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Van Cortlandt Park Parade Ground
Phase IB Archeological Survey
Borough of the Bronx, New York

Prepared for
Abel, Bainnson and Butz
New York, New York

and
The New York City
Department of Parks and Recreation

By

JMA architects archeologists planners
John Milner Associates, Inc.

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Croton-on-Hudson, New York

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JOHN MILNER ASSOCIATES, INC.
1 CROTON POINT AVENUE
CROTON-ON-HUDSON, NEW YORK 10520

FEBRUARY 2009

MANAGEMENT SUMMARY

SHPO Project Review Number (if available):	None
Involved State and Federal Agencies:	New York City Department of Parks and Recreation
Phase of Survey:	Phase 1B Archeological Survey
Location Information	
Location:	Van Cortlandt Park Parade Ground
Minor Civil Division	00501
County:	Borough of the Bronx
Survey Area:	
Length:	290 linear meters (28 trenches: 27 10 m-long, 1 20-m long)
Width:	
Number of Acres surveyed:	10 acres
USGS 7.5 Minute Quadrangle Map:	1966 *Yonkers, NY-NJ*
Archeological Survey Overview:	
Number & interval of shovel tests:	8 shovel tests, judgmental locations
Number and size of units:	N/A
Width of plowed strips:	N/A
Surface Survey Transect Interval:	N/A
Results of Archeological Survey:	
Pre-contact sites identified:	4 possible pit features identified
Historic sites identified:	-
Sites recommended for Phase II/avoidance:	Areas adjacent to Trenches 5 and 16 (Features 1, 2, 3, 4)
Report Authors:	Geraldine E. Baldwin, RPA
Date of Report:	February 2009

MANAGEMENT ABSTRACT

JMA (John Milner Associates, Inc.) conducted a Phase IB archeological survey of the Van Cortlandt Park Parade Ground on behalf of Abel, Bainnson and Butz, LLP, for the City of New York Department of Parks and Recreation, Capitol Projects Division, Project ID # X092-107M. The Van Cortlandt Park Parade Ground (the Project Area) is situated within Van Cortlandt Park, located east of Broadway, south of the Mosholu Parkway and north of West 246th Street, in the Borough of the Bronx, New York. The survey work was designed to address the recommendations presented in JMA's previous Phase 1A report, in accordance with the comments in the Landmarks Preservation Commission's environmental review dated February 17, 2008. Field work was conducted for this project between September 2 and 19, 2008.

The reconstruction of the Van Cortlandt Park Parade Ground includes the installation of new drainage and irrigation systems, and includes some grading and filling for the reconstruction of existing soccer, baseball and other recreational facilities (the Project). The Phase IB survey was designed to study the portions of the Project Area that: a) lie within a previously documented Native American Late Woodland/Contact Period village site Keskiskick (Mosholu); and b) have the potential to contain features associated with the seven map documented structures (MDS) that were located within the Parade Ground during the nineteenth-century. In consultation with the City of New York Parks Department and the Landmarks Preservation Commission, the Phase 1B survey work was conducted using a phased approach, which included: 1) the mechanical excavation of trenches; 2) mechanical stripping to explore potentially intact land surfaces; and, 3) the excavation of shovel tests on the stripped surfaces. The trenching was used to determine the depth of fill material across the Parade Ground and to identify potentially intact land surfaces and features in the trench profiles.

The Phase 1B survey fieldwork included 28 trenches, for a total of 290 linear meters of mechanically excavated soil, and eight 30 cm diameter shovel tests. In total, JMA recovered 449 artifacts from the Phase 1B test excavations; these include eleven (11) prehistoric Native American artifacts recovered from seven (7) of the test trenches excavated within the Project Area. JMA identified four features as a result of the survey work: two reddened pit-like features (Features 1 and 2) were recorded in Trench 5. Both of the features lie immediately below the topsoil layer, between 20 and 25 cm below the present ground surface. It is unknown whether these features represent modern filling and smoothing activities, recent camping activities on the Parade Ground, or deposits associated with the Late Woodland village site Keskiskick. Features 3 and 4 were identified in Trench 16, both between 20 and 28 cm below the present ground surface. In profile, both of these features have a lens of charcoal at the base and reddened soils below. Additional archeological investigation is recommended for the areas surrounding Trenches 5 and 16 to document the nature, extent, temporal period, and function of the identified features and the determine the extent of the buried/truncated land surface.

JMA excavated five trenches (Trenches 7, 14, 15, 25, and 27) in the areas where the former map-documented structures were located. No structural remains or features associated with these structures were identified. JMA excavated one trench (Trench 8) in the vicinity of the former road. The stratigraphy of the trench documented evidence of a compact, coal ash road bed. This surface may be associated with a former the road that extended from the Van Cortlandt manor house to Vault Hill. No additional work is recommended for this area.

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1.0 INTRODUCTION

1.1 PURPOSE AND GOALS OF THE INVESTIGATION

JMA (John Milner Associates, Inc.) has conducted a Phase IB archeological survey of the Van Cortlandt Park Parade Ground (Figure 1). The Phase IB survey was conducted on behalf of Abel, Bainnson and Butz, LLP, for the City of New York Department of Parks and Recreation, Capitol Projects Division, Project ID # X092-107M. This work was performed in association with the ongoing Phase 1 and Phase 2 Redevelopment of Van Cortlandt Park, which includes the installation of a new drainage and irrigation system, and some grading and filling work. This work is being conducted in advance of the construction of new soccer, baseball and track facilities (Figure 2). This report is intended to assist the City of New York Department of Parks and Recreation in complying with its obligations under the City of New York Environmental Quality Review Act (CEQR).

The purpose of the Phase IB survey was twofold: to determine if any intact land surfaces and/or features associated with the Woodland period village site Keskiskick survive within the Parade Ground, and to determine if structural remains and/or features associated with the late nineteenth-century structures exist. This work was conducted between September 2 and 19, 2008. A total of 290 linear meters of soil was mechanically-excavated, and eight 30 cm diameter shovel tests were hand-excavated within the Project Area during the Phase IB survey.

This work was designed to address the recommendations presented in JMA's Phase IA report (2008), in accordance with the comments in the Landmarks Preservation Commission's environmental review of February 17, 2008. All research and report preparation were conducted in accordance with the New York City Landmarks Preservation Commission's *Guidelines for Archaeological Work in New York City* and the New York Archaeological Council's *Standards for Cultural Resources Investigations and the Curation of Archaeological Collections* (NYAC 1994), recommended for use by the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP).

1.2 PROJECT LOCATION AND DESCRIPTION

Van Cortlandt Park is a 62-acre parcel located in the Borough of the Bronx, New York. It is located on the eastern side of Broadway, south of the Henry Hudson Parkway and Mosholu Parkway, and north of West 246th Street (Figure 1). Currently, there is an asphalt track that extends around the perimeter of the Park, eight soccer and/or football fields, six little league baseball and/or softball fields, and 13 cricket fields on the park. The Phase IB survey work was conducted within the area determined to be archeologically sensitive in the Phase IA survey (Figure 3).

The reconstruction work for the Parade Ground will be conducted in two phases so that public use of the park can continue with minimal interruption. The "Phase 1" area is located in the northern half of the Parade Ground, from the steps north, and the "Phase 2" reconstruction area extends from the steps south to the manor house and tennis courts. Both reconstruction areas will include new drainage and irrigation systems, and cut and fill work. Drainage plans call for the installation of catch basins, storms drainages and pipes across much of the Project Area (Figure 3).

1.3 PREVIOUS ARCHEOLOGICAL WORK

JMA previously prepared a report (JMA 2008) entitled *Van Cortlandt Park Parade Ground Phase IA Archeological Investigation, Borough of the Bronx, New York* which was submitted to Abel, Bainnson & Butz and the New York City Department of Parks & Recreation.

The Phase IA report summarized the results of the background research and identified previously recorded archeological sites and historic properties located in the vicinity of the Project. One large village site (Keskiskick) was formerly located within the Parade Ground Project Area. The site was excavated by John Bradley James Jr., of Riverdale, in 1889-1900. These excavations documented a "substantial Native American settlement extending over 14 acres". There are ten previously recorded prehistoric sites and one Indian path located within one mile of the Project Area. The Phase IA investigation determined that portions of the 62-acre Parade Ground are considered sensitive for the presence of Native American artifacts and features associated with the village site. Phase IB survey work was recommended. JMA recommended that a phased, Phase IB survey approach be undertaken within the archeologically sensitive area to determine if intact stratigraphy or features associated with the Keskiskick site remain within the Parade Ground. The survey work began by the excavation of trenches across the sensitive area. The trenches were excavated to document the depth of fill, and to determine whether intact land surfaces were present. Where intact land surfaces were identified a portion of the area was stripped and shovel tests were excavated to determine if buried cultural deposits were present.

JMA also reviewed eighteenth and nineteenth-century cartographic resources that depict the Project Area. There were seven structures formerly located within the Parade Ground. These structures were associated with the Van Cortlandt farm and orchard during the late nineteenth-century. They were razed in 1889-1900 during the creation of the Parade Ground by the City of New York. The Van Cortlandt manor house (90NR00073) is a New York City Landmark, National Historic Landmark, and is listed on the National Register of Historic Places.

1.4 PROJECT PERSONNEL

JMA staff for the Phase IB survey of the Van Cortlandt Park Parade Ground included Geraldine E. Baldwin, RPA (Project Archeologist) and Amanda M. Schreiner (Field Assistant). The identification and cataloging of the artifacts recovered from the survey work were conducted by Belinda J. Cox (Assistant Archeologist). GIS maps were produced by David Massey and William Chadwick, Ph.D., RPA and the graphics for this report were produced by Sarah Ruch, Robert Schultz and Mary Paradise.

2.0 PHASE IB ARCHEOLOGICAL SURVEY METHODS

2.1 ARCHEOLOGICAL SURVEY METHODS

The Project Area was divided into two areas (Phase 1 and Phase 2) that correspond to the reconstruction phase areas. The archeological survey was conducted in the areas determined to have; 1) less than 10 ft of fill; 2) where the Keskiskick village site formerly stood and; 3) in the locations of the road and seven former structures (Figure 3). The field methods included mechanical trench excavation and stripping, screened samples of back dirt pile sediment, and subsurface shovel testing.

JMA excavated 27, 10 m-long, trenches, one, 20 m-long trench and eight shovel tests during the Phase IB survey. The trenches were placed within the archeologically sensitive areas (Figure 4). Five trenches (1, 2, 3 6, and 9) were excavated within the Project's "Phase 1" reconstruction area and six trenches (7, 13, 14, 15, 25, and 26) were excavated to identify remnants of the former structures and the road that went from the manor house to Vault Hill. The remaining trenches were excavated within the "Phase 2" reconstruction Area to identify the depth of fill, and to locate potentially intact land surfaces or features associated with the Keskiskick village site. JMA attempted to place the trenches outside of the active athletic fields. Trench excavations were mechanically packed down (tamped) following the backfilling activities.

Trenches were initially excavated to a depth of approximately 1 m (4 ft) b.g.s. in order to document the stratigraphy and determine the depth of fill. All trench walls were cleaned by trowel to identify the presence or absence of cultural features and/or cultural material. Samples of the back dirt sediment were screened at 2 m intervals across the length of each trench. The screened sample helped to determine the presence of cultural material and if a concentration of cultural material was present. Photographs were taken of ongoing excavation and of the stratigraphic profiles[1]. The stratigraphic profiles for the trenches and shovel tests are located in Appendix A and the artifact catalog for this project is listed in Appendix B.

When potentially intact land surfaces were identified in the trench profile, the area adjacent to the trench was stripped to just above that surface. The remaining overburden material was hand-cleaned (shovel-shaved) to identify any additional features and shovel tests were excavated on the stripped surface. The soil excavated from the shovel tests was passed through one-quarter inch hardware cloth to ensure uniform artifact recovery. Artifacts from each stratum were placed in plastic bags labeled with provenience information. Shovel test excavations were documented on standard field forms. The field forms include information on soil type and composition, soil color (using standardized Munsell Soil Color Charts), type of deposit, and artifacts found for each stratum excavated.

The locations of all excavated trenches, shovel tests and identified features were plotted by a hand-held Trimble *Geoexplorer3* data collector for mapping and relocation purposes, if necessary. These data points were used to create a map of the locations of the areas excavated during the Phase IB survey.

[1] There are no photographs for the Phase 1B trenching and shovel testing work conducted between September 8 and 15 due to a camera malfunction. The malfunction resulted in the loss of all photographs for this time period. Therefore, there are no digital images for the excavation of Trenches 12-21 or of Features 2, 3 and 4. Similarly, there are no images of the stripping and shovel testing conducted around Trench 16. Mr. Brian Taylor, Resident Engineer for the Parks Department, kindly provided a photograph of Feature 1 in Trench 5.

2.2 LABORATORY METHODS

All recovered cultural remains, notes, photographs and maps were returned to JMA's laboratory in Croton-on-Hudson, New York for processing and analysis. Artifacts were organized by shovel test and provenience. Artifacts were sorted by type and either dry-brushed (metal) or cleaned with tap water (glass, ceramics, etc). All artifacts were catalogued and entered into Microsoft *Access* and *Excel* (Appendix B).

3.0 SUMMARY AND RESULTS

3.1 PHASE 1B SURVEY RESULTS

JMA excavated 28 trenches within the archeologically sensitive area of the Parade Ground. Trench placement took into consideration the locations of the Keskiskick village site, the seven historic structures and road formerly located on the Parade Ground property, and the proposed locations of catch basins and associated drainage pipes and manholes. The on-going use of the Parade Ground for athletic events (soccer matches and track meets), every day use of the Park by the public, and Stipulations by park personnel (backfill trenches, stay off soccer fields, pack down dirt following excavation of trenches) also contributed to decisions regarding the placement and excavation sequence/schedule of test trenches. The Phase IB survey also documented the depth of fill across the Parade Ground. If the extent of the fill material was recorded up to and below the proposed grading and installation depths, no further work was conducted in that location. Table 1 lists the trenches excavated in relation to the locations of the proposed catch basins and drainage pipes.

Table 1. Trench locations in relation to proposed drainage locations.

Phase Area	Trench Number(s)	Catch Basin	Proposed Excavation Depth	Cultural Remains Identified
1	1,6	25.75	1.3 m (4.4 ft)	None
2	4, 5, 27 and 28	26.5	1.0 m (3.3 ft)	Features 2 & 3
2	7, 8 25 and 26	29.0	1.6 m (5.5 ft)	None
2	20 and 24	28.7	1.5 m (5 ft)	None
2	13, 16-18	29.2	2 m (6.5 ft)	Features 3 & 4
2	10-12, 14	27.75	2 m (6.5 ft)	None
2	2, 3 and 9	24.7	1.3 m (4.4 ft)	None

3.2.1 Phase 1 Reconstruction Area

The "Phase 1 Reconstruction Area" extends east from just north of the steps on Broadway to the track (old rail road berm) and extends to the northern end of the Parade Ground (Photograph 1; Figure 3). The Phase 1 area was encircled by a chain link fence during the Phase IB survey. The topography of this area is generally a level field, although it tends to rise in elevation to the north, towards the Mosholu Parkway, west towards Broadway and east towards Vault Hill. The lower elevations within this section of the Parade Ground correspond with the former path of Tibbetts Brook. The areas around the former channel of Tibbits Brook are considered to be archeologically sensitive (Figure 3). Prior drainage work in this area included the installation of culverts to redirect Tibbets Brook. There is the potential for high, well-drained areas, adjacent to the brook that may have been buried and protected. The depth of disturbance associated with the installation of the catch basins, and irrigation lines in this portion of the Project ranges from 1.3 m (4.4 ft) to 2 m (6.5 ft). All trenches excavated in the Phase 1 reconstruction area aimed to identify buried land surfaces and/or features that may have supported Woodland period occupation, and therefore may be affected by the proposed reconstruction work.

JMA excavated five trenches (Trenches 1-3, 6 and 9) in the Phase 1 area of the Parade Ground (Figure 4). The depth of fill material in this area ranges from 0.65 m (25 in) b.g.s. in Trench 9, to 1.13 m (3.7 ft) b.g.s. in Trench 6. Trenches 1

and 6 were placed within the area where catch basin 25.75 is planned. The estimated depth of excavation for catch basin 25.75 is 2 m (6.5 ft) b.g.s. The trenches were first excavated to a depth of approximately 1 m (3.3 ft) b.g.s. so that the profile could be drawn. The final depth of the excavations was between 1.5 m (4.9 ft) and 2 m (6.5 ft) b.g.s. No intact cultural stratigraphy or features were identified in the trench profiles.

Generally, the stratigraphic profiles recorded in the trenches in the Phase 1 area contained two to three layers of compact fill overlying stream channel deposits composed of coarse sands, gravels and/or rounded cobbles (Photograph 2, Figure 5). Light yellowish brown, bedded, stream-deposited sands, with some oxidization staining, were identified in trenches 1-3 between 0.85 m (33 in) and 1.1 m (3.6 ft) b.g.s., and at 1.6 m (5.2 ft) b.g.s in Trench 6. The water table was reached in Trench 2 at 1.2 m (3.9 ft) b.g.s. Gray (Muncell Gley 1 6/n) clay was recorded at 1.75 m (5.7 ft) within Trench 3 (Figure 5). Table 2 illustrates the depth of fill material/top of intact alluvial deposits within the Phase 1 Reconstruction Area.

Table 2. Depth of fill material recorded within trenches excavated within the Phase 1 Reconstruction Area.

Trench Number	Catch Basin	Depth of fill
1	25.75	75 cm (2.4 ft)
2	NA	75 cm (2.4 ft)
3	NA	1.1 m (3.6 ft)
6	25.75	1.1 m (3.6 ft)
9	NA	65 cm (2.1 ft)

Although intact alluvium and clay deposits were recorded in the Phase 1 Reconstruction Area, no buried archeological deposits or significant cultural remains were identified. Therefore, it is the opinion of JMA that the proposed work in this area will not impact any significant archeological deposits. No further work is recommended in the Phase 1 Reconstruction Area.

3.2.2 Phase 2 Reconstruction Area

The Phase 2 Reconstruction Area extends from the track finish line on the east side of Broadway, south to the Van Cortlandt manor house driveway. This area extends east across the Parade Ground towards the track west of Van Cortlandt Lake (Figure 2). Project plans for the Phase 2 area also include the installation of new drainage and irrigation systems, and grading and filling the Parade Ground for the new athletic fields. The majority of the Phase 2 area is considered to be archeologically sensitive since the Keskiskick Native American village site was formerly located in this area.

The placement of the trenches across the Phase 2 reconstruction area was designed to; 1) identify the seven structures formerly located on the Van Cortlandt property; 2) expose buried land surfaces and/or features associated with the Keskiskick village site; and 3) document disturbance to potentially significant cultural deposits within the areas of the proposed catch basins and drainage pipe locations (Figure 2). This work also documented the depth of fill material across the Phase 2 area. Table 3 lists the trenches that were placed in locations of the former structures, the road, and the depth of fill identified in these areas (Figure 3).

Table 3. Trenches excavated in the locations of the former structures and/or the former road and the depth of fill.

