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A PHASE IB CULTURAL RESOURCE INVESTIGATION

OF THE

ST. RAYMOND'S CEMETERY EXPANSION AREA,

BRONX COUNTY, NEW YORK

(CEQR # 92-612X)

by

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(final)

Performed by: Kittatinny Archaeological Research, Inc. Stroudsburg, PA and Brooklyn, NY

Performed for: St. Raymond's Cemetery Bronx, NY

ABSTRACT

St. Raymond's Cemetery, Bronx County, New York is planning to acquire an approximately eleven and a half acre parcel of land located adjacent to the existing cemetery, in order to permit expansion of its operations. A Phase I Cultural Resource Investigation, is required under provisions of the City Environmental Quality Review (CEQR) regulations administered by the New York City Landmarks Preservation Commission (LPC). A Phase IA investigation (Documentary Research) of this property was recently conducted. The current report of field testing and additional background research (Phase IB) supplements the previous one, and the two together constitute the full Phase I investigation.

The property under investigation consists of an irregularly shaped eleven-and-a-half acre tract situated between the existing cemetery, Ferry Point Park, and the Hutchinson River Expressway. The Phase IA investigation of this study area concluded that there is a high probability that both prehistoric and historic period occupations occurred in this vicinity. However, extensive filling and disturbance of the study area made it impossible to determine to what degree potentially culture-bearing deposits may have survived to the present. Therefore, it was recommended that field testing (a Phase IB investigation) be undertaken.

Since, the amount of fieldwork needed to fulfill the requirements of a Phase IB investigation would vary greatly depending on the degree of disturbance which has taken place, it was further recommended that an initial stage of testing, which would determine the presence or absence of any potentially culture-bearing deposits, be conducted first. This would be followed, if necessary, by a more thorough testing of potentially culture-bearing deposits only in those areas within the projected impact zone.

The first part of the Phase IB investigation involved documentary research using early nineteenth to early twentieth century maps depicting the project locality that were not analyzed during the initial study. These sources provided additional information that enabled a more accurate definition of the area within which buildings formerly associated with the nineteenth century Ferris Estate were located.

A total of 28 test trenches was excavated using a backhoe, to a maximum depth of 12-13 feet, and the stratigraphy encountered observed and recorded. A former natural ground surface was encountered in a number of trenches in the northwestern portion of the study area, buried below varying amounts of modern fill. In the remainder of the study area, this ground surface was either not present at the depths investigated, heavily disturbed, or replaced by a marsh deposit. The latter

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represents the tidal wetlands which existed into the early twentieth century in much of the study area. This mix of dry uplands and low-lying wetlands conforms with the historically documented environment of the area. No indication of the documented historic-period occupation was encountered.

In two of the trenches excavated in the area of intact upland soils, evidence of Native American occupation was encountered while cleaning the trench walls for examination. The artifacts included: one blocky fragment, one flake, and one worked cobble fragment, all of gray brown chert. A portion of the cobble was retouched to create a scraping edge, which bears evident use wear. One hard shell clam fragment was also recovered from this context.

Based on the data available, the northwest corner of the study area was once raised, dry land adjacent to the marsh formerly located to the south. The area would have been an excellent location for Native American camp sites oriented towards the exploitation of marsh resources. Camp sites located there may also be associated with individuals interring their dead in the burial area formerly located immediately south of the project property.

St. Raymond's Cemetery has adopted an avoidance plan which meets with the approval of the Landmarks Preservation Commission. Therefore, no further cultural resource investigation is recommended.

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I. INTRODUCTION

St. Raymond's Cemetery, Bronx County, New York is planning to acquire an approximately eleven and a half acre parcel of land located adjacent to the existing cemetery, in order to permit expansion of its operations. A Phase I Cultural Resource Investigation, is required under provisions of the City Environmental Quality Review (CEQR) regulations administered by the New York City Landmarks Preservation Commission (LPC). A Phase IA investigation (Documentary Research) of this property was recently conducted by Kittatinny Archaeological Research, Inc. (Boesch, Bianchi, and Perazio 1993). The current report of field testing and additional background research (Phase IB) supplements the previous one, and the two together constitute the full Phase I investigation.

The property under investigation consists of an irregularly shaped eleven-acre tract situated between the cemetery, Ferry Point Park, and the Hutchinson River Expressway (Figure 1). Available evidence indicates that a large amount of fill, containing building demolition debris and domestic trash, was deposited in this area in the recent past. Prior to this filling, the area consisted of a combination of low-lying wetlands and upland habitats.

