## **Agency Submission**

# Phase IA/IB Archaeological Assessment, NYC Farm Colony (LPC #LP-01408)

# Staten Island, Richmond County, New York

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# **Project Summary**

**SHPO Project Review Number**: not assigned. Work completed under NYC Landmarks Preservation Commission Application (LPC Docket #: 158542, SRA #: 15-8832; Amendment 1, LPC #: 158846, Misc #: 15-9171).

**Involved City, State and Federal Agencies**: New York City Planning Commission (CPC), The Mayor's Office of Environmental Coordination (MOEC), the New York City Landmarks Preservation Commission (LPC), and NYC Citywide Administrative Services (DCAS)

Phase of Survey: Phase IA/IB archaeological assessment

#### **Location Information**

Location: Staten Island

Minor Civil Division: Staten Island

County: Richmond

#### Survey Area (Metric & English)

Length: not applicable Width: not applicable

Depth (when appropriate): not applicable

Number of Acres Surveyed (when appropriate): 6.87 acres (2.87 hectares) Number of Square Meters and Feet Excavated: 16.75 sq meters (189.3 sq feet)

Percentage of Site Excavated: not applicable

USGS 7.5 Minute Quadrangle Map: Arthur Kill 7.5 minute, 1981

#### **Archaeological Survey Overview**

Number & Interval of Shovel Tests: 52 (20 x 20 in; 50 x 50 cm); 15 m (50 ft) and 12.5 m (25 ft)

Number & Size of Units: 2 test units (2x1 meter and 1x1 meter)

Width of Plowed Strips: none Survey Transect Interval: see above

#### **Results of Archaeological Survey**

Number & Name of Archaeological Sites identified: one (cemetery and associated features)

Number & Name of Historic Sites identified: none

Number & Name of Sites Recommended for Phase II/Avoidance: one (Features 1 and 16, cemetery area)

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Date of Report: December 2014

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## **Executive Summary**

VHB Engineering, Surveying and Landscape Architecture, P.C. (VHB), White Plains, New York, and their consultant Chrysalis Archaeological Consultants, Inc. (Chrysalis), New York, completed a Phase IA/IB archaeological assessment of parts of a 46-acre parcel owned by the City of New York. The parcel is located on a portion of Block 1955, Lot 1, in Richmond County (Staten Island; Figure 1.1). This location houses remnants of the New York City (NYC) Farm Colony.

The New York City Landmarks Preservation Commission (LPC) has designated the Farm Colony and an associated facility as an LPC Historic District under the name New York City Farm Colony – Seaview Hospital Historic District (LPC #LP-01408). The Farm Colony also was known historically under the names County House, the Poor Farm, the Richmond County Almshouse (aka Alms House), and the Richmond County Poor House Farm (Photograph 1.1). Unless within a quote, the facility is referred to as the Farm Colony in this report. The actions resulting from the implementation of the Proponent's plan are referred to as the Project and the Project is called the Landmark Colony.

NFC Associates, LLC (the Proponent) proposes to develop the 46-acre parcel which is roughly bounded by Walcott Avenue to the north, Brielle Avenue (aka Manor Road) to the east, Colonial Avenue and Forest Hill Road to the west, and the Staten Island Greenbelt to the south. The Project would require the disposition of City-owned land and zoning-related approvals from the City Planning Commission (CPC), which are subject to Uniform Land Use Review Procedure (ULURP) and City Environmental Quality Review (CEQR). The Mayor's Office of Environmental Coordination (MOEC) is the lead agency for the environmental review of the Project and is undertaking coordinated review of the CEQR process with CPC and LPC. The Project area is currently managed by the NYC Citywide Administrative Services (DCAS). No Federal or State Actions are required for the Project.

Based on a Project design dated March 11, 2014, which guided the archaeological fieldwork, the Proponent plans to develop an age-targeted community comprised of a mix of building styles and unit options, along with commercial and/or community facility spaces and accessory parking (Figure 1.2). The Project's key elements include:

- Rehabilitation of five (5) existing historic buildings: three for residential use; one for mixed-use of commercial, community facility, and residential; and one for storage
- Three (3) new residential elevator buildings
- Four (4) clusters of new residential Carriage Homes
- One (1) new clubhouse with associated swimming pool
- One (1) new commercial building Nine (9) new landscape element/garden structures
- Stabilization of one existing building "ruin"
- One (1) new community garden space for residents of the development
- Fencing of the existing potter's field and construction of a public memorial in honor of the potter's field
- Parking lots, access roads, and entry gates off Forest Hill Road and Brielle Road
- Underground utilities

While some of the Project buildings are historic or will be based on historic footprints (for example, roads), the other buildings and structures will be newly constructed for the Project. Because the Project will modify much of the existing landscape of the Farm Colony, there exists the potential to impact archaeological features which could provide

significant information about the cultural history of both the setting and this charity facility. For these reasons, the LPC requested that a Phase IA/IB Archaeological Assessment of the Farm Colony be completed. The purpose of the assessment was to address specific questions related to

- confirmation of the location of the Farm Colony cemetery (aka potter's field) which is shown on the 1911 New York City, Borough of Richmond Topographic Survey Sheet 38 plan (1911 Topographic Survey; Figure 1.3),
- features associated with the cemetery, and
- the locations of other historically documented but now obscured or demolished buildings, landscapes, and structures.

The Phase IA/IB investigations were conducted under a Work Plan submitted by VHB to LPC and EDC on March 25, 2014. The initial Phase IA work was conducted by Carol S. Weed and Nicole Benjamin-Ma (VHB) in April, 2014. The results of the Phase IA investigations were reported by Ms. Weed in an End-of-Research (EOR) Letter Summary submitted to EDC on April 24 and LPC on May 4. On May 15, Amanda Sutphin (LPC) met with Ms. Weed (VHB) and others on-site to review the existing conditions in the areas called out in the Phase IA EOR for systematic investigation during Phase IB.

The Phase IA research found reference to the build elements with the Farm Colony at various stages of the colony's use. In addition, new detail was found on the use of the cemetery though no historical maps other than the 1911 Topographic Survey plan (Figure 1.3) showed the location of the cemetery boundaries. Other historical maps, however, provided detail on the locations of buildings and structures in the original Administrative center of the Farm Colony. Based on the Phase IA research results, LPC agreed that Phase IB field investigations should be completed in the so-called Administrative Core, across the reported location of the cemetery, and in two design buffer areas located along the south and east sides of the cemetery as defined on the 1911 Topographic Survey plan.

The Phase IB archaeological investigations were completed under a LPC Application which was countersigned by DCAS and issued by LPC on June 12, 2014 (LPC Docket #: 158542, SRA #: 15-8832; Amendment 1, LPC #: 158846, Misc. #: 15-9171). Amendment 1 was issued to cover shovel tests excavated near the reported Cemetery Area. Chrysalis Archaeology conducted the Phase IB fieldwork beginning June 9, 2014, with transect layout and June 24, 2014, with the cessation of field effort in the Administrative Core area. The Phase IB investigations were done under the direction of Alyssa Loorya and Lisa Greiger with input from Ms. Weed. This work was summarized in an End-of-Fieldwork (EOF) Letter Summary which was submitted to EDC and LPC.

The Phase IB investigations did not find subsurface features or discrete artifact concentrations in the Administrative Core. No further archaeological investigations are recommended herein for this area however an archaeological monitor should be on-call, not on-site, during construction preparation activities in this area in the event that unanticipated features such as privies or cisterns are revealed. If present, it is assumed these features would be revealed at the interface between strata A2 and B, an average depth of one foot below present gound surface.

Sixteen discrete features were found in the Cemetery and Design Buffer areas. These features include

- fieldstone and rubble scatters (Features 5, 6, 7, 8, 10, 11, 13)
- a fill deposit that is temporally discrete (Feature 16),
- other fill deposits (Features 9, 14, 15)
- a grave marker with associated depression (Feature 12)
- stone walls (Features 2, 3, 4), and
- structure remnants (Feature 1) which appear on a 1937 Sanborn map and which are located in the vicinity of the original morgue building appearing on the 1911 Topographic Survey map

Because the Project proposes to landscape the reported cemetery location and place a commemorative plaque or other signage to honor the inhabitants of the Farm Colony interred in the cemetery within the design buffer, LPC originally indicated that the vertical and horizontal extent of cultural features and deposits needed to be defined.

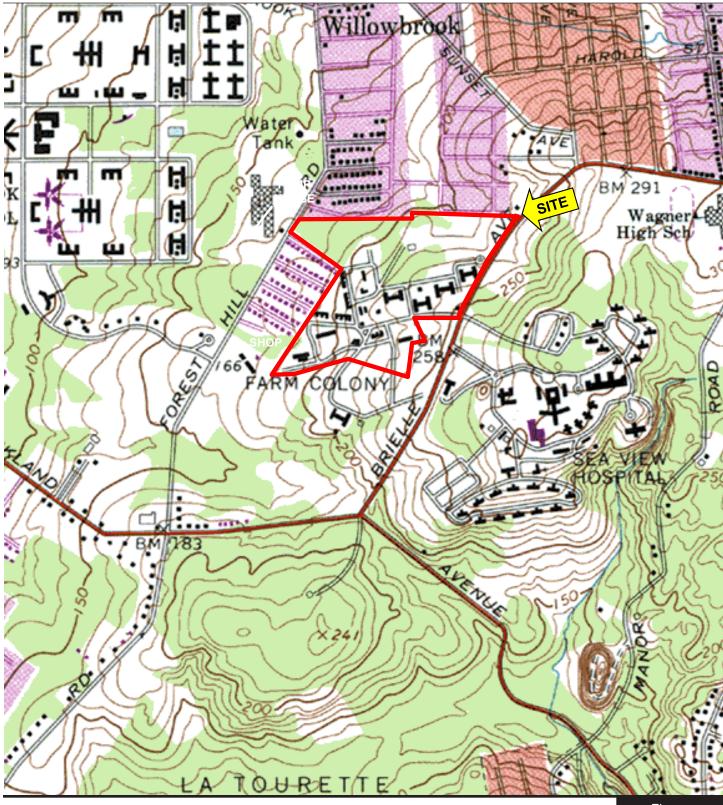
Nancy Owens Studio, LLC, prepared a landscape plan for the cemetery area which considered possible impacts to archaeological features that had been documented or that were presumed to be present (graves). LPC and EDC reviewed the plan with the Proponent team in September, 2014. The landscape plan is presented herein as an appendix.

LPC and EDC are in agreement that the landscape plan limits possible impacts through the use of fill and monitored excavation. As outlined in an Unanticipated Discovery Plan, also included here as an appendix, an Archaeological Monitor will document avoidance of all the archaeological features except Feature 1 within the cemetery boundary and its design buffer. Feature 1 will be removed though elements of it will be retained for display. The Archaeological Monitor will document the removal of the feature to confirm that no evidence of the original 1911 building remains. The archaeological monitor also will be on-site during implementation of the landscape plan within the cemetery and design buffer boundaries that involves ground disturbance and excavation. For these reasons, no further archaeological investigations are recommended as all archaeological features of possible significance will be avoided and protected by the Project.

The report that follows contains four chapters, references cited, and six support appendices. The body of the report was developed jointly by Chrysalis and VHB and the organization primarily responsible for the chapter is noted parenthetically in the following list

- Executive Summary (VHB),
- Chapter 2 Research Methods and Results (VHB),
- Chapter 3 Field and Laboratory Methods and Results (Chrysalis),
- Chapter 4 Conclusions and Recommendations (Chrysalis, VHB), and
- References Cited (Chrysalis, VHB)

The appendices include are A-Correspondence including the complete Work Plan; B – New York State Site Inventory Form for the Cemetery and associated features; C – Shovel Test Summary; D – Artifact Summary; E – Nancy Owens Studio Landscape Plan, September 15, 2014; and F – Avoidance, Monitoring, and Unanticipated Discovery Plan (UDP). The figures and photographs pertinent to specific chapters are presented at the end of that particular chapter. All tables are embedded in the narrative.



The Landmark Colony Staten Island, New York

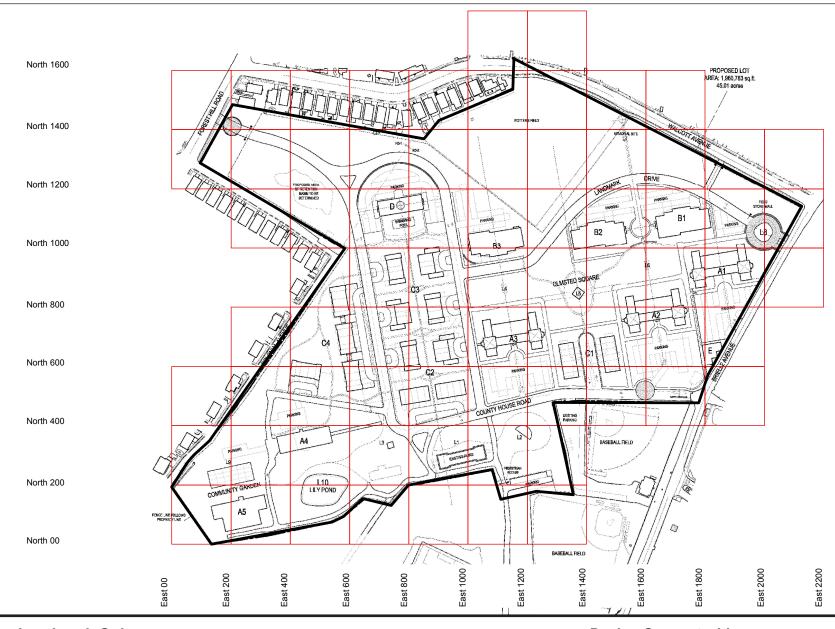
Site Location-1980 Arthur Kill USGS 7.5-minute quadrangle

Figure **1-1** 



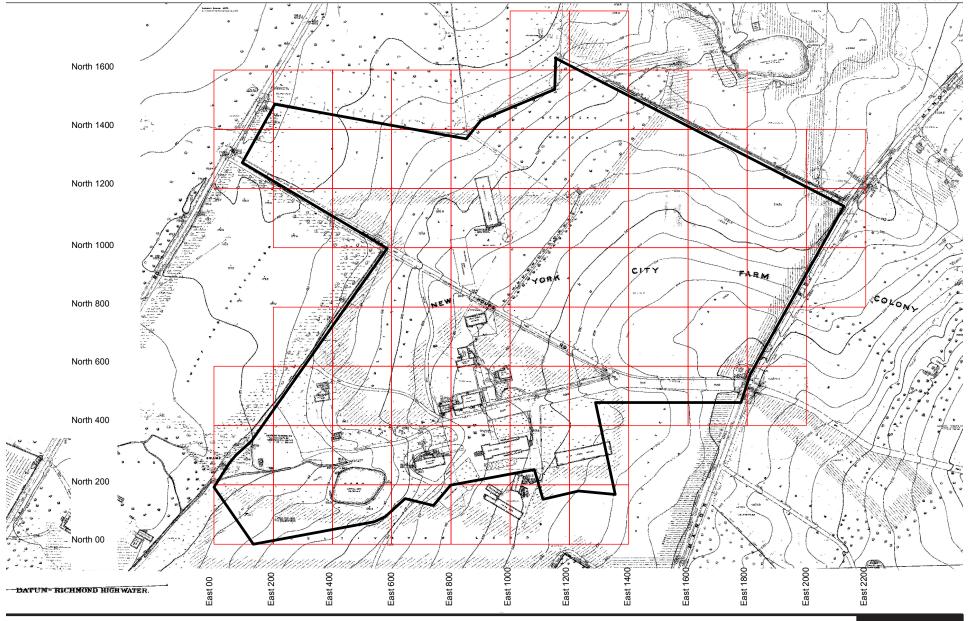
Photograph 1.1

Looking north/northeast at the early 1900s landscape of the Superintendent's (aka Administrative) core complex at the Farm Colony. The bell tower and the flag pole are to picture center left.



The Landmark Colony Staten Island, New York Design Concept with Study Grid

Figure **1.2** 



**The Landmark Colony** 

Staten Island, New York

1911 NYC Borough of Richmond Topographic Survey Sheet 38. with Study Grid

Figure **1.3** 

Pr

Project Site

Index Grid

## **Research Methods and Results**

## **Research Methods**

In order to address the research domains, the focus of the research was on reviewing sources pertaining to the physical layout of both the Farm Colony and the potter's field (Zavin 1985; Grossman et al. 1986, among others cited below). The sources used during the research are listed in Table 2.1 below.

	Table 2.1. Data Sources Used and Data Obtained			
Research Domain	Source Location(s)	Data		
Functional Areas, Potter's Field	New York Public Library	1) Board of Estimate and Apportionment records 2) Annual Reports of the Department of Public Charities of the City of New York (1903-1920) 3) Annual Reports of the Department of Public Welfare (1920-1937) 4) Annual Report of the Department of Welfare (1939/1940-1962) 5) Matteo, Thomas W. 2005. Sea View and the Farm Colony, Staten Island's first historic district. Sea View Historic Foundation. 6) The Staten Island World (1908-1920) 7) Staten Island Advance (1886-1940) 8) 1911 New York City Borough of Richmond, Topographic Survey Sheet 38 9) 1937 Sanborn, Volume XXX		
Functional Areas	New York City Department of Records, Municipal Archives	1) Photographs 0842 – 0872, 2753, 2757		
Functional Areas	New York Historical Society (not accessed, see status note for source)	1) Bien, Vermeule C.C. 1891 2) Dripps 1872		
Functional Areas	City of New York Public Design Commission Archives	Lots 279A through 279Y		
Functional Areas	Sanborn Map Company	1917 to present		
Functional Areas	University of New Hampshire, Diamond Library, USGS Map Archives	Staten Island		
Functional Areas	Staten Island Institute of Arts and Sciences, History Archives	1) Farm Colony, Poor Farm 2) Hagadorn's Semi-Weekly Staaten Islander 3) Richmond County Gazette		
Functional	Landmarks Preservation	Farm Colony and Seaview Hospital		

	Table 2.1. Data Sources Used and Data Obtained				
Research Domain	Source Location(s)	Data			
Areas	Commission				
Functional Areas Potter's Field	Staten Island Historical Society/Historic Richmond Town	1) Farm Colony 2) Coroner's Office			
Functional Areas, Potter's Field	New York State Office of Parks, Recreation, and Historic Preservation (NY SHPO)	Individual inventory forms and NR data			
Potter's Field	Friends of the Abandoned Cemeteries of Staten Island (FACSI)	Interview     Review of web data input by FACSI			

The research was conducted by Carol S. Weed, Rita Walsh, Nicole Benjamin-Ma, and Mathew Sloane. The VHB researchers utilized some source materials supplied to them by Nancy Owens Studios, LLC; V+B Architects; and the Proponent. Project photographs were taken at various times by David Kennedy (VHB Project Scientist), Ms. Weed, and Ms. Walsh between November 2013 and April 2014.

While much of the source material was reviewed on-line, certain documents were available only at repositories. This was the case with the New York Public Library microfilm materials which included the New York City charity and welfare department annual reports and the Staten Island Institute of Arts and Sciences, History Archives documents. All of the documents including maps that were obtained on-line or copied will be downloaded to disk for the LPC upon completion of the Phase IA/IB report.

Words are warranted about three source repositories and the documents from them. The New York Historical Society was listed in the March 2014 Work Plan as the source of the Dripps 1872 and Bien, Vermeule 1891 Staten Island maps. Neither was viewable on-line so the editions of these maps in the on-line David Rumsey Collection were reviewed. The four newspapers (*Hagadorn's Semi-Weekly Staaten Islander* Richmond County Gazette, *Staten Island Advance*, and *Staten Island World*) are not indexed and specific dates were research. No additional references to the Farm Colony were found.

The Friends of Abandoned Cemeteries, Staten Island (FACSI) have posted transcribed materials to the NY-GenWeb Staten Island list. These materials include funeral home logs and transcribed articles from the *Staten Island Standard*. The log data have been entered by FACSI into tables and abbreviations are used which are not always referenced on the posted tables. Table 2.2 herein presents these abbreviations and the associated names. The abbreviations and their conversions were obtained from Ms. Lynn Rogers, Executive Director of FASCI, and the preface to the tables listed under the heading 'Obscure Records of Interments and Burials In Staten Island NY Cemeteries' on NY-GenWeb.

Table 2.2 - List of FACSI Abbreviations					
Abbreviation	Abbreviation Name				
CL	Transcribed List of Burials (aka, LIST)				
CR	Cemetery Records				
CWL	Charles W. Leng				
FACSI	Friends of Abandoned Cemeteries Records				
FN	Fountain Cemetery				
FN	Fountain Cemetery				
LK	Lake Cemetery				

Table 2.2 - List of FACSI Abbreviations			
Abbreviation	Name		
МН	Mariners Harbor		
NB	New Brighton		
ОТ	Old Town Deaths, NYC Municipal Archives		
PR	Port Richmond		
RWV	RW Vosbergh (historian, 1922-23 cemetery recording)		
SI	Staten Island Cemetery		
SRG	Seamans Retreat Cemetery		
SRH	Seamen's Retreat Hospital		
SRR	Seamen's Retreat Records		
TC	Trinity Chapel (Cemetery), later Church of Ascension		
WB, also WNB	West Brighton, West New Brighton		
WTD	William T. Davis		

# **Environmental and Historic Contexts and Research Design**

#### **Environmental Context**

In the post-Colonial era, the Project parcel hosted individual farmsteads and then the New York City Farm Colony (aka Richmond County Poor Farm; Poor House Farm; Farm Colony). Based on resource inventories presented in the Annual Reports of the Department of Public Charities and Public Welfare (NYC Charities 1903 to 1914), the natural resources of consequence within the Farm Colony grounds included potable springs, hardwood stands, and a variety of flora and fauna including berries, nuts, deer, resident and migrating birds, and various small mammals. The Project soils were of sufficient quality to have sustained agriculture through the 19<sup>th</sup> and early 20<sup>th</sup> centuries. The characteristics of the Farm Colony parcel are briefly summarized below.

#### **Project Setting**

The Project area, today, is bounded on the south by LaTourette Park and the Greenbelt, on the north by Walcott Avenue, on the east by Brielle Avenue, and on the west by Forest Hill Avenue. This area is wooded with a dense undergrowth of shrubs and vines. Although the Farm Colony grounds are fenced, incursions onto the grounds by the public are common. Feral cats compete with deer, raccoon, and opossum and undoubtedly stalk varied song and predator bird populations.

#### **Geology and Soils**

Topographically, the Farm Colony lies on an east-west slope with a gradient descending from 240 feet (ft) above mean sea level (amsl) on the east to 172 ft on the west. In the historic period, the gradient was considered sufficient to support gravity-feed water lines that originated at springs upslope from today's Brielle Avenue.