Phase Area	Trench	Structure/Road	Catch Basin	Depth of fill	Archeological Deposits Recorded
2	7	Small structures on Old Post Road	29.0	1 m (3.2 ft)	None
2	8	Old Post Road	29.0	73 cm (2.3 ft)	Compact road fill
2	14	E-Shaped Structure	27.75	58 cm (1.9 ft)	None
2	15	Northern structure	NA	43 cm (1.4 ft)	None
2	25	Small structure/road	29.0	92 cm (3 ft)	None
2	26	Small structure/road	29.0	1.3 m (4.2 ft)	None

3.2.2.1 Historic Structure Investigations

There were seven map-documented structures (MDS) and a road formerly located on the Van Cortlandt property prior to it being acquired by the City of New York (Figure 3). Two of these MDS lie outside of the archeologically sensitive area and were not investigated during the Phase IB survey. Trenches 7, 8, 25 and 26 were excavated in the vicinity of the structures to determine if structural evidence and/or features associated with the structures were present. The trenches were also used to determine if evidence of the former road exists.

Trench 7

Trench 7 and was placed 15 m north of the track and Nature Center (Figure 4, Photograph 3). Project plans show that catch basin 29.0 will be placed in this location. The depth of excavation for the catch basin is 1.6 m (5.5 ft) b.g.s. (Table 1).

Stratum I consists of a 30 cm-thick level of brown 10YR 4/3 silty sand (top soil) overlying a 70 cm-thick level of compact, light brown 7.5YR 6/4 coarse sand, mottled with yellowish brown 10YR 5/8 sand with gravels and cobbles (Stratum II). Both of these strata are interpreted as fill deposits. Naturally-deposited alluvium was recorded in the trench profile from 1 m to 2.3 m b.g.s. Loosely compact yellowish brown 10YR 5/8 sand with some rounded cobbles (Stratum III) was recorded between 1 and 1.5 m b.g.s. Stratum IV consists of banded, very pale brown 10YR 7/3 fine to medium sand with yellowish brown 10YR 5/8 fine to medium sand. Stratum IV extended from 1.5 m to 2.3 m b.g.s. (Figure 6).

Multiple historic artifacts were recovered from the fill layers in Trench 7 including pearlware, whiteware, redware, ironstone, and stoneware, a glass marble, a kaolin pipe stem fragment, brick and coal (Appendix B). These artifacts range in date from the early-eighteenth through the late-nineteenth-century and are consistent with the historic occupation of the Van Cortlandt property. Native American artifacts recovered from the fill material include a chert core and a broken quartz flake. Sixteen fragments of oyster shell (41 grams) were also recovered from the fill material. Although numerous (n=50) historic and prehistoric artifacts were recovered from this location, they were all recovered from the fill deposits and do not represent significant cultural remains.

No evidence of the former structures or intact cultural stratigraphy was identified in the profile of Trench 7. Although the excavation of catch basin 29.0 will extend below the fill deposits in this location, the construction will not impact any significant archeological remains.

Trench 8

Trench 8 was placed just north of a baseball field in the vicinity of the former road and was 10 m in length (Figure 4, Photograph 4). Project plans show that catch basin 29.0 will be placed in this location. The depth of excavation for the catch basin is 1.6 m (5.5 ft) b.g.s. (Table 3).

The stratigraphy recorded in this section of the Parade Ground Project Area consists of a 20 cm-thick layer of brown 10YR 4/3 silty loam (top soil) overlying a 10 cm level of compact, dark yellowish brown 10YR 4/6 sand with gravel (Stratum II). Stratum III was recorded between 20 and 50 cm b.g.s. and consists of compact, dark yellowish brown 10YR 4/4 sand mottled with pale brown 10YR 6/3 sand and broken rock rubble, coal ash and slag. This was underlain by compact strong brown 7.5YR 5/8 mottled with dark yellowish brown 10YR 4/4 sand and gravels (Stratum IV). Both of these strata are interpreted as fill deposits potentially associated with the former road. Stratum V consists of stream deposits of strong brown 7.5YR 5/8 coarse sands with rounded gravels and cobbles. This is underlain by banded strong brown 7.5YR 5/8 and yellow 10YR 7/8 fine sand (Figure 7).

Cultural materials recovered from the back dirt piles include stoneware, whiteware, ironstone, unglazed redware, bottle glass and table glass, plastic, and Styrofoam. Coal ash, slag, mortar and brick were recorded in the trench profile within Stratum III and are considered to represent road bed materials. No intact deposits or features associated with the village site were identified and no Native American cultural material was recovered from this section of the Project Area.

Trench 14

Trench 14 was placed in the middle of the archeologically sensitive area, just south of the northern baseball field (Figure 4, Photograph 5). The trench was placed in this location to explore the large E-shaped building formally located on the Parade Ground. Trench 14 was 20 m (65.6 ft) long. Project plans show that catch basin 27.75 will be placed in this location (Table 3). The depth of excavation for the catch basin is 2 m (6.5 ft) b.g.s.

The stratigraphy recorded in Trench 14 consists of three layers of fill to a depth of 58 cm b.g.s.(Figure 8). Stratum I is very dark grayish brown 10YR 3/2 sandy loam with gravels. Stratum II is a 20 cm-deep layer of compact, black 7.5YR 2.5/1 sandy loam with corroded metal and charcoal. Brown 7.5YR 4/4 sand and gravel (Stratum III) underlies Stratum II and is 8 cm thick. Twentieth-century artifacts including an "AA" battery, fragments of plastic utensils, an aluminum pull tab, and window glass were recovered from in the back dirt piles from these strata. These artifacts are not considered significant cultural remains and were not collected.

Naturally-deposited stream sediments were recorded below the fill material. Stratum IV consists of a 32 cm-thick layer of brown and reddish brown 7.5YR 4/4 and 7.5YR 5/8 medium to coarse sands and gravels. Strong brown 7.5YR 4/6 and brown 7.5YR 5/6 coarse sand and water-worn cobbles (Stratum V) was recorded between 50 and 90 cm b.g.s. Stratum VI consists of bedded fine sands with a few gravels that vary in color from pinkish gray 7.5YR 7/2 to strong brown 7.5YR 5/6 (Figure 8). No cultural material was recovered from Strata IV through VI.

No evidence of the former structure or intact cultural stratigraphy was identified in the profile of Trench 14. Although the excavation of catch basin 27.75 will extend below the fill deposits in this location, the construction will not impact any significant archeological remains.

Trench 15

Trench 15 was placed just north of a baseball field approximately 50 m north of Trench 14 and was 10 m in length (Figures 3 and 4, and Figure 9). The trench was placed in this location to identify structural evidence of a small structure that was formerly located in this area (Figure 3). Project plans for this area include cut and fill activities. No catch basins are proposed in the vicinity of Trench 15.

The stratigraphy recorded in the trench profile consists of a 31 cm-thick layer of dark yellowish brown 10YR 4/4 sandy loam (top soil). This is immediately underlain by a 12 cm level of yellowish brown 10YR 5/6 medium sands, gravel and water worn cobbles (Stratum II). Stratum III is a 12 cm-thick layer of dark yellowish brown 10YR 4/4 medium to coarse sand with gravel and cobbles. Bedded pinkish gray 7.5YR 7/2 sand (Stratum IV) was recorded between 55 and 144 cm b.g.s. Strata II-IV represent naturally-deposited stream sediments.

The area appears to have been significantly graded during the construction of the Parade Ground. One cut nail, machine-made bottle glass, ceramic, coal and a bird bone was recovered from the fill material. None of these artifacts represent significant cultural remains. No intact cultural stratigraphy, cultural features or structural remains were identified within the trench profile.

Trenches 25 and 26

Trenches 25 and 26 were placed just to the north of the track, tennis courts, and Nature Center in the southernmost portion of the Parade Ground (Photographs 6 and 7). The trenches were placed 30 m west and east of Trench 7, respectively, and were each 10 m long (Figure 4). The placement of the trenches in these locations was to, 1) determine if evidence associated with the former structures and the road could be documented and, 2) determine if the construction of catch basin 29.0, and associated drainage pipes, will impact any significant archeological deposits in this area (Figures 2 and 3). Catch basin 29.0 will be excavated to a depth of approximately 1.6 m (5.5 ft) b.g.s.

Trench 25 was placed on the western side of Trench 7 and the former location of the former road (Figure 3). The stratigraphy recorded in Trench 25 consists of very dark grayish brown topsoil (10YR 3/2). Stratum II consists of compact strong brown 7.5YR 4/6 sand mottled with dark brown 10YR 3/3 sand with gravel. These two strata are interpreted as fill. Underlying the fill is intact alluvial deposits of sand and gravels. These natural deposits were recorded to the base of the excavation at 2 m (6.5 ft) b.g.s. (Photograph 8).

Artifacts recorded from the fill deposits (n=52) include brick, nails, bottle glass, plastic, and window glass. One chert flake and two clam shell fragments were also recovered (Appendix B). The stratigraphy recorded in Trench 25 documented soil disturbance of the upper 92 cm of the trench profile. Naturally-deposited stream channel sediments extend to the base of the trench. No structural evidence of the former structure or associated features were identified in the trench profile.

No evidence of the former structure or intact cultural stratigraphy was identified in the profile of Trench 25. Although the excavation of catch basin 29.0 will extend below the fill deposits in this location, the construction will not impact any significant archeological remains.

Trench 26 was placed on the eastern side of the former road to look for evidence of one of the structures formerly located in this area (Figure 4, Photograph 7). Catch basin 29.0 will be placed in this location. The depth of excavation for the catch basin is 1.6 m (5.5 ft) b.g.s.

The stratigraphy recorded in Trench 26 consists of a 33 cm-thick layer of dark yellowish brown 10YR 4/4 sandy loam (topsoil) overlying a 20 cm-thick layer of mottled yellowish brown 10YR 5/6 and dark yellowish brown 10YR 4/4 fine sandy loam (Stratum II). Both of these strata are interpreted as fill. Stratum III extends from 51 to 87 cm b.g.s. and consists of yellowish brown 10YR 5/6 fine sand (Photograph 9). Strata I-III are interpreted as mixed and/or fill deposits. Artifacts recovered from the fill (n=26) consist of architectural and domestic materials that include brick, glass, whiteware and coal (Appendix B).

Stratum IV consists of dark yellowish brown 10YR 4/6 coarse sands with gravel and cobbles and extended from 87 to 130 cm b.g.s. Intact stream deposits were recorded at the base of the trench (from 1.3 to 2 m b.g.s.) and consist of yellowish brown 10YR 5/4 with dark yellowish brown 10YR 4/4 bedded sands. No buried land surfaces or cultural features were identified within the trench profile. Although the construction of catch basin 29.0 will extend below the fill deposits in this location, the construction will not impact any significant archeological remains.

3.2.2.2 Archeologically Sensitive Area Survey

JMA excavated a total of 18 trenches within the remaining portions of the Project Area (Figure 4, Table 1). All of the trenches were 10 m in length. Twenty trenches were placed in the vicinity of proposed catch basins and drainage pipe locations to determine if they will impact intact archeological deposits and/or features associated with the Keskiskick village site. The catch basins will be excavated between 1 m (3.3 ft) to 2 m (6.5 ft) b.g.s. (Table 1). Eight trenches (16-23) were placed on an east-west oriented transect across the Parade Ground. Generally, the trenches were placed along a 108° (east-of-north) compass bearing. The angle was shifted slightly to the south in the eastern end of the Parade Ground to avoid damage of two athletic fields in this area.

Trench 4

Trench 4 was placed in the northwestern portion of the Phase 2 Reconstruction Area, 50 m east of the track and bandstand and just south of the Phase 1 Area (Figure 4). Project plans show that catch basin 26.5 will be placed in this area. The depth of excavation for the catch basin is 1 m (3.3 ft) b.g.s. (Table 1).

The stratigraphy recorded in this section of the Project Area consists of a 7 cm-thick layer of dark grayish brown 10YR 4/2 sandy loam (Stratum I/top soil) overlying 61 cm of compact brownish yellow 10YR 6/6 sandy loam with gravels and cobbles (Stratum II). Both Strata I and II are interpreted to be fill deposits. Artifacts recorded in the back dirt piles include modern bottle glass, aluminum foil, Styrofoam and coal. Stratum III extended from 68 to 102 cm b.g.s., and consists of yellowish brown 10YR 5/6 to brown 10YR 4/3 coarse sands and gravels with decomposing schist. Stratum IV consists of yellowish brown 10YR 5/6 medium to coarse sand with pebbles and light yellowish brown 10YR 6/6 bands of sand (Figure 10).

To make sure that the sediments observed in the trench profile were naturally deposited, JMA excavated two shovel tests (4.1 and 4.2) within Trench 4. The shovel tests were excavated at the base of the 1 m (3.3 ft) trench. Shovel test 4.1 was placed in the west end of the trench and shovel test 4.2 in the eastern end of the trench. The bottom of the shovel tests was recorded at 1.8 m (4.5 ft) b.g.s. The shovel tests extended below Stratum IV into Stratum V which

consists of banded light yellowish brown 10YR 6/4 and brownish yellow 10YR 6/6 fine sands with few gravel. No cultural material was recovered from either of the shovel tests.

Both Strata III and IV are considered to be intact alluvial deposits. No intact cultural stratigraphy or features were identified in the trench profile. Although the construction of catch basin 26.5 will extend below the fill deposits in this location, the construction will not impact any significant archeological remains.

Trench 5

Trench 5 was placed in the western edge of the archeologically sensitive area, just east of the track finish line adjacent to Broadway (Figure 4, Photograph 10). Project plans call for the installation of catch basin 26.5 in this area (Table 1). The proposed depth of excavation for the catch basin will be 1 m (3.3 ft) b.g.s. Trench 5 was first excavated to a depth of 1 m (4 ft) b.g.s. to facilitate the documentation of the trench profile (Photograph 10). Trench 5 was then excavated to a depth of 2 m (6.5 ft) b.g.s.

The stratigraphy recorded in Trench 5 consisted of a 20 cm-thick layer of brown 10YR 4/3 fine sandy loam (topsoil) overlying dry and compact, light yellowish brown 10YR 6/4 sand (Stratum II). Both of these strata are interpreted as fill (Figure 11). Artifacts recovered from these strata include machine-made bottle glass, aluminum pop-top pull tabs, and two wire nails. Stratum III extends from 60 cm to 1.4 m b.g.s. and consists of compact, dark yellowish brown 10YR 4/6 medium sand. Stratum IV consists of yellowish brown 10YR 5/8 compact sandy clay with gravel.

Two features were identified in the profile of Trench 5. Feature 1 was identified in the west wall of Trench 5 immediately below Stratum I at a depth of 10 cm b.g.s. (Figure 11). Feature 1 appears to cuts into Stratum II and consists of an approximately 25 cm-thick deposit of reddish yellow 5YR 6/8 compact sandy loam (Photograph 11). No cultural remains were identified within the feature profile or the back dirt piles.

Feature 2 was identified in the east wall of Trench 5. The feature was identified immediately below Stratum I at a depth of approximately 12 cm b.g.s. The soils within Feature 2 consist of reddish yellow 5YR 6/8 compact sandy loam and is approximately 20 cm thick. No cultural remains were identified within the profile of the feature and no cultural material was recovered from the back dirt pile.

Potentially intact cultural deposits were identified within the profile of Trench 5. Two features (features 1 and 2), consisting of reddened soils in round-bottomed pits, were recorded in the western and eastern walls of Trench 5. These features were identified immediately below the topsoil at a depth of 20 cm b.g.s. The features were surrounded by compact light yellowish brown 10YR 6/4 fine sand and cut into a compact, dark yellowish brown 10YR 4/6 fine to medium sand deposit that may represent naturally-deposited stream sediments that may have been truncated in the upper portion of the stratum. No cultural material was identified in the feature profiles. The areas surrounding the features were not stripped during the Phase IB survey due to on-going use of the park in this vicinity. It is unknown whether these "features" are intact cultural deposits related to the village site or later use of the park, or merely smeared areas of burned demolition debris and/or fill. Trench 5 was excavated within the reported location of the Keskiskick village site and it is possible that these features are associated with that site. Phase II testing is recommended in this area. The Phase II testing should aim to determine if the features lie within a truncated cultural landform and should document the extent and nature of the features.

Trench 16

Trench 16 was placed in the southwestern portion of the archeologically sensitive area and was 10 m in length (Figure 3). It lies 7 m south of Trench 13, 65 m east of the southern-most cricket field, and approximately 100 m (50 ft) north of Van Cortlandt manor (Figure 4, Photograph 12). Project plans place the installation of catch basin 29.2 in this area. The depth of the excavation for the catch basin is 2 m (6.5 ft) b.g.s.

Trench 16 was placed in this location to determine whether intact cultural deposits associated with the Keskiskick village site exist in this portion of the Parade Ground. There is no photo documentation of the field work conducted in and around Trench 16 due to a camera malfunction. Field work conducted in this area included 1) trench excavation, 2) stratigraphic documentation of the trench profile, stripping topsoil on the north and south sides of the trench, 3) excavation of shovel tests, and 4) documentation of features 3 and 4.

The stratigraphy recorded in the south wall of Trench 16 and the location of Feature 3 is illustrated in Figure 12. Stratum I consists of a 22 to 24 cm-thick level of dark yellowish brown 10YR 3/4 sandy loam (topsoil) overlying a thin (2 cm-thick) band of dark grayish brown 10YR 4/2 fine sand (Stratum II). Artifacts recovered from samples taken from Stratum I include demolition materials such as mortar, window glass, brick, coal and metal nails, as well as domestic remains including porcelain, whiteware, table ware, machine-made bottle glass and shell (oyster and clam). A broken chert flake, a piece of chert shatter, coal and a piece of burned white-bodied ceramic was recovered from the surface of Stratum II (Appendix B). Stratum II was discontinuous across the length of the trench, but was identified in both the south and north wall profiles. Both features 3 and 4 were recorded immediately below Stratum II.

Stratum III consists of a 2 to 8 cm-thick lens of dark grayish brown 10YR 4/2 medium coarse sand and gravel and Stratum IV consists of a 2 to 20 cm-thick level of strong brown 7.5YR 4/6 medium to coarse sand with gravel. Two thin (less than 10 cm-thick) bands, of water-worn gravel (Stratum V) and strong brown 7.5YR 5/6 coarse sand (Stratum VI) were recorded between 46 and 56 cm b.g.s. Stratum VI is underlain by alternating deposits of sands, gravels and water-worn cobbles. The excavation of Trench 16 was terminated at 2 m (8 ft) b.g.s. (Figure 12). Stratum II may represent a remnant of an intact land surface or later fill episode that capped features 3 and 4. Strata III-VII is sterile, naturally-deposited stream sediments. No evidence of cultural features was identified below Stratum III.

JMA mechanically stripped the upper 19-cm of topsoil on each side of Trench 16. The stripping work was conducted to determine the horizontal extent of Stratum II and to expose the horizontal extent of the features. This area was then shovel-shaved (hand-cleaned) to determine if additional features and/or artifacts were present. A total area of 25 m^2 was stripped on either side of Trench 16 (Figure 13).