The Phase IA investigation of this study area concluded that there is a high probability that both prehistoric and historic period occupations occurred in this vicinity. However, the extensive filling and disturbance of the study area made it impossible to determine to what degree potentially culturebearing deposits may have survived to the present. If disturbance has been severe, then any cultural resources which may have at one time existed on this property have probably been destroyed. By contrast, if cutting was only shallow or of limited extent, and if the filling operation merely covered, but did not disturb, the potentially culture-bearing deposits, then the remains of past occupations are likely to have survived. Therefore, it was recommended that field testing (a Phase IB investigation) be undertaken.

Since, the amount of fieldwork needed to fulfill the requirements of a Phase IB investigation would vary greatly depending on the degree of disturbance which has taken place, it was further recommended that an initial stage of testing, which would determine the presence or absence of any potentially culture-bearing deposits, be conducted first. This would be followed, if necessary, by a more thorough testing of potentially culture-bearing deposits only in those areas within the projected impact zone. As described below, deposits containing evidence of Native American occupation were encountered in one portion of the study area. However, an avoidance plan has been developed which meets with the approval of the Landmarks Preservation Commission (see Appendix B). Therefore, no further cultural resource investigation is recommended.

Personnel

This investigation was conducted by Kittatinny Archaeological Research, Inc. of Stroudsburg, Pennsylvania and Brooklyn, New York. Eugene J. Boesch, MA, SOPA, functioned as Senior Archaeologist, conducting the background research and directing the fieldwork. Philip A. Perazio, MA, SOPA, was the Principal Investigator. Project management was provided by Valerie B. Perazio, MA. The field crew consisted of Leonard Bianchi, Amy P. Boesch, Eugene Boesch, Jr., JoAnn McLean, Arnold Pickman, and Linda V. Sacher. Graphics were prepared by T.C. Lynch Illustration and Design.

II. RESEARCH DESIGN

A. Methodology

The first part of this phase of the archaeological evaluation of the Saint Raymond's Cemetery Expansion project area involved documentary research using early nineteenth to early twentieth century maps depicting the project locality that were not analyzed during the initial study (see Boesch, Bianchi, and Perazio 1992). Research was conducted at the Map Division of the New York Public Library.

Based on this research and the initial documentary study we were able to assess the archaeological sensitivity of the project property and develop a plan for the sub-surface testing of the area. Assessment of prehistoric period sensitivity was based on the location of known archaeological sites listed in site files and reported in the literature, as well as a consideration of the pre-filling topographic and physiographic characteristics of the project area (see Boesch, Bianchi, and Perazio 1993:17-24). Assessment of historic period sensitivity was based on an analysis of nineteenth and twentieth century maps as well as a review of secondary sources (see Boesch, Bianchi, and Perazio 1993:29-39).

Sub-surface testing of the project area was conducted on April 14th, 15th, 19th, 20th, and 21st. A total of 28 test trenches were excavated using a backhoe, and the stratigraphy encountered observed and recorded. Each test trench covered approximately 8 feet by 16 feet of ground surface and extended either to depths: 1. where naturally occurring subsoil was encountered; 2. where ground water was encountered which made further excavation impossible due to slumping of trench walls; 3. where concrete or other demolition rubble were encountered which prevented further excavation; or 4. exceeding twelve feet (four feet below the maximum depth to be impacted by the planned excavation of graves).

Artifacts were not systematically collected from any of the test trenches. However, when artifacts of potential significance were seen during the preparation of the trench walls for profile recording, they were collected. Whenever possible the stratigraphic context of the artifact was recorded. Artifacts were returned to the laboratory where they were washed, tabulated, and placed in plastic bags according to provenience.

The location of each test trench is shown on Figure 1. Appendix A to this report details the stratigraphy encountered in each test trench. The wall profiles for each trench were recorded in photographs (Plates 9-33) and in measured drawings (representative profiles are presented in Figures 2-11). The profiles record the stratigraphy encountered in each test trench and other relevant information.

B. Project Area Description

The project area is an irregularly shaped parcel approximately eleven and a half acres in size located immediately south and west of Saint Raymond's Cemetery and east of the Hutchinson River Expressway (I-678; see Figure 1). Two "paper street" alignments (Schley and Foote Avenues) are located within it (Figure 1). The routes of these roadways were surveyed and designated as avenues by New York City but were never constructed.

The project site generally consists of open ground with areas of scrub, small trees, and wetland vegetation. The entire parcel has been filled, with the extent of the fill varying across the property (see Chapter IV).

As a result of information recovered from the test trenches, the project area has been divided into four zones.