USDA (2013, 2014) classifies the soils of the Project area as Greenbelt loams, 0-3 and 3-8 percent slopes; Greenbelt-Urban land complex, 0-3 and 3-8 percent slopes; and Urban land – Greenbelt complex, 0-3 and 3-8 percent slopes. Of

these, Greenbelt (GbB) covers 95 percent of the Cemetery Area. The typical profile of the Greenbelt loam, 3-8 percent slope is described on Table 2.3.

	Table 2.3. Project Area Soils (USDA 2013, 2104)					
Name	Soil Horizon	Color	Texture,	Slope %	Drainage	Landform
	Depth (cm; in)		Inclusions			
Greenbelt	A: 0-5 in	A: 5YR 3/2 dk	A: lo, friable;	3 - 8	Well drained,	Summits, back
loam, 3-8	Bw1: 5-16 in	rd brn	Bw1: lo, friable,		but not prime	and footslopes,
percent (GbB)	Bw2: 16-30 in	Bw1: 5YR 3/4	10% gravel, 2%		agricultural	side slopes
(USDA 2014)	C: 30-79 in	dk rd brn	cobbles			
		Bw2: 2.5YR 3/3	Bw2: lo, friable,			
		dk rd brn	10% gravel, 2%			
		C: 5YR 3/3 dk	cobbles			
		rd brn	C: sa lo, 2%			
			gravel, 5%			
			cobble			

Key: Shade: dk = dark

Color: brn = brown; rd = reddish

Soils: lo = loam, loamy; sa = sand, sandy

The soil profiles for the Greenbelt-Urban complex is effectively the same though its upper horizons are disturbed by development. In both cases, the soil profile is deep and well drained.

### Hydrology

Archaeologically, potable water sources are commonly identified as freshwater cold springs, permanent or seasonal streams or non-vegetated freshwater ponds and lakes. Wetlands, though present on-site are not usually tapped as potable water sources because of vegetation contamination. Two headwater streams originate east of Brielle Avenue and route into the Farm Colony section. The historic record indicates that seven springs were present in the Farm Colony and that these serviced both personal and functional needs.

#### **Historic Context and Research Questions**

#### **Historic Context**

#### The Farm Colony Elements

The Project parcel historically hosted the New York City Farm Colony (aka Richmond County Poor Farm; Poor House Farm; Farm Colony). This public facility operated between the 1830s and the 1970s. Some of the farm colony buildings will be rehabilitated as part of the Project. The colony is one part of the New York City Farm Colony – Seaview Hospital complex which, as noted above, is an LPC Historic District (LPC #LP-01408). The Farm Colony's contributing elements are listed on Table 2.4 below. Individual elements of the Farm Colony also are recorded in the New York State Register of Historic Places maintained by the New York State Office of Parks, Recreation, and Historic Preservation [NY SHPO]. These elements also are listed on Table 2.4.

	Table 2	.4 - NY SHPO and LPC Farm Colony Elements	1	
NY SHPO USN*	USN Name	LPC Name	Building Dates (LPC DR 1985)	
8501.001055	Pavilion D	Dormitory D	1931	
8501.001056	Pavilion C	Dormitory C	1931	
8501.001057	Pavilion B	Dormitory B	1931	
8501.001058	Pavilion A Building 3 (Social	Dormitory A	1931	
8501.001059	Services, Auditorium, Dorm)	Men's Dormitory 3 & 4	1908-1909	
8501.001061	Workshop	Shop Building	>1911<1917	
8501.001062	Employee Dormitory	Dormitory for Male Help	1908-1909	
8501.001063	Service Building	Dining Hall, Kitchen, Service and Bakery Building	1914	
8501.001064	Laundry	Laundry – Industrial Building	1914	
8501.001065	Dormitory 5 & 6	Women's Dormitory 5 & 6	1910-1912	
8501.001067	Nurses Residence	Pavilion for the Insane - Nurses Residence	1910, 1938	
8501.001060	Buildings 1+2	Men's Dormitory 1 & 2	1903-1904	
Non-assigned	Not inventoried in SPHINX	Potter's Field	1830s – 19XX	
Non-assigned	Not inventoried in SPHINX	Board of Health Disinfecting Plant	>1898<1907	
Non-assigned	Not inventoried in SPHINX	Morgue (A.D. 1914) and garage building	1914, 1926-1931	

<sup>\*</sup> USN = Unique Site Number

The LPC Designation Report (LPC DR; Zavin 1985) for the LPC District lists the potter's field as a contributing element to the district. Other contributing elements to the district include the Board of Health Disinfecting Plant and the 'new' morgue and garage building. The Farm Colony elements, however, are not listed as contributing to the National Register of Historic Places District (NY SHPO National Register #04NR05341, Howe and Policastro 2005) which deals only with the Seaview Hospital section of the Farm Colony – Seaview Hospital complex. Because the Project lies within the LPC District and the property is in public control, actions involving district elements are being coordinated between the lead agency and LPC.

The LPC District DR (1985) excludes particular buildings or building remnants that date, for the most part, to the later use phases of the facility. The LPC District DR (Zavin 1985:47) describes the excluded, non-contributing buildings as follows (numbering added, spelling corrected):

- 1) 1930 one-story brick incinerator building and adjacent moderately tall smoke stack located southeast of the morgue/garage building
- 2) 1941 one-story brick structure possibly housing electrical equipment lying to the north of the dormitory for male help
- 3) Collapsing brick and wood shed located to the west of the laundry/industrial building
- 4) Large corrugated metal warehouse which stands immediately to the north of dormitory B
- 5) Several apparently older structures of several materials -- stone, brick, concrete-block and wood -- located to the north of the service road behind dormitories A through D
- 6) Deteriorated wood garage lying opposite the southeast corner of the Pavilion for the Insane
- 7) Vandalized greenhouse of relatively recent date located on the east side of the shop building (the greenhouses shown on earlier maps are no longer standing),
- 8) Small 1941 brick structure on the north side of the exit roadway giving onto Walcott Avenue, and
- 9) 1942 gatehouse and visitors' reception center located on the north side of the main entry road and fronting Brielle Avenue

With regard to this listing, the Phase IA research will focus effort on obtaining additional detail about Item 5, "several apparently older structures..." and their locations and functions. Also needed is the existing condition of both these and the other buildings noted as non-contributing to determine if they now represent archaeological features of concern.

While the LPC District is defined on the basis of its contributing buildings and the Farm Colony cemetery, the designation report also notes elements of the larger cultural landscape. These elements are not called out as contributing to the district. The cultural landscape elements that are noted include main access and service roads, curbing and street lighting fixtures, sidewalks and pathways, a playing field, community gardens, ordered tree planting along *allees*, and an octagonal gazebo. The LPC DR (1985:36) authors note that the "existing landscaping thus reflects both phases of the institution's history."

Archaeological features certainly form one part of the cultural landscape within the LPC District. Though the LPC DR (Zavin 1985) does not specifically address archaeological features or issues, it does include the potter's field, an archaeological site, as a named element. Specifically, Zavin (1985: 36) in the LPC DR describes the potter's field as:

A cemetery is located at the northern most corner of the site. As indicated on a 1911 topographical map, it was at that time the only densely wooded area on the Farm Colony lands. Still a wooded area today, it is bounded on the north and west by Walcott Avenue and the rear lot lines of houses fronting on that street. Except for the indented western boundary, it is roughly rhomboidal in shape and measures approximately 450 x 450 feet.

A narrow roadway leading to it from the south was marked by an *allee* of silver maples. Although a portion of this approach road was obliterated when dormitories A through D were constructed in 1931, some of those trees remain. The foundations of an early morgue at the north end of the *allee* (the southernmost corner of the cemetery) would appear to remain at a point 450 feet south of the north property line and 450 feet east of the west property 1 ine.

This cemetery is a potter's field associated originally with the Richmond County Poor Farm and still in use as late as 1905. Scattered and fallen white marble stones of modest dimensions and others still in their original locations can be found here today.

A report by Greenhouse Consultants (Grossman et al. 1986) on their Phase IA investigations within the Farm Colony, however, does address issues related to archaeological survey. Though they did not complete systematic walkover of the Farm Colony, they did visit locations within the Farm Colony that reportedly held evidence of early features. One of these was the Farm Colony cemetery (aka potter's field). Grossman et al. (1986:13) provide these additional details to those noted in Zavin (1985):

The foundations of a small 1-story morgue remain in the southeastern corner of the cemetery (see Figure 11). Scattered gravestones still exist...Seventy-nine burials were recorded for the year 1905 in the Annual report of the Department of Public Charities of the City of New York for 1905 (Zavin 1985).

The LPC DR (Zavin 1985) and Grossman et al. (1986) references to the cemetery, the original morgue, and demolished Dormitory Building 7 & 8 suggest that surface or near surface structural remains are (were) present in or near the Farm Colony cemetery in 1985 and 1986.

#### Farm Colony Archaeological Investigations and Current Sensitivity Assessment

To date, four cultural resources investigations have been conducted within parts of the LPC Historic District. Three of these were Phase IA investigations and they were conducted by the aforementioned Grossman et al. (1986), Roberts and Clark (2002), and Meade (2008). In chronological order, the investigations dealt with the Farm Colony, the so-called northern parcel at Seaview Hospital, and a single building in the vicinity of the Seaview Hospital complex. The fourth is recent ground penetrating radar (GPR) work conducted by GPRS under the direction of NFC Associates. This work was suspended after a test run conducted in December 2013.

Grossman et al. (1986) is the most pertinent as it dealt with archaeological sensitivity at the Farm Colony portion of the LPC District. Grossman et al. (1986) concluded that the Farm Colony parcel had low to medium archaeological sensitivity for Native American sites and higher sensitivity for Historic period resources. They based their Native American sensitivity assessment on a lack of recorded sites in the vicinity and permanent, potable water sources. Eugene Boesch (1994), however, seems to classify the general area as medium to high sensitivity because of proximity to the Greenbelt swamps. As for the Historic period sensitivity, Grossman et al. (1986) used historic maps to document the presence of at least two pre-Farm Colony farmsteads (Woke and Garlich) and the early Farm Colony building complex attributed to Superintendent McCormack. They did not attempt map overlays and they completed no systematic inspection of high sensitivity locales.

The Roberts and Clark (2002) assessment concentrated in the Colony Cottage area north of Seaview Hospital and east of the Farm Colony. This area also was assessed as having low sensitivity for Native American sites again because of a lack of permanent potable water sources and that fact that there "are better locations for camping and observing game" (Roberts and Clark 2002:8). Roberts and Clark (2002) did conclude that a specific location within their study area which had hosted an historic farmstead retained high sensitivity but that the majority of the area had been agricultural fields and had low sensitivity for resource recovery.

Meade's 2008 study was tightly focused on the immediate vicinity of an existing historic Group Building in the Seaview Hospital complex. She too concluded that there was low probability of finding Native American materials because of a lack of permanent potable water sources and previously reported sites and the presence of steep slopes. She noted that as expected there was a high probability of finding archaeological materials dating to the hospital use period.

Ground Penetrating Radar Systems, Inc. (GPRS; James 2014) has completed a single GPR transect that was positioned east of the EDC boundary for the Potter's field but within the 1911 Topographic Survey boundary for the feature. Based on the results, GPRS concluded that GPR anomalies are present in the area outside of the EDC boundary and that these anomalies fit the signatures of possible grave shafts. GPRS conducted no subsurface investigations to determine the nature of the anomalies.

#### **Anticipated Direct Impacts on Archaeological Resources**

As presently defined, direct impacts are planned for several areas within the Farm Colony. These impacts will result from the construction of new buildings and structures, landscaping, and infrastructure emplacements. The direct impact areas as defined in March, 2104, are shown on Figure 1.2. It is anticipated that the direct impact areas will be re-defined in the coming months to accommodate design modifications and address issues resulting from the on-going natural and cultural resource investigations.

Direct impacts also will result from pre-construction ground preparation action such as vegetation clearing, recontouring, and building and structure demolition. One of the issues raised by the GPR work concerned preparatory archaeological fieldwork needed prior to pre-construction ground preparation activities. A stabilization report prepared by Page Ayers Cowley Architects, LLC (PAC) detailed the approaches recommended prior to building stabilization. In the PAC report, the authors (PAC n.d.: II-2) noted:

The Farm Colony's existing internal roads should be cleared of any obstructions (trees, building debris, garbage from illegal dumping, etc.).

All vegetation with a six-inch diameter and within ten-feet of the perimeter of the building should be cleared, including the young trees and saplings as well as the underbrush. All mature trees close to the buildings should be individually examined to determine if their roots are damaging the foundations and exterior walls. The climbing vines should be cut approximately four feet from grade and the vines attached to the buildings should be allowed to die. Root systems should be lifted and removed. The vines attached to the buildings should not be physically removed, as this may cause further loss of historic fabric, instead, they should be allowed to wither and fall-off overtime.

The area extent of these pre-construction preparatory activities are presently unknown however the September 2014 landscape plan specifically outlines ground treatment in the cemetery and design buffer.

#### **Research Questions**

The Phase IA research was directed by a research design that was developed based on the results of prior work and comparative data generated by other cemetery projects completed in the five boroughs. The research questions were refined following the Phase IB fieldwork and laboratory analyses.

#### **Research Design Domains and Questions**

The Phase IA research discussed herein is guided by a research design which is structured around two research domains and associated research questions. The research design domains and questions are:

#### Research Domain: Functional Areas

The historic maps reviewed during Phase IA provide information on Project area developments beginning in the early 1800s and continuing through the recent era. As noted above, it appears that the Farm Colony experienced four functional use episodes. The archaeological footprints of these uses became better defined through time as the mapping became more detailed. It appears that there have been development episodes in certain areas that have either obscured or obliterated evidence of earlier uses and what remains of the earlier building, structure, and landscape footprints is not well understood. Therefore, the first research domain is focused on the definition and documentation of the functional areas during each of the four periods. The resultant data will be input into GIS and visually presented as overlays in the Phase IA documentation.

The first research domain is focused on the definition and documentation of the functional areas during each of four temporal periods. The temporal periods are:

- 1) Farmstead (<A.D. 1830s);
- 2) Richmond County Poor House Farm (+A.D. 1829 to 1901);
- 3) New York City Farm Colony (A.D. 1901-1925); and
- 4) New York City Colony, dependent infirm (+ 1925-1970s).

<u>Functional Area Research Questions:</u> The research questions for Functional Areas are aimed at developing an archaeological feature hierarchy by temporal period for the Project area. On a gross level, the answers to the questions will provide bases for determining the possible importance of a particular feature type in the use history of the Farm Colony area. To this end, the following questions will be addressed

- (1) What are the feature types documented? What are the defining criteria for the types?
- (2) Do the feature types define functional spaces? Do these functional areas (and, by association, the feature types) change through time? What heralds the change (demolition, re-use, abandonment, economic change)?
- (3) What is the likelihood that the feature type is retained in the Project area and that an archaeological signature can be identified?
- (4) Are there archaeological features which appear to have functionally distinct use lives?

#### Research Domain: Farm Colony Cemetery Components

At present, the cemetery (aka potter's field) is poorly defined in plan and in terms of its temporal duration, burial patterns, marker locations, and associated features. Zavin (1985) and Grossman et al. (1986) provided cogent overviews of available data but both researchers appear to have been more focused on other aspects of the Farm Colony culture history.

Two cemetery boundaries have been identified. One is that shown on the 1911 Topographic Survey map which bounds the cemetery as about 450 feet along its south and east sides (Figure 1.3, with reference grid overlaid). The other is the EDC boundary which shows a much smaller footprint. Most maps referenced however do not show a cemetery or potter's field at all and this is atypical as such features are commonly shown.

The actual use period of the cemetery is unknown. The absence of this feature from the Beers 1887, Sanborn 1917-1950, and Vermeule and Bien 1890 maps, suggests that its use during the Farm Colony's public periods was limited. This, in turn, may reflect the overall population density at the Farm Colony particularly in the period from 1830 to about 1898.

The horizontal plan of the cemetery's graves is unknown. Only one headstone and grave location have been relocated in 2014 though Grossman et al. (1986) and others noted the presence of multiple markers both presumably in place and moved to piles. Further, while the GPRS survey results point to individual graves, potter's fields often employed trench burial particularly by age or sex. The presence of an early morgue feature which may be mapped near the southeast corner of the 1911 cemetery boundary, fencing, and an *allee* that connected the cemetery area to the main Farm Colony complex are mapped but unconfirmed archaeologically.

<u>Farm Colony Cemetery Component Research Questions:</u> The focus of the second research domain, therefore, is on defining the physical characteristics of the potter's field including its boundary, burial types, burial depths, and associated components. The answers to the questions will provide bases for determining whether or not the potter's field can be avoided, the extent of which burial removals may have to be conducted, and the nature of associated components. To these ends, the following questions will be addressed

(1) What are the maximum boundaries of the Potter's field? How has the boundary changed through time?

- What are the surface burial indicators (gravestones)? Where are these indicators on the landscape? What are the types and inscriptions on the gravestones and do these have temporal implications?
- (3) What are the subsurface anomalies within and outside of the 1911 boundary? What is the interpretation of these anomalies?
- (3) What are the other components (fences, morgue, *allee*, other)? Are there surface manifestations of these features? Are these features associated with one or more particular periods?

#### **Results of Phase IA Research**

The research results are presented below as responses to the domain questions posed in the March 2014 research design. To briefly review, the two domains are Functional Areas and Farm Colony Components. Unless otherwise noted, the four temporal periods called out in the March 2014 Work Plan research design are considered in each of the question responses.

#### Research Domain: Functional Areas

Three groups of questions are posed about Functional Areas. These deal with feature types, functional areas, and archaeological sensitivity.

#### **Feature Types**

In order to define the feature types present, maps, literature, and historical photographs were examined. The following maps, referenced by date and publisher/creator, were reviewed. Those maps that depict the locations of confirmed, built features have been prepared as figures in support of this report. The figure numbers of these are referenced parenthetically after each citation below:

- 1872 Dripps (no features),
- 1874 Beers (Figure 2.1),
- 1891 Bien/C. C. Vermeule (no features),
- 1898 Robinson (Figure 2.2),
- 1907 Robinson (Figure 2.3),
- 1909 Almirall's Proposed Development of the New York City Farm Colony (Almirall, feature concepts)
- 1911 New York City (NYC) Topographic Survey Sheet (Figure 1.3),
- 1915 City of New York Department of Charities utilities map (NYC Charities; Figure 2.4), and
- 1932/rev. 1943 New York City Department of Public Works, Bureau of Architecture (NYC DPW-BOA; Figure 2.5).
- 1937 Sanborn (Figure 2.6)

For reference purposes, a 200 by 200 ft North/East grid has been laid over each of the figures in order to provide locational reference for various features. In subsequent discussions below, feature locations are referenced by the southwest corner of the grid cell in which they occur. This is noted as Grid N00/E00 for example.

The presence of these mapped features are supported by extensive references made in the City of New York Department of Public Charities and City of New York Department of Public Welfare annual reports. The latter, however, usually provide only general locations for particular features. Where possible, these buildings and structures have been correlated by name with features depicted on the maps. Photographs on file at the NYC Municipal Archives

illustrate views of the Farm Colony which show the only instances of particular features. These included a decorative fountain among others.

The feature types identified on the maps and in other sources are buildings, structures, and a single object. No cultural landscapes or archaeological sites were identified though as discussed below, it is known that archaeological remnants of particular buildings and structures are present. The working definitions for these three feature types are as follows.

A building "is created principally to shelter any form of human activity" (National Register Bulletin 15, Section 4). By definition, a building must include its structural parts (roof, walls, interiors, foundations) and all of the parts must be present to be considered eligible to the National Register. In the Farm Colony study, the term building was used for any feature which originally had 'four walls and a roof.' While technically a building missing walls or a roof is an archaeological site, that definition is not used herein. The buildings identified in the literature and on the maps include one or more examples of: bakery, cottage, dining hall, dormitory, garage, greenhouse, house (residential, watch), insane pavilion, kitchen, laundry, morgue/mortuary, pavilion, service building, shed (wagon, carriage), shop (paint, carpentry), stable,

In contrast, a structure are those functional constructions "made usually for purposes other than creating human shelter" (lbid). The structure must have all of its component parts to be considered eligible to the National Register. In the Farm Colony study, features classified as structures include animal pens (hen, piggery), a cellar, fences, fields/lawns/plots (including hot beds), infrastructure (sewer, steam, water), paths/walks, a pond, retaining walls, roads, a water tank, and wells. The potter's field is technically a structure as are most of its component features except the morgue.

An object is "primarily artistic in nature" and may be modest in size and not elaborate (Ibid). These objects have significance however because of their setting, use, role, or character. Examples of objects that have been listed on the National Register are a boundary marker, a fountain, a milepost, and a sculpture. In the Farm Colony study, the only objects recognized in the New York City Municipal Archives photographs were a flagpole and a bell tower (Municipal Archives dpc\_2751\_1; Photograph 1.1 herein) which were located in the Farm Colony core complex yard. The core complex is defined as the central focal area which contained the Martins farmstead originally and then the Superintendent's House and nearby Alms House (Photograph 1.1; also Figures 1.3 and 2.1 thru 2.4).

The early period (Farmstead, <A.D. 1830s) features are documented only from the October 26, 1829 agreement to erect a new building adjacent to the existing farm house on the Martins farm (Richmond County 1829). The farm was purchased by the Richmond County Supervisors as the location of a Poor House Farm. The agreement states that the provider "will well & substantially erect, build and finish one house at the West end of the house now erected on Said Farm." The new house as outlined in the agreement was to be

Twenty six feet in length by eighteen feet and a half in width and twelve feet posts the roof to be on a level with the present house according to the draught (draft) scheme and explanation hereunto annexed with good Stone, Timber, Board, Plank, Earth, Shingels (sic) Lime Brick Nails Glass, Hinges latches & every other Material as Shall and may be necessary

The building wood was to be cut on-site from available white pine and chestnut masts. Stones for the foundation and other uses also were to be obtained on-site.

The second period (Richmond County Poor House Farm, ±A.D. 1829 to 1901) feature documentation consists of the 1874 Beers and 1898 Robinson maps and the 1902 NYC Public Charities Annual Report (NYC Charities 1903). There are significant locational differences in the plotting of the buildings and structures on the two maps and an internal inconsistency in the number of buildings on the property in 1902. The 1874 Beers (Figure 2.1) shows two structures (both roads) and six buildings. The subsequent 1898 Robinson map (Figure 2.2) illustrates two roads also, seven buildings, and the location of two prior or proposed buildings marked by dashed rectangles. The 1902 annual report notes both nine buildings on 98 acres (NYC Charity 1903:37) and 16 buildings (NYC Charity 1903:286) in addition to seven natural springs that feed a pond "that furnishes all the ice necessary for summer use at the colony" (NYC Charity

1903:287). The discrepancy in the numbers may be accounted for by animal pens or other structures. While there is no pond noted on the 1898 map, there is one noted on Robinson's 1907 map (Figure 2.3, see Grid N200/E00).

