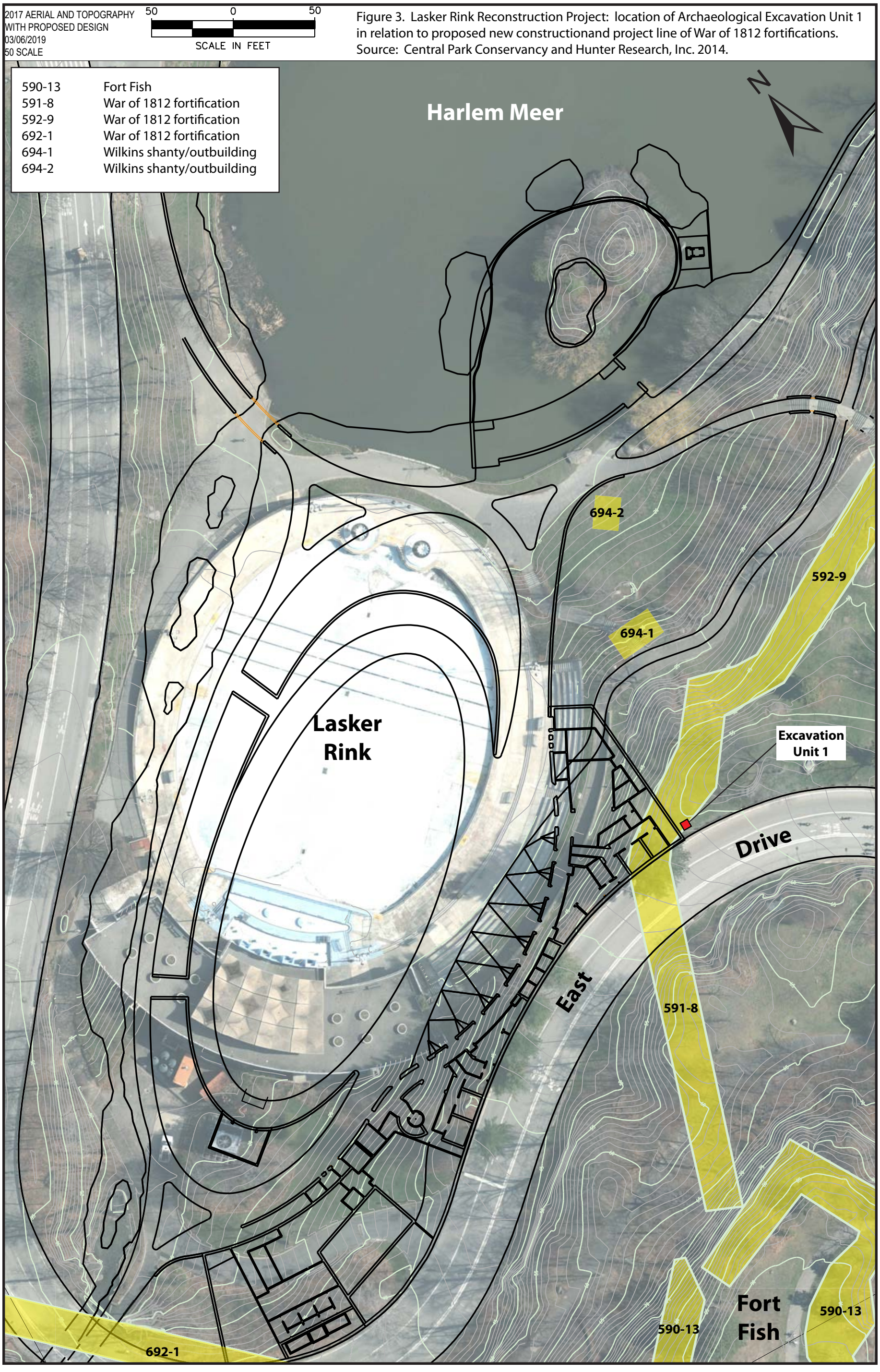


Figure 3. Lasker Rink Reconstruction Project: location of Archaeological Excavation Unit 1 in relation to proposed new constructionand project line of War of 1812 fortifications. Source: Central Park Conservancy and Hunter Research, Inc. 2014.