1. Zone 1

Zone 1 is the northwest corner of the project area (Figure 1). It is roughly triangular-shaped and consists primarily of open land that is relatively level and grassy (Plate 1). A narrow stand of trees and scrub vegetation is present in this zone adjacent to a portion of the western property boundary. Concrete blocks and other modern debris are located within this stand which is situated at a lower elevation than the open, grassy area and separated from it by an abruptly down-sloping bank. This topography reflects differential filling of the area.

Two service roads extend across portions of Zone 1.

2. Zone 2

Zone 2 is the northeast corner of the project area (Figure 1). It is an irregularly shaped area that is primarily open, relatively level, and grassy (Plate 2). This zone is the area where, according to the map research, backyard areas and buildings associated with the Ferris Estate were probably located (see Boesch, Bianchi, and Perazio 1993; see Chapter III).

3. Zone 3

Zone 3 consists of portions of the proposed alignments of Foote and Schley Avenues (Figure 1). The Schley Avenue alignment is relatively level and covered with small trees, scrub, and wetland vegetation while the Foote Avenue alignment is relatively level and covered only with scrub vegetation (Plate 3).

4. Zone 4

Zone 4 consists of the portions of the project area not included in Zones 1, 2, or 3 (Figure 1). The parcel is relatively level although differential filling has produced some areas that are higher in elevation than others (Plate 4). Zone 4 is roughly trapezoidal in shape with portions being covered with grass, scrub, trees, and/or wetland vegetation (Plate 5).

Backdirt or spoil piles derived from the excavation of graves in Saint Raymond's Cemetery cover a large portion of Zone 4.

A service road traverses the area.





PLATE 1. BACKHOE EXCAVATION IN ZONE 1, VIEW NW.



PLATE 2. ZONE 2, WITH TRENCH SOIL IN FOREGROUND AND CEMETERY BUILDINGS IN BACKGROUND, VIEW NE.



PLATE 3. ZONE 3, VIEW SE.



PLATE 4. ZONE 4, VIEW SE.



PLATE 5. ZONE 4, VIEW SW.



PLATE 6. 1842 US COASTAL SURVEY MAP.

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PLATE 7. 1868 F.W. BEERS MAP.



PLATE 8. 1927 G.W. BROMLEY MAP.

III. DOCUMENTARY RESEARCH

The objective of the supplemental documentary research conducted during this phase of the archaeological investigation of the Saint Raymond's Cemetery expansion area was to provide additional information that enabled us to more accurately define the area within which buildings formerly associated with the Ferris Estate were located.

As previously indicated, a structure associated with that estate was located in the project vicinity by 1851 (Boesch, Bianchi, and Perazio 1993:40). This structure was apparently constructed sometime after 1842 since it is not indicated on a <u>United States Coastal Survey Map</u> of the area dated to that year (Plate 6). By 1868, the Ferris property had developed into a fairly large estate (Plate 7).

The 1927 Bromley Map (Plate 8) indicates the location of structures associated with the Ferris Estate relative to the proposed routes of Schley and Foote Avenues. However, the orientation of the proposed route of Foote Avenue as indicated on the project area map (Figure 1) does not correspond to that indicated on the Bromley Map (Plate 8). The proposed route of Haynes Avenue (as indicated on the Bromley Map) corresponds to that of Foote Avenue as indicated on Figure 1. It is likely that what is termed Foote Avenue on Figure 1 corresponds to Haynes Avenue as represented on the Bromley Map. If so, the structures indicated as owned by J.H. Ferris would have been located within the present project area in the vicinity of the boundary between Zones 2 and 4. Backyard areas, including features and outbuildings, would probably have been located in Zone 2.

The two-story structure depicted on the <u>Bromley Map</u> as located at the northeastern corner of the Haynes and Randall Avenues intersection (Plate 8) was probably located within the project area in the eastern portion of Zone 1.

IV. FIELDWORK

A. Introduction

Twenty-eight test trenches were excavated by backhoe within the project area. For the purposes of this discussion, based on information recovered from the test trenches, the project area has been divided into four zones as described above.

1. Zone 1

Seven trenches were excavated in this roughly triangular-shaped area (#'s 1, 2, 2a, 4, 6, 20, and 26; see Figures 1-8, Plates 9, 10, 11, 13, 15, 29, 30, and Appendix A). A former ground surface consisting of a humus layer and underlying leaching zone (B-horizon soil), apparently pre-dating the presence of the cemetery in the area, was encountered in each test. The humus was a black/gray black silt to clayey silt while the leaching zone was a brown sandy silt to clayey silt. The ground surface was encountered at various depths ranging between 2.8 and 13.3 feet below modern grade, being overlain by fill. The amount of fill present in the test trenches was variable which obviously determined the depth below modern grade of the pre-cemetery ground surface. However, the surface appears to be present at relatively shallower depths as one moves northwest across the project site suggesting that, prior to filling, the grade in that area was higher than portions of the site further south.