The bigger problem is the significant difference between the plotted locations of the Farm Colony core complex (aka, the Superintendent's complex) between the 1872 and 1898 maps. In 1872, the two largest buildings are located at Grid N800 between E600-E1000. The Robinson 1898 plotting shows three large structures plotted between N400-800 and E1000-E1400. The western end of the center road plots in the same grid cell on both maps while the eastern end of the road plots about 200 feet north on the 1898 Robinson map.

During the second period, the feature types are known to include the Superintendent's House and the County House. Other buildings are not identified though it is likely that at least one barn of some type was present at least until 1902. In that year, all the milk cows were "transferred from this farm to Randall's Island" (NYC Charity 1903:287). A piggery or at the least a pig sty, also might have been present based on the reference to the A No. 1 pork products produced at the Farm Colony (NYC Charity 1903:286).

In sum, up to this point in the Farm Colony use history the number of buildings/structures appears to have been small. The number of residents appears to have been relatively small as well. The 1902 annual report lists only 106 residents, discounting staff (NYC Charity 1903:37). The 1884-1895 decade book for the Hennessey Funeral Home lists only six burials transferred from the Farm Colony to other cemeteries during that period. It was Richmond County policy to seek payment for burial in the Farm Colony cemetery or transfer the body to another cemetery as soon as possible after death. At this point in the Farm Colony history, there is no indication in the available records that burials were made in the Farm Colony cemetery of persons from outside of the Farm Colony. This policy changed however in the late 1890s after the City of New York assumed control of the facility.

By the New York City Farm Colony period (A.D. 1901-1925), there were serious changes in both the built environment and in the population numbers. The 1907 Robinson map (Figure 2.3) illustrates the presence of 11 buildings, at least one pond, two roads, and two access roads within the Project footprint. The new disinfecting plant was further south, outside of the Project footprint. By 1915, the NYC Charities utilities map for the Farm Colony illustrates 33 buildings/structures on the west side of Manor Road. Of this total, 22 are located in the Project area. Concomitantly, the annual reports for the period identify 34 buildings and structures, not counting construction of and improvements to paths/walks, roads, walls, wells, and utility lines. Thus, there is close agreement between the mapping and the documentation.

As illustrated on Figures 2.2 and 2.3, the concentration of features was initially south of the so-called County House Road. Between 1911 and 1915, pace north of the main arterial was built-out and the County House Road itself was reconfigured (Figure 2.4). However, there is particular avoidance of the area northeast of Dormitory 7&8 and northwest of an allee that extends northeast across Grid N1200/E1400. This is the area that coincides with the Farm Colony cemetery as shown on the 1911 topographic survey map (see Figure 1.3). This avoidance suggests that the area was being purposefully excluded from development.

It is during this period that extensive infrastructure improvements were implemented as well. NYC Charities annual reports list drain, sewer, steam heat, and water improvements as listed on Table 2.5 and illustrated in Photographs 2.1 and 2.2. Many of these improvements are shown on Figure 2.4 which was originally developed to illustrate the locations of the new water and sewer service lines across the Farm Colony west of Manor Road.

_	Table 2.5 - Infrastructure Features Between 1902 and 1921				
Feature Type	Features Noted	City of NY Dept. of Public Charities Annual Report	Date/Page		
Drain	drain pipe from stable to cesspool	1908	1909:650		

Table 2.5 - Infrastructure Features Between 1902 and 1921					
Feature Type	Features Noted	City of NY Dept. of Public Charities Annual Report	Date/Page		
Drain	450 ft. ditch and 200 ft. earth pipe laid south of Manor Road for drainage of water from nearby hills/ flooding problem in basements	1910	1911:73		
Drain	2,000 feet of surface drains constructed	1912	1913:174		
Sewer	new sewer lines - 1,260 ft (18 in. pipe) and 200 ft. (8 in. pipe) to carry away sewage "to a safe distance", also between new Male Dormitory and main sewer line (water line also connected to new building)	1910	1911:74		
Sewer	Hospital attempting to purchase 21 acres private property between Brielle and the Farm Colony so that sewer can be run directly through it	1920	1921:34		
Steam Heat	new steam line from Dormitories 1-2 to engineer's shop and storehouse	1913	1914:241		
Steam Heat	plans drawn for tunnels and ducts connecting Farm Colony with Seaview Hospital- heat Colony with steam from Seaview Hospital plant	1913	1914:13		
Steam Heat	steam line for heating Colony from plant at Seaview Hospital Completed	1914	1915:153		
Water	proposal to do 300-foot test well to supply Farm and Cottage Colonies	1903	1904:37		
Water	2 new wells dug - old one exhausted/ new road from main road to cottages	1905	1906:328		
Water	500 ft. of water pipe laid, 18-inch and 12-inch (no locational information)	1909	1910:77		
Water	12-in. water main from Clove Road, sewerage sedimentation tank and filter beds constructed	1911	1912:163		

The final period under consideration is the New York City Colony, dependent infirm (± 1925-1970s) period. Figure 2.5 illustrates the configuration of the Farm Colony through 1943. Zavin (1985:47) excluded several 1930s and 1940s buildings or building remnants from this period in her LPC District Designation Report (DR). The following were considered non-contributing buildings and except for item 5, have not been considered in this archaeological review:

- 1) 1930 one-story brick incinerator building and adjacent moderately tall smoke stack located southeast of the new morgue/garage building
- 2) 1941 one-story brick structure possibly housing electrical equipment lying to the north of the dormitory for male help
- 3) Collapsing brick and wood shed located to the west of the laundry/industrial building
- 4) Large corrugated metal warehouse which stands immediately to the north of dormitory B
- 5) Several apparently older structures of several materials -- stone, brick, concrete-block and wood --located to the north of the service road behind dormitories A through D
- 6) Deteriorated wood garage lying opposite the southeast corner of the Pavilion for the Insane

- 7) Vandalized greenhouse of relatively recent date located on the east side of the shop building (the greenhouses shown on earlier maps are no longer standing),
- 8) Small 1941 brick structure on the north side of the exit roadway going onto Walcott Avenue, and
- 9) 1942 gatehouse and visitors' reception center located on the north side of the main entry road and fronting Brielle Avenue

What is important from the perspective offered by the 1943 map is that there is no evidence of the original Superintendents complex depicted at this point. Based on this map and 1930s master plans (Lustig 1932, Meyers 1930), the core complex, which had been the focal element of the Farm Colony from its inception, continued to host service facilities and administrative offices in addition to a growing number of dormitories and staff housing buildings. There are landscaped spaces amidst the development, however, and these include relatively shallow impact features such as walks, paths, access roads, and new buildings and structures. This leads to the second set of research questions which focus on functional areas.

#### **Functional Areas**

The reference maps applicable to each of the four periods support the conclusion that there were functionally discrete areas defined at the Farm Colony that did not change radically over time. The initial core was Martins original farmstead. The farmstead core complex was expanded to accommodate the first County House and all functions appear to have been focused in this area. By the end of the second period, however, discrete work areas were defined south of the core complex now marked by the Superintendent's Cottage, other residential buildings and buildings devoted to the laundry, bakery, and the group kitchen. The income producing spaces were fields to the northeast, livestock locations to the south, and workshops southwest of the core complex.

With the advent of the City oversight and a steady population increase, residential spaces in the form of dormitories were established north, northeast, and east of the core complex. Functional spaces devoted to work and life maintenance activities were still emplaced within the core complex or to its west and south. The space that had been devoted to agricultural production was gradually taken over by residential dormitories. By the mid-1920s, the annual reports indicate that agricultural production as a revenue generator was gradually being replaced by workshops devoted to piecework.

It appears that the changes in spatial layout had two drivers: population increase and a shift in economic emphasis. The Farm Colony population increased after 1901 when the City consolidated services and inmates from other boroughs were relocated to the Farm Colony. By the mid-1920s, the Farm Colony no longer looked at agricultural production as an economic mainstay and its inmates began to do more workshop work (NYC Charities 1927). The Farm Colony produced its own food but it increasingly turned to outside food sources as well and it gradually ceased export of produce to other City facilities (NYC Charities 1924, 1925, and 1927). Archaeologically, this shift would likely be recognized by a loss of fields, the presence of an increasing number of commercially produced foodstuff containers, and manufacturing apparatus and work space indicative of industrial level production of goods.

### Archaeological Sensitivity

Based on repeated episodes of new construction, there is little likelihood that significant features other than the potter's field that date to the first two periods (<A.D. 1830s and ±A.D.1829-1901) remain intact. Based on the maps dated between 1874 and 1907 (Figures 1.3, 2.1 through 2.5), the Administrative Core complex was radically reconfigured though shaft features such as privies could have been retained in the landscaped areas around the Superintendents House, the Garden Cottage, and the original Almshouse. Overall, however, most of the larger buildings were demolished and built-over for dormitories and staff residences or repurposed into service buildings. Examples of the latter included the conversion of the old stable into a machine shop in 1913 (NYC Charities 1914:240-

245) and the conversion of the original 'insane pavilion' building into a tool house and storage cellar (NYC Charities 1911:73-74).

This said, what types of features may have survived the onslaught of new development during third period. It is likely that utility infrastructure in the form of drains, water lines, steam lines, and wells; access routes in the form of path/walks; and retaining walls have survived though walls observed in the field are no longer intact. Other features also may have left an archaeological signature. These include the ice pond, the original laundry, the 1911 morgue, the Garden Cottage, the second period stables, and three structures (Watch House, Carriage Shed, and Store House) that appear to have been in or near to the core complex.

The original ice pond was intentionally filled in 1910 (NYC Charities 1911:74) and its reported location was subsequently devoted to a vegetable garden. The second period laundry burned in 1903 (NYC Charities 1904:320) and it was replaced by another laundry building erected elsewhere. The possible remnants of the original morgue, located at the southeast corner of the potter's field, seems to be present based on casual walkover of the reported area. According to the 1915 NYC Charities annual report (1916:101), this morgue was abandoned in 1915 and the associated cemetery was not used after about 1924. A 1937 Sanborn map shows a building labelled 'cement storage' near to the location of the original morgue building (Figure 2.6).

The Garden Cottage is noted as being adjacent to the Superintendent's House in 1917. It was removed that year and the grounds re-landscaped (NYC Charities 1918:98). The second period stable was reportedly too close to the dormitories and the kitchen (NYC Charities 1913:173) and it was demolished in 1912. New stables were relocated southwest of the core complex near the industrial building that was erected the same year (NYC DPW-BOA 1943; Figure 2.5). The exact locations of the Watch House, the Carriage Shed, and the Store House locations within the core complex are unknown (NYC Charities 1907:445). The 1907 annual report notes, however, that after the buildings were demolished their locations were covered by lawn.

Except for the ice pond and the morgue, all of these buildings were located near the Superintendent's core complex which is defined as between Grid N600-N1000/E1000-1400 on Figure 5 (the 1911 topographic survey map). The current design concept (see Figure 1.2) shows this area as hosting extensive new construction.

# Research Domain: Farm Colony Cemetery (aka Potter's Field) Components

While the Farm Colony cemetery (aka potter's field) in inherently a Farm Colony feature, there are specific concerns about the potter's field from planning and management perspectives that necessitate more directed investigation into its location and characteristics. In order to manage the research, four groups of questions were posed in the March 2014 Work Plan. These focus on feature boundary, surface indicators, subsurface indicators, and feature components. The Phase IA research shed some light on two of the four research questions and the subsequent fieldwork provided additional data.

#### Feature Boundary and Surface Indicators of the Feature

No maps obtained or reviewed to date other than the 1911 topographic survey map shows the purported location of the cemetery. Zavin's (1985:35) discussion of the potter's field remains the most cogent presented in the sources researched. The important points of her discussion pertaining to the size and location of the feature are:

- it is roughly rhomboidal in shape and measures approximately 450 by 450 feet.
- a narrow roadway leading to it from the south was marked by an allee of silver maples.
- the foundations of an early morgue [are located at the north end of the *allee* (the southernmost corner of the cemetery)
- This cemetery was still in use as late as 1905, and

• scattered and fallen white marble stones of modest dimensions and others still in their original locations can be found here today.

Regarding Zavin's various points, additional information is available from the Phase IA research. The size is based on the 1911 map. Two maps (Figures 1.3 and 2.4 herein) illustrate the location and orientation of the allee and its location can be confirmed archaeologically and through identification of the remaining silver maples. The possible remnants of the morgue were observed in 2014 during area walkover and subsequently revealed during the Phase IB close interval survey of the cemetery and design buffer areas. Photographs 2.3 and 2.4 show the northern boundary of the Farm Colony adjacent to Walcott Avenue (Photograph 2.3) and the presumed northern boundary of the cemetery (Photograph 2.4).

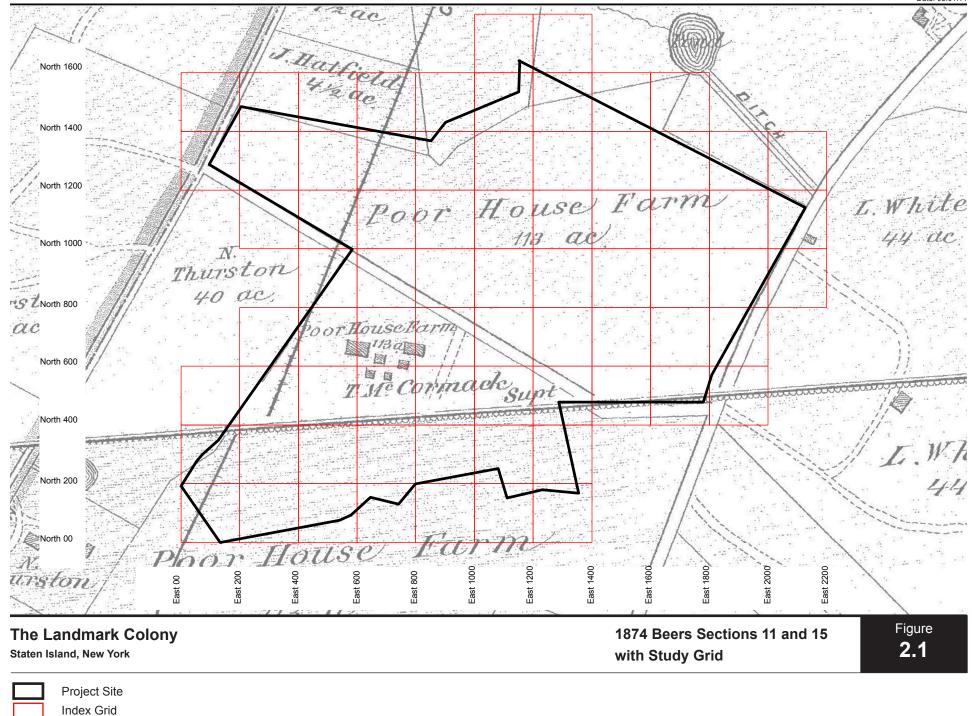
The use period of the cemetery is longer than noted. The NYC Charities annual report for 1908 states that the Potter's field graves were "remounded, walks graded, and trash picked up" as part of the year's facility maintenance (NYC Charities 1909:654). The annual reports list burial in the potter's field as late as 1913 though as the size of the cemetery remains elusive, so does the number of interments (Table 2.6). Table 2.6 presents the accounting of the number of deaths and burials at the Farm Colony based on data presented in the City of New York Public Charities and Public Welfare annual reports. The original morgue was used until 1914 suggesting the cemetery was in service at least to that date. The replacement facility mortuary continued be used by the County, the Farm Colony, and Seaview Hospital until at least 1922; in the 1923 annual report it is no longer listed (NYC Charities 1924:11). All lines of evidence support the cemetery in use until at least 1913 but closing no later than 1924.

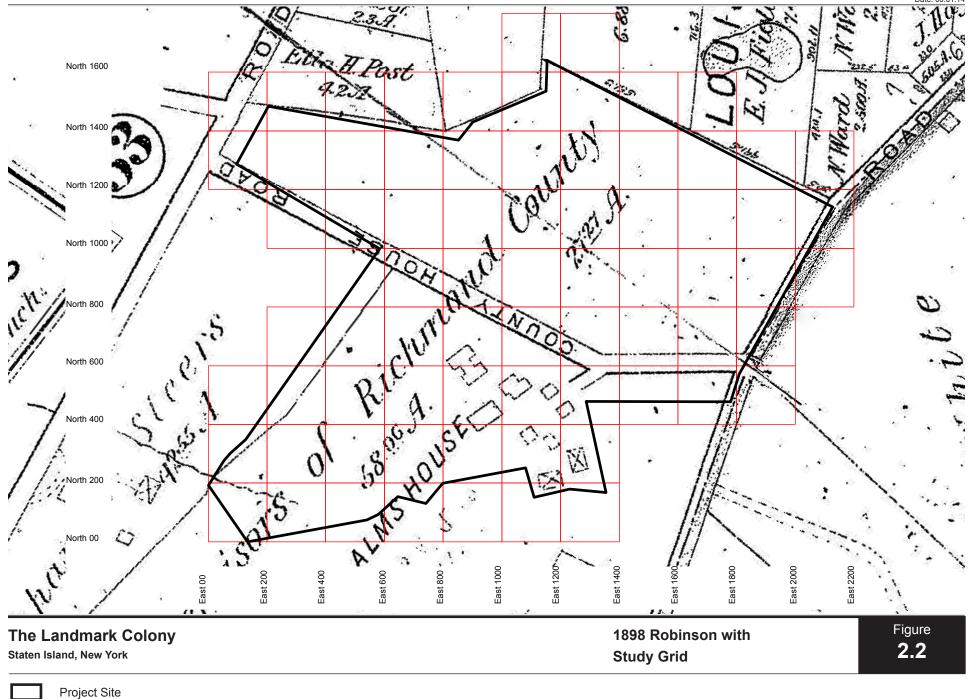
Table 2.6 - Farm Colony Deaths and Interments for the Period 1904-1924										
City of NY Dept. of Public Charities Annual Report	Date:Page	Notes	Bodies Received at Farm Colony	Farm Colony Deaths	Burial Permits Issued	Farm Colony Burials	Coroner's Burials	Burials by Friends	Burials Removed for Reburial	
	1005.420	Potter's Field burial								
1904	1905:429, 433	permits			81	17	54			
1905	1906:323, 326	Potter's Field burial permits			75 & 79 cited	12	67			
		Potter's								
1906	1907:448	Field burial permits				6	79		5	
1908	1909:649	Bodies received at the Farm Colony morgue				16	63	23		
1909	1910:74	Potter's Field burial permits			63					
1910	1911:72	Potter's Field burial permits			77					
1911	1912:148, 151	Potter's Field burial permits			93 & 130 cited					
1912	1913:171	Potter's Field burial permits			131					

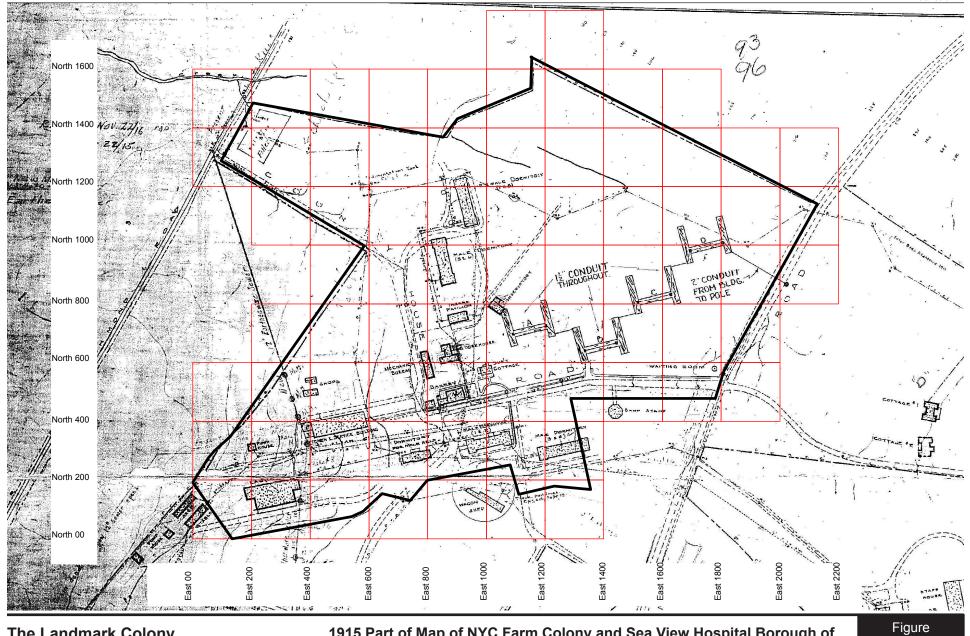
City of NY		Table 2.6 - Far	1						
Dept. of Public Charities Annual	B.A. B.		Bodies Received at Farm	Farm Colony	Burial Permits	Farm Colony	Coroner's	Burials by	Burials Removed for
Report	Date:Page	Notes	Colony	Deaths	Issued	Burials	Burials	Friends	Reburial
		Bodies							
		received at							
		the Farm							
4042	4044.220	Colony	240						
1913	1914:230	morgue	218	1					
		Bodies							
		received at							
		the Farm							
1014	1915:150	Colony	564						
1914	1915:150	morgue	564						
		Farm Colony							
		inmate							
1920	1921:23	deaths		67					
1920	1921.23	Farm		07					
		Colony							
		inmate							
1921	1922:184	deaths		81					
1921	1322.104	Farm		01					
		Colony							
		inmate		1					
1922	1923:12	deaths		84					
		Farm		<del>                                     </del>	1				
		Colony							
		inmate							
1923	1924:186	deaths		99					
		Farm							
		Colony							
		inmate							
1924	1925:183	deaths	1	107	1		1		

Grossman et al. (1986:13) state that "scattered gravestones still exist." They did not provide the locations of these elements however. Ms. Lynn Rogers reported on April 7, 2014, that two stones were present in 2003 when others walked the reported location of the potter's field. Ms. Rogers noted that FACSI has been unable to locate a burial log or burial plot map for the Potter's field, however, and systematic survey of the reported location has not been attempted. As illustrated in Photographs 2.3 and 2.4 the area now is either heavily overgrown or stripped of surface vegetation. No survey was conducted before the vegetation was stripped.