Feature 3

Feature 3 was identified in the south wall profile of Trench 16 between 24 and 26 cm b.g.s. The feature lies between 4.42 m and 4.60 m along the length of the 10 m long trench. In profile, Feature 3 is 10 cm deep and has two internal zones; Stratum I is brown 10YR 4/3 sandy loam and Stratum II is black 10YR 2/1 burned wood or charcoal. In profile, Feature 3 is a rounded pit (Figure 14). In plan view, Feature 3 is a small, elongated, pit-like feature that is 28 cm long (N-S) by 40 cm wide (E-W) (Figure 13). The feature immediately overlies intact naturally-deposited stream sediments. Slag and charcoal were noted at the Stratum I/II interface.

JMA excavated six shovel tests (16.1-16.6) on the south side of the trench. Shovel tests were placed within the stripped area at a 3-m interval. Shovel tests were excavated to between 35 and 50 cm below the stripped surface (approximately 54 to 69 cm b.g.s.). Stratum II was identified in three of the excavated shovel tests (16.2, 16.5 and 16.6) (Figure 13). No Native American lithic materials were recovered. Modern historic artifacts were recovered from the shovel tests including machine-made bottle glass, coal, common, cut and wire nails, pop-top pull tabs, and small brick fragments (Appendix B). These were recovered from the sand (Stratum II) and from the overlying top soil/fill deposit. One piece of chert shatter and a piece of cinder was recovered from the Stratum I/II interface. None of these artifacts represent significant cultural remains. No additional features were identified on the surface of the southern stripped area.

Feature 4

Feature 4 was identified in the north wall profile of Trench 16 between the depths of 20 to 23 cm b.g.s. (Figure 16). In profile Feature 4 is 60 cm wide (N-S) and 19 cm deep; it is a round-bottomed pit. The matrix of the feature is brownish yellow 10YR 6/6 fine to medium sand which is underlain by a lens of yellowish red 5YR 5/8 to red 2.5YR 4/8 burned sand. Feature 4 was identified along the trench profile between 4.30 and 4.90 m and lies immediately below Stratum II. No cultural material was identified within the feature profile.

The upper 20 cm of top soil (Stratum I) was mechanically stripped off of the north side of Trench 16 and the surface was hand-cleaned to fully document the extent of Feature 4. When fully exposed, Feature 4 was 1.10 m (3.6 ft) in length (N-S) and 0.66 m (2.1 ft) in width (E-W) (Figure 17). A charcoal lens delineates the outer edge of the feature and separates it from the surrounding matrix. No other features were identified within the stripped area. Artifacts recovered from the stripped sediment in the vicinity of Feature 4 include machine-made bottle glass, whiteware, blue transfer-print whiteware, metal, coal, and an aluminum pop-top (Appendix B).

No shovel tests were excavated in the stripped area on the northern side of the trench, due to extremely wet weather conditions. JMA placed plastic sheeting within the base of Trench 16 and over both of the stripped areas, and the excavations were backfilled.

Feature 3 and 4 were identified on the south and north sides of Trench 16, respectively. They are both located in roughly the same location of the trench. It may be possible that these two features represent one larger feature that was cut by the trench excavation. The temporal or cultural affiliations of the features are unknown, but they are capped by a sand deposit that may represent an intact land surface or later fill deposit. Both of the features immediately overlie naturally-deposited stream sediment, gravel and cobbles. Thus, there is the potential for these features to represent intact deposits either associated with the Keskiskick village site or the later use of the property by military personnel. Therefore, Phase II testing is recommended in the areas surrounding Trench 16. The Phase II work should also aim to document the extent of the potentially intact land surface, and to determine the nature and extent of Features 3 and 4.

Trenches 17-23

Trenches 17 through 23 were placed across the Parade Ground from west to east (Figure 4). The trenches were placed at a 30 m interval from each other and on a bearing of 108°. Theses trenches were excavated to determine if buried cultural deposits and/or features are present and to document the stratigraphy across the Parade Ground that

may be affected by the Phase 2 reconstruction activities.

The stratigraphy recorded in trenches 17-23 consisted of varying amounts of topsoil and mixed fill deposits immediately overlying naturally-deposited stream sediment (Appendix A). No intact or buried land surfaces or additional features were identified. Very few Native American artifacts were recovered from the Parade Ground Project Area during the Phase IB survey. Most of these were recovered from the back dirt pile within Stratum I and II. Most of the artifacts were recovered from the fill deposits in the southwestern areas of the Parade Ground. All of these were recovered in association with late-nineteenth and early-twentieth century domestic artifacts and structural debris (Appendix B).

Trenches 24, 27 and 28

Trenches 24, 27 and 28 were placed to the north and west of the Van Cortlandt manor house (Figure 4). This area is the western-most extent of the archeologically sensitive area. The trenches were placed in this location to document the depth of the fill material and to determine if any remnants of the village site remain. Construction plans place two catch basins (catch basins 28.7 and 26.5) and associated drainage pipes in the vicinity of these trenches (Figure 3, Table 1).

The stratigraphy recorded in this section of the Parade Ground included two layers of fill material overlying intact stream sediments. A water pipe was identified in Trench 27 between 62 and 71 cm b.g.s. The profile recorded in Trench 27 illustrated disturbance to a depth of 86 cm b.g.s. No cultural features or buried land surfaces was identified in the trench profiles. This portion of the Parade Ground appears to have been stripped to the naturally-deposited sands and gravels and then filled to form the present ground surface. No additional work is recommended for this portion of the Parade Ground.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 SUMMARY AND CONCLUSIONS

JMA conducted the Phase IB archeological survey field work for the Van Cortlandt Park Parade Ground in September, 2008. The Phase IB survey included the mechanical excavation of 28 trenches and hand excavation of eight shovel tests. The stratigraphy recorded in almost all of the trenches consisted of two to three layers of compact and mottled fill material overlying truncated alluvial deposits of sands, gravel and rounded cobbles. These in turn overlie bedded sands that were deposited by stream channel movement.

No human remains or possible burial shaft features were observed during the Phase 1B fieldwork.

In total, JMA recovered 449 artifacts from the test excavations within the Project Area (Appendix B). These included mixed prehistoric (Native American), historic (eighteenth/nineteenth century) and modern materials from fill deposits. JMA recovered eleven (11) prehistoric Native American artifacts during the Phase 1B Survey. These artifacts were recovered from Trenches 7, 9, 11, 16, 17, 22 and 25 (Table 4).

Table 4. Summary of prehistoric Native American artifacts recovered during the Phase 1B survey.

Provenience	Artifact Description	Comments/Context
Trench 7, Stratum I, 0-30cm (Lot 1)	1 quartz flake, 1 chert core fragment	Recovered in association with 19th-20th century materials
Trench 9, Stratum I, 0-65cm (Lot 3)	1 quartz debitage	Recovered in association with 19th-20th century materials
Trench 11, Stratum I, 0-30cm (Lot 5)	1 broken quartz flake	No other artifacts recovered
Trench 16, Stratum I, 0-30 cm (Lot 7)	1 broken chert flake	Recovered in association with 19th-20th century materials
Trench 16, Stratum II, 30-32cm (Lot 8)	1 chert shatter	Recovered with coal and ceramic
Trench 16, STU 2,Stratum II, 16-20cm (lot 16)	1 chert shatter	Recovered in association with 19th-20th century materials
Trench 17, Stratum I, 0-36cm, (Lot 9)	1 quartzite flake fragment	Recovered in association with 19th-20th century materials
Trench 22, Stratum 1, 0-25cm, (Lot 19)	1 quartz shatter, 1 quartz flake	Recovered in association with 19th-20th century materials
Trench 25, Stratum I, 0-24 (Lot 31)	1 quartz flake	Recovered in association with 19th-20th century materials

The majority of the Native American artifacts (debitage, core fragments, and fire-cracked rock) were recovered from the southern and southwestern portions of the Project Area. This was not surprising since this is the reported vicinity of the Keskiskick village site. All of the artifacts were recovered from fill layers and were mixed with late-eighteenth through twentieth-century domestic and architectural materials. Modern historic objects (plastic, Styrofoam, pop-top pull lids) were also recovered from these contexts. None of the prehistoric artifacts that were recovered from the Project Area were from intact cultural stratigraphy or in the profiles of the identified features.

JMA identified four features as a result of the Phase IB study. Features 1 and 2 were identified in the profile of Trench 5 directly below the top soil layer and on top of a potentially intact land surface (Stratum III) and

immediately overlay naturally-deposits stream sediment. Based upon the location of the features in the stratigraphic profile they may be a result of modern disturbances possibly associated with grading and filling activities undertaken in the Parade Ground since the late-eighteenth century, or may be associated with later military activities there. It is unknown whether there features are intact cultural deposits or fill episodes. JMA recommends that Phase II testing be undertaken in the vicinity of Trench 5. The Phase II testing work should be conducted to determine the nature and extent of the features and to determine if they are within intact cultural deposits.

Features 3 and 4 were identified in the northern and southern profiles of Trench 16. Both of the features lie below a 2 cm-thick lens of sand that may have capped the features and protected them from the cutting and grading activities that took place on the Parade Ground during the nineteenth and twentieth centuries. Features 3 and 4 appear to lie within a remnant intact land surface that was also identified in portions of the north and south side of the trench that were stripped during the Phase IB survey. No other features were identified within the stripped areas. Feature 3 is a small, oval-shaped, round-bottomed pit feature that has two internal zones and is located on the southern side of the trench. Feature 4 is a large oval-shaped pit that also appears to be round-bottomed in profile. Both of the features have a line of charcoal at the base of the profile. In plan view, Feature 4 is demarcated from the surrounding matrix by a thin line of charcoal. Phase II testing work is recommended for the area surrounding Trench 16. The testing work will be conducted to further document the nature and extent of the potentially intact land surface and to determine the function of Features 3 and 4. The excavation of the features will aid in assigning a temporal period to the features.

4.2 RECOMMENDATIONS

It is the opinion of JMA that Phase II testing work be conducted in select portions within the Phase 2 reconstruction area of the Parade Ground. Specifically, this work should focus around JMA Trenches 5 and 16. The testing work should include; 1) mechanical stripping/removal of overlying sediments on the east and west sides of Trench 5 as well as the northern and southern sides of Trench 16. The excavation of additional shovel tests should be conducted as part of the work plan. The shovel tests will aim to identify the horizontal and vertical extent of the potentially intact land surfaces. The Phase II testing work should also focus on the excavation of Features 1-4. This will allow for the identification of the nature and function of the features and will determine whether the features represent Native American activity associated with the Keskiskick village site, or whether they are associated with later military activity and/or cutting and grading activities conducted within the park since the City of New York acquired the property.

5.0 REFERENCES CITED

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United States Geological Survey (USGS)
1966 *Yonkers, N.Y.-NJ* (photorevised 1979)7.5-Minute Series (topographic) Quadrangle (Revised 1979). U.S. Department of the Interior, Geological Survey, Washington, D.C. Scale 1:24,000.

FIGURES

Figure 1. Detail of the USGS (1966) *Yonkers, NY-NJ* 7.5-minute quadrangle map showing the location of the Van Cortlandt Park Parade Grounds Project Area.

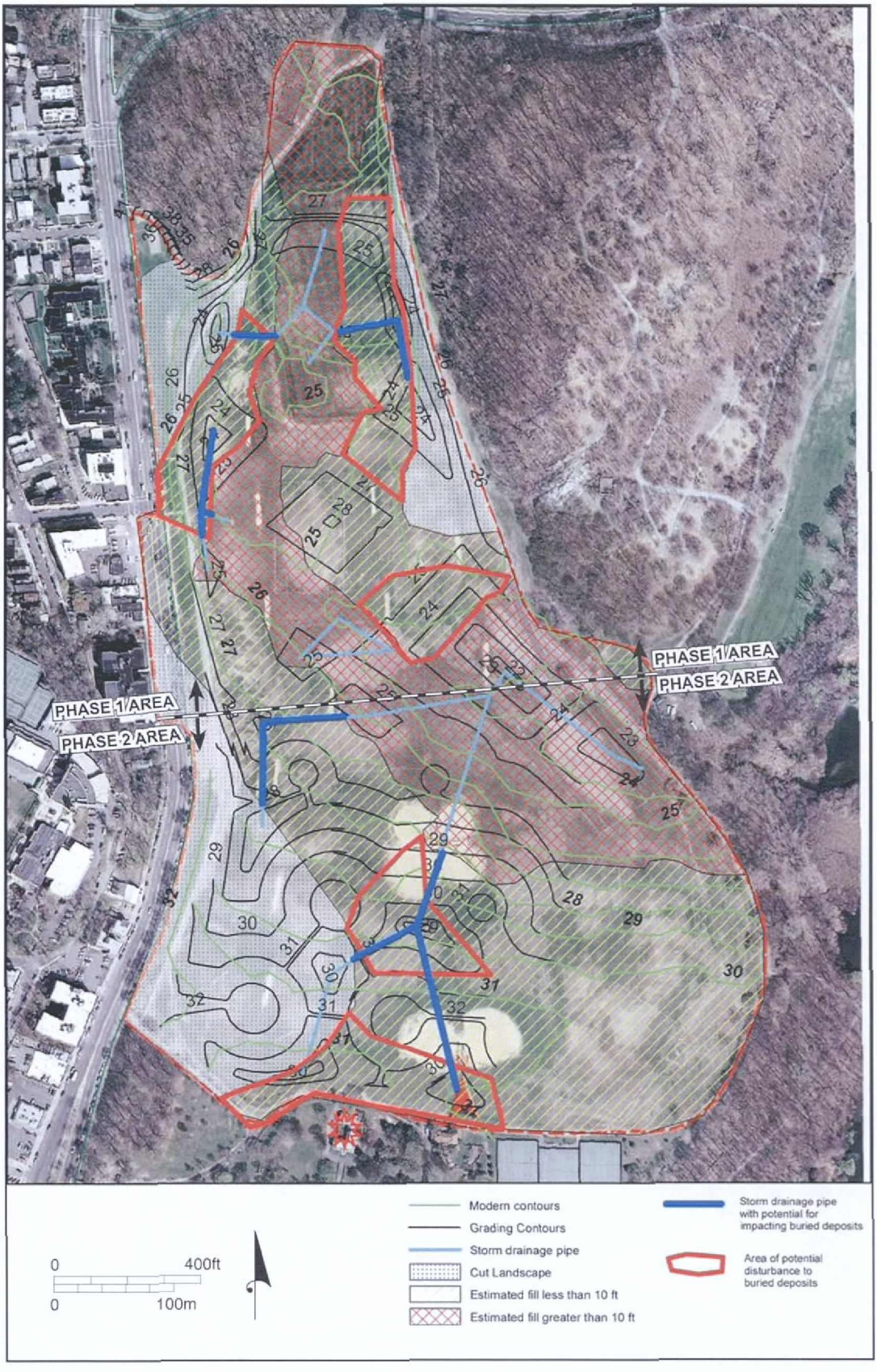


Figure 2. Detail of the New York City Department of Parks and Recreation grading and irrigation plan for the Van Cortlandt Park Parade Ground.

Figure 3. Project map illustrating archeologically sensitive areas, and the seven historic structures formerly located within the Van Cortlandt Park Parade Ground.

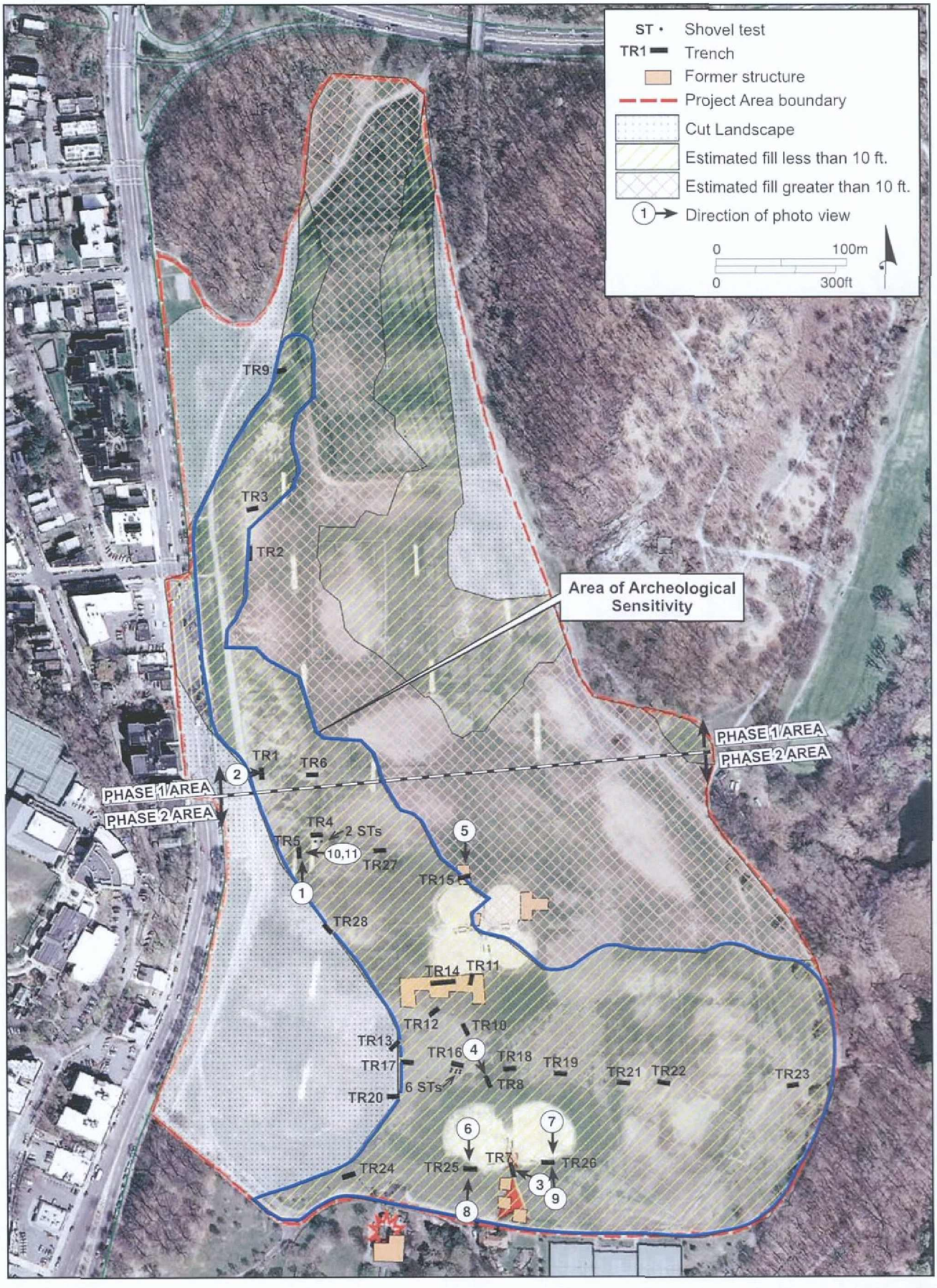
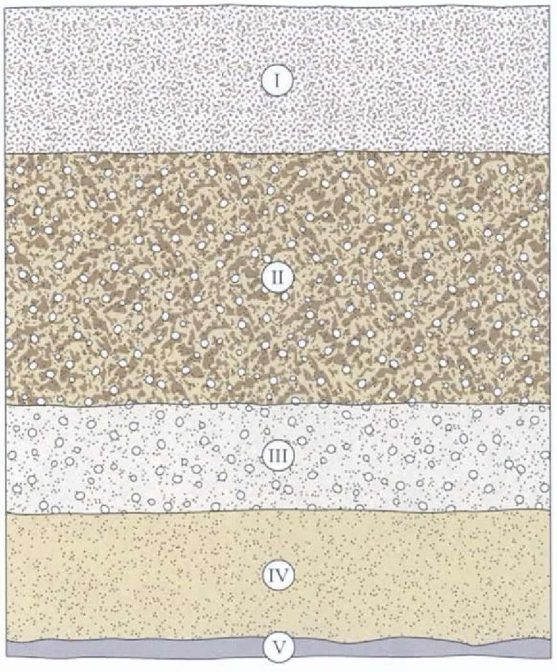
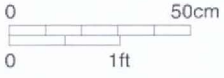


Figure 4. Plan map of the Van Cortlandt Park Parade Ground Project Area showing archeologically sensitive area, the locations of former structures, excavated trenches and shovel tests, and photographic views referenced in the report.