Evidence of Native American activity was associated with the former ground surface in Test Trenches 2a and 4. One gray brown chert blocky fragment (wt. = 81.3 grams) and one gray brown chert flake (wt. = 0.5 grams) were recovered from Test Trench 2a. Cortex is present on the blocky fragment. One hard shell clam fragment (wt. = 4.1 grams) was also recovered from this context. A worked gray brown chert cobble fragment was recovered from the former ground surface stratum in Test Trench 4; (length = 115.58 mm.; width = 71.58 mm.; thickness = 68.0 mm.; weight = 465.5 grams). A portion of the cobble (39.98 mm. in length) was retouched to create a scraping edge with an edge angle of 84 degrees. Use wear damage is evident along the scraping edge.

Below the former ground surface stratum in each test trench was natural subsoil.

A more recent ground surface consisting of black silt was present within the fill in six of the tests excavated in this zone, implying that at least two episodes of filling occurred in the area. According to workmen at Saint Raymond's Cemetery, this area was most recently filled approximately five years ago. This surface probably dates to that time. In Test Trench 4, evidence of an asphalt road was found overlying the recent ground surface suggesting that a road had been constructed on that surface.

Ground water was initially encountered between 5.8 and 9.0 feet in six of the test trenches excavated in Zone 1. It was not encountered in Test Trench 6.

2. Zone 2

Zone 2 is the northeast corner of the project area (Figure 1). It is the area where, according to the map research, backyard areas and outbuildings associated with the Ferris Estate were located. Five test trenches (#'s 3, 9, 10, 11, and 12; see Figures 1, 9, and 10, Plates 12, 17-20, and Appendix A) were excavated in this zone. The stratigraphy encountered in three of the tests (#'s 3, 9, and 12) was similar to that seen in Zone 1. A pre-cemetery ground surface, located at depths below grade ranging between 5.3 and 14 feet, was situated beneath layers of fill and a more recent ground surface stratum. The pre-cemetery surface was disturbed in two of the tests (#'s 3 and 12). In those tests it consisted of gray black silt extensively mottled with subsoil and contained quantities of brick, plastic, and other modern debris. Only in Test Trench 9, where the pre-cemetery surface was situated between 13 and 14 feet below grade, did it appear undisturbed. Thirteen feet below modern grade exceeds the maximum depth to be impacted by the planned grave excavations.

Below the pre-cemetery surface was the natural subsoil.

In Test Trench 11, unconsolidated fill deposits were present to the maximum depth of excavation which was 13 feet. In Test Trench 10 an asphalt/concrete surface was uncovered at 7 feet below grade. The thickness of this surface was too great for the backhoe to penetrate.

Ground water was initially encountered between 6.3 and 9.6 feet in all of the test trenches excavated in Zone 2.

3. Zone 3

Zone 3 consisted of portions of the proposed locations of Foote and Schley Avenues (Figure 1). Four test trenches were excavated in this zone (#`s 8, 21, 22, and 25; see Figure 1, Plates 31, 32, and Appendix A). Unconsolidated and unstable fill deposits were present in each test trench to the maximum depth of excavation which ranged between 13 and 14 feet. The fill contained quantities of relatively recent debris including plastics, tires, styrofoam, glass, metal, and cloth. Ground water was initially encountered in each test between 7.5 and 13.0 feet below modern grade.

4. Zone 4

Zone 4 consists of the portions of the project area not included in Zones 1, 2, or 3 (Figure 1). Twelve test trenches were excavated there (#'s 5, 7, 13-19, 23, 24, and 27; see Figures 1 and 11, Plates 14, 16, 21-28, 33, and Appendix A). A marsh deposit was present beneath fill in Test Trenches 5, 7, 13, 18, 23, and 27. This deposit, encountered at depths ranging between 8.3 and 13.2 feet below modern grade, consisted of organic black/gray black silt with roots and twigs. Below it was natural subsoil.

Ground water was detected in each of these tests at depths ranging between 5.5 and 11.1 feet below modern grade.

Unconsolidated and unstable fill deposits were located in Test Trench 16 to the maximum depth of excavation which was 12 feet. Ground water in this trench was encountered at 9.5 feet.