The final two questions, <u>Subsurface Indicators of the Feature and Feature Components</u>, were not clarified by the Phase IA research nor during the subsequent Phase IB fieldwork. The nature of the subsurface anomalies identified during the initial GPR survey are unresolved though they may relate to discrete fill episdoes consisting of both Farm Colony rubbish and off-site, unauthorized dumping that occurred after the Farm Colony was closed. As for the feature components, physical evidence of the allee and the morgue were provisionally identified in the field. The reported presence of boundary fences is not confirmed though stone fences were found within the cemetery area and design buffer areas that may be sections of cemetery walls or cemetery interior parcel dividers.







**The Landmark Colony** 

Staten Island, New York

1915 Part of Map of NYC Farm Colony and Sea View Hospital Borough of Richmond Department of Public Charities with Study Grid

2.4



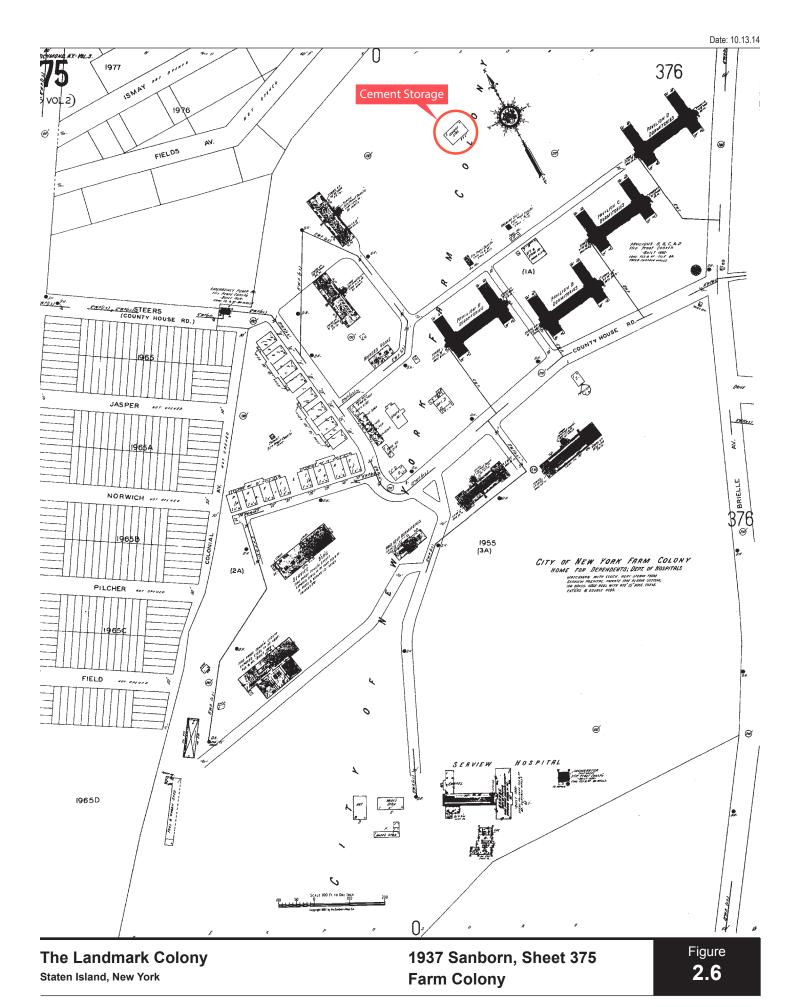


**The Landmark Colony** 

Staten Island, New York

1932 (rev.1943) NYCDPW, Bureau of Architecture Plan with Study Grid

Figure **2.5** 



# Photograph 2.1

Example of existing fire hydrant and attached water lines. The picture also illustrates current ground cover conditions in the southwest area of the core area.



# Photograph 2.2

Looking north at the larger cleared area showing the extent of that area and the surrounding conditions.



# Photograph 2.3

Looking south from Walcott Avenue toward the Potter's Field landform.



# Photograph 2.4

Looking south at the detail of
the landform edge
showing the step with the
fence posts in place.
This appears to be facility
fencing rather than fencing
that encircled the
Potters Field.



# Field and Laboratory Methods and Results

The Phase IB field investigations included three work episodes: set-up, Cemetery and Design Buffer fieldwork, and Administrative Core fieldwork. The work was conducted by Chrysalis between June 9 and 24, 2014, under the field direction of Alyssa Loorya and Lisa Greiger. Ms. Weed made visits to the Project (June 2, 6, 16, and 19) as did Dr. Christopher Riccardi (June 6). NFC Associates, Inc., provided daily access to the Farm Colony and Mr. Matthew Claro was the proponent's field liaison. NFC supplied assistance with vegetion clearing and Rogers Surveying, Inc., completed civil survey of features, shovel test pits (STPs), transect lines, and test units (TUs).

The laboratory processing and analysis started during the fieldwork and continued to July 3. The laboratory supervisor was Lisa Geiger and analysts included Ms. Loorya, Ms. Geiger, and Eileen Kao.

# **Field Methods**

Chrysalis conducted Phase IB investigations across two APEs: the Cemetery Area in the northern quadrant of the property at the location of the Farm Colony cemetery as defined on the 1911 Topographic Survey sheet and the Administrative Core surrounding County House Road in the southern quadrant (see Figure 1.3). Due to considerable plant overgrowth, Chrysalis employed machetes to clear transect lines for surveys and shovel tests in both APEs. Axes and chainsaws were utilized to clear larger transect lines in the Administrative Core to enable excavators to bring mesh screens, shovels, and other digging equipment through the overgrowth in this area. Chrysalis also donned Tyvek Level D disposable coveralls as necessary to prevent contact with abundant poison ivy and poison oak overgrowth found clustered throughout both APEs.

#### **Administrative Core**

Chrysalis conducted a systematic walkover and STP excavation across a 122 by 61 meter (m) (400 by 200 foot [ft]) area north of County House Road and an overlapping 91 by 61 m (300 by 200 ft) area east of the Colony's current south entranceway. Chrysalis created a north-aligned grid across the Administrative Core by overlaying Transects A through K at 15-m (50-ft) intervals along an east – west axis, with pits numbered 1 through 9 at 15-m (50-ft) intervals north – south (Figure 3.1). This grid was used as a basis to perform ground survey of the Administrative Core, focused on documenting extant structural feature with written and photographic records.

Chrysalis plotted and laid 69 STPs at the intersects of the grid across the Administrative Core; each location was designated by pin flag (see Figure 3.1). STPs were excavated by natural strata, terminating in sterile subsoil. Each stratum was screened separately though quarter-inch (1/4 inch) mesh screens. STPs were documented by recording data and field observations on standardized forms and with digital photography. Soil descriptions were recorded using the Munsell color system and standard field textural classification.

# **Cemetery Area**

Chrysalis conducted a systematic close-interval survey to assess extant remains across the Cemetery Area. VHB provided Chrysalis with maps delineating the boundaries of the Farm Colony cemetery as shown on the 1911 Topographic Survey map including 15-m (50-ft) wide buffers and the location of extant silver maples which once lined an allee extending to the cemetery from the Administrative Core. Chrysalis used VHB's southeast Farm Colony cemetery plus design buffer field boundary, designated Line D, as a baseline for the systematic walking survey (Figure 3.2). Thirty-three (33) transect lines were laid at 3.8-m (12.5-ft) intervals and paced at a 295 degree angle from the baseline to the property edge, as marked by a metal fence forming the north Colony boundary along Walcott Avenue (see Figure 3.2). Surveyors walking these transect lines documented the appearance and location of surface features such as grave markers, irregularities in the ground surface, and stone scatters using standardized forms and digital photography.

Cemetery Area survey also included excavation of two test units (TUs) and three .5 by .5 m (20 by 20 inch [in]) shovel test pits (STPs). Chrysalis excavated TU 1, a 2 by 1 m (6.6 by 3.25 ft) unit, at Transect 33's location at the northeast extreme of the Line D baseline. Excavation was intended to assess the depth of 20<sup>th</sup> century fill found across the east half of the Cemetery Area. Chrysalis also excavated TU 2, a 1m by 1m (3.25 by 3.25 ft) test unit 7.6 m (25 ft) east of the baseline at Transect 11, to assess any continuation of fill or landforming activities outside the proposed cemetery boundaries. Three shovel test pits, designated C-STP 1 through C-STP 3, completed Cemetery Area testing. These STPs were located southwest of the proposed Line C/Transect 1 cemetery boundary (Figure 3.3) and were excavated to assess continuation or changes in fill or landforming activities.

Test units and shovel test pits were excavated by natural strata, terminating in sterile subsoil. Each stratum was screened separately though quarter-inch (1/4 in) mesh screens. Artifacts were collected and documented; architectural debris, coal, decomposed metal fragments, and slag were noted and discarded in the field. TUs and STPs were documented by recording data and field observations on standardized forms and with digital photography. Soil descriptions were recorded using the Munsell color system and standard field textural classification. Additional documentation for TUs included soil profiles hand drawn to scale.

# Field Results Administrative Core

# Systematic Walkover

Chrysalis conducted systematic close-interval ground survey across the transects formed by the grid overlaid across the Administrative Core. Forest ground and tree cover was extremely dense in this area. The majority of the Administrative Core was only accessible after chainsaw clearing of the transect lines, with the ground floor still extensively obscured by thorn and vine growth. Chrysalis identified no discernable historical features across the Administrative Core, although limited visibility hindered feature identification.

Present across the southeast portion of the Administrative Core was a large bulk of brick, mortar, and cut stone rubble (Figure 3.3). Survey across Transects G through K and numbers 5 through 9 revealed several boundaries to the rubble areas, including a corner at the southwest extreme of the survey area. Based upon its location and size, its likely this rubble is related to demolition of a structure marked as a 1911 dormitory on a 1930 Department of Public Works map of the Colony (Figure 3.4).

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#### **Shovel Test Excavations**

Chrysalis plotted 69 STPs across the Administrative Core area (see Figure 3.3). These STPs were located to assess soil stratigraphy in the area suggested to house early 19th century farming structures and attempt to uncover extant features associated with the Farm Colony and Poor House Farm occupation.

Due to their placement atop concrete roadways or associated concrete sidewalks, Chrysalis did not excavate 13 plotted STPs (A5, B5, D4, F4, G4, G7, G8, G9, H9, I3, I9, J3, and K9; see Figure 3.3). Three STPs (H5, H6, and H7) were not excavated because they plotted in areas of stone and brick rubble located east of the modern entrance road. The excavation of four STPs (I5, I7, J7, and J8) east of the entrance road was terminated between 20 cm (.65 ft) and 30cm (.98 ft) below ground surface (bgs) due to dense underlying architectural debris. Large portions of this area appeared to be covered by the brick, fire brick, and stone rubble identified as an early 20th century institutional building during ground survey.

The majority of the 49 excavated STPs showed consistent intact stratigraphy including an A1 forest mat, an A2 horizon with low-frequency small artifact inclusions, and a compact B horizon with increasingly sandy and pebbled soil (Table 3.1; Photograph 3.1; also Appendix C, Table C-1). The 10YR 3/1 sandy loam A1 varied in depth +/- 10 cm (4 in). The 10YR 4/3 loamy silt A2 varied in depth from 11 cm (4.3 in) below surface to 54 cm (21 in) below surface, with slightly thicker A2 horizons found in the northwest portion of the Administrative Core in STPs B1 and C4 and A2 generally terminating by 20 cm (7.8 in) in the northeast portion of the testing area. No major disturbances or plow scars were evident in the A horizons.

	Table 3.1 - Administrative Core Area, Shovel Test Pit General Stratigraphy				
Stratum	Soil Designation	Depth (bgs)	Soil Description	Contents/Notes	
				Window glass, whiteware,	
			10YR 3/1 sandy	rubber, machine-blown bottle	
1	A1	0 - 10cm	loam	glass from 3 STPs.	
				Window glass, nails, porcelain,	
				whiteware, hotel ware, machine-	
				blown bottle glass, 1 kaolin pipe	
II	A2	10 - 30cm	10YR 4/3 loamy silt	from 22 STPs	
				Compact B horizon devoid of	
III	В	30 – 50cm	5YR 5/6 clay silt	artifacts, 5% pebble inclusions.	

Two STPs that differed from this pattern were located near extant 20th century structures north of County House Road. STP A1 featured a 10YR 4/2 silty sand with mid-20th century beer cans, metal, and bone fragments to 58 cm (22.8 in) below surface before terminating above a moist B horizon. STP D2 had a 10YR 4/2 silty sand with brick, mortar rubble, and wood inclusions consistent with 20th century building materials found on-site to at least 71 cm (28 in) below surface. These pits were located near existing structures and likely exhibited atypical soil stratigraphy due to 20th century grading and excavation for these buildings' construction or maintenance.

Administrative Core STPs yielded numerous mid- to late-20th century plastic and metal artifacts from the A1 forest mat that were noted and discarded in the field. The A2 horizon yielded small 19<sup>th</sup> and 20th century artifact fragments in low frequency. These artifacts included bone, bottle glass, a Prosser button, ironstone, lamp glass, nails, porcelain, shells, whiteware, and window glass. One white ball clay pipe stem fragment appeared with a molded geometric design. Administrative Core STPs showed no horizontal artifact distribution in A1 or A2 horizons that might pinpoint areas of specific activity.

# **Cemetery Area and Design Buffer**

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# **Systematic Walkover and Features 1 through 15**

Close-interval survey across 33 transects resulted in the identification of 15 surface or near surface features across the Cemetery Area (see Figure 3.2; Table 3.2). The feature types are discussed after the table. A sixteenth feature, a temporally discrete fill deposit designated Feature 16, was isolated in TU 1. It is discussed with that test unit but is listed on Table 3.2.

	Table 3.2 -	· Cemetery Area, Feature Lo	ocation and Description
Feature	Transect(s)	Distance From Baseline (ft)	Type and Description
	, ,	25 and 25 ft SW of	Structure Remnant: Mortared stone and brick-
1	6 - 12	baseline	patched pillars
			Stone Wall: Dry-laid stone wall, turning west
2	1-8	30 ft	south of Transect 1
			Stone Wall: Dry-laid stone walls forming
			roughly straight boundary near the northwest
3	12 – 22	340 – 400 ft	property boundary.
			Stone Wall: Mortared set of stone foundation
			walls forming 90 degree corner at west
4	1-3	420 ft	extreme of area
			Fieldstone Scatter: Scatter of four irregular
5	7	330 ft	fieldstones
			Rubble Scatter: Rectangular concrete block
6	3	415 ft	with brick edging. Part of area of brick rubble.
			Rubble Scatter: Mortared brick rubble with
7	3	400 ft	eight extant courses; not in situ.
			Rubble Scatter: Mortared brick rubble
8	3	420 ft	segment; not in situ.
			Fill Deposit: artifact concentration (ironstrone
			ceramics, coal, glass) which is eroding out of
9	24	203 ft	edge of fill dump area.
			Rubble Scatter: 5-ft long area of stone and
10	13	80 ft	brick rubble scatter.
			Fieldstone Scatter: Five irregular scattered
11	1	215 ft	fieldstones.
			Grave Marker: "Charles G. Pollitt" grave
			marker. Top engraved portion broken, 1.8-ft
			tall base intact. Depression (6.5 by 3 ft) in
12	4	195 ft	ground south of intact stone portion.
			Fieldstone Scatter: approximately 8 ft long
13	3	43 ft	between Transects 2 and 3.
			Fill Deposit: Drop in elevation at edge of fill on
14	24	155 ft	east side of cemetery area.
			Fill Deposit: Fallen tree revealing content of fill
			material in east half of cemetery area –
15	29	151 ft	ironstone ceramics, coal, coal ash, and heat-

	Table 3.2 - Cemetery Area, Feature Location and Description				
Feature Transect(s) Distance From  Baseline (ft) Type and Description					
			modified glass.		
		_	Fill deposit including heat-damaged early 20th		
16	12 - 33	0 – 155 ft	century glass, ceramics, and metals.		

#### **Fieldstone and Rubble Scatters**

Seven features (Features 5, 6, 7, 8, 10, 11, and 13) documented during ground survey were irregular scatters of uncut stones or disarticulated, irregular blocks of mortared brick and concrete. These materials were documented due to their irregularity compared to the surrounding landscape but did not warrant additional investigation. None of these uncut stone scatters suggested burial activity. The brick and concrete scatters documented did not correspond to *in situ* architectural material. Instead, these modern materials appeared to be small, unregulated construction refuse deposits of convenience.

## Fill Deposits

Features 9, 14, and 15 are artifact concentrations which appear to be related to a large fill deposit covering the eastern portion of the Cemetery Area. These features each included ironstone ceramics, charcoal, coal ash, and both intact and melted glass vessels. Features 9 and 14 revealed these artifacts eroding at ground surface out of the edge of a drop in elevation at 47.2 m (155 ft) and 61.8 m (203 ft) from the baseline along Transect 24. These elevation drops, suggesting multiple levels of similar fill overlying each other on the east half of the Cemetery Area, included ironstone flatware marked "N.Y. City Property 1899" and "N.Y. City Property 1926". Feature 15 was comprised of the same types of coal ash, ceramic sherds, and glass exposed at the base of a fallen tree on Transect 29 46 m (151 ft) from the baseline. Mapping these artifact scatters and subsequent TU 1 excavation lead to these features being identified as portions of a larger fill deposit located atop the east half of the potter's field. TU 1 excavation further refined the contents and depth of this fill deposit, discussed below.

#### **Grave Marker**

The lone grave marker identified during survey, designated Feature 12, was a .5 by .48 m (1.8 by 1.6 ft) standing, intact portion of marble with a detached upper engraved portion (see Figure 3.5). The broken, top portion of marble slab was marked: "Charles G. Pollitt of Radcliffe England, Born Oct. 14, 1871, Died May 9..." The date of death was obscured by the break in the grave marker (Photograph 3.3). According to an 1881 English census, a Charles G. Pollitt resided in Radcliffe, Lancashire, England born around 1872 (National Archives of the UK 1881:RG11,

Piece: 3870; Folio: 6; Page: 3; Roll: 1341925). Pollitt's father, Charles Grimes Pollitt, appeared to have immigrated to the United States, as a Charles Pollitt of his age and English origin is listed as entering the pension care system of the National Home for Disabled Volunteer Soldiers while residing in Connecticut after serving 36 months with a unit in New York (National Home for Disabled Volunteer Soldiers 1899: 291). It is unknown when the junior Charles Pollitt indicated on the grave marker may have journeyed to the United States or when he died. His father's pension of \$12 per month for a hernia injury suggests the family was not extremely wealthy, perhaps leading Charles G. Pollitt or his family to find residence at the Colony.

Matching chamfered corners on the standing portion of Pollitt's gravestone with the broken section confirmed the marker's engraved side faced north. A shallow depression lay immediately south of the standing tombstone measuring 2 m (6.5 ft) north-south by 1.2 m (4 ft) wide and lowering from .13 m (.4 ft) to .3 m (1 ft) below the surrounding ground surface in its center. Decomposition or removal of Pollitt's body may be responsible for this depression if the deceased rested south of the grave marker. Notably, this would indicate marker placement in front of the buried remains rather

than modern custom of placing markers behind the burial area. No additional grave markers were evident during survey, although heavy ground cover by plant growth and root and leaf mats inhibited surface visibility.

#### Stone Walls

Cemetery Area ground survey also found three stone wall segments (Features 2, 3, and 4). Two of these wall segments were comprised of dry-laid, irregular large fieldstones forming walls varying in thickness between .45 m (1.5 ft) and .6 m (2 ft) wide. The first stone wall remnant, Feature 2, was oriented northwest to southeast 7.6 m (25 ft) west of and roughly parallel to Transect 1/Line C (Figure 3.5). This dry-laid wall section began 3 m (10 ft) east of the survey baseline before turning at a nearly 90 degree corner to run north-northwest and tapering off near Transect 7 (Photograph 3.4). Although outside of the ground survey area, daily entrance and exit to the Cemetery Area through a foot-worn path southwest of the APE initially revealed the Feature 2 stone wall. Chrysalis surveyors performed basic land clearing along the length of Feature 2 to better identify its extent outside Transect 1. Feature 2's west terminus lay 6.1 m (20 ft) southwest of Transect 1, tapering off without a formalized end point. Probing with 1.6 ft long chaining pins did not indicate additional wall stones lay nearby below the forest mat. Feature 2's north terminus similarly tapered off, with stones becoming less numerous and ending between Transects 7 and 8.

A second stone wall, Feature 3, runs southwest to northeast along the northwest Colony property line across Transects 10 through 22. Dry-laid fieldstones of varying sizes composed Feature 3, with two areas of extant mortar containing large pebbles visible at surface (Photograph 3.5). Feature 3's northeast terminus falls near the northern point of the Cemetery Area, petering out without a formal end point as the topography becomes irregular. This irregular end may be due to coverage by modern refuse and architectural debris visible through the forest mat. The wall's southwest end fell somewhere below a large fallen tree surrounded by modern large refuse items and architectural debris deposited near Transect 10. The Feature 2 and 3 fieldstone walls roughly corresponded to the Potter's field limits as tentatively determined by documentary research, historic maps, and extant silver maple trees said to have lined an *allee* extending to the potter's field from the Administrative Core.

Feature 4 is the third fieldstone wall complex identified during ground survey. The feature consists of two mortared stone walls that intersected at a 90 degree angle across Transects 1 through 5 at the northwest Colony property boundary (Photograph 3.6). Unlike the Feature 2 and 3 walls, a sandy mortar was evident as it eroded from between the extant Feature 4 fieldstone elements. The extant walls terminated by tapering off into the forest cover 7.6 m (25 ft) from the corner to the west end and 8.2 m (27 ft) south from the corner without formal end points. Probing for additional buried fieldstones was not suitable in this area, as modern architectural debris littered the northwest side of the Cemetery Area that was indiscernible from the Feature 4 materials when encountered using chaining pin probes. The area within the boundary formed by the two Feature 4 extant fieldstone walls had a higher ground surface elevation than the surrounding area, perhaps due to large modern rubble and refuse pieces dumped into the area and visible through the forest mat. This extensive refuse deposit area obscured any additional wall portions south and southwest of the documented portions.

#### **Structure Remnants**

Survey and clearing in the Cemetery Area identified Feature 1, a group of mortared stone pillars located east of the survey baseline between Transects 4 and 10. Initially identified as two possible cemetery entrance markers, extensive clearing revealed the feature consisted of 52, 0.55 m (1.8 ft) wide pillars (see Figures 3.2 and 3.5, also Figure 3.6) and two larger pillars located along the feature's north side. A third, larger pillar aligns with the other two but it is laying on its side.