Trench 3
South Wall





I 10YR 4/3 brown silt loam; topsoil

II 10YR 5/6 yellowish brown fine sandy loam with rounded river cobbles and 10YR 4/3 brown sandy loam; fill

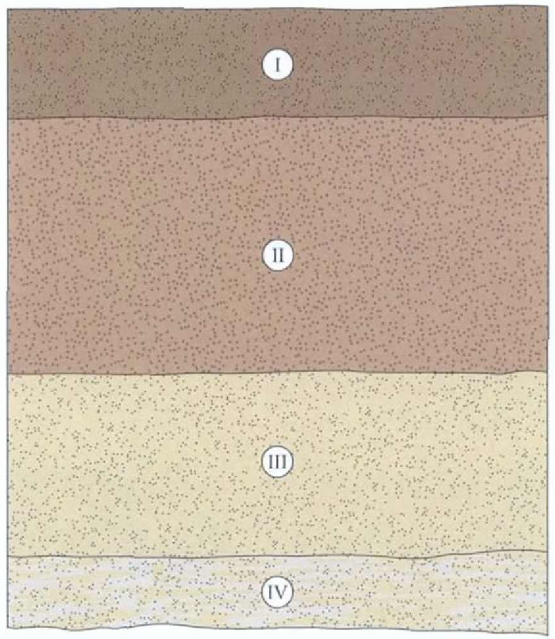
III 10YR 6/4 light yellowish brown medium sand with cobbles, wet banded alluvial sands

IV 10YR 5/6 yellowish brown sand

V Gley 1 6/N clay

Figure 5. South wall profile of Trench 3 showing fill deposits overlying naturally-deposited stream sediments and clay.

Trench 7
West Wall



0 50cm

0 1ft

I 10YR 4/3 brown silty sand; topsoil

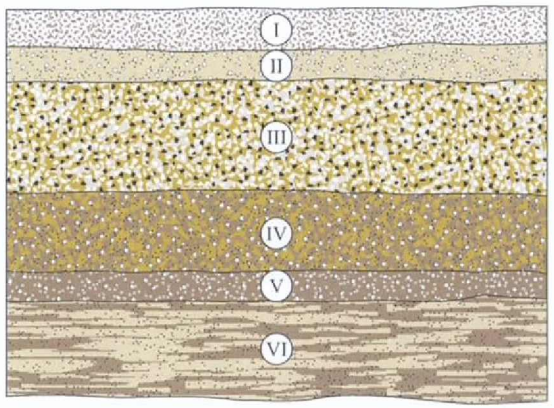
II Compact 7.5YR 6/4 light brown coarse sand mottled with 10YR 5/8 yellowish brown sand with gravels and cobbles; fill

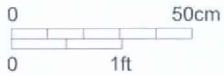
III Loosely compact 10YR 5/8 yellowish brown sand with cobbles

IV Banded 10YR 7/3 very pale brown fine to medium sand with 10YR 5/8 yellowish brown fine to medium sand

Figure 6. West wall profile of Trench 7 showing fill deposits overlying naturally-deposited stream sediment.

Trench 8
West Wall





I 10YR 4/3 brown silt loam; topsoil

II Compact 10YR 4/6 dark yellowish brown sand with gravel; fill

III Compact 10YR 4/4 dark yellowish brown sand mottled with 10YR 6/3 pale brown sand with rock rubble and coal/slag; road bed

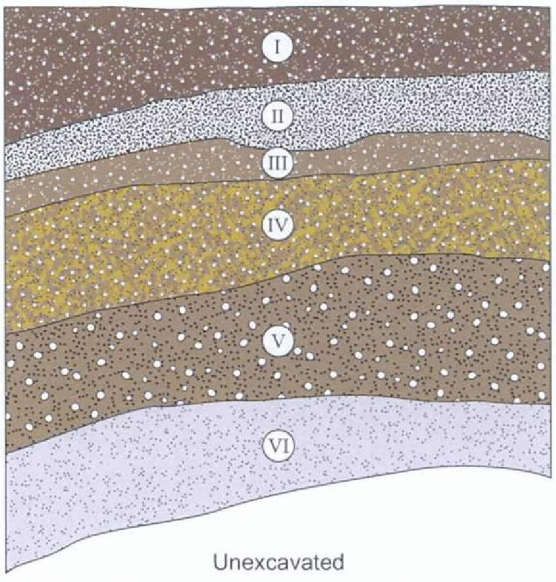
IV Compact 7.5YR 5/8 strong brown sand and gravel mottled with 10YR 4/4 dark yellowish brown sand and gravel; fill

V 7.5YR 5/8 strong brown coarse sand and rounded gravels and cobbles

VI Banded 7.5YR 5/8 strong brown sand with some 10YR 7/8 yellow sand

Figure 7. West wall profile of Trench 8 at 2 m (8 ft) b.g.s. showing fill and potential road bed materials overlying naturally-deposited stream sediments.

Trench 14
North Wall



I 10YR 3/2 very *dark grayish* brown sandy loam with gravels

II 7.5YR 2.5/1 black sandy loam

III 7.5YR 4/4 brown medium sand with gravel

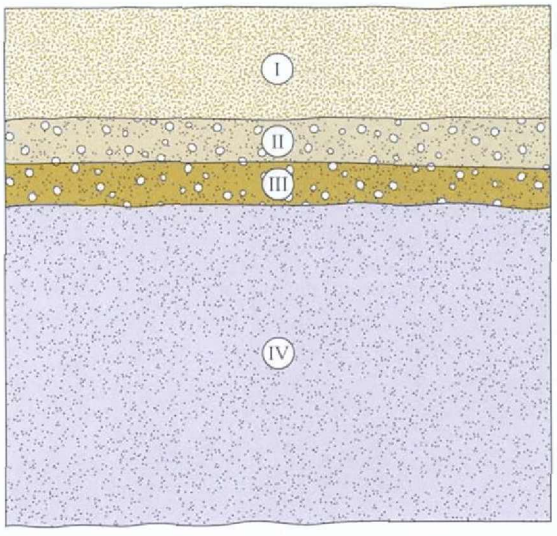
IV 7.5YR 4/4 brown mottled with 5/8 reddish yellow medium to coarse sand and gravel

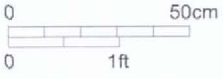
V 7.5YR 4/6 strong brown with 5/6 coarse sand with 70% water-worn rounded cobbles

VI 7.5YR 7/2 pinkish gray with 5/6 bedded sand with few gravels

Figure 8. North wall profile of Trench 14 showing layers of fill material overlying naturally-deposited stream sediments.

Trench 15
South Wall





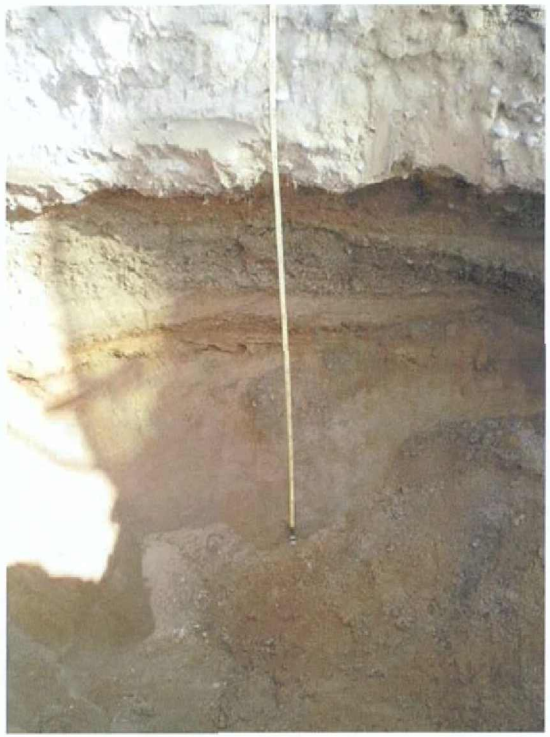
I 10YR 4/4 dark yellowish brown sandy loam; topsoil

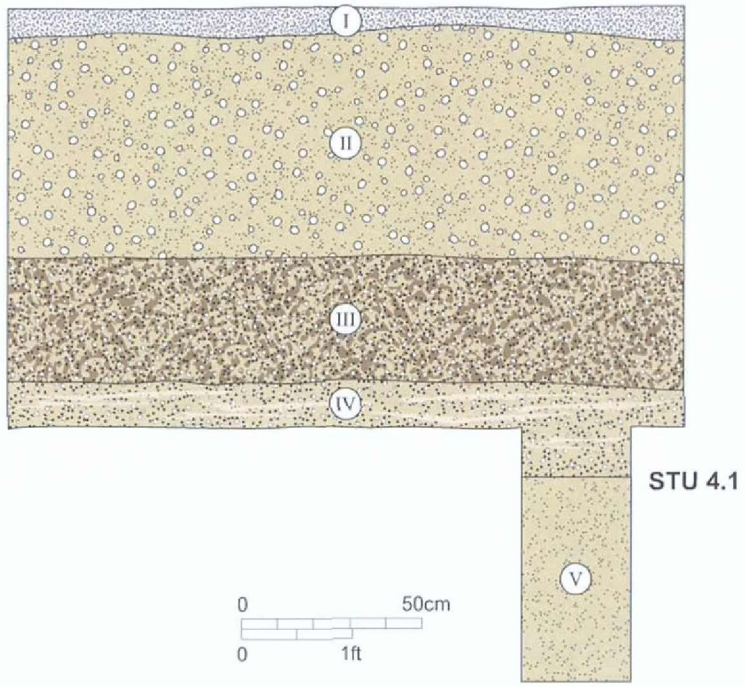
II 10YR 5/6 yellowish brown medium sands with gravel and rounded cobbles

III 10YR 4/4 dark yellowish brown medium to coarse sand with gravel and many cobbles

IV *7.5YR 7/2 pinkish gray bedded sands with very few gravels*

Figure 9. South wall profile of Trench 15 showing layers of fill material overlying naturally-deposited stream sediments.





I 10YR 4/2 dark grayish brown medium sandy loam

II Compact 10YR 6/6 brownish yellow medium sandy loam with gravel and cobbles; fill

III 10YR 5/6 yellowish brown with 10YR 4/3 brown coarse sand and gravel with decomposing schist

IV 10YR 5/6 yellowish brown medium to coarse sand with pebbles and 10YR6/4 light yellowish brown bands of sand

V 10YR 6/6 brownish yellow fine to medium sand with <1%gravel

Figure 10. North wall profile of Trench 4 showing fill material overlying naturally-deposited stream sediments.

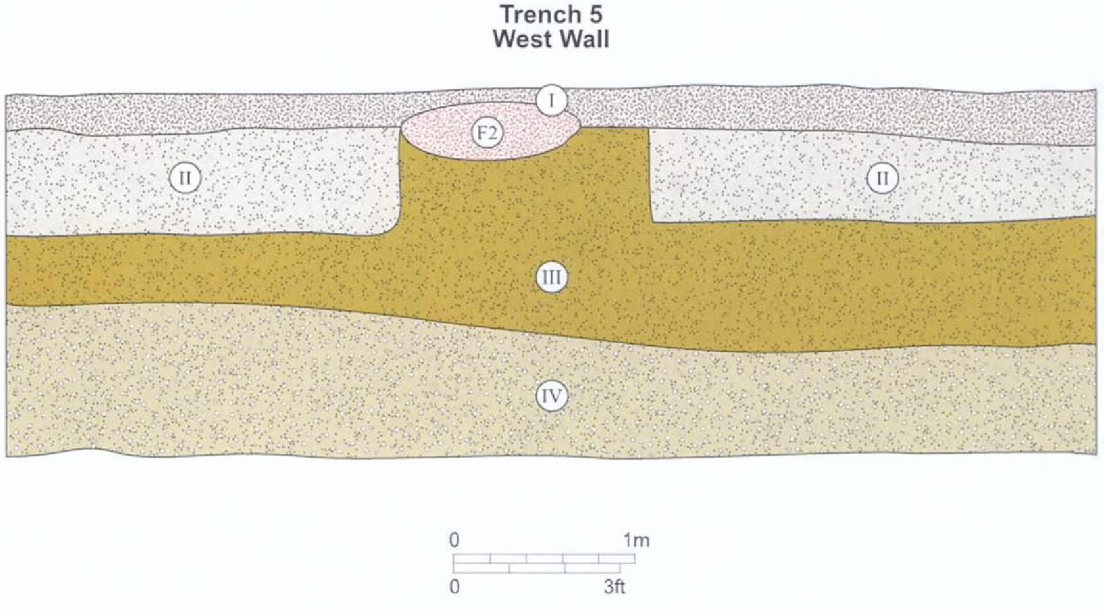
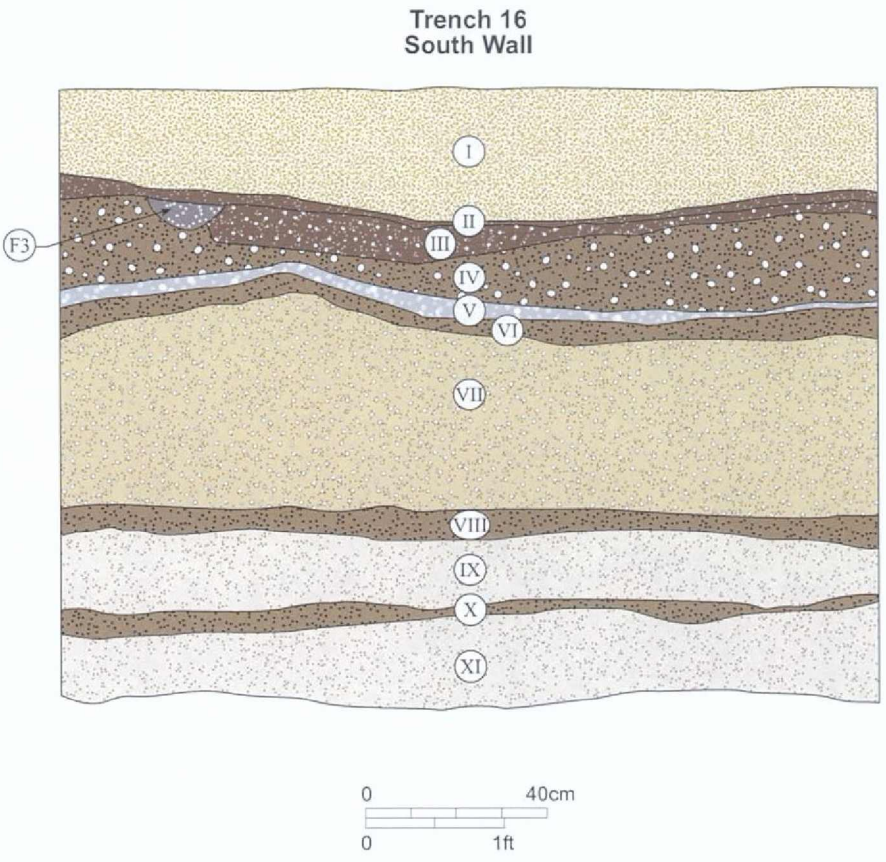


Figure 11. West wall profile of Trench 5 showing Feature 1 in upper 20 cm of trench.



I 10YR 3/4 dark yellowish brown fine to medium sandy loam

II 10YR 4/2 dark grayish brown fine to medium sand

III 10YR 4/2 dark grayish brown fine to medium sand with gravel

IV 7.5YR 4/6 strong brown medium coarse sand with gravel

V Gravel

VI 7.5YR 5/6 strong brown coarse sand

VII 10YR 5/6 yellowish brown sand, gravel, and water-worn cobbles

VIII 7.5YR 4/6 strong brown coarse sand

IX 10YR 6/4 light yellowish brown bedded fine sand

X 7.5YR 4/6 strong brown coarse sand

XI 10YR 6/4 light yellowish brown bedded fine sand

F3 10YR 4/2 dark grayish brown coarse sand

Figure 12. Stratigraphic profile of the south wall of Trench 16 showing location of Feature 3.

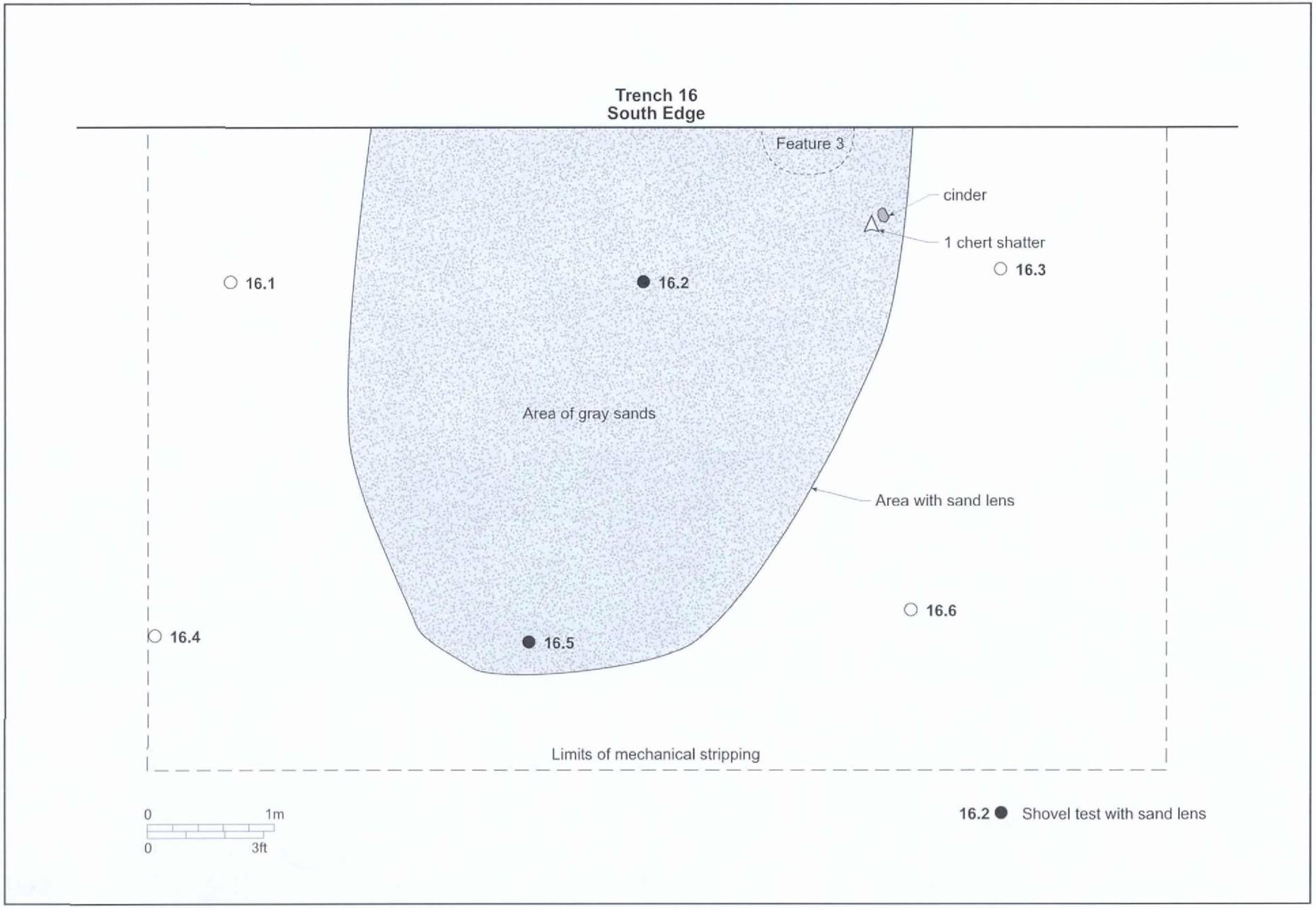


Figure 13. Plan map of stripped area on the south side of Trench 16.