Test Trenches 14, 15, 17, and 19 also encountered only fill deposits. However, these trenches were only excavated to between 6 and 11.2 feet in depth. At the bottom of each trench a layer of concrete debris was discovered which could not be removed by the backhoe. Ground water was only present in Test Trench 15 where it was encountered at 9.5 feet below modern grade.

Test Trench 24, located in the southwestern portion of the project area, also encountered only fill deposits. Groundwater entered this trench immediately below grade causing the rapid collapse of its walls making observations difficult.











FIGURE 5. BACHOE TRENCH 4, NORTH PROFILE.

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ZONE 1

4/15/93







FIGURE 7. BACKHOE TRENCH 20, NORTH PROFILE.

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SCALE IN FEET







FIGURE 9. BACKHOE TRENCH 3, WEST PROFILE.

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ZONE 2





FIGURE 10. BACKHOE TRENCH 9, WEST PROFILE.









FIGURE 11. BACKHOE TRENCH 5, NORTH PROFILE.

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PLATE 9. BACKHOE TRENCH 1, NORTH PROFILE.


PLATE 10. BACKHOE TRENCH 2, NORTH PROFILE.



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PLATE 11. BACKHOE TRENCH 2a, NORTH PROFILE.



PLATE 12. BACKHOE TRENCH 3, NORTH PROFILE.



PLATE 13. BACKHOE TRENCH 4, WEST PROFILE.



PLATE 14. BACKHOE TRENCH 5, NORTH PROFILE.



PLATE 15. BACKHOE TRENCH 6, NORTH PROFILE.



PLATE 16. BACKHOE TRENCH 7, EAST PROFILE.



PLATE 17. BACKHOE TRENCH 9, NORTH PROFILE.



PLATE 18. BACKHOE TRENCH 10, NORTH PROFILE.



PLATE 19. BACKHOE TRENCH 11, NORTH PROFILE.



PLATE 20. BACKHOE TRENCH 12, NORTH PROFILE.



PLATE 21. BACKHOE TRENCH 13, SOUTH PROFILE.



PLATE 22. BACKHOE TRENCH 13, GROUND SURFACE.



PLATE 23. BACKHOE TRENCH 14, SOUTH PROFILE.



PLATE 24. BACKHOE TRENCH 15, WEST PROFILE.



PLATE 25. BACKHOE TRENCH 16, WEST PROFILE.



PLATE 26. BACKHOE TRENCH 17, WEST PROFILE.



PLATE 27. BACKHOE TRENCH 18, WEST PROFILE.



PLATE 28. BACKHOE TRENCH 19, WEST PROFILE.



PLATE 29. BACKHOE TRENCH 20, WEST PROFILE.



PLATE 30. BACKHOE TRENCH 20, GROUND SURFACE.



PLATE 31. BACKHOE TRENCH 21, EAST PROFILE.



PLATE 32. BACKHOE TRENCH 22, EAST PROFILE.



PLATE 33. BACKHOE TRENCH 23, EAST PROFILE.

V. RECOMMENDATIONS

A. Summary and Conclusions

1. Zone 1

An apparently intact pre-cemetery ground surface was located below fill in all the test trenches excavated in this zone. The surface did not appear to represent a marsh deposit. In two tests, evidence for Native American activity was recovered from the ground surface during preparation of the trench walls for recording.

The area now included within Zone 1 may formerly have been raised, dry land surrounding the marsh formerly located to the south (see Boesch, Bianchi, and Perazio 1993). If so, the area would have been an excellent location for Native American camp sites oriented towards the exploitation of marsh resources. Camp sites located there may also be associated with individuals interring their dead in the burial area formerly located immediately south of the project property (see Boesch, Bianchi, and Perazio 1993:17-18).

The grave excavations as originally proposed for the project area would impact the pre-cemetery ground surface in this zone (see Appendix B).

2. Zone 2

Zone 2 includes the former location of backyard areas and outbuildings associated with the Ferris Estate. The area was probably relatively high in elevation and dry, overlooking the marsh formerly present to the south. No evidence of outbuildings, or of any features associated with the occupation of the Ferris Estate, was discovered in any of the excavated tests. The apparent pre-cemetery ground surface found in this zone appeared to be extensively disturbed in locations where it was encountered less than approximately 12 feet below grade. In the single test where the ground surface was found to be present at approximately 13 feet below grade it appeared to be intact. Prior activities in the area probably disturbed this stratum in localities where it is now situated at less than 12 feet below grade.

The proposed grave excavations planned for the area will reportedly not exceed 12 feet and therefore should not affect the undisturbed portion of this stratum.

3. Zone 3

Only land fill was encountered in the test trenches excavated in this zone, which was probably formerly part of the marsh. The proposed grave excavations will not penetrate through the fill deposits.