The smaller pillars, constructed of mortared stone blocks with periodic brick patching, are evenly spaced between 1.5 m (5 ft) and 1.67 m (5.5 ft) apart and arranged orthogonally (Photograph 3.2). Discontinuous spaces left within the highly regular rectangular layout suggest at least five pillars may have been previously removed or their remnant bases remain buried. This pillar grouping falls roughly within an area marked on the 1911 topographic survey sheet as housing a rectilinear structure, identified through documentary research as the original on-site morgue. However, Feature 1 coincides precisely with the reported location of the cement storage building illustrated on the 1937 Sanborn map.

On the 1911 Topographic Survey map, the structure measures approximately 7.6 by 4.5 m (25 by 15 ft). Feature 1's pillars, however, cover a 18 by 12 m (60 by 40 ft) area which is more in-line with the 1937 building. Because of the presence of the larger entrance pillars and the feature location in the southeast corner of the 1911 cemetery, the feature is interpreted as an example of re-use. The Feature 1 grouping represents structural remains associated with the cemetery use and then subsequently re-used, likely with modification, for storage during the latter years of the Farm Colony (Figures 1.3, 3.7).

# Test Unit and Shovel Test Excavations and Feature 16

#### Test Unit 1 and Feature 16

Chrysalis excavated TU 1 3 m (10 ft) east of the baseline at Transect 33. In consultation with VHB and LPC, excavators placed the unit on the sloped edge of the Feature 16 fill zone that covered the east half of the Cemetery Area in order to document the fill context and depth. This unit also was located to investigate the depth of a concrete footer for a 20<sup>th</sup> century chainlink fence installed near the edge of the property along the Walcott Street border.

The original excavation layout was a 2m by 1m (6.5 by 3.2 ft) rectilinear unit, its long side oriented northeast – southwest (39 degrees from north) to mirror the ground survey baseline. In order to abut the concrete fence base in the unit's northeast profile, excavators extended TU 1 an additional .5 m (1.6 ft) northeast after initial groundbreaking indicated the fence base lay beyond the original boundaries. TU 1 lay across a steep, 1.2 m (4 ft) slope suspected after ground survey to have been created by opportunistic refuse dumping in the first half of the 20th century. Such materials also appear to be exposed in Features 9, 14, and 15.

TU 1 revealed intact natural stratigraphic horizons dominated by a large fill deposit, Feature 16 (Figures 3.8, Photograph 3.7). An A1 horizon lay at surface atop two thick layers of fill dense with ash, charcoal, and early 20th century ceramics and glass (Table 3.3). The A1 forest mat included over 253 artifacts, mostly ceramics and glass closely matching those found in the Feature 16 fill below that likely entered the A1 after eroding through the thin slope cover and tumbling down the steep slope.

	Table	3.3 - Cemetery Area	a, TU 1 Soil Stratigraphy	
Stratum	Soil Designation	Depth (cm bgs)	Soil Description	Contents/Notes
I	A1	0 – 24 cm, also 86 – 110 cm	10YR 3/1 sandy loam	Window glass, metal, machine- blown bottle
II	Feature 16, Level 1	24 - 40 cm (south corner)	2.5Y 5/4 sand and ash	Concrete and mortar rubble, medium and large brick fragments, slag, machine-blown bottle glass
III	Feature 16, Level 2	40 – 140 cm	10YR 3/2 sandy loam	Machine-blown glass bottles, mason jars, ironstone, hotel ware, oxidized metal fragments, slag, concrete and mortar fragments
IV	Builders Trench, Level 1	109 – 176 cm (northeast side of unit)	10YR 4/2 loamy sand	Machine-blown bottle glass, mason jar glass, brick fragments. Builder's trench for concrete fence base installation.
V	Feature 16, Lens	140 – 142 cm	10YR 4/3 silty sand	Lens created by water action

	Table 3.3 - Cemetery Area, TU 1 Soil Stratigraphy					
Stratum	Stratum Soil Designation Depth (cm bgs) Soil Description Contents/Notes					
				between Feature 16 Level 2 and		
				B horizon.		
				Compact B horizon devoid of		
VI	В	121 – 152 cm	5YR 5/8 clay silt	artifacts, 5% pebble inclusions.		

The Feature 16 fill deposit lay below the southeast half of the A1 horizon. This fill included two levels of distinct material. Feature 16 Level 1 was a 20 cm (7.8 in) thick ashy sand layer found in the southern, highest elevated side of TU 1. This layer covered the southeastern portion of TU 1 and yielded 13 artifacts as well as many medium-sized fragments of concrete and mortar noted and discarded in the field. The only two diagnostic artifacts recovered were 1 shard of milk bottle glass and 1 sealed "SQUIBB" medicine bottle dating at earliest to 1889.

Feature 16 Level 2 made up the largest portion of the fill deposit and contained a higher frequency of artifacts and inclusions than Level 1. Feature 16 Level 2 abutted the north side of Level 1 and underlay the Level 1 matrix from 40 to 140cm (15.7 to 55 in) below the west corner datum. Its southwestern side underlay the A1 horizon. The Level 2 loamier sandy soil included a high concentration of artifacts as well as large amounts of small, oxidized metal fragments evenly distributed across the layer. As Level 2 depths approached 1 m (3.2 ft) at its southwest wall within Type C soils, excavators left a 50 cm (20 in) wide step at 76cm (30 in) below datum to reduce chances of soil collapse. Two large iron vessels lay embedded in the southwest wall between .6 m (2 ft) and 1.4 m (4.6 ft). The first was a large bucket, the second appeared to be a lug-handled milk or water container at the 50 cm (20 in) step (Photograph 3.8). Excavators could not remove these vessels from the southwest wall without compromising the unit integrity and risking soil collapse.

Adjacent to Feature 16 Level 2 was a builder's trench for the concrete fence base forming TU 1's north boundary. This 10 YR 4/2 loamy sand matrix extended 33 cm (13 in) south from the concrete base and terminated just below the concrete at 176 cm (69 in) below datum. Included in the matrix were 38 artifacts, mostly bottle glass shards (n=31) with several brick fragments (n=3) and metal fragments (n=4). The TPQ for this context was 1923, based upon Dairylea Dairy Farmer cooperative embossed milk bottles. The Dairylea milk bottles match the style of several recovered from TU 1's A1 horizon. The context's regular form and milk bottle inclusions suggest the builder's trench was dug through mostly A1 and possibly some Feature 16 material to install the concrete base and backfilled with the same contexts.

Underlying both the builder's trench and Feature 16 Level 2 was a very compact clay silt B horizon with 5% pebble inclusions. This dense layer appeared across the unit with a thin 10 YR 4/3 silty sand lens between the overlying feature fill and the B horizon. It is uncertain if this lens represented the remnants of a buried A horizon previously impacted by Feature 16 deposition or bioturbation and mineral drainage from the feature fill into the clean subsoil below. It is more likely the lens reflects mineral drainage from Feature 16 Level 2, as it followed Feature 16 across uneven depths, becoming more shallow following the Level 2 fill north rather than lying as an even layer as would be more consistent with an Ab horizon (Figure 3.7). The compact B horizon with minor pebble inclusions was identical to subsoil exposed further east in the Cemetery Area TU 2 and STPs and in the Administrative Core.

#### **Test Unit 2**

Test Unit 2 (TU 2), excavated east of the baseline and north of the Feature 1 pillar grouping, was located to investigate the east side of the fill area. The unit's placement was intended to investigate the depth of any Feature 16 fill in the southeast portion of the Cemetery Area and to assess any land forming activities that might have resulted from operations in the potter's field or subsequent land use.

TU 2 excavation revealed no continuation of Feature 16 fill materials in the south half of the baseline area and no evident manipulation of the buried A horizon or subsoils. The unit displayed stratigraphy matching that exposed by additional STPs in the Cemetery Area and STPs in the Administrative Core: a A1 forest mat, an organic A2, and a compact B horizon (Table 3.4).

	Table 3.4 – Cemetery Area, TU 2 Soil Stratigraphy.					
Stratum	Soil Designation	Depth (cm bgs)	Soil Description	Contents/Notes		
			10YR 3/1 sandy			
1	A1	0 – 35 cm	loam	No cultural material (NCM).		
				Small whiteware, milk glass, and window glass fragments. Root		
II	A2	35 – 70 cm	10YR 4/3 loamy silt	disturbances.		
				Compact B horizon devoid of		
III	В	70 – 120 cm	5YR 5/6 clay silt	artifacts, 5% pebble inclusions.		

The A1 horizon continued to 35 cm (12.2 in) below surface, slightly deeper than the A1 found eroding from atop Feature 16 at TU 1. No artifacts appeared within the TU 2 A1 horizon. Below this lay a slightly more silty A2 horizon containing 7 artifacts. The only diagnostic elements were a fragment of milk glass and a small whiteware sherd, indicating post-1815 deposition. The A1/A2 interface was fairly distinct and obscured only by root bioturbation. Below the A2 lay the compact clay silt B horizon with pebble inclusions typical of the area. The A2/B interface was distinct, lacked plow scars, and showed moderate mixing from root and water action.

TU 2 excavation indicated the Feature 16 fill deposit did not extend southwest from TU 1 as far as survey Transect 11. The buried A2 horizon included fragmented artifacts that may have originated from the early Farm Colony up through the institutional usage of the property. While plowing and planting may account for these artifacts' inclusions into the A2 and their fragmented nature, lack of plow scars hinders confirmation of farming.

#### **Shovel Test Pits**

Excavation of three STPs west of the Feature 2 stone wall completed Phase IB testing in the Cemetery Area. In consultation with VHB and with LPC approval, Chrysalis located three 50 by 50 cm (20 by 20 in) STPs 1.5 m (5 ft) southwest of the Feature 2 stone wall. The STPs were excavated at 15-m (50-ft) intervals continuing southwest along a 39 degree angle to follow the survey baseline alignment. These STPs were placed to investigate the presence of any refuse dumping or fill deposits similar to Feature 16 along the west side of the Cemetery Area and reveal localized stratigraphy outside of the potter's field limits, as tentatively identified with Feature 2 acting as a southwest boundary.

The Cemetery STPs (C-STPs) revealed an A1 forest mat, a buried A2 horizon, and a compact B horizon (Table 3.5; Photograph 3.9; also Appendix C, Table C-2).

	Table 3.5 – Cemetery Area, C-STP 1 Through 3 General Soil Stratigraphy					
Stratum	Soil Designation	Depth (cm bgs)	Soil Description	Contents/Notes		
			10YR 3/1 sandy			
I	A1	0 – 6 cm	loam	NCM		
II	A2	6 – 25 cm	10YR 4/3 loamy silt	Window glass in C-STP 2		
				Compact B horizon devoid of		
III	В	25 – 45 cm	5YR 5/6 clay silt	artifacts, 5% pebble inclusions.		

While the stratigraphy was similar in appearance and distribution to TU 2, the C-STP soil horizons were generally shallower than those uncovered in the test unit east of the potter's field. Soil classifications matched those uncovered in TU 2, but the A1 horizon was much shallower in the C-STPs with a maximum depth of 8 cm (3.1 in). This was due to C-STP placement on a trafficked, wide footpath leading into the potter's field, chosen for ease of excavation because it lacked thick plant growth. The buried A2 horizon was also thinner in this area, measuring only 8 cm (3.1 in) thick in the westernmost C-STP 1 and increasing to 20 cm (7.8 in) in C-STP 2 and 28 cm (11 in) thick in C-STP 3. Heavy foot traffic

near C-STP 1 had appeared to wear away most of the A1 horizon; this may have compacted and eroded the A2 as well, especially where the A1 had been nearly fully compromised. Alternatively, land use activities such as plowing and farming may not have occurred frequently southwest of the pPotter's field, leading to thinner A2 soil formation. The A2 yielded only three non-diagnostic window glass fragments from C-STP 2.

A compact B horizon lay below the A2 across the C-STPs. This soil matched the B uncovered in TU 1 and TU 2 and featured a compact clay silt matrix with some medium grained sands and pebbling. Increasing depth within the B horizon yielded increasing numbers of small, decaying fieldstones and additional soil moisture, but did not appear to expose a definite C horizon.

The C-STPs revealed no continuation of Feature 16 or other fill materials west of the proposed Ppotter's field stone wall boundary. They also exhibited A2 formation, incorporating small 19th or 20th century artifact inclusions without evident plow scars. The C-STPs exhibited thinning of the A1 and A2 horizons heading southwest of the Cemetery Area and continuation of a compact clay silt B horizon subsoil across the Colony area.

# **Laboratory Methods**

All recovered artifacts were placed in plastic bags labeled according to provenience (area, test unit or STP number, and stratum) in the field. While in the field, each artifact bag was assigned a field specimen (FS) number unique to each context. This number was entered into a provenience table with identifying information for each context. The fields in the provenience table include: FS number, unit or STP, stratum, level, number of artifact bags, date, and excavator initials.

Artifact processing began upon arrival at the Chrysalis facility in Brooklyn, New York. Technicians processed the artifacts using standard archaeological techniques: artifacts were washed using soft-bristle brushes and a mild, non-ionic detergent before air-drying on racks. After cleaning, a basic level of analysis was utilized to identify the following artifact characteristics: general functional group (e.g., household); object form (e.g., bottle); material composition (e.g., common glass); ware type, if applicable for ceramics (e.g., whiteware); decoration (e.g., embossed); manufacturing technique (e.g., machine mold-blown); date of manufacture (e.g., 1790–1830); maker's marks, if present; and number of artifacts of each type within each context (Table 3.6). Analysts entered this data directly into a Microsoft *Access* database (Appendix D for artifact inventory).

Table 3.6 - Artifact Group Descriptions			
Group	Description		
Activities	A broad category for things people do (but not manufacturing, commerce or games)		
Architectural	The more or less permanent components of buildings and other structures, such as bridges. Also any sorts of drain pipes and roof, floor and wall tiles.		
Arms	Artifacts related to firearms, including projectiles and artillery		
Clothing	Artifacts used for covering the human body		
Commercial	Commerce and money		
Debitage	All lithic debitage (flakes, shatter, tested material, split cobbles)		
Electrical	Electrical wiring, insulators, light bulbs, switches and switch covers		
Faunal	Non-human species remains		
Flora	Nuts, seeds, etc.		
Fuel	Things used to create heat (coal, coal cinders). Not charcoal because this could be accidental rather than deliberate burning. Prehistoric (FCR)		
Funerary	Artifacts associated with burial practices such as coffin hardware, planks, name plates, tomb stones, etc.		
Furnishings	Furniture, household accessories, plumbing fixtures, window or door coverings		

Table 3.6 - Artifact Group Descriptions			
Group	Description		
Hardware	A broad category for all sorts of fasteners (except nails and spikes), easily removable parts of buildings and furniture (almost always metal), decorative elements, and such		
Household	Any artifacts used for food preparation, storage, service, and consumption		
Indeterminate	Unidentifiable artifacts such as metal fragments		
Lighting	Anything associated with producing artificial light, except for electrical light		
Manufacturing	Machine parts, kiln furniture and wasters, by-products of making things in a craft, proto-industrial or industrial fashion. Slag except coal slag		
Medical	Medicinal and pharmaceutical artifacts		
Ornament	Decorative items, e.g. figurines, flowerpots, etc.		
Other	Objects that don't fit into any other category. These items require explanation in Notes section of entry.		
Personal	Artifacts associated with use by one person or artifacts contributing to individuals' identities		
Sample	C-14 samples, soil samples, and unpicked light flotation sample fraction		
Sanitary	Chamber pots, soap dishes, toothpaste pots, wash basins, and ewers		
Tack	Anything related to horses and other draft or riding animals		
Tools & Equipment	Hand tools used to make other things or to manipulate the physical world		
Toys/Recreation	All toys, sporting equipment, and gaming pieces		
Transportation	Items related to cars, trucks, railroads, and other major transit forms		

Each line of data received its own entry number. This entry number was written on 4-mm-thick, acid-free polyethylene bags with zipper-locking closures. Each entry was bagged separately within bags containing the surrounding context in order to facilitate retrieval of artifacts for exhibit or study. Chrysalis organized each context bag in ascending order within heavy-duty, double-walled, acid free storage boxes labelled with site, context, and catalog number.

The Microsoft Access inventory forms used to catalog artifacts employed uniform menus that include standard terms (e.g., earthenware, pearlware, etc.) in order to create consistent entries across the wider database. The inventory forms could also accept unique terms when necessary to accommodate unusual artifacts or attributes. The program automatically assigned individual record numbers to each entry as it was created. Chrysalis maintained a daily backup file of all data within multiple storage servers.

The final disposition of the Staten Island Farm Colony collection is anticipated to be the New York City Archaeological Repository at 114 W. 47<sup>th</sup> Street, New York, NY. Creation of the repository and standardization of storage within the site are currently (as of October, 2014) in process.

# **Laboratory Results**

#### **Administrative Core**

Excavation in the Administrative Core yielded 129 artifacts, primarily identified as belonging to the Architectural and Household functional groups. These elements were highly fragmented and typically consisted of hotel ware and whiteware ceramics, colorless widow glass, and highly decomposed nails. Outliers included one white ball clay pipe stem fragment and one small Nottingham Type stoneware hollowware sherd.

The A1 horizon in the Administrative Core included numerous mid- to late-20th century artifacts in each STP, including bottle caps, aluminum cans, and plastic paintball munitions. These items were discarded in the field. One STP excavation, H5, recovered eight Architectural items: seven brick fragments and one cut nail. STP B2 yielded 2 rubber

fragments and 18 window glass fragments, likely due to close proximity to a partially-deconstructed greenhouse. STP A4 yielded three container glass fragments, one window glass fragment, one milk glass shard, and one whiteware sherd.

The A2 horizon yielded 115 artifacts. These materials included whiteware and hotel ware ceramics, stoneware sherds, machine-blown bottle glass, porcelain, and window glass distributed without horizontal differentiation. The Administrative Core A2 assemblage had a *terminus post quem* (TPQ) of 1923 based upon three milk bottle glass shards embossed with portions of the Dairlylea Dairymen's Cooperative Association logo. The Dairymen's League Cooperative Associated formed in 1907, but the group adopted the "Dairylea" brand name for its products in 1923 (Dairy Farmers of America 2014). None of the artifacts recovered during Administrative Core STP excavation could be definitively identified as belonging to the 19th century site occupation, although the pipe stem, porcelains, and whitewares (especially one shell-edged sherd) had potential to pre-date the 20th century site use.

# **Cemetery Area and Design Buffer**

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#### Test Unit 1 and Feature 16

Test Unit 1 excavation yielded 792 artifacts. The recovered artifacts appeared in the A1 horizon (n=253), Feature 16 Level 1 (n=13), Feature 16 Level 2 (n=471), the concrete fence builder's trench (n=38), and the interface between Feature 16 and the B horizon (n=17).

Excavators recovered 253 artifacts from the A1 forest mat at TU 1, consisting primarily of construction debris and machine-blown bottle glass consistent with the Feature 16 fill below. Of this material, 114 Household items dominated the collection (45% of the assemblage). These artifacts were mostly machine-blown glass but also included 16 ironstone ceramic sherds (6%). Only nine glass fragments could be definitively identified as Medical items (3.5%), including two complete machine-blown, extract-finished vessels. The 94 glass shards of indeterminate function likely belonged to either Household or Medical functional groups (37%). This material very closely matched the form and the functional group percentage breakdown found in Feature 16 (see below). These artifacts probably eroded from the steep slope formed by the edge of the Feature 16 fill and tumbled through the developing Stratum A1 forest floor.

Feature 16 Level 1 was a thick ashy sand layer found in the southern, highest elevated side of TU 1. This layer made up only a small portion of the Feature 16 assemblage, yielding 13 artifacts as well as many medium-sized fragments of concrete and mortar. The concrete and mortar were noted and discarded in the field. The only two diagnostic artifacts recovered were one shard of milk bottle glass and one sealed medicine bottle dating at earliest to 1889.

Feature 16 Level 2 yielded the majority (n = 471) of the Feature 16 assemblage. The artifacts are summarized in Table 3.7 and the assemblage was mostly hotel ware ceramics, architectural debris, and machine-blown bottle glass.

Table 3.7: Cemetery Area, TU 1, Feature 16 Levels 1 and Level 2, Artifact Group Summary					
Group					
Architectural	18	3.72			
Electrical	1	.21			
Faunal	36	7.44			
Household	225	46.49			
Indeterminate	172	35.54			
Lighting	1	.21			
Manufacturing	1	.21			
Medical	21	4.34			
Personal	2	.41			

Table 3.7: Cemetery Area, TU 1, Feature 16 Levels 1 and Level 2, Artifact Group Summary					
Group	Group Count Percent (%)				
Sanitary	1	.21			
Tack	1	.21			
Tools	5	1.03			
TOTAL	484	100.0			

Diagnostic artifacts included 222 Household oriented ceramics and glass fragments (47%), 20 Medical glass bottle shards (4%), and 165 Indeterminate bottle glass shards that likely served Household or Medical functions (36%). Within the Household functional group, 44 robust ironstone hotel wares made up 9% of the assemblage, with 6 pearlware sherds and 7 porcelain fragments representing a smaller proportion of more fragile service materials. The majority of the Household items were machine-blown glass (31% of the assemblage). Feature 16 Level 2's TPQ was 1929, based upon 14 bottle glass fragments containing Owens-Illinois type machine mold marks. The Owens Bottle Company and the Illinois Glass Company merged in 1929 to form the Owens-Illinois Glass Company, adopting a distinctive manufacture symbol incorporating each firm's "O" and "I" production mark icon (Toulouse 1971: 405). Unfortunately, although many Owens-Illinois bottles are marked with production year dates, none of the recovered bottles retained enough information to pinpoint their production decade. Additional artifacts of note included 32 faunal fragments, mostly clam and oyster shell.

The majority of materials recovered from Feature 16 in TU 1 reflected household, and particularly kitchen or food-related, usage. Key materials related to kitchen activities from the combined Feature 16 Level 1 and Level 2 contexts included 15 glass shards and 5 complete vessels representing a variety of sizes of mason canning jars, 38 glass milk bottle shards and 1 complete vessel, and a nickel silver knife and spoon. Additionally, 66 ceramic sherds, mostly ironstone hotel ware (n=44), were recovered. These included a slightly greater percentage of hollowware elements than flatware (63% hollowware). Kitchen-specific items included two machine-blown glass condiment bottles, a large cleaver or machete-like knife, and an enameled tin pail or cook pot. Notably, 26 of the Indeterminate function glass shards showed evidence of heat damage.