Figure 3. Lasker Rink Reconstruction Project: location of Excavation Unit 1 in relation to proposed new construction and project line of War of 1812 fortifications. Source: Central Park Conservancy and Hunter Research, Inc. 2014.

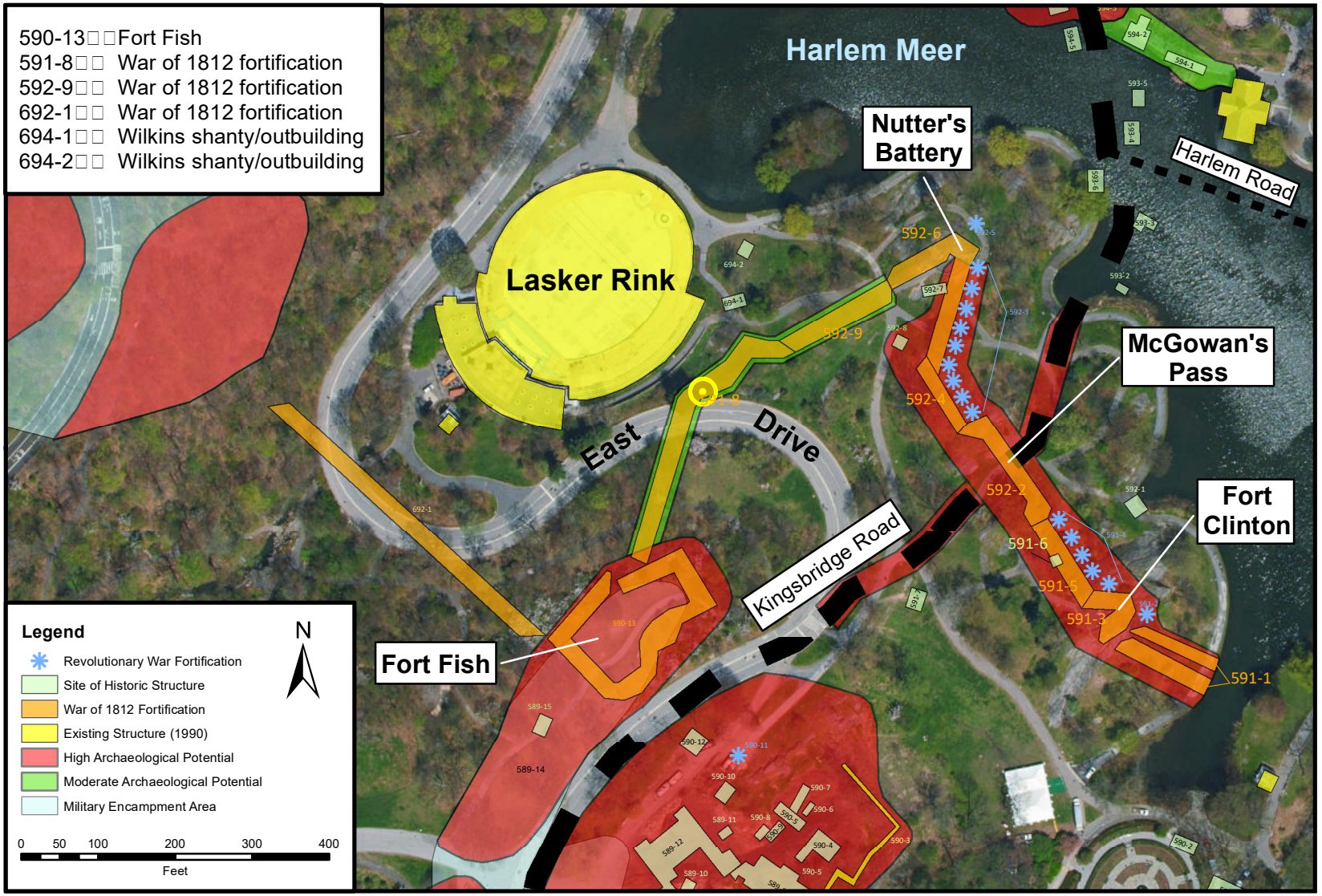


Figure 4. Detail of "Central Park – North Park Study Area Archaeological Sensitivity Map" showing projected line of War of 1812 fortifications and other potential archaeological resources in the vicinity of the proposed Lasker Rink Reconstruction Project. Source: Hunter Research, Inc. 2014.