4. Zone 4

The depth of fill and the presence of the organic black silt with roots and twigs encountered in this zone suggest that the area was formerly marsh. It is unlikely that evidence of Native American camp sites or historic period deposits would be present within the marsh soil.

The proposed grave excavations will impact only the marsh deposit and fill.

B. Recommendations

It is recommended that measures be taken to protect and preserve the former ground surface stratum encountered in Zone 1 from any impact caused by the excavation of graves. Measures may include either: 1. the deposition of at least 14 feet of fill over the former ground surface stratum. (Twelve foot deep graves could then be excavated in the area with no impact occurring to the former ground surface); or 2. designating Zone 1 a non-burial area within the cemetery. The area could perhaps be landscaped into a garden or used for storage. No extensive sub-surface disturbance, however, should occur in the area if this option is employed.

If protection and preservation of the former ground surface stratum is not possible, it is recommended that additional sub-surface investigation by shovel testing be conducted within Zone 1. Testing of the former ground surface stratum should occur subsequent to the removal of the overlying fill by mechanized equipment.

The Cemetery has opted for an avoidance plan described in Appendix B, which has been approved by the LPC. Therefore, no further cultural resource investigations is recommended for this project.

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APPENDIX A

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SAINT RAYMOND'S CEMETERY EXPANSION PROJECT AREA: ARCHAEOLOGICAL STRATIGRAPHY

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BACKHOE TEST TRENCH	STRATUM	DEPTH	DESCRIPTION	COMMENTS
1 north profile	I	0-8.7'	fill	fill is unconsolidated
	II	8.7-9.0'	gray black silt	former ground surface
	III	9.0-9.5'	brown sandy silt	B-horizon soil
	IV	9.5-11′	yellow brown sandy silt	subsoil

ground water encountered at 7.0.4

2 north profile	I	0-5.1'	fill	fill is unconsolidated
	II	5.1-5.5′	black silt with marsh grass	former ground surface; very compact
	III	5.5-7.3'	fill	homogeneous layer
	IV	7.3-7.6'	black silt	former ground surface
	v	7.6-8.0'	brown sandy silt	B-horizon soil
	VI	8.0-9.3′	yellow brown sandy silt	subsoil

ground water encountered at 8.0'

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BACKHOE TEST TRENCH	STRATUM	DEPTH	DESCRIPTION	COMMENTS
2a south profile	I	0-4.5'	fill	fill is unconsolidated
	II	4.5-4.9′	black silt with marsh grass	former ground surface; very compact
	III	4.9-6.7'	fill brown silt	mixed with rubble
[IV	6.7-7.6'	black silt mottled with brown silt	former ground surface; gray black chert blocky fragment, gray black chert flake, hard shell clam fragment
	v	7.6-7.9'	brown sandy silt	B-horizon soil
1	VI	7.9-8.8'	yellow brown sandy silt	subsoil

ground water encountered at 8.2'

3 west profile	I	0-5.3/5.6	fill	fill is unconsolidated
	II	5.3/5.6- 6.8/7.1'	black silt	former ground surface
	III	6.8/7.1- 10'	fill	mixed with rubble
	IV	10-11.5'	black silt mixed with subsoil	former ground surface with modern artifacts
	v	11.5- 13.5'	yellow brown sandy silt	subsoil

ground water encountered at 8.7'

BACKHOE TEST TRENCH	STRATUM	DEPTH	DESCRIPTION	COMMENTS
4 north profile	I	0-2.5/3.2'	fill	fill is unconsolidated
eas	II stern half f trench	2.5/2.9- 2.8/3.1'	asphalt	road surface
eas	III stern half f trench	2.8/3.1- 3.4/3.5'	gravel	road bed
Wes O	IV stern half f trench	2.8/3.2- 3.7/3.8'	black silt	former ground surface
	v	3.0/3.8- 3.8/4.6'	brown sandy silt	B-horizon soil; chert cobble- scraper edge
	VI	3.8/4.6- 7.0/7.9	yellow brown sandy silt	subsoil

ground water encountered at 5.8'

5 north profile	I	0-6.2'	fill	fill is unconsolidated
	II	6.2-8.3'	gray brown silt mottled with yellow brown clayey silt	redeposited topsoil mixed with subsoil
	III	8.3-8.9/ 9.1'	black organic silt with roots	marsh deposit
	IV	8.9/9.1- 13.4'	yellow brown clayey silt	subsoil

ground water encountered at 9.5'