The combined Feature 16 Level 1 and 2 assemblage indicated a deposit that incorporated Medical items with kitchenoriented Household wares. The glass artifacts definitively identified as Medical objects included 7 complete vessels and 14 shards mostly belonging to small bottles or jars. Three shards related to a vial and a medium size test tube or unfooted tall vial also appeared. Of the medicine bottles, 5 bottles retained embossed marks from the Squibb Company. E.R. Squibb founded his pharmaceutical company in Brooklyn in 1858, producing mainly dental supplies and cod liver oils by the early 20th century (Rhodes 2008: 227). One bottle of each of the following label types appeared: Bayer Company, Daggett and Ramsdell, and Kruschen Salts. Bayer sold its trademark Aspirin painkiller by 1899. During World War I, the Unites States rescinded Bayer's trademark over the term aspirin due to the company's German origin (Mehta 2005). Omission of the term Aspirin on the vessel recovered from TU 1 may indicate a post-1919 date for the bottle. Daggett and Ramsdell was a pharmaceutical and cosmetics company primarily producing compact powders and a well-known cold cream from the 1890s (Time Magazine 1948). Kruschen salts are alkaline salts mixed with citric acid that were popularly sold from England and France in the first three decades of the 20th century as a general cure-all for vitality, digestive health, and weight loss. Their presence in a kitchen-centered assemblage might be explained by recommendations to take the salts in pill form or as a powder mixed into a daily cup of tea (JAMA 1931: 1555).

The Feature 16 assemblage recovered from TU 1 reflects a closed deposit likely associated with kitchen activities of the New York City Colony around 1930. The high proportion of durable ironstone and hotel wares among the ceramic materials as well as stamps upon 4 fragments marked "N.Y. CITY PROPERTY" indicate usage in an institutional setting consistent with the Colony. The presence of a large number of milk bottle glass elements (n=39, 8% of assemblage) as well as at least 5 mason jar style storage vessels amidst the relative lack of service vessels and food waste suggests the assemblage was sourced from a food storage and preparation area operated by the Colony. Medical containers found among the assemblage might indicate basic medical care went hand-in-hand with food service at the Colony, or storage of these materials was managed in one area. Coal and ash inclusions in both Level 1 and 2 matrices, inclusions of

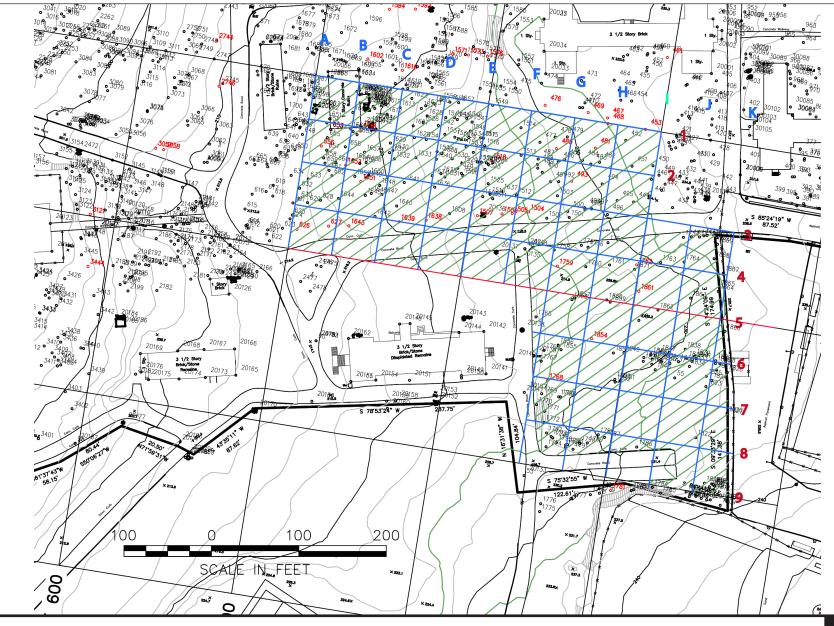
oxidized metal fragments across Level 2, and the 26 melted glass fragments recovered from Feature 16 signify this fill deposit was burned. The well-sorted nature of the coal, ash, damaged glass, and oxidized metals suggest burning occurred prior to deposition rather than as trash burning in place that would have yielded localized heat damages and pockets of burnt materials.

# **Test Unit 2**

Excavations at TU 2 yielded only seven artifacts, all from the A2 horizon. Unlike Administrative Core STPs, the TU 2 A1 forest mat did not contain any 20th century artifacts. The A2 horizon included one Architectural colorless window glass fragment, two Household ceramics (whiteware and porcelain), and four pieces of Indeterminate rubber and glass. These materials were highly fragmented and did not provide temporal information other than one diagnostic whiteware sherd (c. 1815 – present).

# **Cemetery Shovel Test Pits**

Excavation of three STPs in the southwestern portion of the Cemetery Area yielded only three artifacts. These artifacts, one aqua and two colorless window glass shards, appeared within C-STP 2's A2 horizon. The window glass fragments recovered were non-diagnostic, providing little temporal insight to A2 formation or activity. Unlike the Administrative Core STPs, no discarded 20th century materials appeared in the Cemetery Area STPs.

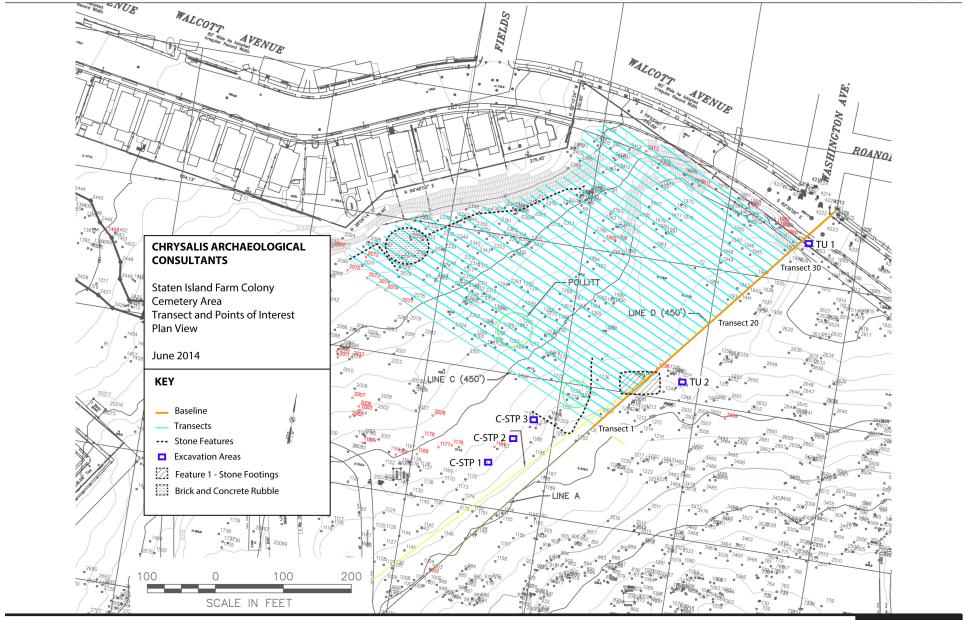


**The Landmark Colony** 

Staten Island, New York

**Administrative Core Area Transects** 

Figure **3.1** 

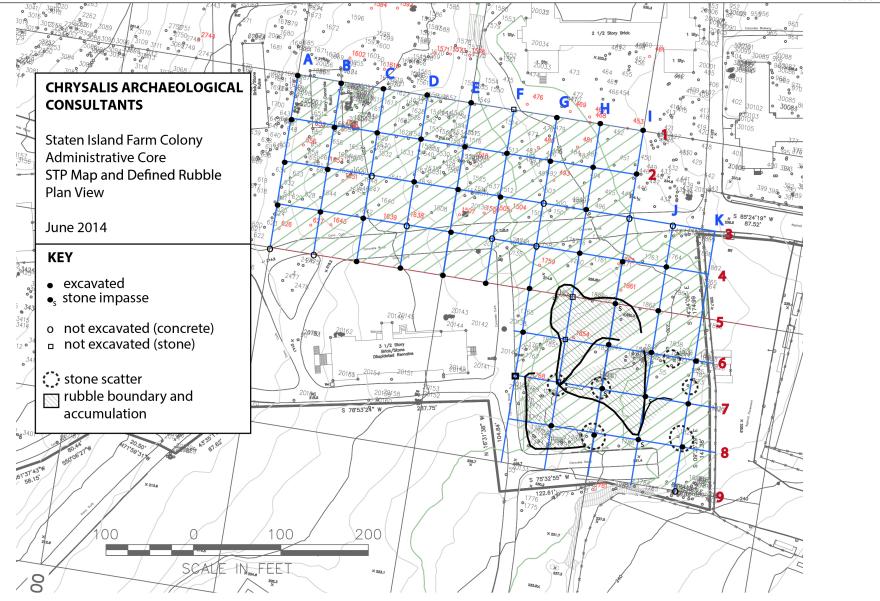


The Landmark Colony

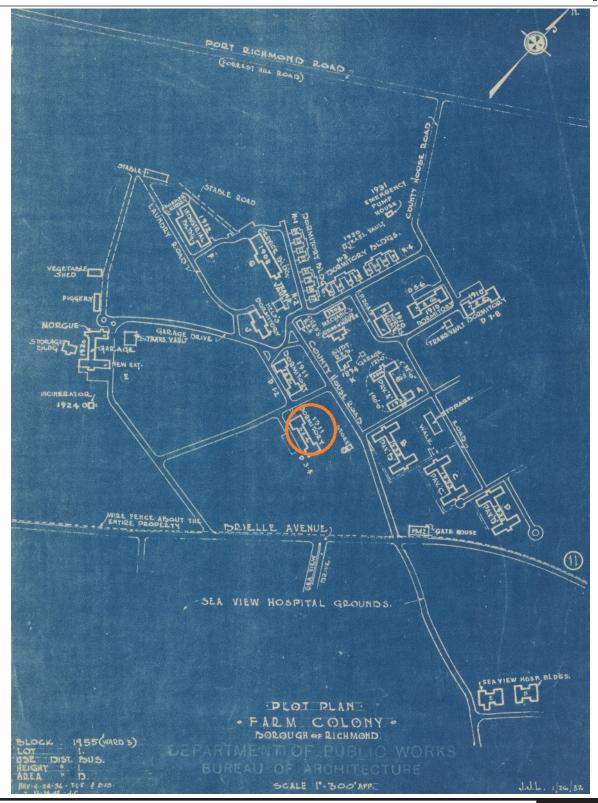
Staten Island, New York

**Cemetery and Design Buffer Areas Transects, Excavations, and Selected Features** 

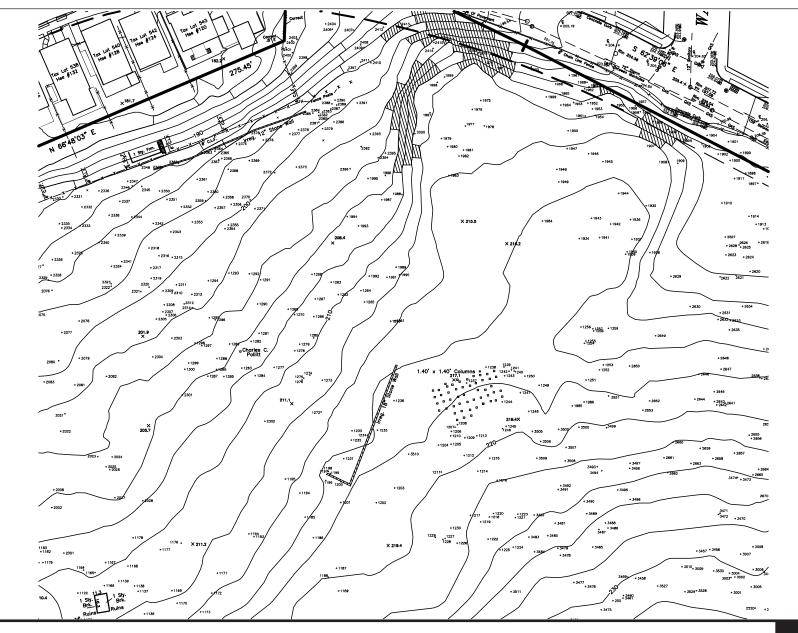
Figure **3.2** 



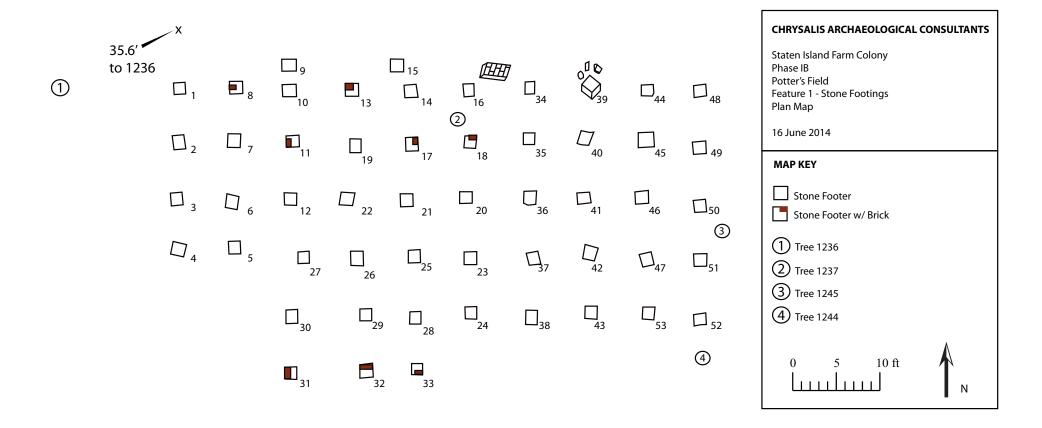
Administrative Core Area shovel Tests and Rubble Area



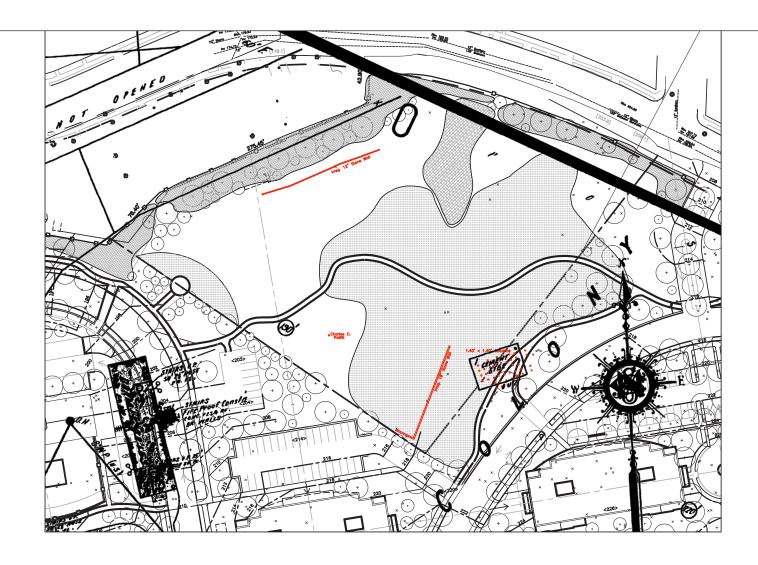
1932 (rev. 1943) DPW Plan with Administrative Core Area Rubble Area Highlighted



**Cemetery Area 2014 Survey Plot of Select Features** 



Staten Island, New York





1937 Building Outline and 2014 Feature 1 Overlay

#### **CHRYSALIS ARCHAEOLOGICAL CONSULTANTS**

Staten Island Farm Colony Unit 1 SE Profile DW, DG

18 June 2014

# Key

I - 10 YR 3/1 SaLo II - 2.5 YR 5/4 Sand w/ ash (Feature 16)

III - 10 YR 3/2 SaLo (Feature 16)

IV - 10 YR 4/2 SaLo w/ concrete

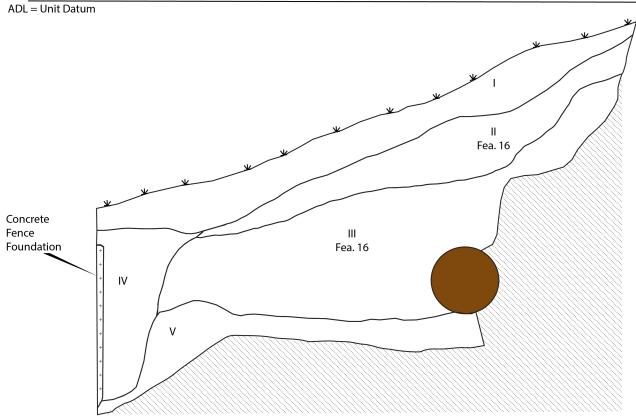
V - 5 YR 5/8 Clay

**y** Ground surface

Concrete

Metal (milk pail)

Unexcavated



Staten Island, New York

**Cemetery Area, Test Unit 1 Feasture 16 Southeast Profile** 

# Photograph 3.1

Administrative Core Area, STP 16 north profile, representative of stratigraphy revealed across majority of excavated STPs.



Photograph 3.2

View facing north. Cemetery Area, feature 1 central pillars after clearing.



Photograph 3.3

View facing south. Cemetery Area, broken-off, engraved portion of the Pollitt grave stone.



Photograph 3.4

View facing north. Cemetery Area,feature 2 fieldstone wall.



Photograph 3.5

View facing east. Cemetery Area, feature 3 fieldstone wall.



# Photograph 3.6

View facing southwest.

Cemetery Area,
feature 4 mortared
fieldstone wall complex.



Photograph 3.7

View facing southeast. Cemetery Area, feature 16 (TU1) southeast profile.



# Photograph 3.8

Cemetery Area, feature 16 (TU1) southwest profile, with iron vessels embedded within 50cm step and unit



Photograph 3.9
Cemetery Area, C-STP 2
north profile.



# Conclusions and Recommendations

On the basis of Phase IA research and the Phase IB investigations, VHB and Chrysalis have determined historical materials remain, distributed in low to high concentrations across the Project area. The Administrative Core shows low concentrations of historical materials across the surveyed area and no features were identified. However, it is recommended that an archaeological monitor be on-call, though not on-site, during construction preparation activities in the Administrative Core as intact shaft features may be revealed at the strata A and B interface.

In contrast, the Cemetery and Design Buffer Areas have the potential to yield significant data on Farm Colony functions based on intact refuse deposits and structure remnants. Because the Project proposes to landscape the reported cemetery location and place a commemorative plaque or other signage to honor the inhabitants of the Farm Colony interred in the cemetery within the design buffer, LPC originally indicated that the vertical and horizontal extent of cultural features and deposits needed to be defined. Nancy Owens Studio, LLC, prepared a landscape plan for the cemetery area which considered possible impacts to archaeological features that had been documented or that were presumed to be present (graves). LPC and EDC reviewed the plan with the Proponent team in September, 2014.

LPC and EDC are in agreement that the landscape plan limits possible impacts through the use of fill and monitoried excavation.. As outlined in an Unanticipated Discovery Plan, also included here as an appendix, an Archaeological Monitor will document the avoidance of the archaeological features within the cemetery boundary and its design buffer and the removal of Feature 1. The Archaeological Monitor also will be on-site during implementation of the landscape plan within the cemetery and design buffer boundaries that involves ground disturbance and excavation.. For these reasons, no further archaeological investigations are recommended as all archaeological features of possible significance will be avoided and protected by the Project.

## **Conclusions**

#### Administrative Core Area

Systematic survey of the Administrative Core resulted in the recovery of a relatively low incidence of historical materials, and testing revealed no evidence of 19th century structures and outbuildings. Phase IA research sought to define functional areas across the Project area and designated the Administrative Core as the seat of managerial and maintenance structures. While early 20th century buildings related to work and housing are extant, Phase IB testing in the Administrative Core did not uncover features that might add to a temporal archaeological feature hierarchy or

inform research questions regarding functional use of the area during its Farmstead or Poor House use periods prior to 1901.

Phase IA research suggested the Administrative Core area was highly disturbed by New York Farm Colony early 20th century land development. Phase IB testing confirmed this. Administrative Core STPs showed the area retains a highly regular stratigraphy with a mix of artifacts produced in the early to mid-19th and 20th centuries commingled within the A2 horizon. This suggests leveling activities merged the accumulating A horizons to a depth of approximately 30 cm (1 ft) by the 1930s. This date coincides with major development activities during the New York City Colony, dependent infirm (± 1925-1970s) period. Land development during this era likely included razing small buildings and leveling ground surfaces for new structures. This activity may have created a cohesive, commingled A horizon later capped by the organic A1 forest mat. Alternately, the A2 may have accumulated gradually beginning from early 19th century site occupation, resulting in no differentiation in soil texture or color of the A2 between land use eras. In this case, small population or non-localized land use could explain the few early 19th century artifacts recovered from the A2. Regardless of formation process, the A2 horizon's ubiquitous form across the Administrative Core and lack of features or artifacts that horizontally locate 19th century land use prevent identification of any particularly archaeologically sensitive areas prior to the New York City Colony phase. Remnant walls, foundations, or outbuildings from 19th century Project area land use may remain and would likely be characterized by continuation beyond the A2 horizon into locally impacted subsoil.

# **Cemetery and Design Buffer Areas**

Phase IB testing in the Cemetery Area and Design Buffer revealed a scarcity of burial markers but several features that help define the cemetery boundaries and inform research on institutional life in the early 20th century (Figures 4.1 and 4.2). Survey and testing in the Cemetery Area was designed to define the cemetery (aka potter's field) boundaries, burial depths, and associated components. The Feature 2 and Feature 3 stone walls roughly match the potter's field shape on historical maps and follow the path of silver maples that Phase IA research suggests lined an *allee* to the cemetery. These stone walls provide probable boundary markers for the south, east, and northwest limits of the Farm Colony cemetery. The lack of burial markers other than the Feature 12 Pollitt marble slab identified during survey suggest that either standing grave stones were uncommon among the burials at the potter's field or these elements were impacted and/or removed at some point.

The Feature 1 structure, represented by extant mortared pillars, is interpreted as the remains of two building periods, one associated with the cemetery as the entrance pillars and original morgue and the other a subsequent use of the morgue building for other functions. The original form and exact function of this potential morgue structure remain undetermined. Finally, the Feature 16 fill deposit represents a post-1929 food storage and preparation context discarded across an area in the eastern half of the Cemetery Area. Institutional stamps on ceramics and the assemblage date suggest this fill originated from the New York City Colony, dependent infirm (± 1925-1970s) use period. The well-sorted burnt elements present in the deposit indicates the materials were damaged by a New York City Colony fire before deposition or were set ablaze in a separate location as part of refuse disposal precedures. The Feature 16 deposit may have been discarded on top of the cemetery or intentially located east to avoid the burial area. The limits of the cemetery were likely known to those who deposited Feature 16, as burials continued in the field as late as 1913. The deposit's extent and depth across the Cemetery Area remain undetermined. If these limits intentionally lay outside the potter's field, the feature's boundaries would be helpful in determining area of highest potential for human remains.