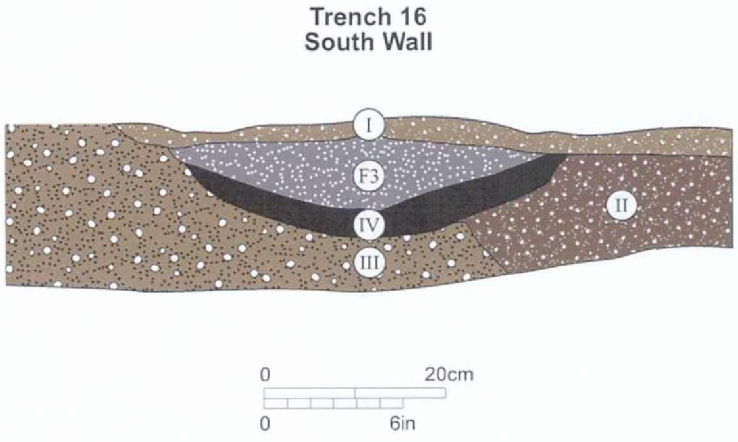


Figure 14. Detail of Feature 3 on the south wall of Trench 16.

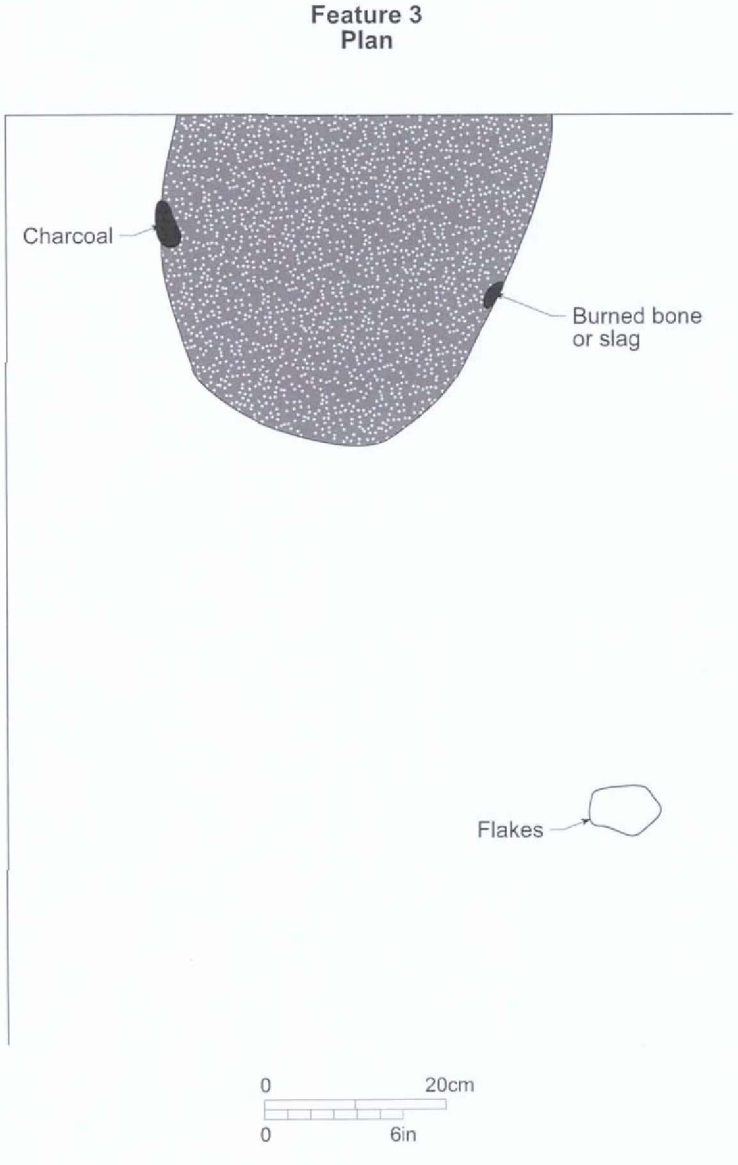
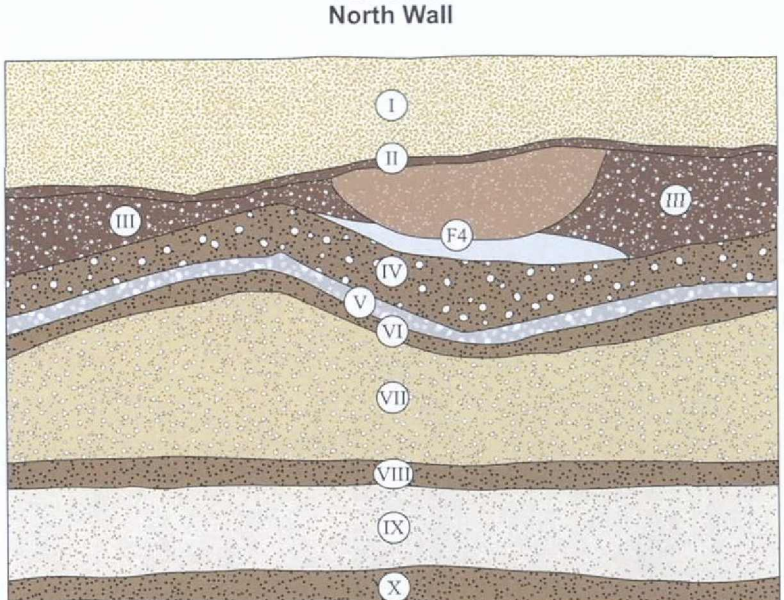


Figure 15. Plan map of Feature 3 showing artifacts located on the striped ground surface.

Trench 16
North Wall



I 10YR 3/4 dark yellowish brown fine sandy loam

II 10YR 4/2 dark grayish brown fine sand

F4 10YR 6/6 *brownish yellow* sand; 5YR 5/8 yellowish red burned sand

III 10YR 4/2 dark grayish brown sand with gravel

IV 7.5YR 4/6 strong brown medium sand with gravel

V Gravel and 7.5YR 5/8 strong brown coarse sand

VI 7.5YR 5/6 strong brown coarse sand

VII 10YR 5/6 yellowish brown medium coarse sand, gravel, and water-worn cobbles

VIII 7.5YR 5/6 strong brown coarse sand

IX 10YR 6/4 light yellowish brown bedded fine sand

X 7.5YR 5/6 strong brown coarse sand

XI 10YR 6/4 light yellowish brown bedded fine sand

Figure 16. North wall profile of Trench 16 showing location of Feature 4.

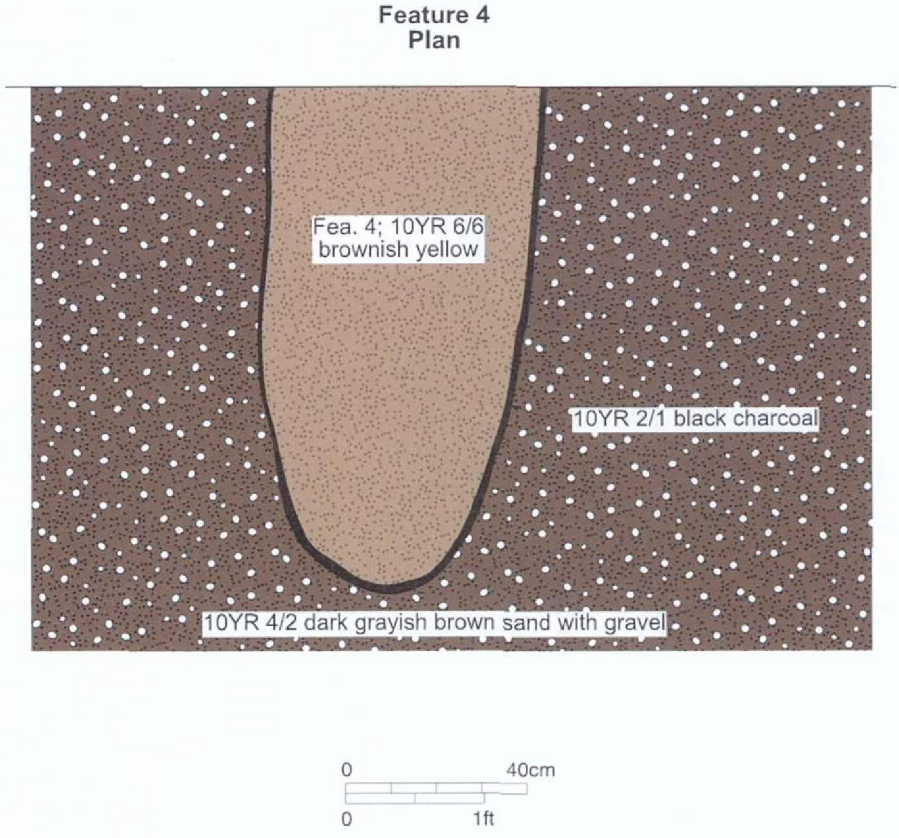


Figure 17. Plan view of Feature 4 within Trench 16.

PHOTOGRAPHS

Photograph 1. Location of the Phase 1 Area of the Van Cortlandt Park Parade Ground Reconstruction Project, view to the north. Note location of Trench 5 laid out in foreground.

Photograph 2. East wall profile of Trench 1, showing fill material overlying naturally-deposited stream sediments and clay.

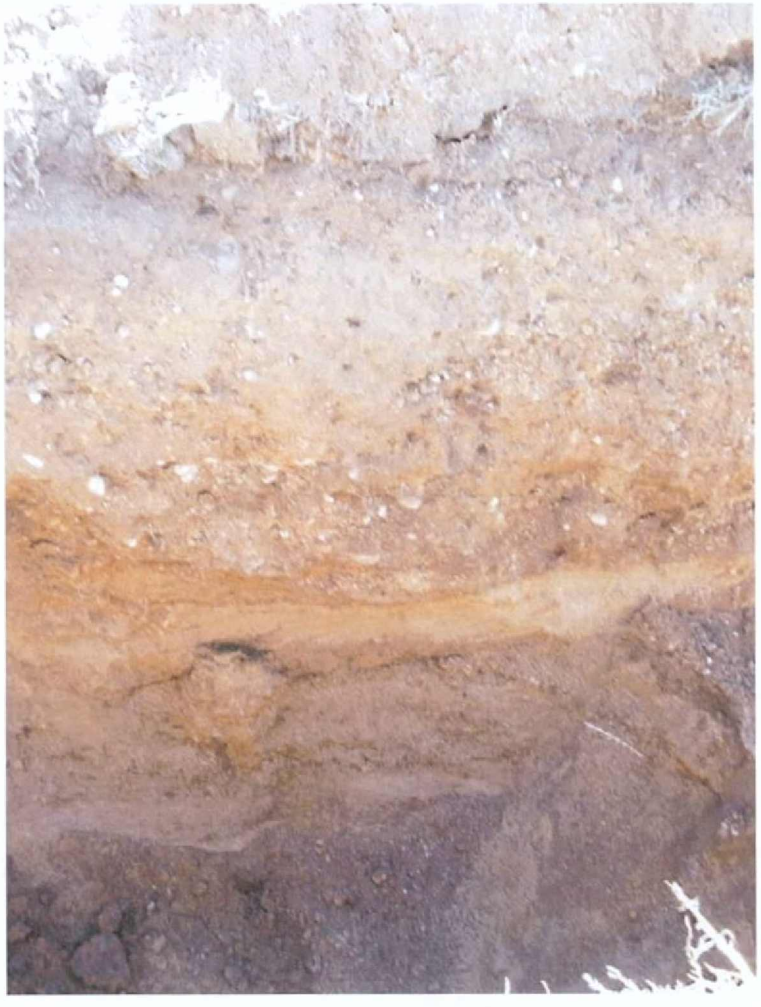
Photograph 3. Opening excavation of Trench 7, view to the southwest.

Photograph 4. Location of Trench 8, view to the south.

Photograph 5. Location of excavated Trench 15, view to the south.

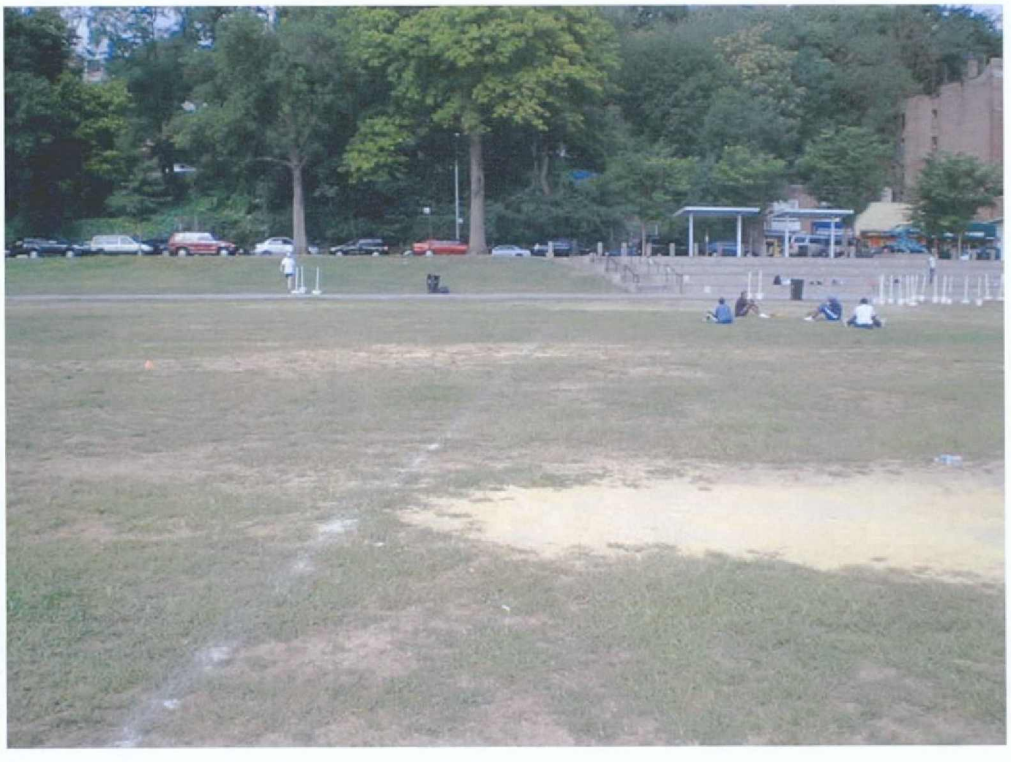
Photograph 6. Location of Trench 25, view to the south.

Photograph 7. Location of Trench 26, view to the south.



Photograph 8. North wall profile of Trench 25 at 2 m (8 ft) b.g.s. showing fill material underlain by naturally-deposited stream sediments.

Photograph 9. North wall profile of Trench 26 showing disturbed stratigraphy to a depth of 1.3 m (4.4 ft) b.g.s.



Photograph 10. Location of Trench 5, view to the west.

Photograph 11. JMA archeologists cleaning off trench wall profiles, view to the west. Note Feature 2 on west wall profile (Photo by Brian Taylor).

Photograph 12. Location of Trench 16, view to the south.