	STRATUM	DEPTH	DESCRIPTION	COMMENTS
6 west profile	I	0-12.0'	fill	fill is unconsolidated
	II	12.0- 13.0'	gray black clayey silt	former ground surface
	III	13.0- 13.3'	brown silt	B-horizon soil
round water not one	IV	13.3- 13.7'	yellow brown clayey silt mottled with gray black clay silt	subsoil
	Juncerea			
7 west profile	I	0-0.3/0.8'	black/light brown sandy silt with gravel	modern humus/ B-horizon soil
	II	0.3/0.8- 1.5/2.0'	brick and rubble	fill
	III	1.5/2.0 10'	fill	fill is unconsolidated
	IV	2.5-3.2/ 4.0'	brown silt	fill lens; mixed with rubble
	v	·10-11'	organic gray black silt with roots and twigs	former marsh deposit
·	V VI	·10-11' 11-13'	organic gray black silt with roots and twigs yellow brown sandy silt	former marsh deposit subsoil
round water encounte	V VI ≥red at 5.	·10-11' 11-13'	organic gray black silt with roots and twigs yellow brown sandy silt	former marsh deposit subsoil

BACKHOE TEST TRENCH	STRATUM	DEPTH	DESCRIPTION	COMMENTS
9 west profile	I	0-4.5'	fill	fill is unconsolidated
	II	4.5-5.5'	gray black silt	former ground surface
	III	5.5-13'	fill	mixed with rubble
	IV	13-14'	gray black silt	former ground surface
	v	14-15'	yellow brown sandy silt	subsoil
ground water encount	ered at 8.	51		
10 west profile	I	0-31	fill	compact
	II	3-7'	fill	fill
	III	71	asphalt/ concrete surface	probably old road surface
ground water encount	ered at 7'	(on top of	concrete surface	2)
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ground water encountered at 6.3'

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BACKHOE TEST TRENCH	STRATUM	DEPTH	DESCRIPTION	COMMENTS
12 west profile	I	0-4.5'	fill	fill is unconsolidated
	II	· 4.5-5/5.5	5' gray black silt	former ground surface
	III	5/5.5- 9.5/10.24	fill-gray brown sandy silt	mixed with rubble
	IV	9.5/10.5- 10.8/11'	• gray black silt mixed with subsoil	former ground surface with modern artifacts
	v	10/10.2- 10.5'	brown silt mottled with brown tan silt	disturbance with modern artifacts
	VI	10.8/11- 13.2'	yellow brown sandy silt	subsoil
ground water encount	ered at 9	.6'	·	
13 north profile	I	0-9.3'	fill	fill is unconsolidated
	II	9.3-9.9'	organic gray black silt with roots and twigs	former marsh deposit
	III	9.9-12'	yellow brown sandy silt	subsoil
ground water encount	ered at 1	0.0'		
14 north profile	I	0-8'	fill	many fill loads visible
	II	8'	concrete rubble	fill debris
round water not end	countered			

BACKHOE TEST TRENCH	STRATUM	DEPTH	DESCRIPTION	COMMENTS
15 north profile	I	0-11.2'	fill	gray brown silt with rubble
	II ⁻	11.2'	concrete rubble	fill debris
ground water encount	ered at 9.	51		
16 north profile	I	0-9.54	fill	many fill loads visible
	II	9.5-12'	fill	homogeneous
ground water encount	ered at 9.	5'		
17 north profile	I	0-6'	fill	fill is unconsolidated
	II	6'	concrete rubble	fill debris
ground water not enc	ountered			
18 north profile	I	0-10.5'	fill	fill is unconsolidated
	II	10.5-11.5'	organic gray black silt with roots and twigs	marsh deposit
	III	11.5-13'	gray black silt with sand	marsh deposit
	IV	13-15'	yellow brown sandy silt	subsoil

ground water encountered at 9'

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BACKHOE TEST TRENCH	STRATUM	DEPTH	DESCRIPTION	COMMENTS
19 north profile	I	0-6.5'	fill	fill is unconsolidated
	II	6.51	concrete rubble	fill debris
ground water not end	countered			
20 north profile	I	0-5.3'	fill	fill is unconsolidated
	II	5.3-5.8'	black silt with marsh grass	former ground surface; very compact
!	III	5.8-7.4'	fill	homogeneous layer
	IV	7.4-7.8'	black silt	former ground surface
	v	7.8-8.3'	brown sandy silt	B-horizon soil
	VI	8.3-9.4'	yellow brown sandy silt	subsoil
ground water encount	ered at 8	.2'		
21 north profile	I	0-13.5'	fill	fill is unconsolidated
ground water encount	ered at 1	2.5'		
22 north profile	I	0-13'	fill	various loads visible
ground water encount	ered at 7	.5'		