# Recommendations

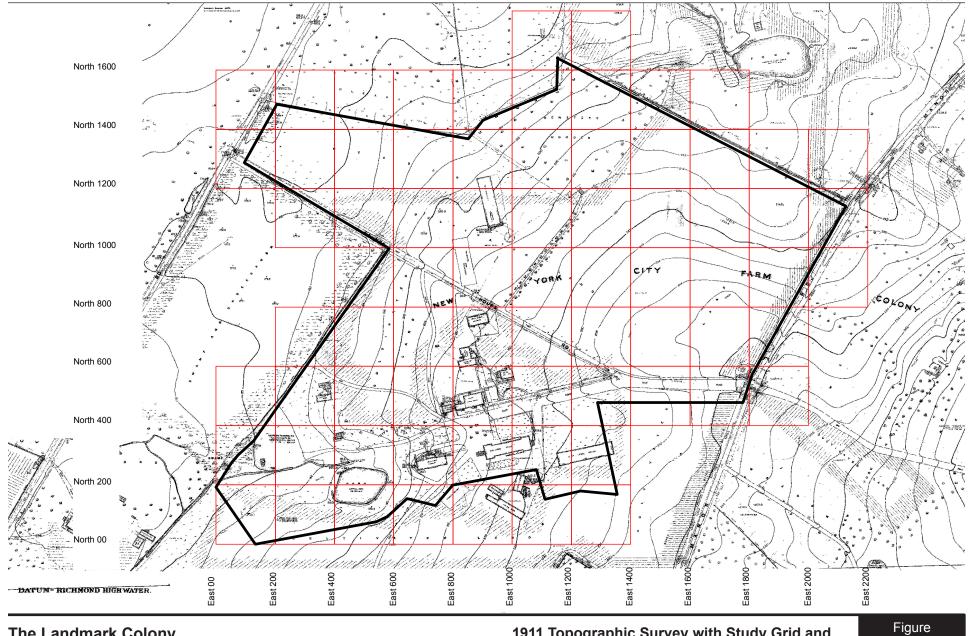
## **Administrative Core**

As intact architectural foundations, privies, wells, or similar features related to 19th century Farmstead or Richmond County Poor House Farm activities may remain intact below the A1 and A2 horizons, VHB and Chrysalis recommend that an archaeological monitor be on-call, though not on-site, during construction preparation activities in the

Administrative Core as intact shaft features may be revealed at the strata A and B interface. Though Phase IB testing did not identify horizontally discrete activity areas, the potential remains to expose historical features at the interface. Extant materials that may occupy small portions of the property between the tested intervals would likely take the form of well-contained structural foundations or dumping areas. Due to the significant amount of ground cover, potential surface indicators of these feature types were not observable and/or inaccessible during systematic walkover.

# **Cemetery Area and Design Buffer**

Based on the September 2014 landscape plan and its proposed approaches to vegetation clearance, surface preparation, and new plantings, VHB and Chrysalis recommend no further work in the cemetery area and design buffer. The landscape plan will be implemented under the UDP and if ground excavation or disturbance is required it will done with an archaeological monitor in place.

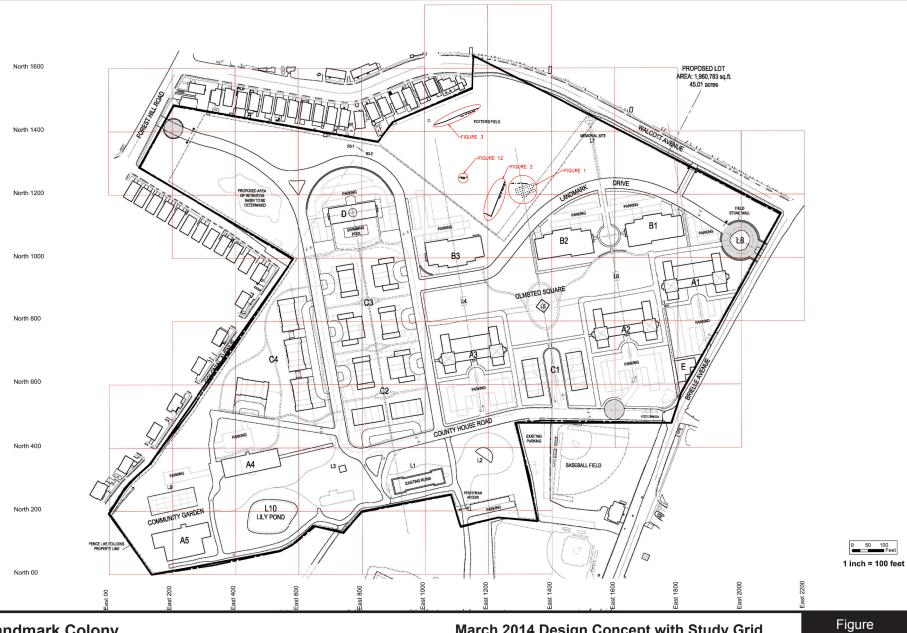


**The Landmark Colony** 

Staten Island, New York

1911 Topographic Survey with Study Grid and **Select Features** 

Project Site Index Grid



**The Landmark Colony** 

Staten Island, New York

March 2014 Design Concept with Study Grid and Select Features

4.**2** 



Project Site Index Grid

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Anonymous. NYC Municipal Archives, dpc\_2807, Farm Colony.

Anonymous. NYC Municipal Archives, dpc\_2808, Farm Colony womens pavilion.

Anonymous. NYC Municipal Archives, dpc\_2809, Farm Colony panorama.

## Appendix A - Correspondence



Planning Transportation Land Development Environmental

May 22, 2014

Ms. Amanda Sutphin Landmarks Preservation Commission Municipal Building 1 Centre Street, 9<sup>th</sup> Floor North New York, NY 10007

RE: Landmark Colony (LP-01480), LPC Application in Support of Archaeological Investigations

Dear Ms. Sutphin,

This cover letter prefaces the following items: an Application Form for Work on Designated Properties, Attachment 1 entitled "Scope of Phase IB Archaeological Investigations Landmark Colony (LCP #LP-01408)," and three numbered figures. These items are being submitted under Landmarks Law, in support of archaeological investigations to be conducted to advance design development for re-use of the Landmark Colony. The project design will be submitted at a future date to LPC for consideration.

NFC Associates, LLC (the Proponent) proposes to develop this 46-acre parcel which is owned by the City of New York. The proposed project would require the disposition of City-owned land and zoning-related approvals from the City Planning Commission (CPC), which are subject to Uniform Land Use Review Procedure (ULURP) and City Environmental Quality Review (CEQR). The Project area is currently managed by the NYC Citywide Administrative Services (DCAS) who are the owner signatory on the enclosed Application.

The goals of the archaeological investigations are to 1) try to determine the boundaries of the historic potter's field; and 2) determine if archaeological features dating to the period 1829-1925 are present in the core area of the future facility. In order to advance the design development, we would like the archaeological fieldwork to begin as early as possible in June, 2014.

If you require further information, please do not hesitate to contact me at (212) 857-7327 or cweed@vhb.com.

Sincerely,

Carol S. Weed (MA, RPA)

Senior Project Manager, Cultural and Natural Resources

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### INSTRUCTIONS FOR FILING

**Work that Requires LPC Approval**: If an owner wishes to perform any work on a designated landmark or on a property in a designated historic district, he or she must obtain a permit from the Landmarks Preservation Commission ("LPC") approving such work before carrying it out. The LPC reviews the proposed work to determine its effect on the significant features of the property and, in a historic district, its effect on nearby designated properties.

**Applications:** An application consists of an application form and all other information necessary to describe the proposed work adequately. Only complete applications can be processed. If, upon review, the LPC staff finds that an application is incomplete, the staff will send a checklist of materials to the applicant, indicating what additional materials are required. An application that remains incomplete three months after the applicant has been notified by LPC staff that additional materials are required to complete the application shall be deemed to be withdrawn.

The LPC uses a single application form. Any person seeking to perform alterations, construction, reconstruction, demolition or minor work on a landmark (including work on an interior landmark or a landmark site) or in a historic district must complete the application form in order to secure a permit. Filing may be done by mail or in person.

All application forms must be signed by the owner of the property. An application for work on or in a cooperative building must be signed by the President or other appropriate officer of the Co-op Board. An application for work on or in the portions of a condominium building in common ownership must be signed by the President or other appropriate officer of the Condominium Association. The signature of the managing agent of the building is not sufficient, unless the managing agent is also the President or other appropriate officer of the Co-op Board or Condominium Association. An application for work on or in an individual condominium unit must be signed by the owner of that unit. An attorney may sign on behalf of the building owner if the attorney has power of attorney for the owner, provided that the attorney notes (below his or her signature) that he or she has power of attorney. Owners and their architects are encouraged to consult with LPC staff after filing an application form.

Descriptive materials will usually have to be submitted to complete the application. The applicant should use photographs, drawings, photo-montages, material samples and written specifications to explain and describe the **Existing Condition** of the building, the **Proposed Condition** of the building, and, if the information is available, the **Historic or Original Condition** of the building.

Depending on the type of work proposed, the descriptive materials submitted for the application should include floor plans, elevations, sections, perspective views, and/or details of building elements. In a historic district, photographs showing the building in the context of the nearby designated buildings and the surrounding streetscape are required.

#### Types of Permits

A CERTIFICATE OF NO EFFECT ON PROTECTED ARCHITECTURAL FEATURES (a "CNE") is issued when the proposed work requires a Buildings Department permit but does not affect the significant, protected architectural features of a designated building. For example, the LPC staff may issue a CNE for projects requiring alterations to an undesignated interior or to non-significant features of a rear wall. The LPC has 30 working days from the date that the LPC staff certifies the application is complete to process a CNE. However, the issuance of a CNE usually takes less time.

A PERMIT FOR MINOR WORK (a "PMW") is issued for work on protected architectural features of a designated property when a Buildings Department permit is not required. LPC staff may issue a PMW for projects such as exterior painting, replacing doors or window sashes, installing storm windows, or masonry restoration. A member of the LPC staff may need to visit the site before issuing a PMW. The LPC has 20 working days from the date that the LPC staff certifies that the application is complete to process a PMW.

A CERTIFICATE OF APPROPRIATENESS (a "COFA") is issued for work that requires a Buildings Department permit and affects the significant, protected features of a building, or when any proposed changes cannot be found to be appropriate by the LPC staff. A CofA maybe issued only after the proposal has been brought to a public hearing before the LPC and has been formally approved and, where applicable, any conditions of the approval have been satisfied. The LPC holds public hearings on C of A applications on Tuesdays, two or three times each month. In order to be considered at a public hearing, an application must be filed and certified as complete by the LPC staff during the month preceding that public hearing. The applicant is required to contact their local community board before the public hearing. When an applicant's work requires a C of A, the LPC must make a determination on the application within 90 working days of the date that the LPC staff certifies that the application is complete.

NOTE: All new buildings proposed to be built in historic districts, and most enlargements to existing designated buildings, require a Certificate of Appropriateness. All applicants must file plans for such projects with the Buildings Department and submit to the LPC an Objection Sheet from the Buildings Department in order for the LPC staff to certify the application as complete and calendar the application for a public hearing.





## **APPLICATION FORM**

#### FOR WORK ON DESIGNATED PROPERTIES

This application will not be deemed complete until it is so certified by the Landmarks Preservation Commission. An application consists of an application form and the materials necessary to describe the project fully. If being submitted in response to a Warning Letter or Notice of Violation, please enter the number below.

Please print or type all items. If not applicable, mark N.A.

STAFF USE ONLY	LPC DOCKET#	DATE RECEIVED	STAFF			
	ACTION ☐ PMW ☐ CNE ☐ COFA	☐ REPORT ☐ OTHER:	WORK TY	PE		
	LPC #LP- 01408, Landmark Co	lony		not applicable		
DESIGNATED	ADDRESS	DIOITY		FLOOR OR APARTMENT #		
	Richmond/Staten Island 1955		1			
	BOROUGH	BLOCK	LOT	ZONING		
WARNING LETTE	R / NOV # (IF WORK IS TO ADDRESS A	violation) not applicable				
	INTERIOR ALTERATIONS	ROOFTOP OR REAR ADDITION: VISIBLE	YARD P(YES OR NO)	SIDEWALK OR STREET PAVING		
DESCRIPTION	RESTORATION WORK	AWNINGS / SIGNAC	SE / LIGHTING	BARRIER-FREE ACCESS		
OF WORK	REPLACE WINDOW(S) OR DOOR(S)	NEW BUILDING		SIDEWALK CAFE		
(CHECK ALL THAT APPLY)	THRU-WALL / WINDOW AIR CONDITIONING EQUIPMENT	STOREFRONTS		TEMPORARY INSTALLATION(S)		
	ROOFTOP OR REAR YARD HVAC	NEW WINDOW OR	DOOR OPENING	OTHER: Archaeology		
IS THIS APPLICATION	— I TO AMEND OR EXTEND AN EXIST	NG PERMIT? V NO	YES, DOCKET#	_		
	A REQUEST FOR A NOTICE OF COI			VET #		
		· -				
	ENT ON THE PROPERTY? V NO					
ARE YOU APPLYING	TO ANY OF THE FOLLOWING? [ ]	DEPT. OF BUILDINGS 🔽 CIT	PLANNING COMM.	BOARD OF STANDARDS AND APPEALS		
TENANT / LESSEE /	NAME, TITLE, AND FIRM (IF APPLICABLE) not	applicable				
CO-OP	ADDRESS		CITY, STATE, ZIP	CODE		
SHAREHOLDER	PHONE (DAY)	FAX	EMAIL ADDRESS			
ARCHITECT /	NAME, TITLE, AND FIRM (IF APPLICABLE) Carol S. Weed, Sr. Project Manager, VHB					
ENGINEER / CONTRACTOR (IF	ADDRESS Two Penn Plaza, Suite	2602	CITY, STATE, ZIP	NY, NY 10121		
APPLICABLE)	PHONE (DAY) 212.857.7327	FAX 212.971.7239	EMAIL ADDRESS	cweed@vhb.com		
PERSON FILING APPLICATION	NAME, TITLE, AND FIRM (IF APPLICABLE)	rol S. Weed, Sr. Project	Manager, VHB			
E.G., EXPEDITOR,	ADDRESS Two Penn Plaza, Suite	2602	CITY, STATE, ZIP	CODE NY, NY 10121		
ATTORNEY, MANAGING AGENT)	PHONE (DAY) 212.857.7327	FAX 212.971.7239	EMAIL ADDRESS	cweed@vhb.com		
	am the owner of the above-listed property. ny permission for this application to be filed					
	NAME, TITLE, AND FIRM (IF APPLICABLE)	ey Kara Koch, Deputy (	Commissioner			
OWNER For applications fo work on or in a cooperative or condominium building, the	COMPANY, CORPORATION, OR ORGANIZ (IF APPLICABLE)	ATION NYC DCAS (Cityv	vide Administrative	e Services)		
"owner" is the Co-op Board or Condominium Association. An	ADDRESS 1 Centre Street		CITY, STATE, ZIP (	ODE NY, NY 10007		
officer of the Co-op Board or Condominium Association must sign this application. Please consult the Instructions for Filing for additional information.	PHONE (DAY) 2 12.300.0200	FAX		jkoch@dcas.nyc.gov		
for additional information. SIGNATURE						
	SIGNATURE OF OWNER			DATE		

# ATTACHMENT 1 - SCOPE OF PHASE IB ARCHAEOLOGICAL INVESTIGATIONS LANDMARK COLONY (LPC #LP-01408) STATEN ISLAND, RICHMOND COUNTY, NEW YORK

Lead Agency:

The Mayor's Office of Environmental Coordination (MOEC)

Prepared for:
NFC Associates, LLC
25A Marble Loop
Staten Island, New York 10309
Contact: Ray Masucci
Principal
(718) 605-0900

by:

Carol S. Weed (MA, RPA)
Senior Project Manager, Cultural and Natural Resources
VHB Engineering, Surveying and Landscape Architecture, P.C.
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White Plains, New York 10606
(212) 857-7327

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- 3. 2014 Arborist Map Base with Grid Overlay

#### **INTRODUCTION**

NFC Associates, LLC (the Proponent) proposes to develop a 46-acre parcel owned by the City of New York located on a portion of Block 1955, Lot 1, in Richmond County (Staten Island). The parcel is roughly bounded by Walcott Avenue to the north, Brielle Avenue (aka Manor Road) to the east, Colonial Avenue and Forest Hill Road to the west, and the Staten Island Greenbelt to the south. The proposed project would require the disposition of City-owned land and zoning-related approvals from the City Planning Commission (CPC), which are subject to Uniform Land Use Review Procedure (ULURP) and City Environmental Quality Review (CEQR). The Project area is currently managed by the NYC Citywide Administrative Services (DCAS).

The proposed project will also require approval from the New York City Landmarks Preservation Commission (LPC) as it is an LPC Historic District (LPC #LP-01408). The Mayor's Office of Environmental Coordination (MOEC) is the lead agency for the environmental review of the proposed project and is undertaking coordinated review of the CEQR process with CPC and LPC. No Federal or State Actions are required for the proposed project.

Based on a project design dated March 11, 2014, the Proponent is proposing to develop an age-targeted community comprised of a mix of building styles and unit options, along with commercial and/or community facility spaces and accessory parking (the "Project": Figure 1, with study grid superimposed). Referred to as the Landmark Colony, the Project's key elements include:

- Rehabilitation of five (5) existing historic buildings: three for residential use; one for mixed-use of commercial, community facility, and residential; and one for storage
- Three (3) new residential elevator buildings
- Four (4) clusters of new residential Carriage Homes
- One (1) new clubhouse with associated swimming pool
- One (1) new commercial building Nine (9) new landscape element/garden structures
- Stabilization of one existing building "ruin"
- One (1) new community garden space for residents of the development
- Fencing of the existing potter's field and construction of a public memorial in honor of the potter's field
- Parking lots, access roads, and entry gates off Forest Hill Road and Brielle Road
- Underground utilities

While some of the Project buildings are historic or will be based on historic footprints (for example, roads), the other buildings and structures will be newly constructed for the Project. Because the Project will modify much of the existing landscape of the Farm Colony portion of the LPC-defined New York City Farm Colony – Seaview Hospital Historic District (LPC #LP-01408), there exists the potential to impact archaeological features which could provide significant information about the culture history of the setting. Prior research (Zavin 1985; Grossman et al. 1986) into the use history of the Farm Colony parcel has defined four use periods:

- 1) Farmstead (<A.D. 1830s);
- 2) Richmond County Poor House Farm (+A.D. 1829 to 1901);
- 3) New York City Farm Colony (A.D. 1901-1925); and
- 4) New York City Colony, dependent infirm (<u>+</u> 1925-1970s).

As may be apparent in the use period names, there were functional shifts on the landscape from single-family farmsteads to a public farm with other functions to a public facility with minimal to no farming. Whether or not these functional shifts are identifiable in the archaeological record is currently unknown as no systematic archaeological survey of the Farm Colony property has been conducted.

Based on a 1911 topographic survey map of the Farm Colony area (Figure 2) and references in various public documents, it is presumed that a cemetery (aka potter's field) was present on the Colony grounds. The location of the potter's field, however, is unconfirmed. A ground-penetrating radar (GPR) survey strip was completed in December 2013 and the results of that work suggested that subsurface features were present in the area designated on the 1911 map as adjacent to the cemetery boundary.

The Project designers have developed a design that avoids the cemetery as drawn on the 1911 map and employs the use of the buffers to ensure that the cemetery is undisturbed. In order to confirm the cemetery boundaries and that the buffers would protect the cemetery, LPC requested archaeological investigations be completed. Also, LPC requested additional research to define any other areas of archaeological sensitivity, if indeed these were present outside of the cemetery area. To these ends, VHB developed a Work Plan that outlined the archaeological work that would be completed going forward and before design finalization.

The Work Plan (March 25, 2014) outlined the Phase IA and Phase IB investigations in some detail and sketched the steps after Phase IB. The plan, developed by VHB in March, was submitted to EDC on April 24 and LPC on May 4 and accepted by both agencies. The Phase IA investigations as outlined in the plan were conducted in April and the End-of-Research (EOR) Summary was submitted to EDC on April 24 and LPC on May 4 and accepted by both agencies. On May 15, Amanda Sutphin met with Carol Weed and others on-site to review the existing conditions in the areas called out for systematic investigation during Phase IB. The following section outlines the work that will be completed under the LPC Application for this phase of archaeological work.

#### PHASE IB INVESTIGATIONS AND REPORTING

Based on the LPC approved field plan, the field investigations will take place in late May/early June 2014. These field investigations will include specific actions in pre-selected locations including the potter's field, the design buffers, and the so-called administrative core of the Colony.

- Potter's Field, disturbed fill area, perimeter profiles (east, north, and west) to determine depth of fill.
   The profiles will be hand-excavated and will measure, including steps, no more than 2 meters vertical by 1 meter horizontal. The exact profile locations will be determined following perimeter survey.

   The maximum total excavation for this area is 8 square meters.
- 2. Potter's Field, east side perimeter features: the "entrance gate" and the morgue foundation will be clearly defined on the surface and mapped. The east side perimeter will be systematically walked to determine if other surface features are present. If present, these also will be defined on the surface and mapped. The general location of east side is marked "Line D" on Figure 3.
- 3. Potter's Field, north and west perimeters adjacent to the fill: will be walked systematically and any surface features surface defined and mapped. The north and west boundaries are defined by the property boundaries.
- 4. Potter's Field, west outside of fill area: will be systematically walked to identify and record the presence of gravestones and associated shaft depressions, memorial plantings like the 'daffodils' noted in the field on May 15 (see location marked Pollitt on Figure 3), and other features if present. These features will be mapped.
- 5. If gravestones and possible shaft depressions are identified, their areas may be subjected to GPR investigations.
- 6. GPR also may be used to identify the location of the filter bed line as shown on the 1915 utilities map. The filter bed line extended along the south perimeter of the reported cemetery location and that intersected the allee near the southeast corner of the cemetery. GPR survey for this feature will be confined to Survey Blocks N1000/E1000-1200.