Figure 5. Holland, John Joseph. "View from Fort Fish at McGowan's Pass looking towards Harlem." 1814. Source: New-York Historical Society, Luce Center, Object No. 1889.13.

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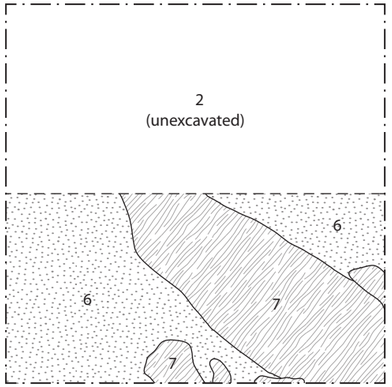
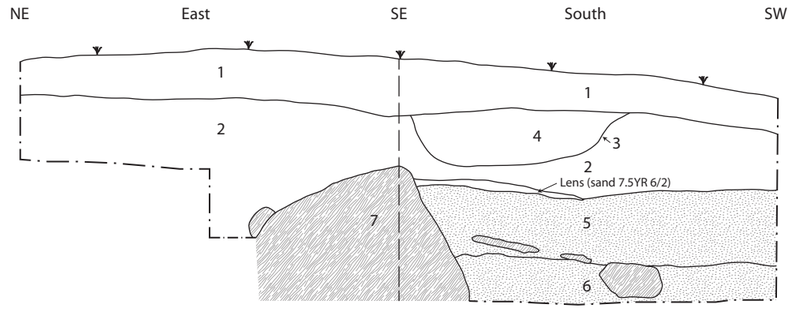
Excavation Unit 1
Closing Plan