APPENDIX A:
TRENCH & SHOVEL TEST STRATIGRAPHIC PROFILES

Appendix A:
Van Cortlandt Park
Parade Ground
Phase IB
Stratigraphic Profiles

Unit	Stratum	Depth (cm)	Soil Description	Feature	Lot
1	1	0-25	10YR 6/2 light brownish gray silt loam		0
1	2	25-60	10YR 5/6 yellowish brown coarse sand and gravel		0
1	3	60-80	10YR 4/6 dark yellowish brown coarse sand and gravel		0
1	4	80-110	10YR 4/6 dark yellowish brown sand w/ gravel		0
1	5	110-150	10YR 6/4 light yellowish brown bedded alluvial sand		0
1	6	150-170	10YR 6/4 light yellowish brown mottled w/ 10YR 7/8 yellow bedded alluvial sand		0
2	1	0-35	10YR 4/2 dark grayish brown silt loam		0
2	2	35-80	10YR 4/4 dark yellowish brown mottled w/ 10YR 5/6 yellowish brown loamy sand w/ pebbles & cobbles		0
2	3	80-120	10YR 6/4 light yellowish brown sand (groundwater)		0
3	1	0-40	10YR 4/3 brown silt loam		0
3	2	40-110	10YR 5/6 yellowish brown mottled w/ 10YR 4/3 brown sandy loam w/ pebbles & cobbles		0
3	3	110-140	10YR 6/4 light yellowish brown sand w/ pebbles & cobbles		0
3	4	140-175	10YR 5/6 yellowish brown sand		0
3	5	175-180	Glay 1 6/N greenish blue clay		0
4	1	0-7	10YR 4/2 dark grayish brown sandy loam		0
4	2	7-68	10YR 6/6 brownish yellow sandy loam w/ pebbles & cobbles (compact)		0
4	3	68-102	10YR 5/6 yellowish brown mottled w/ 10YR 4/3 brown sand w/ gravel (decomposing bedrock)		0
4	4	102-114	10YR 5/6 yellowish brown sand w/ gravel & pebbles		0
4.1	4	114-128	10YR 5/6 yellowish brown sand w/ gravel & pebbles		0
4.1	5	128-144	10YR 4/6 dark yellowish brown mottled w/ 10YR 6/4 light yellowish brown bedded alluvial sand		0
4.2	4	114-128	10YR 5/6 yellowish brown sand w/ gravel & pebbles		0
4.2	5	128-144	10YR 4/6 dark yellowish brown mottled w/ 10YR 6/4 light yellowish brown bedded alluvial sand		0
5	1	0-20	10YR 4/3 brown sandy loam		0
5	2	20-60	10YR 6/4 light yellowish brown fine sand (compact)		0
5	3	60-140	10YR 4/6 dark yellowish brown fine sand (compact)		0
5	4	140-200	10YR 5/8 yellowish brown sandy clay w/ pebbles & cobbles (compact)		0
5		10-34	5YR 6/8 reddish yellow sandy loam (compact)	2	0
5		10-36	5YR 6/8 reddish yellow sandy loam (compact)	1	0
6	1	0-30	10YR 4/3 brown sandy loam w/ gravel		0
6	2	30-60	10YR 6/4 light yellowish brown sand w/ gravel (compact)		0
6	3	60-130	10YR 6/4 light yellowish brown coarse sand w/gravel (compact)		0

Appendix A:
Van Cortlandt Park
Parade Ground
Phase IB
Stratigraphic Profiles

Unit	Stratum	Depth (cm)	Soil Description	Feature	Lot
6	4	130-160	7.5YR 6/8 reddish yellow sandy clay w/ gravel & pebbles (compact)		0
6	5	160-200	7.5YR 7/1 light gray mottled w/ 7.5YR 7/4 pink bedded alluvial sand		0
7	1	0-30	10YR 4/3 brown loamy sand		1
7	2	30-100	7.5YR 6/4 light brown mottled w/ 10YR 5/8 yellowish brown sand w/ pebbles & cobbles (compact)		0
7	3	100-150	10YR 5/8 yellowish brown sand w/ pebbles & cobbles		0
7	4	150-170	10YR 7/3 very pale brown mottled w/ 10YR 5/8 yellowish brown bedded alluvial sand		0
8	1	0-10	10YR 4/3 brown loamy sand		2
8	2	10-20	10YR 4/6 dark yellowish brown sand w/ gravel (compact)		0
8	3	20-50	10YR 4/4 dark yellowish brown mottled w/ 10YR 4/6 dark yellowish brown compact sand (coal slag and broken rock)		0
8	4	50-72	7.5YR 5/8 strong brown mottled w/ 10YR 4/4 dark yellowish brown compact sand (coal slag and broken rock)		0
8	5	72-80	7.5YR 5/8 strong brown coarse sand w/gravel & cobbles		0
8	6	80-106	7.5YR 5/8 strong brown mottled w/ 10YR 7/8 yellow bedded alluvial sand		0
9	1	0-65	10YR 4/2 dark grayish brown mottled w/ 10YR 6/6 brownish yellow silt loam (compact)		3
9	2	65-101	10YR 6/6 brownish yellow mottled w/ 10YR 4/4 dark yellowish brown sand w/ pebbles & cobbles		0
9	3	101-140	10YR 5/6 yellowish brown coarse sand		0
9	4	140-152	10YR 3/2 very dark grayish brown mottled w/ 7.5YR 6/1 gray sandy clay		0
10	1	0-35	10YR 4/2 dark grayish brown silt loam		4
10	2	35-60	10YR 5/6 yellowish brown coarse sand w/gravel & cobbles		0
10	3	60-140	10YR 7/3 very pale brown mottled w/ 10YR 5/8 yellowish brown fine sand		0
10	4	140-160	10YR 7/3 very pale brown mottled w/ 10YR 5/8 yellowish brown fine sand (groundwater)		0
11	1	0-30	10YR 4/4 dark yellowish brown silt loam		5
11	2	30-70	7.5YR 5/8 strong brown loamy sand w/ pebbles & cobbles		0
11	3	70-100	10YR 6/4 light yellowish brown coarse sand w/gravel & cobbles		0
11	4	100-110	7.5YR 7/1 light gray sand w/ pebbles & cobbles		0
11	5	110-190	7.5YR 7/1 light gray mottled w/ 7.5YR 5/4 brown bedded alluvial sand		0
12	1	0-40	10YR 3/2 very dark grayish brown mottled w/ 10YR 4/4 dark yellowish brown silt loam		0
12	2	40-130	10YR 4/6 dark yellowish brown mottled w/ 10YR 3/6 dark yellowish brown sand w/ gravel		0
12	3	130-170	10YR 8/1 white mottled w/ 10YR 7/3 very pale brown bedded alluvial sand		0
13	1	0-49	10YR 4/4 dark yellowish brown silt loam		0
13	2	49-101	10YR 6/6 brownish yellow sand w/ gravel		0
13	3	101-114	10YR 4/6 dark yellowish brown sand w/ gravel		0

Appendix A:
Van Cortlandt Park
Parade Ground
Phase IB
Stratigraphic Profiles

Unit	Stratum	Depth (cm)	Soil Description	Feature	Lot
13	4	114-158	10YR 3/6 dark yellowish brown bedded alluvial sand		0
14	1	0-40	10YR 3/2 very dark grayish brown loamy sand w/ pebbles & cobbles		0
14	2	40-50	7.5YR 2.5/1 black loamy sand w/ pebbles & cobbles		0
14	3	50-58	7.5YR 4/4 brown sand w/ gravel		0
14	4	58-90	7.5YR 4/4 brown mottled w/ 7.5YR 7/2 pinkish gray sand w/ gravel		0
14	5	90-129	7.5YR 4/6 strong brown mottled w/ 7.5YR 6/1 gray sand w/ pebbles & cobbles		0
14	6	129-160	7.5YR 7/2 pinkish gray mottled w/ 7.5YR 6/1 gray bedded alluvial sand		0
15	1	0-31	10YR 4/4 dark yellowish brown silt loam		6
15	2	31-43	10YR 5/6 yellowish brown sand w/ pebbles & cobbles		0
15	3	43-55	10YR 4/4 dark yellowish brown sand w/ pebbles & cobbles		0
15	4	55-144	7.5YR 7/2 pinkish gray bedded alluvial sand		0
16	1	0-30	10YR 3/4 dark yellowish brown loamy sand		7
16	2	30-32	10YR 4/2 dark grayish brown sand		8
16	3	32-38	10YR 4/2 dark grayish brown sand w/ gravel		0
16	4	38-46	7.5YR 4/6 strong brown sand w/ gravel		0
16	5	46-50	7.5YR 5/6 strong brown coarse sand w/gravel		0
16	6	50-56	7.5YR 5/6 strong brown coarse sand		0
16	7	56-94	10YR 5/6 yellowish brown sand w/ pebbles & cobbles		0
16	8	94-102	7.5YR 5/6 strong brown coarse sand w/gravel		0
16	9	102-112	10YR 6/4 light yellowish brown bedded alluvial sand		0
16	10	112-120	7.5YR 5/6 strong brown coarse sand w/gravel		0
16	11	120-200	10YR 6/4 light yellowish brown bedded alluvial sand		0
16		24-32	7.5YR 4/6 strong brown sand w/ gravel	3	23
16		18-30	10YR 6/6 brownish yellow loamy sand	4	0
17	1	0-36	10YR 3/3 dark brown sandy loam		9
17	2	36-47	7.5YR 5/6 strong brown mottled w/ 10YR 4/4 dark yellowish brown sandy loam		0
17	3	47-78	7.5YR 5/6 strong brown mottled w/ 10YR 6/6 brownish yellow sand w/ gravel		0
17	4	78-98	10YR 5/6 yellowish brown mottled w/ 10YR 3/6 dark yellowish brown sand w/ gravel		0
17	5	98-136	10YR 6/4 light yellowish brown coarse sand		0
18	1	0-57	10YR 3/3 dark brown silt loam		10
18	2	57-79	7.5YR 4/6 strong brown mottled w/ 7.5YR 5/8 strong brown coarse sand w/gravel & cobbles		0

Appendix A:
Van Cortlandt Park
Parade Ground
Phase IB
Stratigraphic Profiles

Unit	Stratum	Depth (cm)	Soil Description	Feature	Lot
18	3	79-120	7.5YR 5/8 strong brown mottled w/ 7.5YR 5/2 brown coarse sand w/gravel & cobbles		0
18	4	120-160	10YR 6/4 light yellowish brown bedded alluvial sand		0
19	1	0-45	10YR 4/4 dark yellowish brown mottled w/ 7.5YR 5/8 strong brown loamy sand w/ gravel		11
19	2	45-122	10YR 2/2 very dark brown loamy sand		12
19	3	122-160	7.5YR 4/4 brown loamy sand		0
19	4	160-200	10YR 6/4 light yellowish brown bedded alluvial sand (groundwater)		0
20	1	0-16	10YR 5/3 brown silt loam (compact)		13
20	2	16-30	10YR 6/6 brownish yellow fine loamy sand (compact)		0
20	3	30-48	7.5YR 5/6 strong brown fine loamy sand (compact)		0
20	4	48-68	10YR 5/6 yellowish brown mottled w/ 7.5YR 6/2 pinkish gray coarse sand w/gravel		0
20	5	68-129	10YR 5/6 yellowish brown mottled w/ 7.5YR 6/2 pinkish gray sandy clay loam		0
21	1	0-24	10YR 3/2 very dark grayish brown silt loam		0
21	2	24-40	10YR 7/6 yellow loamy sand		0
21	3	40-61	10YR 2/2 very dark brown loamy sand		0
21	4	61-94	10YR 5/8 yellowish brown sand w/ gravel		0
21	5	94-140	7.5YR 5/6 strong brown mottled w/ 10YR 4/4 dark yellowish brown coarse sand w/gravel & cobbles		0
22	1	0-25	10YR 3/4 dark yellowish brown sandy loam		29
22	2	25-54	10YR 4/4 dark yellowish brown mottled w/ 10YR 3/4 dark yellowish brown sandy loam w/ pebbles & cobbles		0
22	3	54-118	10YR 7/6 yellow bedded alluvial sand		0
22	4	118-140	7.5YR 4/6 strong brown mottled w/ 7.5YR 6/1 gray coarse sand w/gravel & cobbles		0
23	1	0-40	10YR 4/3 brown silt loam w/ gravel		33
23	2	40-116	10YR 5/8 yellowish brown bedded alluvial sand		0
23	3	116-140	10YR 6/3 pale brown mottled w/ 10YR 4/2 dark grayish brown coarse sand		0
24	1	0-47	10YR 4/3 brown silt loam		30
24	2	47-74	10YR 5/8 yellowish brown mottled w/ 10YR 5/3 brown fine sand (compact)		0
24	3	74-110	10YR 6/8 brownish yellow mottled w/ 10YR 5/2 grayish brown coarse sand w/gravel & cobbles		0
25	1	0-24	10YR 3/2 very dark grayish brown sandy loam		31
25	2	24-92	7.5YR 4/6 strong brown mottled w/ 10YR 3/3 dark brown sand w/ gravel		0
25	3	92-140	10YR 4/6 dark yellowish brown sand w/ gravel		0
25	4	140-160	10YR 6/4 light yellowish brown sand w/ gravel		0
25	5	160-165	10YR 6/3 pale brown fine sand		0

Appendix A:
Van Cortlandt Park
Parade Ground
Phase IB
Stratigraphic Profiles

Unit	Stratum	Depth (cm)	Soil Description	Feature	Lot
25	6	165-200	7.5YR 7/2 pinkish gray mottled w/ 10YR 4/4 dark yellowish brown bedded alluvial sand		0
26	1	0-33	10YR 4/4 dark yellowish brown loamy sand		32
26	2	33-40	10YR 5/6 yellowish brown mottled w/ 10YR 4/4 dark yellowish brown sandy loam		0
26	3	40-58	10YR 5/6 yellowish brown fine sand		0
26	4	58-130	10YR 4/6 dark yellowish brown mottled w/ 10YR 3/6 dark yellowish brown coarse sand w/gravel & cobbles		0
26	5	130-160	10YR 5/4 yellowish brown mottled w/ 10YR 4/4 dark yellowish brown bedded alluvial sand		0
27	1	0-25	10YR 3/2 very dark grayish brown mottled w/ 10YR 4/4 dark yellowish brown loamy sand w/ gravel		34
27	2	25-40	10YR 5/4 yellowish brown sand w/ gravel		0
27	3	40-62	10YR 6/6 brownish yellow mottled w/ 10YR 5/2 grayish brown coarse sand w/gravel & cobbles		0
27	4	62-71	10YR 7/6 yellow sand		0
27	5	71-76	10YR 7/6 yellow mottled w/ 10YR 3/2 very dark grayish brown coarse sand w/gravel & cobbles		0
27	6	76-82	10YR 6/6 brownish yellow mottled w/ 10YR 3/2 very dark grayish brown sand		0
27	7	82-96	7.5YR 4/6 strong brown mottled w/ 10YR 3/2 very dark grayish brown coarse sand w/gravel & cobbles		0
27	8	96-120	10YR 6/6 brownish yellow sand		0
28	1	0-24	10YR 3/3 dark brown silt loam		35
28	2	24-62	10YR 6/6 brownish yellow mottled w/ 10YR 4/4 dark yellowish brown loamy sand w/ gravel		0
28	3	62-86	10YR 7/1 light gray fine sand		0
28	4	86-120	10YR 5/6 yellowish brown sand w/ gravel (compact)		0
28	5	120-140	10YR 6/4 light yellowish brown fine sand		0
16.1	1	0-26	10YR 3/2 very dark grayish brown silt loam		14
16.1	2	26-36	10YR 5/6 yellowish brown mottled w/ 10YR 4/4 dark yellowish brown sand w/ gravel		15
16.2	1	0-16	10YR 3/4 dark yellowish brown fine loamy sand		0
16.2	2	16-20	10YR 4/3 brown fine loamy sand		16
16.2	3	20-30	10YR 4/2 dark grayish brown mottled w/ 7.5YR 6/1 gray bedded alluvial sand		17
16.3	1	0-21	10YR 3/2 very dark grayish brown silt loam		18
16.3	2	21-42	10YR 4/4 dark yellowish brown sand w/ gravel		19
16.4	1	0-17	10YR 3/2 very dark grayish brown silt loam		20
16.4	2	17-42	10YR 4/6 dark yellowish brown sand w/ gravel (compact)		21
16.4	3	42-50	10YR 6/6 brownish yellow mottled w/ 10YR 6/2 light brownish gray sand		0
16.5	1	0-13	10YR 3/4 dark yellowish brown fine loamy sand		22
16.5	2	13-18	10YR 4/3 brown fine sand		0

Appendix A:
Van Cortlandt Park
Parade Ground
Phase 1B
Stratigraphic Profiles

Unit	Stratum	Depth (cm)	Soil Description	Feature	Lot
16.5	3	18-23	10YR 4/2 dark grayish brown mottled w/ 7.5YR 6/1 gray loamy sand w/ gravel (compact)		0
16.5	4	23-34	7.5YR 4/6 strong brown bedded alluvial sand		0
16.6	1	0-9	10YR 3/2 very dark grayish brown silt loam (compact)		0
16.6	2	9-22	10YR 4/3 brown sand w/ gravel (compact)		0
16.6	3	22-36	10YR 6/6 brownish yellow bedded alluvial sand		0
16	0	22-22			24
16	0	22-22		3	25

APPENDIX B:
ARTIFACT CATALOG

Appendix B:
Van Cortlandt Park
Parade Ground
Phase IB
Artifact Catalog

Lot	Unit	Stratum	Depth (cm)	Count	Artifact Description	Date Range	Comments
1	7	1	0-30	3	Coal: Lump/Nugget	0-0	
1	7	1	0-30	2	Chinese Export Porcelain: Underglaze Blue	0-0	one is flow-blue
1	7	1	0-30	1	Coal: Cinder	0-0	
1	7	1	0-30	1	Hard-Paste Porcelain: Hotel Ware	1860-2000	1860-2000
1	7	1	0-30	1	Domestic Gray Stoneware: Blue Decorated Salt Glaze	0-0	
1	7	1	0-30	3	Industrial Stoneware Bottle: Albany Interior/Bristol-Like Exterior	0-0	two vessels 1810-1920
1	7	1	0-30	1	Decorated/Embossed Glass Fragment: Clear	0-0	embossed letters"…S…" U, M or N preceeds 'S'
1	7	1	0-30	2	Whiteware: Plain	1810-2000	1810-2000
1	7	1	0-30	1	Whiteware: Blue Hand Painted	1810-1930	lg blue dots between two thin bands 1810-1930
1	7	1	0-30	16	Faunal: Oyster Shell Fragments	0-0	four are nearly whole (36g)
1	7	1	0-30	1	Whiteware: Banded	1825-1890	lt blue band & green, poss pearlware 1825-1890
1	7	1	0-30	1	Pearlware: Molded	1780-1830	poss embossed, instead 1780-1830
1	7	1	0-30	1	Ironstone: Blue Transfer Print	0-0	floral & leaf motif
1	7	1	0-30	1	Redware: Unglazed	0-0	
1	7	1	0-30	1	Redware: Unidentified	0-0	
1	7	1	0-30	1	Free-Blown Bottle Fragment: Olive Green	0-0	base open pontil mid-18th to early 19th
1	7	1	0-30	1	Dinnerware, Plastic: Utensil	0-0	fork tine
1	7	1	0-30	1	Machine-Made Bottle Fragment: Coke-Bottle Green	1903-2000	body
1	7	1	0-30	1	Unidentified Bottle Fragment: Green	0-0	base
1	7	1	0-30	1	Unidentified Bottle Fragment: Light Green	0-0	
1	7	1	0-30	1	Unidentified Bottle Fragment: Aqua	0-0	body-may have side seam
1	7	1	0-30	1	Whiteware: Red Transfer Print	1829-1915	green, poss pearlware 1825-1835
1	7	1	0-30	2	Brick, Fragment: Unidentified, Unglazed	0-0	discarded in lab
1	7	1	0-30	1	Toy, Plastic: Other	1915-2000	symbol
1	7	1	0-30	1	Toy, Glass: Machine-Made Marble	1920-2000	1920-2000
1	7	1	0-30	1	Broken Flake: Quartz	0-0	>45mm
1	7	1	0-30	1	Pipe Stem: 4/64th-Inch Ball Clay	0-0	1750-1800
1	7	1	0-30	1	Core: Chert	0-0	core frag w/cortex, 30-40mm
2	8	1	0-10	1	Redware: Unglazed	0-0	
2	8	1	0-10	1	Domestic Brown Stoneware: Salt Glaze/Albany Slip on Buff	1810-2000	mouth sherd of crock?
2	8	1	0-10	1	Miscellaneous Glass Tableware: Unidentified	0-0	poss frosted