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BACKHOE TEST TRENCH	STRATUM	DEPTH	DESCRIPTION	COMMENTS
23 north profile	I	0-12'	fill	varíous loads visible
	II	12-13'	organic gray black silt with roots and twigs	marsh deposit
	III	13-14.5'	gray tan clayey silt	subsoil
ground water encount	tered at 11	1'		
24 south profile	I	0-81	fill	ground water preventing full observation
ground water encount	tered at 0.	.51		
25 south profile	I	0-14'	fill	fill is unconsolidated
ground water encount	tered at 10	0.0'		
26 north profile	I	0-5.6'	fill	fill is unconsolidated
	II	5.6-6.0'	black silt	former ground surface; very compact
	III	6.0-7.5′	fill	homogeneous layer
	IV	7.5-7.9′	black silt	former ground surface
	v	7.9-8.4′	brown sandy silt	B-horizon soil
	VI	8.4-12'	yellow brown	subsoil

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ground water encountered at 9.0'

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BACKHOE TEST TRENCH	STRATUM	DEPTH	DESCRIPTION	COMMENTS
27 north profile	I	0-12.5'	fill	various loads visible
·	II	12.5-13.24	' organic gray black silt with roots and twigs	marsh deposit
	III	13.2-14.5	yellow brown sandy silt	subsoil

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ground water encountered at 11.1'

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APPENDIX B:

NEW YORK STATE PREHISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM

	NEW YORK STATE PREHISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM
	For Office Use OnlySite Identifier
Î	Project Identifier CEQR 92-612X Date 2 August 1993
	Your Name Philip A. Perazio Phone (717) <u>620-2591</u> Address P.O. Box 1117 Stroudsburg, PA 18360
	Organization (if any) Kittatinny Archaeological Research, Inc.
	<pre>1. Site Identifier(s) New Saint Raymond's Cemetery 2. County Bronx One of following: City New York City Township Incorporated Village Unincorporated Village or Hamlet</pre>
	3. Present Owner <u>St. Raymond's Cemetery</u> Address <u>1201 Balcom Avenue</u> Bronx, NY 10465
	4. Site Description (check all appropriate categories):
	SiteStray findCave/RockshelterWorkshopPictographQuarryMoundBurialShell middenVillageSurface evidenceX CampMaterial in plow zoneMaterial below plow zoneX Buried evidenceIntact occupation flocSingle componentEvidence of featuresStratified
	Location
	Soil Drainage: excellent X good fair poor Slope: flat gentle X moderate steep Distance to nearest water from site (approx.) <u>100 yards</u> Elevation: <u>approx. 14-16 ft. asl</u>
	5. Site Investigation (append additional sheets, if necessary):
	Surface date(s) Site Map (Submitted with form*) Collection
	Subsurfacedate(s) <u>14-22 April 1993</u> Testing: shovel_coring_other <u>Backhoetrenches</u> unit size <u>Var.</u> no. of units <u>7</u> (Submit plan of units with form*)
	Excavation: unit size no. of units (Submit plan of units with form*) * Submission should be 8 1/2"xll", if feasible
	Investigator Eugene J. Boesch and Philip A. Perazio

Bronx/BEER KAR/CIEQR Rei'd Aug 14,1993

P.O. Box 1117, Stroudsburg, PA 18360 717-620-2591 P. O. Box 73, Downingtown, PA 19335 215-269-7161 P.O. Box 26, Columbia, NJ 07832 908-496-8335 FAX: 717-620-0186

12 August 1993

KITTATINNY

ARCHAEOLOGICAL

Cultural Resource Consultants

RESEARCH, INC.

Ms. Marjorie Ingle Nowick, Archaeologist New York City Landmarks Preservation Commission 225 Broadway New York, NY 10007

St. Raymond's Cemetery Expansion Area, Bronx, New York re: Phase IB Cultural Resource Investigation (CEQR # 92-612X)

Dear Ms. Nowick:

Please find enclosed one copy of our report for the abovereferenced project for your review. The client has agreed to implement the avoidance procedures outlined in our letter of 25 May 1993 and accepted by you on 27 May 1993. Therefore, it is our opinion that there will be no impact to potentially significant culture-bearing deposits. Consequently, we recommend that no further work be required for this project.

If you have any questions, please feel free to contact us.

Yours truly, Valerie B. Perazio President

VBP/cm

enclosure

C: John Griffin, Superintendent, St. Raymond's Cemetery Mark A. Varrichio, Attorney for St. Raymond's Cemetery