Excavation Unit 1
South and East Profile



Schist

Subsoil

Limit of Excavation

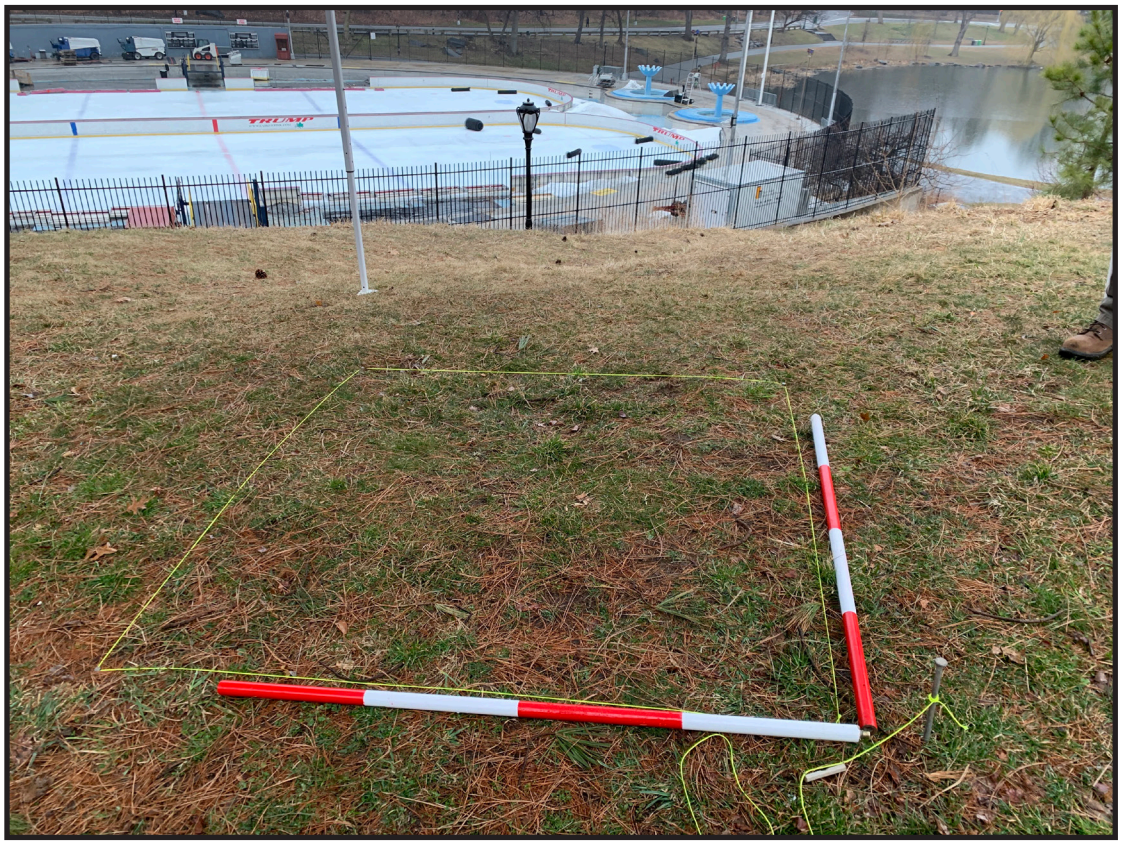
0 2

Feet

Context List

Context	*Description [Interpretation] (Munsell)*
1	Sandy loam [modern topsoil] (10YR 3/4)
2	Mottled sandy loam w/ pebbles [late 19th/20th century fill] (10YR 5/6, 10YR 3/4)
3	Cut, filled by context 4 [20th-century tree planting]
4	Sandy loam [20th-century tree planting] (2.5Y 6/1)
5	Mottled coarse sand glacial till w/ decayed bedrock and gravel [subsoil] (10YR 5/6, 7.5YR 6/2)
6	Mottled clayey sand [subsoil] (10YR 5/6, 10YR 5/3)
7	Schist [bedrock]

Figure 6. Plan View and East and South Profiles of Excavation Unit 1.



Photograph 1. View looking north showing the location of Excavation Unit 1 prior to excavation. The Lasker Ice Skating Rink is at the top of the view and the Harlem Meer is in the upper right corner. Scales in feet (Photographer: James Lee, March 2019 [HRI Neg.#19012/D2:011]).

Photograph 2. View looking southwest showing Excavation Unit 1 at an early stage of excavation. The East Drive is beyond and Fort Fish is just out of view at the upper left (Photographer: James Lee, March 2019 [HRI Neg.#19012/D2:005]).

Photograph 3. View looking east showing Excavation Unit 1 at an early stage of excavation. The dark stain in the upper right corner [Contexts 3 and 4] is interpreted as the remains of a root ball from a former tree. The surrounding soil [Context 2] is a mix of modern topsoil and redeposited subsoil. Scales in feet and tenths of feet (Photographer: Michael Brown, March 2019 [HRI Neg.#19012/D1:003]).

Photograph 4. View looking east showing Excavation Unit 1 following removal of the root ball from a former tree with its characteristic bowl-shaped outline. Scales in feet and tenths of feet. Scales in feet and tenths of feet (Photographer: Michael Brown, March 2019 [HRI Neg.#19012/D1:011]).

Photograph 5. View looking south showing the south profile of Excavation Unit 1. The outline and soils of the root ball [Contexts 3 and 4] are visible in the far left corner of the excavation unit; visible beneath the root ball and the underlying B horizon soils is a large outcropping of bedrock. Scales in feet and tenths of feet (Photographer: Michael Brown, March 2019 [HRI Neg.#19012/D1:015]).

Photograph 6. View looking east showing the outcropping bedrock in the southeast corner of Excavation Unit 1. Scales in feet and tenths of feet (Photographer: Michael Brown, March 2019 [HRI Neg.#19012/D1:034]).