Appendix B:
Van Cortlandt Park
Parade Ground
Phase IB
Artifact Catalog

Lot	Unit	Stratum	Depth (cm)	Count	Artifact Description	Date Range	Comments
2	8	1	0-10	1	Free-Blown Bottle Fragment: Olive Green	0-0	base
2	8	1	0-10	1	Unidentified Plastic: Fragment	1915-0	
2	8	1	0-10	1	Miscellaneous Glass Tableware: Stemware Base	0-0	iridescent
2	8	1	0-10	2	Ironstone: Plain White	1813-1900	
2	8	1	0-10	1	Chinese Export Porcelain: Underglaze Blue	0-0	plate rim
2	8	1	0-10	1	Whiteware: Molded	1810-2000	"bead" relief at edge of rim-bowl?
3	9	1	0-65	1	Stone: Modified	0-0	side>poss domino?
3	9	1	0-65	1	Debitage: Quartz	0-0	w/cortex, 20-25mm
4	10	1	0-35	1	Coal: Lump/Nugget	0-0	
5	11	1	0-30	1	Broken Flake: Quartzite	0-0	30-40mm
6	15	1	0-31	1	Machine-Made Bottle Fragment: Silk Screen	1932-2000	silkscreen
6	15	1	0-31	1	Slipware: Unidentified	1670-1795	blue slip
6	15	1	0-31	1	Coal: Cinder	0-0	
6	15	1	0-31	1	Cut Common Nail: 2.5 - 3 Inch Long	1805-2000	rusted
6	15	1	0-31	1	Faunal: Bone	0-0	unburned-bird
6	15	1	0-31	2	Coal: Lump/Nugget	0-0	
6	15	1	0-31	1	Pressed-Glass Tableware: Diamonds	1825-2000	
7	16	1	0-30	3	Unidentified Bottle Fragment: Clear	0-0	
7	16	1	0-30	1	Unidentified Bottle Fragment: Olive Green	0-0	thin, blown
7	16	1	0-30	1	Hinge-Bottom-Mold Bottle Fragment: Clear	1750-1880	base sherd
7	16	1	0-30	1	Unidentified Bottle Fragment: Frosted	0-0	
7	16	1	0-30	1	Unidentified Bottle Fragment: Amber	0-0	
7	16	1	0-30	1	Window Glass: 1 - 2mm Thick	0-0	
7	16	1	0-30	1	Unidentified Bottle Fragment: Aqua	0-0	
7	16	1	0-30	1	Flat Glass: Colored	0-0	lt green (tinted?)
7	16	1	0-30	1	Unidentified Bottle Fragment: Amethyst	1880-1915	1880-1915
7	16	1	0-30	2	Decorated/Embossed Glass Fragment: Clear	0-0	one base, one body-stippled relief
7	16	1	0-30	1	Brick, Fragment: Unidentified, Unglazed	0-0	discarded in lab
7	16	1	0-30	3	Machine-Made Bottle Fragment: Coke-Bottle Green	1903-2000	body sherds
7	16	1	0-30	1	Fastener, Metal: Ferrous Belt or Other Buckle	0-0	fragment
7	16	1	0-30	1	Cut Common Nail: 3.5 - 4 Inch Long	1805-2000	

Appendix B:
Van Cortlandt Park
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Phase IB
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Lot	Unit	Stratum	Depth (cm)	Count	Artifact Description	Date Range	Comments
7	16	1	0-30	3	Chinese Export Porcelain: Underglaze Blue	0-0	one is rim
7	16	1	0-30	1	Fastener, Metal: Spike	0-0	4.5-5 inch long
7	16	1	0-30	1	Broken Flake: Chert	0-0	hinge termination, 20-30mm
7	16	1	0-30	1	Creamware: Unspecified	0-0	
7	16	1	0-30	1	Faunal: Oyster	0-0	nearly whole
7	16	1	0-30	2	Whiteware: Plain	1810-2000	
7	16	1	0-30	1	Whiteware: Shell Edge	1810-1900	blue, very small sherd
7	16	1	0-30	1	Faunal: Oyster Shell Fragments	0-0	
7	16	1	0-30	1	Cut Common Nail: 1.5 - 2 Inch Long	1805-2000	
7	16	1	0-30	2	Coal: Cinder	0-0	one is coke
7	16	1	0-30	2	Coal: Lump/Nugget	0-0	
7	16	1	0-30	1	Storage, Metal: Pull Tab	1962-1977	fragment, discarded in lab
7	16	1	0-30	1	Miscellaneous, Metal: Rivet	0-0	brass
7	16	1	0-30	1	Projectile: Lead Bullet	0-0	brass cartridge w/38 S&W[oo]?-discarded in lab
7	16	1	0-30	1	Storage, Metal: Crimped Bottle Cap	1892-2000	fragment w/plastic lining-discarded in lab
7	16	1	0-30	2	Coal: Coal Ash (Slag)	0-0	
7	16	1	0-30	1	Miscellaneous Glass Tableware: Unspecified, Fragment	0-0	clear
8	16	2	30-32	1	Shatter: Chert	0-0	water/weather-worn 10-25mm
8	16	2	30-32	1	Coal: Cinder	0-0	
8	16	2	30-32	1	Unidentified Ceramic: Burnt White Body	0-0	
9	17	1	0-36	2	Brick, Fragment: Unidentified, Unglazed	0-0	discarded in lab
9	17	1	0-36	1	Yellowware: Plain	1830-1930	rim or handle fragment
9	17	1	0-36	1	Whiteware: Unspecified	1810-2000	
9	17	1	0-36	1	Redware: Unglazed	0-0	very thin
9	17	1	0-36	6	Decorated/Embossed Glass Fragment: Clear	0-0	three different designs (vessels?)
9	17	1	0-36	1	Dinnerware, Plastic: Plate/Cup	0-0	cup rim sherd
9	17	1	0-36	2	Unidentified Bottle Fragment: Amber	0-0	
9	17	1	0-36	2	Faunal: Oyster Shell Fragments	0-0	at least one is oyster
9	17	1	0-36	1	Redware: Yellow Interior/Brown Exterior	0-0	rim sherd, thin
9	17	1	0-36	1	Unidentified Plastic: Object	1915-0	black
9	17	1	0-36	1	Creamware: Unspecified	0-0	

Appendix B:
Van Cortlandt Park
Parade Ground
Phase IB
Artifact Catalog

Lot	Unit	Stratum	Depth (cm)	Count	Artifact Description	Date Range	Comments
9	17	1	0-36	1	Flake Fragment: Quartzite	0-0	40-55mm
9	17	1	0-36	1	Unidentified Bottle Fragment: Bright Green	0-0	
10	18	1	0-57	1	Unidentified Plastic: Fragment	1915-0	
10	18	1	0-57	4	Unidentified Bottle Fragment: Clear	0-0	
10	18	1	0-57	1	Unidentified Metal Object: Aluminum	1895-2000	
10	18	1	0-57	1	Cut Common Nail: 2 - 2.5 Inch Long	1805-2000	
10	18	1	0-57	1	Unidentified Bottle Fragment: Bright Green	0-0	body
10	18	1	0-57	1	Cut Common Nail: 2.5 - 3 Inch Long	1805-2000	
11	19	1	0-45	1	Unidentified Bottle Fragment: Olive Green	0-0	
11	19	1	0-45	1	Unidentified Bottle Fragment: Amber	0-0	
11	19	1	0-45	2	Free-Blown Bottle Fragment: Dark Green	0-0	
11	19	1	0-45	2	Unidentified Bottle Fragment: Bright Green	0-0	
11	19	1	0-45	2	Dinnerware, Plastic: Utensil	0-0	one red fork tine, one white fork base
11	19	1	0-45	1	Hard-Paste Porcelain: Molded	0-0	feathered rim edge-bowl fragment
11	19	1	0-45	2	Whiteware: Plain	1810-2000	one is rim sherd
11	19	1	0-45	1	Miscellaneous, Glass: Other	0-0	poss chimney lamp glass, thin & clear
11	19	1	0-45	1	Flat Glass: Colored	0-0	lt green (tinted?)
11	19	1	0-45	3	Faunal: Clam	0-0	all three are fragments
11	19	1	0-45	1	Unidentified Plastic: Fragment	1915-0	
11	19	1	0-45	1	Unidentified Bottle Fragment: Frosted	0-0	
12	19	2	45-122	1	Faunal: Nonhuman Teeth	0-0	fragmentary-in three pieces
12	19	2	45-122	1	Faunal: Oyster Shell Fragments	0-0	likely oyster
12	19	2	45-122	1	Hard-Paste Porcelain: Plain	0-0	semi-porcelain?
12	19	2	45-122	1	Unidentified Bottle Fragment: Olive Green	0-0	poss hand-blown
13	20	1	0-16	1	Faunal: Oyster Shell Fragments	0-0	fragmentary (one layer)
13	20	1	0-16	1	Unidentified Bottle Fragment: Olive Green	0-0	hand-blown
13	20	1	0-16	2	Flat Glass: Colored	0-0	lt green (tinted?)
13	20	1	0-16	1	Yellowware: Plain	1830-1930	
13	20	1	0-16	1	Coal: Lump/Nugget	0-0	
13	20	1	0-16	1	Brick, Fragment: Unidentified, Unglazed	0-0	discarded in lab
13	20	1	0-16	1	Window Glass: 1 - 2mm Thick	0-0	

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Phase IB
Artifact Catalog

Lot	Unit	Stratum	Depth (cm)	Count	Artifact Description	Date Range	Comments
13	20	1	0-16	1	Unidentified Bottle Fragment: Clear	0-0	
13	20	1	0-16	1	Unidentified Bottle Fragment: Cobalt Blue	0-0	when held to light)
13	20	1	0-16	2	Coal: Cinder	0-0	
14	16.1	1	0-26	1	Window Glass: 2 - 3mm Thick	0-0	
14	16.1	1	0-26	2	Unidentified Bottle Fragment: Aqua	0-0	one is neck fragment
14	16.1	1	0-26	1	Brick, Fragment: Unidentified, Unglazed	0-0	discarded in lab
14	16.1	1	0-26	1	Unidentified Bottle Fragment: Amethyst	1880-1915	
14	16.1	1	0-26	1	Whiteware: Plain	1810-2000	very small sherd
14	16.1	1	0-26	3	Unidentified Bottle Fragment: Clear	0-0	
15	16.1	2	26-36	1	Decorated/Embossed Glass Fragment: Amber	0-0	linear decoration
15	16.1	2	26-36	1	Unidentified Bottle Fragment: Clear	0-0	
16	16.2	2	16-20	3	Coal: Cinder	0-0	
16	16.2	2	16-20	1	Decorated/Embossed Glass Fragment: Amber	0-0	
16	16.2	2	16-20	1	Faunal: Clam	0-0	small fragment
16	16.2	2	16-20	1	Unidentified Bottle Fragment: Frosted	0-0	
16	16.2	2	16-20	1	Shatter: Chert	0-0	non-cultural
16	16.2	2	16-20	1	Unidentified Bottle Fragment: Clear	0-0	
16	16.2	2	16-20	1	Cut Common Nail: 3 - 3.5 Inch Long	1805-2000	
17	16.2	3	20-30	1	Decorated/Embossed Glass Fragment: Aqua	0-0	apparent (incomplete) letter "...O..."
17	16.2	3	20-30	1	Unidentified Bottle Fragment: Clear	0-0	
18	16.3	1	0-21	1	Cut L-Head Nail: Fragment	0-0	
18	16.3	1	0-21	1	Faunal: Clam	0-0	<1g
18	16.3	1	0-21	1	Wire Common Nail: 2 - 2.5 Inch Long	1850-2000	
18	16.3	1	0-21	2	Cut Nail: Shaft Only	1805-2000	
18	16.3	1	0-21	2	Coal: Cinder	0-0	
19	16.3	2	21-42	1	Coal: Cinder	0-0	
19	16.3	2	21-42	2	Coal: Lump/Nugget	0-0	
20	16.4	1	0-17	1	Machine-Made Bottle Fragment: Aqua	1903-2000	w/seam
20	16.4	1	0-17	1	Machine-Made Bottle Fragment: Silk Screen	1932-2000	clear w/"...SI COLA BOTT..."
20	16.4	1	0-17	1	Storage, Metal: Pull Tab	1962-1977	discarded in lab
21	16.4	2	17-42	1	Brick, Fragment: Unidentified, Unglazed	0-0	discarded in lab

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Lot	Unit	Stratum	Depth (cm)	Count	Artifact Description	Date Range	Comments
21	16.4	2	17-42	5	Unidentified Bottle Fragment: Clear	0-0	
22	16.5	1	0-13	1	Unidentified Bottle Fragment: Frosted	0-0	
22	16.5	1	0-13	1	Unidentified Bottle Fragment: Olive Green	0-0	
22	16.5	1	0-13	1	Coal: Cinder	0-0	
22	16.5	1	0-13	1	Brick, Fragment: Unidentified, Unglazed	0-0	discarded in lab
23	16		24-32	1	Wire Common Nail: 2.5 - 3 Inch Long	1850-2000	
23	16		24-32	2	Coal: Coal Ash (Slag)	0-0	
23	16		24-32	1	Faunal: Clam	0-0	
23	16		24-32	1	Unidentified Nail: Shaft Only	0-0	
23	16		24-32	1	Wire Common Nail: 3 - 3.5 Inch Long	1850-2000	
23	16		24-32	1	Faunal: Calcined Bone	0-0	
23	16		24-32	2	Wire Common Nail: Fragment	1850-2000	
23	16		24-32	1	Whiteware: Plain	1810-2000	very small sherd
23	16		24-32	1	Pipe Stem: Fragment	0-0	13/32nd inch, proximal end, x-mends w/Lot#25
24	16	0	22-22	1	Whiteware: Plain	1810-2000	rim sherd
25	16	0	22-22	1	Pipe Stem: Fragment	0-0	13/32nd inch, medial frag, x-mends w/Lot#23-specimen
29	22	1	0-25	1	Faunal: Oyster Shell Fragments	0-0	
29	22	1	0-25	1	Shatter: Quartz	0-0	25-30mm
29	22	1	0-25	1	Whole Flake: Quartz	0-0	35-40mm
29	22	1	0-25	1	Redware: Brown Glaze	0-0	brown w/black specks interior & exterior
29	22	1	0-25	3	Unidentified Bottle Fragment: Clear	0-0	
29	22	1	0-25	2	Unidentified Bottle Fragment: Olive Green	0-0	
29	22	1	0-25	1	Unidentified Bottle Fragment: Amethyst	1880-1915	
29	22	1	0-25	5	Machine-Made Bottle Fragment: Silk Screen	1932-2000	one w/letters"...VER..."
29	22	1	0-25	1	Storage, Metal: Pull Tab	1962-1977	discarded in lab
29	22	1	0-25	1	Unidentified Bottle Fragment: Amber	0-0	
29	22	1	0-25	5	Unidentified Bottle Fragment: Bright Green	0-0	
29	22	1	0-25	2	Storage, Metal: Crimped Bottle Cap	1892-2000	discarded in lab
29	22	1	0-25	1	Coal: Lump/Nugget	0-0	
29	22	1	0-25	1	Unidentified Bottle Fragment: Frosted	0-0	
29	22	1	0-25	1	Unidentified Bottle Fragment: Light Green	0-0	

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Lot	Unit	Stratum	Depth (cm)	Count	Artifact Description	Date Range	Comments
29	22	1	0-25	1	Decorated/Embossed Glass Fragment: Clear	0-0	
30	24	1	0-47	1	Brick, Fragment: Burned (Glazed & Unglazed)	0-0	grey glaze? (poss melted glass)
30	24	1	0-47	1	Unidentified Bottle Fragment: Amber	0-0	
30	24	1	0-47	2	Faunal: Bone	0-0	
30	24	1	0-47	2	Unidentified Bottle Fragment: Aqua	0-0	
30	24	1	0-47	2	Ironstone: Blue Transfer Print	0-0	
30	24	1	0-47	1	Decorated/Embossed Glass Fragment: Clear	0-0	very fragmentary-indecipherable
30	24	1	0-47	1	Miscellaneous Glass Tableware: Unspecified, Fragment	0-0	
30	24	1	0-47	1	Wire Common Nail: 2 - 2.5 Inch Long	1850-2000	
30	24	1	0-47	1	Unidentified Plastic: Fragment	1915-0	discarded in lab
30	24	1	0-47	1	Faunal: Coral	0-0	
30	24	1	0-47	3	Brick, Fragment: Unidentified, Unglazed	0-0	two equal <1g in weigt-all discarded in lab
30	24	1	0-47	1	Whiteware: Flow Blue	1842-1910	small rim sherd 1842-1910
30	24	1	0-47	1	Whiteware: Black Transfer Print	1820-1915	interior & exterior decoration 1820-1915
30	24	1	0-47	2	Coal: Cinder	0-0	
30	24	1	0-47	1	Window Glass: 1 - 2mm Thick	0-0	
30	24	1	0-47	2	Whiteware: Indeterminate Decoration	1810-2000	blue-painted?
30	24	1	0-47	1	Blown-In-Mold Bottle Fragment: Olive Green	0-0	
30	24	1	0-47	3	Unidentified Bottle Fragment: Olive Green	0-0	three vessels
30	24	1	0-47	1	Creamware: Unidentified	1762-1820	
30	24	1	0-47	2	Whiteware: Unidentified	1810-2000	
30	24	1	0-47	3	Coal: Lump/Nugget	0-0	very small specimens
30	24	1	0-47	1	Flat Glass: Colored	0-0	tinted?
31	25	1	0-24	2	Domestic Coin: Small Cent	1856-2000	"1963" and "1978" 1856-2000
31	25	1	0-24	3	Window Glass: 1 - 2mm Thick	0-0	
31	25	1	0-24	1	Pipe Bowl Fragment: Ball Clay	0-0	
31	25	1	0-24	1	Complete Flake w/Cortex 25-40mm: Chert	0-0	
31	25	1	0-24	1	Window Glass: 2 - 3mm Thick	0-0	
31	25	1	0-24	7	Unidentified Bottle Fragment: Bright Green	0-0	
31	25	1	0-24	3	Unidentified Bottle Fragment: Amber	0-0	
31	25	1	0-24	1	Miscellaneous Glass Tableware: Unspecified, Fragment	0-0	thin-possibly hand-blown