ARTIFACT INVENTORY

Excavation Unit 1, Context 1		**Catalog #**	**1**
Modern			
1	Composite, Metal and Plastic, battery fragment, labeled "PROCELL INDUSTRIAL BATTERY"	Row #	26
1	Composite, Plastic, bead whole, molded design, white, machine made, knot-shaped, one hole thru center of object	Row #	13
1	Fired Clay - Ceramic, Porcelain, Industrial, furnishing fragment, probable bathroom or kitchen hardware (i.e. sink or toilet part)	Row #	23
1	Glass, Curved, bottle body fragment, green	Row #	25
2	Glass, Curved, bottle body fragment, brown	Row #	24
1	Metal, White Metal, bottle cap whole, labeled "CANADA DRY"	Row #	27
1	Metal, White Metal, pull tab whole	Row #	28
Historic			
2	Fauna, Bone - remains, large mammal fragment	Row #	10
3	Fired Clay - Ceramic, Earthenware, Redware, flower pot rim fragment	Row #	11
9	Fired Clay - Ceramic, Earthenware, Redware, flower pot body fragment	Row #	12
1	Fired Clay - Ceramic, Earthenware, Redware, plate body fragment, lead glaze interior	Row #	19
2	Fired Clay - Ceramic, Earthenware, Staffordshire mottled glaze with buff body, dish rim and body fragment, 1680 - 1780	Row #	14
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, hollow ware body fragment, undecorated, 1780 - 1890	Row #	17
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, hollow ware body fragment, transfer printed, medium blue, 1784 - 1859	Row #	22
2	Fired Clay - Ceramic, Refined Earthenware, Pearlware, small hollow ware base and body fragment, undecorated, 1780 - 1890	Row #	18
6	Fired Clay - Ceramic, Refined Earthenware, Transitional Creamware, small hollow ware base and body fragment, 1820 - 1870	Row #	15
3	Fired Clay - Ceramic, Refined Earthenware, Whiteware, small hollow ware body fragment, undecorated, 1815 - 1940	Row #	16
1	Fired Clay - Ceramic, Stoneware, White salt-glazed, hollow ware rim fragment, Scratch Blue, 1735 - 1778	Row #	21
14	Glass, Curved, bottle body fragment, clear/uncolored	Row #	1
1	Glass, Curved, bottle base fragment, clear/uncolored, embossed with numbers "12"	Row #	2
10	Glass, Curved, bottle body fragment, light aqua	Row #	4
1	Glass, Curved, bottle base fragment, light aqua, embossed with "LIQUOR" and "230"	Row #	5
2	Glass, Curved, tumbler base fragment, molded design, clear/uncolored	Row #	3
5	Glass, Flat, window fragment, light aqua	Row #	6
2	Metal, Ferrous metal, nail whole, wire, corroded	Row #	7
1	Metal, Ferrous metal, nail whole, wire, corroded	Row #	8
1	Metal, Ferrous metal, nail fragment, corroded	Row #	9
1	Metal, White Metal, South Type 7, button whole, corroded, 1726 - 1776	Row #	20

Total Artifacts in Context 1: 77

Excavation Unit 1, Context 2		**Catalog #**	**2**
Modern			
4	Glass, Flat, window fragment, dark green	Row #	3
Historic			
1	Composite, Coal, waste material fragment	Row #	12
8	Fired Clay - Ceramic, Earthenware, brick, structural fragment	Row #	11
1	Fired Clay - Ceramic, Earthenware, Redware, flower pot base fragment, undecorated	Row #	10
1	Fired Clay - Ceramic, Earthenware, Redware, hollow ware rim fragment, Rockingham-type glaze, 1830 - 1940	Row #	7
1	Fired Clay - Ceramic, Earthenware, Redware, small hollow ware body fragment, manganese glaze interior, exterior surface missing	Row #	9
1	Fired Clay - Ceramic, Earthenware, Redware, small hollow ware body fragment, lead glaze interior	Row #	8

APPENDIX (Cont.)
ARTIFACT INVENTORY

2	Fired Clay - Ceramic, Refined Earthenware, Pearlware, small hollow ware body fragment, undecorated, 1780 - 1890	Row #	5
1	Fired Clay - Ceramic, Refined Earthenware, Yellowware, small hollow ware body fragment, undecorated, 1828 - 1930	Row #	6
1	Glass, Curved, bottle body fragment, embossed, clear/uncolored	Row #	1
1	Glass, Curved, bottle body fragment, light aqua	Row #	2
1	Metal, Ferrous metal, nail fragment, corroded	Row #	4

Total Artifacts in Context 2: 23

Excavation Unit 1, Context 4 **Catalog # 3**

Historic

1	Composite, Coal, waste material fragment	Row #	6
1	Fired Clay - Ceramic, Earthenware, brick, structural fragment, cut	Row #	5
1	Glass, Curved, bottle base fragment, clear/uncolored	Row #	3
1	Glass, Curved, bottle body fragment, clear/uncolored	Row #	2
3	Glass, Flat, window fragment, light aqua	Row #	1
1	Metal, Ferrous metal, nail fragment, corroded	Row #	4

Total Artifacts in Context 4: 8

Total Artifacts in Excavation Unit 1 : 108

Total Number of Artifacts: 108

*** Item Discarded in Laboratory**