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Lot	Unit	Stratum	Depth (cm)	Count	Artifact Description	Date Range	Comments
31	25	1	0-24	1	Brick, Fragment: Unidentified, Unglazed	0-0	discarded in lab
31	25	1	0-24	1	Unidentified Nail: Shaft Only	0-0	
31	25	1	0-24	5	Unidentified Bottle Fragment: Clear	0-0	
31	25	1	0-24	3	Unidentified Bottle Fragment: Olive Green	0-0	one is thin and lt olive green
31	25	1	0-24	3	Miscellaneous, Plastic: Unidentified	1915-2000	one brown, one black, one red 2-pc refit-discarded in lab
31	25	1	0-24	1	Unidentified Bottle Fragment: Frosted	0-0	
31	25	1	0-24	2	Dinnerware, Plastic: Utensil	0-0	yellow tine fragments-discarded in lab
31	25	1	0-24	1	Unidentified Bottle Fragment: Aqua	0-0	
31	25	1	0-24	1	Storage, Metal: Pull Tab	1962-1977	discarded in lab
31	25	1	0-24	2	Faunal: Clam	0-0	very small fragments
31	25	1	0-24	1	Machine-Made Bottle Fragment: Clear	1903-2000	mouth of bottle w/side seam
31	25	1	0-24	2	Redware: Unglazed	0-0	one is rim sherd
31	25	1	0-24	3	Whiteware: Plain	1810-2000	one is molded rim sherd
31	25	1	0-24	5	Coal: Lump/Nugget	0-0	
31	25	1	0-24	2	Decorated/Embossed Glass Fragment: Clear	0-0	one is stippled; one has letter "...E..."
32	26	1	0-33	1	Miscellaneous Glass Tableware: Unspecified, Fragment	0-0	
32	26	1	0-33	2	Decorated/Embossed Glass Fragment: Amber	0-0	not legible
32	26	1	0-33	1	Storage, Metal: Crimped Bottle Cap	1892-2000	discarded in lab
32	26	1	0-33	3	Unidentified Metal Object: Iron/Steel	0-0	hinge but no holes
32	26	1	0-33	1	Whiteware: Plain	1810-2000	small sherd
32	26	1	0-33	5	Unidentified Bottle Fragment: Clear	0-0	
32	26	1	0-33	3	Coal: Lump/Nugget	0-0	
32	26	1	0-33	3	Unidentified Plastic: Fragment	1915-0	
32	26	1	0-33	1	Unidentified Bottle Fragment: Green	0-0	
32	26	1	0-33	5	Unidentified Bottle Fragment: Amber	0-0	
32	26	1	0-33	1	Brick, Fragment: Unidentified, Unglazed	0-0	discarded in lab
33	23	1	0-40	1	Coal: Lump/Nugget	0-0	
33	23	1	0-40	5	Unidentified Bottle Fragment: Clear	0-0	
33	23	1	0-40	2	Storage, Metal: Pull Tab	1962-1977	discarded in lab
33	23	1	0-40	4	Unidentified Bottle Fragment: Amber	0-0	
33	23	1	0-40	6	Unidentified Bottle Fragment: Bright Green	0-0	

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Lot	Unit	Stratum	Depth (cm)	Count	Artifact Description	Date Range	Comments
33	23	1	0-40	1	Faunal: Clam	0-0	
33	23	1	0-40	1	Machine-Made Bottle Fragment: Clear	1903-2000	mouth frag
33	23	1	0-40	2	Decorated/Embossed Glass Fragment: Clear	0-0	both base frags
33	23	1	0-40	1	Dinnerware, Plastic: Utensil	0-0	white handle frag-discarded in lab
34	27	1	0-25	1	Machine-Made Bottle Fragment: Amber	1903-2000	mouth frag
34	27	1	0-25	10	Unidentified Bottle Fragment: Amber	0-0	
34	27	1	0-25	1	Machine-Made Bottle Fragment: Silk Screen	1932-2000	clear w/whitre "CON.../...RO..."
34	27	1	0-25	3	Decorated/Embossed Glass Fragment: Bright Green	0-0	stippled
34	27	1	0-25	3	Unidentified Bottle Fragment: Bright Green	0-0	
34	27	1	0-25	13	Unidentified Bottle Fragment: Clear	0-0	
34	27	1	0-25	1	Machine-Made Bottle Fragment: Bright Green	1903-2000	mouth frag
34	27	1	0-25	1	Decorated/Embossed Glass Fragment: Coke-Bottle Green	0-0	body w/"...ARK.../...TS 6..."
34	27	1	0-25	1	Decorated/Embossed Glass Fragment: Amber	0-0	base-stippled and "N..."
34	27	1	0-25	6	Decorated/Embossed Glass Fragment: Clear	0-0	one base w/"...TO BE REFI...", five stippled
35	28	1	0-24	1	Storage, Metal: Pull Tab	1962-1977	discarded in lab
35	28	1	0-24	1	Unidentified Nail: Shaft Only	0-0	
35	28	1	0-24	4	Faunal: Oyster Shell Fragments	0-0	fragmentary
35	28	1	0-24	1	Machine-Made Bottle Fragment: Clear	mouth frag	mouth frag

APPENDIX C:
PROJECT CORRESPONDENCE

JMA architects archeologists planners

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Restoration & Rehabilitation • Preservation Planning • Archeological & Historical Research • Cultural Landscapes • Materials Conservation

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VIA FEDERAL EXPRESS

February 12, 2008

Amanda Sutphin
New York City Landmarks Preservation Commission
Municipal Building - 9th Floor
1 Centre Street
New York, New York 10007

RE: VAN CORTLANDT PARK PARADE GROUND
BRONX, NEW YORK

Dear ~~Ms. Sutphin:~~ Amanda

It was a pleasure talking with you earlier today. As discussed I am enclosing a copy of JMA's report *Van Cortlandt Park Parade Ground, Phase 1A Archeological Investigations, Borough of the Bronx, New York.* Also enclosed is a copy of JMA's proposed work scope for a Phase 1B investigation of portions of the Area of Potential Effect (APE) associated with NYC Parks and Recreation's improvements at the Parade Ground Site. Parks is anxious to proceed with their project, and we would very much appreciate an expedited review of our work plan.

Thank you in advance for your help in this matter. If you have any questions about our report or Phase 1B work plan please contact me at (914) 271-0897.

Sincerely,

Joel I. Klein, Ph.D., RPA
Associate Director, Cultural Resources Department

Cc: T. Atela (ABB)

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THE CITY OF NEW YORK LANDMARKS PRESERVATION COMMISSION
1 Centre Street, 9N, New York, NY 10007 (212) 669-7700 www.nyc.gov/landmarks

ENVIRONMENTAL REVIEW

NYC DEPT. OF PARKS AND RECREAT/ 2/14/2008

Project number **Date received**

Project: Van Cortlandt Park Parade Ground BROADWAY BBL 2059000150

[] No architectural significance

[ ] No archaeological significance

[ ] Designated New York City Landmark or Within Designated Historic District

[ ] Listed on National Register of Historic Places

[ ] Appears to be eligible for National Register Listing and/or New York City Landmark Designation

[X] May be archaeologically significant; requesting additional materials

Comments:

The LPC is in receipt of the, "Van Cortlandt Park Parade Ground Phase 1A Archaeological Investigation," prepared by JMA and dated November 2007. The LPC notes that secondary sources (including one referenced in the report Rothschild and Matthews 1993) indicate that there is an African burying ground where slaves of the Van Cortlandt family were interred within the project vicinity. This potential should be discussed in the report.

In addition, the LPC is in receipt of the scope of work for archaeological field testing. We concur that such testing is needed, but would appreciate clarification about the following: (1) Will the proposed trenches be excavated to the project impact depth or to virgin soil? (2) How large is the sensitive area? It would help to know this when evaluating whether or not a maximum of 75 shovel tests is sufficient. (3) It states that no more than 115 linear meters will be excavated and yet proposes to excavate up to 6 trenches that are a minimum of 25 m long. (4) What happens if more than 500 artifacts require processing and analysis? We assume that additional funding will be required, but this should be specified.

2/17/2008

SIGNATURE DATE

24420_FSO_HAB_02192008.doc

PROPOSAL TO CONDUCT A PHASE IB ARCHEOLOGICAL SURVEY WITHIN THE VAN CORTLANDT PARK PARADE GROUNDS, BRONX, NEW YORK

Prepared for:

Landmarks Preservation Commission, NYC
9th Floor
1 Center Street
New York, NY 10007

By

John Milner Associates, Inc.
One Croton Point Avenue
Croton-on-Hudson, NY 10520

and

Abel Bainnson Butz, LLP
80 8th Avenue, Suite 1105
New York, NY 10011

February 12, 2008
Revised
February 26, 2008

Introduction and Summary of Phase IA Archeological Research and Archeological Monitoring

JMA conducted Phase 1A archeological research for the reconstruction of the Van Cortlandt Park Parade Ground Project in October 2007 (JMA 2007). The background literature and record review identified the location of eight historic structures, and determined that the Native American village site Keskeskick (Mosholu) were formerly located within the Parade Ground property. The City of New York acquired the property in 1884 and the grounds were altered to house the New York National Guard. The construction of the Parade Ground included razing the historic structures and filling in the foundations, as well as grading and filling streams, ponds and marshes. Human burials, cultural material and pit features associated with the Keskeskick site were exposed during the grading activities in an area approximately 14 acres in size, located to the north and west of Van Cortlandt Manor. The site was excavated by amateur archeologist John Bradley James, Jr. of Riverdale, NY in 1889-1890.

Sources consulted during the Phase IA investigation (Jenkins 1912:301; Rothschild and Matthews 1993:14) have documented the presence of a cemetery used by the residents of the property and the African slaves of the Van Cortlandt family. This cemetery lies to the south and east of the Parade Ground Project Area and is outside of the area of effect.

JMA conducted archeological monitoring of three geotechnical test pits placed at various locations within the Parade Ground in October 2007. Each geotechnical test pit extended to a depth of 10 ft (3 m) below ground surface (b.g.s.). JMA observed that the depth of fill material varied considerably across the Parade Ground. Generally, the depth of fill was greater in the northern extent of the Parade Ground (in the location of the former Tibbetts Brook channel), and was between 4 and 6 ft (1.3 to 1.8 m) thick in the southern portions of the Parade Grounds.

JMA has determined that the Parade Ground has the potential to contain: 1) historic features associated with the map-documented structures formerly located in the southern portion of the Parade Ground north of Van Cortlandt manor; and 2) potentially intact land surfaces and/or truncated features (including the remote possibility of human remains) associated with the Keskeskick Native American village site.

Proposed Scope-of-Services

JMA has developed a pre-construction Phase IB work plan based upon the information obtained during the Phase IA research, archeological monitoring, and review of grading and drainage plans prepared by ABB for the project. The purpose of this work will be to determine whether intact archeological deposits associated with the Keskeskick site and/or map-documented historic structures formerly located within the Parade Ground are present, or to determine that no intact deposits associated with these resources exist. All proposed Phase IB field work will be conducted within the area identified as archeologically sensitive in the Phase IA report (see attached Figure 18 from Phase IA report). The archeologically sensitive area defined by JMA is approximately 26.3 acres (10.6 hectares) in size, and includes the areas determined to be sensitive for prehistoric and historic cultural remains and features. It is JMA's understanding that the area of proposed disturbance within the archeologically sensitive area does not exceed five (5) acres. JMA will focus the Phase IB survey in the areas that will be directly impacted by the proposed grading and drainage project, within the area defined as archeologically sensitive. All archeological fieldwork will be conducted under the supervision of a Registered Professional Archeologist (RPA).

Phase IB Field Work Plan

The grading and drainage plans prepared by ABB include the grading of up to 2 to 3 ft (approximately 1 m) of existing fill material, the construction of nine (9) Catch Basins (CB), and installation of associated drainage systems within the area determined to be archeologically sensitive. The depths of the individual catch basins vary, but will generally be excavated between 3 and 7 ft (1 to 2 m) b.g.s. JMA will excavate trenches across the archeologically sensitive area to determine the depth of fill. If intact (virgin) soil is encountered above the proposed construction depth, these areas will be further investigated by shovel test

excavated within the intact soil horizon(s). In areas where the depth of fill is determined to extend below the proposed project impact depth, shovel testing will not be conducted.

Historic Archeological Resources

Four historic structures were formerly located within the area defined by JMA as archeologically sensitive. Project plans place three catch basins (CB 27.75, 29.0 and 29.2) and associated drainage systems in the vicinity of the former historic structure locations.

JMA proposes that six (6) mechanically excavated trenches will be excavated in the locations of the former structures. The length of the trenches will be between 25 m (80 ft) and 30 m (100 ft) in length depending on the structure being investigated. JMA anticipated that 160 linear meters of excavation will be needed to document the former structure locations. The trenches will be excavated to determine; 1) the depth of fill material in these locations and; 2) whether intact structural remains and/or features associated with the structures are present. In the event that foundation remains or other features associated with the historic structures are identified, JMA will attempt to determine the extents and integrity of identified archeological features.

Prehistoric/Native American Archeological Resources

JMA proposes a phased approach to conduct the Phase IB archeological survey for the prehistoric component of this project. The object of the Phase IB survey will be to; 1) determine the depth of fill across the archeologically sensitive portions of the Parade Ground; 2) remove fill material overlying potentially intact stratigraphy, and 3) excavate shovel tests to determine the presence/absence of intact archeological deposits and/or features associated with the Keskeskick site. The breakdown of proposed tasks follows:

1) JMA will supervise the mechanical-excavation of eleven (11) test trenches across the middle of archeologically sensitive area within the Parade Ground. The trenches will be spaced at a 100 ft (30 m) interval and will each be approximately 10 m in length. The trenches will be excavated to determine the depth of fill in these areas. If the depth of fill extends below the proposed depth of grading, no further work will be conducted in these locations. If intact soils are identified above the proposed grading level, shovel tests will be excavated to determine the presence/absence of cultural deposits.

2) Eleven (11) test trenches will be excavated within the southern, central and northwestern portions of the archeologically sensitive area within the locations proposed for CBs and drainage pipes. The trenches will be spaced at a 100 ft (30 m) interval and will each be approximately 10 m in length. The trenches will be excavated to determine the depth of fill and whether intact soils are present. If no intact soils are identified, and the depth of fill extends below the proposed depth of the CBs and drainage pipe construction, no further work will be conducted in these locations.

3) If intact soils are identified in any individual trench, JMA will expand the trench and mechanically remove the fill material. JMA will then hand clean (shovel-shave) the exposed areas to the top of the intact soils.

4) JMA will excavate up to 75 shovel tests within the portions of the archeologically sensitive area where intact soils have been identified. The number of shovel tests excavated will be determined by the presence of intact soils.

Unexpected Discovery of Human Remains

Based upon the recovery of thirteen intact human skeletons by James in 1889-1890, there is the potential for undocumented human remains to be present within the Parade Grounds. If human remains are identified during the course of this work, JMA will immediately cease all excavations and contact ABB. The NYC Department of Parks and Recreation (NYC Parks), NYC Landmarks Preservation Commission (LPC), and the Office of the Chief Medical Examiner (OCME) will then need to be notified.

Field and Laboratory Work

All fieldwork will be documented on standard field forms. The field forms will include information on soil type and composition, soil color (using standardized Munsell Soil Color Charts), type of deposit, and artifacts found for every natural/cultural strata and arbitrary level excavated. A small metric grid will be included on the field forms so that the test unit plans and profiles are recorded consistently. All field forms will be filled out in their entirety. Standard provenience information will be recorded on artifact bags and will be cross referenced to artifact bag inventories and a feature inventory, if necessary. Photographs will be taken of ongoing fieldwork, and black and white, color and slide film will be taken for all features and areas of importance.

All strata will be excavated by arbitrary 10 cm levels within natural strata. All excavated sediments will be screened through 6.4 mm (1/4 inch) mesh cloth to insure uniform artifact recovery. All artifacts will be recovered from every arbitrary 10 cm level in each strata, including fill deposits. Artifacts recovered from the Phase IB survey work will be placed in plastic artifacts bags with all provenience information noted. Soil samples will be retained from all informative contexts identified during the Phase IB survey. All artifacts recovered, including from fill deposits as a result of the Phase IB fieldwork, will be recovered from every level in every stratum.

Recovered artifacts will be placed in bags marked with standard provenience information and returned to JMA's laboratory for processing. Once they have been returned to the laboratory, all artifacts will be washed, re-bagged, identified and analyzed. A comprehensive inventory of the finds will be made and entered into a computer database.

Assumptions

The components of JMA's proposal relating to field testing are based on the following assumptions:

- the Phase IB survey will be restricted to the archeologically sensitive area;
- no work will be undertaken if ground is frozen or snow covered;
- permission to enter and access property will be obtained by others;
- no special permits will be needed;
- ABB will provide a backhoe and operator and JMA will have stop-work, start-work authority;
- the total amount of excavated trenches will not exceed 380 linear meters;
- the areas) before archeological work begins;
- the entire project area is, or will be, surrounded by a perimeter fence that restricts unauthorized access to the project site;
- if any intact archeological features (historic shaft features or foundation remains; or prehistoric features) are identified, testing of these features will be conducted as a component of Phase 2 investigations and costs associated with these additional investigations are not included in this proposal;
- no human remains will be recovered;
- any notifications to the medical examiner, coroner, or law enforcement agencies, necessitated by the discovery of human remains, will be the responsibility of others;
- any necessary Native American consultations will be the responsibility of the City of New York;
- no hazardous material is located within the Project Area and none will be encountered;
- no more than 500 artifacts will require processing and analysis. If additional artifacts are recovered the cost associated with processing and analysis are additional expenses;
- costs associated with specialized analyses (e.g. detailed floral/faunal analyses, palynology, radiocarbon dating, etc) are additional expenses; and,
- the NYC Landmarks Preservation Commission will be the primary review authority for archeological work.

Schedule and Deliverables

JMA anticipates that a backhoe and operator will be made available by the City of New York Parks and Recreation for the archeological survey fieldwork. JMA will prepare and submit a Phase 1B archeological survey report within 60 days of the completion of the field survey. The report will be prepared in accordance with the *City Environmental Quality Review Technical Manual,* the *Landmarks Preservation Commission Guidelines for Archaeological Work in New York City* (April 12, 2002)(the *Guidelines*) and, when appropriate, the New York Archaeological Council's *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections* (the *Standards*) recommended for use by the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP). Two paper copies and one electronic copy (in pdf format) of the report will be provided.

Personnel

Dr. Joel Klein will serve as Project Manager and Ms. Geraldine Baldwin will serve as Field Director. Both Dr. Klein and Ms. Baldwin are Registered Professional Archeologists (RPA) and both meet the professional qualifications standards for archeologists established by the Secretary of the Interior.

ITEM NO. _____ ARCHEOLOGICAL SURVEY

WORK: Under these Items, the Contractor shall hire an approved archeological Contractor to perform **ARCHEOLOGICAL SURVEY** in accordance with the plans, specifications, and directions of the Engineer. Archeological survey must be performed throughout the park as accepted by the Landmarks Preservation Commission (LPC).

INTENT: A Phase 1A Archeological Study (JMA 2007) has been reviewed and approved by the LPC. This study determined that the Van Cortlandt Park Parade Ground has the potential to contain Native American archeological resources including the potential for human remains. The Van Cortlandt Park Parade Ground also has the potential for containing structural elements associated with the operation of the property as a farm and dairy during the 19th century.

QUALIFICATIONS: All archeological field work will be conducted by a Registered Professional Archaeologist (RPA). The final report will be consistent with the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation.* The NYC Landmarks Preservation Commission will have approval of the proposed candidate and shall monitor all phases of archeological work.

ARCHEOLOGICAL SURVEY: The extent of archeological survey will be approved by the LPC. The archeologically sensitive area defined by JMA is approximately 26.3 acres (10.6 hectares) in size, and includes the areas determined to be sensitive for prehistoric and historic cultural remains and features. It is JMAs understanding that the area of proposed disturbance within the archeologically sensitive area does not exceed five (5) acres. JMA will focus the Phase IB survey in the areas that will be directly impacted by the proposed grading and drainage project, within the area defined as archeologically sensitive. The RPA shall be on site for archeological testing. JMA will produce a professional quality final report which must be reviewed and approved by LPC.

JMA will require a backhoe and experienced operator for 10 days (80 hours). It is also anticipated that 380 linear feet will be excavated. The backhoe will have both a toothed-bucket and a flat bucket. Because of the nature of the survey work the total cubic yards of material excavated is unknown. All excavated trenches will be backfilled by the operator following the complete documentation of each excavated trench by JMA.