- 7. Systematic walkover will be conducted north and east of Dormitory 1 & 2 in the reported areas of the Superintendent's Cottage, Dormitory 3 & 4, the Band Stand, and a store. These areas are referred to collectively as the administrative core of the Colony.
  - a) The Superintendent Cottage, its semi-circle drive, the bakery, and the chef's house were located the area encompassed on Figure 2 in Grid cells N400/E800-1000. The maximum total excavation for this area is 19 square meters (50 systematic shovel tests = 12.5 sq m + 6.5 sq m for feature definition).
  - b) Dormitory 3 & 4 is located in Survey Block N200/E1000.5-1200.5 east of the road that separates Dormitory 1&2 from Dormitory 3&4. The maximum total excavation for this area is 10 square meters (25 systematic shovel tests = 6.25 sq m + 3.75 sq m for feature definition).
  - c) The store and Band Stand were reportedly located east of the current Colony boundary in the vicinity of the ball field. Survey will be conducted in the southwest quadrant of Survey Block N400/E1200. The maximum total excavation for this area is 10 square meters (25 systematic shovel tests = 6.25 sq m + 3.75 sq m for feature definition).

The total excavation area will not exceed 47 square meters. The field and laboratory methods that will be used are standard and will adhere to the New York Archaeological Council guidelines as accepted by the NY SHPO.

#### Information Recordation

Standardized forms will be used to record field data. These include survey transect logs, shovel test summary forms, bag and special sample logs (if needed), and photograph logs. Most of the descriptive data recorded in the field will be recorded on paper forms. In order to ensure that these data are available in electronic format as soon as possible, data entry will be completed as fieldwork is being conducted. Where appropriate, digitized data also will be geo-rectified and incorporated on to the larger Project plan. The purpose of this is to build the archaeological sensitivity map as quickly as possible so that the results can be discussed meaningfully in the field with the lead agency and LPC.

#### Mapping, Provenience Control, and Systematic Walkover Survey

The systematic survey of the entire Farm Colony is not proposed. Rather, judgmental survey of areas considered possibly sensitive based on the documentation will be conducted. This survey, however, will be done systematically within the standard size survey blocks that are shown on Figures 1 through 3. The survey blocks measure 200 by 200 feet and are parts of a larger N/E grid that is overlaid electronically onto the Farm Colony base maps. The NO/E0 point is in the extreme southwest corner of the Project. All grid blocks are designated based on the N/E coordinate of their southwest corner.

Within each survey block, survey transects <u>outside of the Potters Field and buffer will be spaced at 50 foot</u> intervals. Surface survey transects <u>inside the potter's field and within the design buffers will be at 12.5 foot</u> <u>intervals</u>. The use of the foot-interval over a metric one is because the feature base of the Project is historic. Though there is a possibility that Native American use of the area occurred, these intervals would likely capture that evidence as well.

#### Shovel Test Excavations Outside of the Potter's Field and Design Buffers

Shovel testing will be restricted to blocks containing documented archaeological features outside of the potter's field and design buffers. The grid coordinates of these blocks are listed above and hachured on Figure 3. In total, the minimum number of shovel tests that will be excavated in a 200 by 200 foot block is 25. The

purpose of the systematic shovel testing is to define the context within which an anomaly or documented feature exists.

The shovel tests will measure 20 by 20 inches and be excavated to a minimum depth of 20 inches or confirmed C horizon soil (whichever comes first). All matrix will be screen by stratigraphic layer through ¼-inch hardware mesh. The strata will be described using standard soils terminology and Munsell color designations. The locations of all shovel tests will be mapped using GPS. Any features identified in plan or profile will be documented but not excavated.

#### GPR Survey and Subsurface Investigation within the Potter's Field and Design Buffers

No GPR survey will be conducted until the close interval walkover survey has been completed. Upon completion of that walkover, the GPR survey will be conducted following a plan that will be submitted under separate cover to LPC.

The goals of the GPR survey are two-fold: 1) to define the boundary of the potter's field and 2) define the extent of the anomaly field within the cemetery boundary. At present, the suspected location of the potter's field has been 'buffered' so that design efforts can continue. That buffer is 30 feet wide along the south edge of the potter's field as shown in the 1911 Topographic Survey map and 40 feet wide along the eastern boundary (Figure 1). For survey purposes, the buffer is defined as a 100-foot wide strip on each side.

#### <u>Artifact and Sample Recovery and Recordation</u>

All artifacts recovered will be recorded in the project's Field Sample (FS) log, assigned separate FS numbers by provenience: by block, coordinate, shovel test, and stratigraphic layer. In the unlikely event that piece-plotted artifacts are taken, these also will be listed separately within the FS log. Any non-artifact sample, i.e., flotation, C<sup>14</sup>, or soil samples, taken will be entered into the project's Special Sample (SS) log. Assigned FS and SS numbers will be used to track materials throughout the processing, analysis, and curation process.

As investigations progress, any organic materials encountered will be collected, provenienced, and forwarded to the specialists for analysis. In most cases, only charred vegetable remains (charcoal) will be submitted as  $C^{14}$  samples – optimally, single object samples approaching 1.06 oz. (30 gm). All radiocarbon samples will be submitted to Beta Analytic Inc.

#### **Laboratory Analyses**

The processing, cataloging, and data entry tasks associated with recovered artifacts and samples and the analysis of all records, maps, photographs, and cultural materials for the Project will be undertaken at VHB's office and at the subconsultant's office. All artifacts will be washed (unless detrimental to the item or the item is being submitted for specialized analyses). The artifacts will be sorted by into two gross classes (Native American and Historic) and then into functional classes (Native American chipped stone, ground and pecked stone, ceramics, other; Historic glass, ceramics, metal, plastic, other; Organic floral, animal bone, and human bone). The non-organic artifact analyses will be recorded using a computerized artifact inventory system. All temporally diagnostic artifacts will be described and if appropriate diagnostic elements will be photographed.

#### Phase IA/IB Report

The comprehensive Phase I report will present the results to date and the recommendations for further work. If further work is recommended, then the report should also present a draft research design and work plan for subsequent investigations. The Phase IA/IB report will include the Avoidance/Unanticipated Find Plan. The

Avoidance and Unanticipated Discovery Plan will include reference to monitoring or other action during installation of fencing in the vicinity of the cemetery and any other landscape features that may be emplaced in the cemetery area.

#### **AGENCY COORDINATION**

Because the time frame for the archaeological work is tightly compressed, it is important that the archaeological steps be closely coordinated with LPC. To this end, LPC is receiving periodic updates that detail what items in the Work Plan have been addressed. At major milestones (conclusion of the Phase IB fieldwork), VHB has requested an in-field meeting between the agency and the consultant team members. An additional visit may be suggested if the field work appears to warrant them.

#### **WORK SCHEDULE**

Work Schedule dates have been referenced earlier within the body of this Work Plan. The short-term milestones are

- Completion of Phase IB fieldwork, June 20
- Submission of Phase IB End-of-Fieldwork Summary, June 27

#### **PERSONNEL**

The Phase IA research and Phase IA/IB report compilation will be done by and under the supervision of Carol S. Weed (MA, RPA). She will be supported by the following VHB personnel: Senior Historic Preservation Planner Rita Walsh (MA); Historic Preservation Planner Nicole Benjamin-Ma (BA, MA in progress); Mathew Sloane (MA, GIS and Environmental Planner), and David Rosenberg (E.I.T, CAD). The other participants in that deliverable will be the VHB subconsultant chosen to do the Field IB fieldwork and the GPR provider.

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Anonymous. NYC Municipal Archives, dpc\_2751, View of Ground [Farm Colony] Showing Office and Various Buildings.

Anonymous. NYC Municipal Archives, dpc\_2754, Original Almshouse.

Anonymous. NYC Municipal Archives, dpc\_2756, Exterior of Present Almshouse.

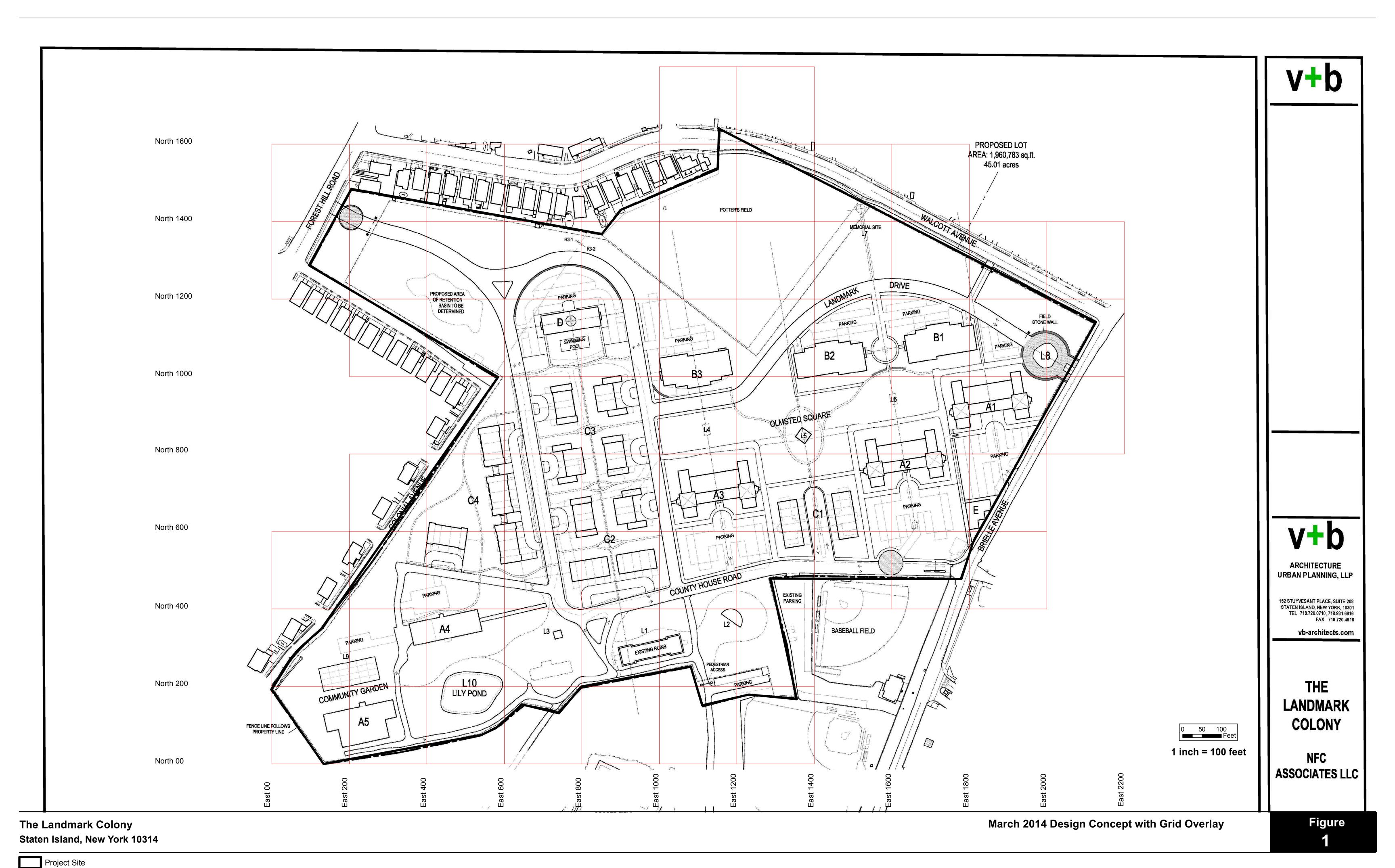
Anonymous. NYC Municipal Archives, dpc\_2757, The Farm. Hedley Photo 1904.

Anonymous. NYC Municipal Archives, dpc\_2805, Farm Colony cottage.

Anonymous. NYC Municipal Archives, dpc\_2807, Farm Colony.

Anonymous. NYC Municipal Archives, dpc\_2808, Farm Colony womens pavilion.

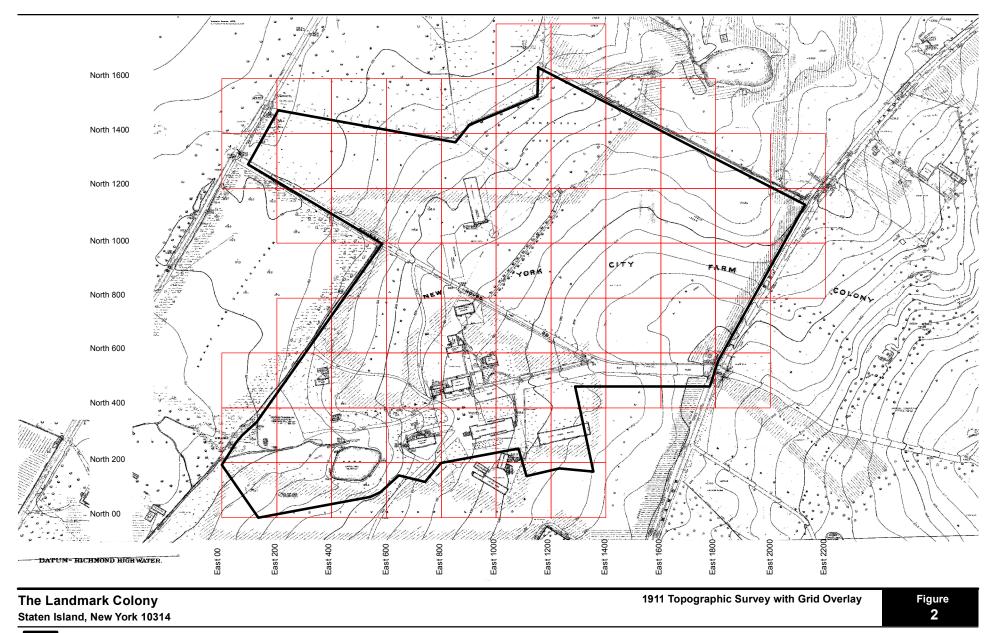
Anonymous. NYC Municipal Archives, dpc\_2809, Farm Colony panorama.



Version: 05/1

Index Grid

Sources: 1. New York (City). Dept. of City Planning 2013. Statent Island MapPLUTO (Edition 13v2). New York City: NYC Department of City Planning.

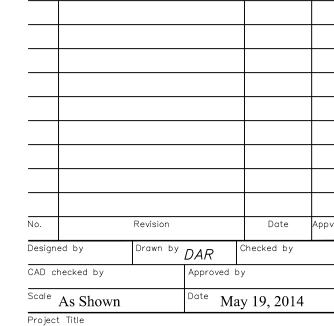


Project Site
Index Grid

Version: 5/19/14

\\VHB\PROJ\NEWYORKCITY\29085.00 BRIELLE AVENUE SITE PLAN\CAD\LD\PLANMISC\PRELIM 050714 37715-TOPO





## <u>Appendix B – NY SHPO Inventory Form</u>



#### NEW YORK STATE HISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM

NYS OFFICE OF PARKS, RECREATION & HISTORIC PRESERVATION  $(518)\ 237\text{-}8643$ 

For Office Use Only--Site Identifier

Project Identifier	
Your Name Carol S. Weed Address VHB, 50 Main St., Suite 360, White Plains, NY 10606	Date December 8, 2014 Phone (212)857.7327
Organization (if any)  1. SITE IDENTIFIER(S) 29085, Potters Field (Features 1 through 16)  2. COUNTY Richmond One of the followin  INCORPORATED  UNINCORPORATED VILLAGE OR	ГOWNSHIP VILLAGE
3. PRESENT OWNER NYC DCAS (Citywide Administrative Services Address 1 Centre Street, NY, NY 10007 (Contact: Joey Kara Koch, De	eputy Commissioner)
4. SITE DESCRIPTION (check all appropriate categories):Struc Superstructure: complete partial complete partial complete below (ground Structural subdivisions apparent X_Only some superstructured construction materials (be as specific as possible construction materials (be as specific as possible construction).	ollapsed not evident d level) not evident surface traces visible
Grounds Under cultivationSustaining erosionNever cultivatedX_Previously cultivated Soil Drainage: excellent good X_ Distance to nearest water from structure (approx.) _r Elevation: 200 ft AMSL	FloodplainPastureland fair poor
5. Site Investigation (append additional sheets, if necessary):  Surface date (s) June, 2014 Site map (submit vaccollection  Subsurface date(s)  Testing: shovel X coring other no. units 52 (Submit plan of units vaccollection)	unit size
Excavation: unit size 3 no. of units  (Submit plan of units with form*)  * Submission should be 8 ½" by 11", if feasible	
Investigator VHB and Chrysalis Archaeology	

Manuscript or published report (s) (reference fully): Lisa Geiger, Alyssa Loorya, and Carol S. Weed. 2014 Phase IA/IB Archaeological Assessment, NYC Farm Colony (LPC #LP-01408), Staten Island, Richmond County, New York. Report submitted by VHB to NYC Landmarks Preservation Commission.

Presen	nt repository of materials
6.	Site inventory:
	a. Date constructed or occupation period Potters field in use between 1904-1924
	b. Previous owners, if known
	c. Modifications, if known
	(append additional sheets, if necessary)
	(append additional sheets, if necessary)
7.	Site documentation (append additional sheets, if necessary): see report
	a. Historic map references
	1) NameDate Source
	Present location of original, if known
	2) NameDateSource
	Present location of original, if known
	b. Representation in existing photography
	1) Photo date Where located
	2) Photo date Where located
	a Primary and secondary source of decumentation (reference fully)
	c. Primary and secondary source of documentation (reference fully) see main text and references cited
	d. Persons with memory of site None known
	,
	2) Name Address
8.	List of material remains other than those used in construction (be as specific as possible in identifying object
and m	aterial):
	If prehistoric materials are evident, check here and fill out prehistoric site form.
0	
9.	Map References: Map or maps showing exact location and extent of site must accompany this form and be
ıdentıf	fied by source and date. Keep this submission to 8½" x 11", if possible.
	HIGGO 71 /2 M
	USGS 71/2 Minute Series Quad. Name Arthur Kill 7.5 minute; see attached Figure 1.1
	For Office Use OnlyUTM Coordinates
4.0	
10.	Photography (optional for environmental impact survey): Please submit a 5"x7" black and white print(s)

showing the current state of the site. Provide a label for the print(s) on a separate sheet.

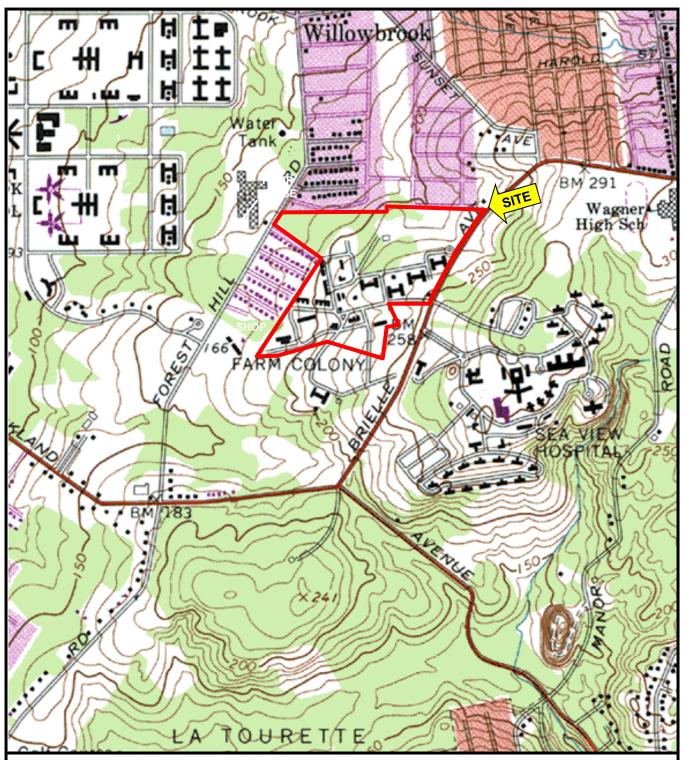


FIGURE 1 - SITE LOCATION MAP

SITE NAME: The Landmark Colony

STREET ADDRESS: Brielle Avenue, Staten Island, New York

NYC TAX LOT NO.: Block 1955, Lot 1 (portions of)

PROJECT NUMBER: 29085.00

BASE MAP SOURCE: USGS Topographic Map – Arthur Kill, NY Quadrangle



## Appendix C – Shovel Test Summary

	Appendix C-1: Administrative Core Shovel Test Summary				
STP#	Stratum	Depth (cm)	Soil Description	Artifact Summary/Notes	
A1	1	0-6	10YR 3/2 sandy loam		
A2	1	0-4	10YR 3/2 sandy loam		
	II	4-19	10YR 4/3 clay silt		
	Ш	19-40	7.5YR 4/3 clay silt		
	II	6-58	10YR 4/3 clay silt	aluminum can (discarded)	
	III	58-69	7.5YR 6/4 silty clay		
A3	1	0-4	10YR 3/2 sandy loam		
	11	4-19	10YR 4/3 loamy silt		
	III	19-40	7.5YR 4/6 mottled with 7.5YR 6/4 clay silt		
A4	1	0-20	10YR 4/3 loamy silt	1 window glass frag, 4 bottle glass, 1 whiteware	
	II	20-40	7.5YR 5/3 clay silt mottled with 10YR 5/3 clay sand		
A5			not excavated - concrete sidewalk		
B1	1	0-4	10YR 3/2 loamy silt		
	II	4-20	10YR 3/4 loamy silty	1 redware, 1 window glass, 1 nail	
	III	20-30	7.5YR 5/3 silty clay		
B2	I	0-4	10YR 3/2 sandy loam	1window glass	
	II	4-25	10YR 3/4 sandy loam		
	III	25-35	10YR 6/2 sand	concrete debris (discarded)	
	IV	35-46	7.5YR 5/3 silty clay		
В3	I	0-6	10YR 3/2 sandy loam	metal hook	
	II	6-35	10YR 3/4 clay silt	clay pipe stem	
	III	35-42	7.5YR 5/3 silty clay		
B4	1	0-4	10YR 3/2 sandy loam		
	II	4-54	10YR 4/3 clay silt	redware, large stones (discarded)	
	III	54-68	7.5YR 5/3 clay		
B5			Not excavated - roadway		
C1	1	0-10	10YR 3/2 loamy silt		

	Appendix C-1: Administrative Core Shovel Test Summary					
STP#	Stratum	Depth (cm)	Soil Description	Artifact Summary/Notes		
	II	10-39	10YR 3/4 loamy silt			
	III	39-49	7.5YR 5/3 silty clay			
C2	I	0-6	10YR 3/2 sandy loam			
	II	6-14	10YR 3/4 compact loamy silt	small coal frag (discarded)		
	III	14-40	7.5YR 5/3 clay silt			
C3	I	0-6	10YR 3/2 sandy loam			
		6	excavation halted at concrete pad @ 6cm bgs			
C4	I	0-7	10YR 3/2 silty loam			
	II	7-19	10YR 43/4 loamy silt	metal fragment, glass		
	III	19-49	7.5YR 5/3 clay silt			
C5	I	0-7	10YR 3/2 silty loam			
	II	7-23	10YR 3/4 compact loamy silt			
		23	excavation halted at concrete footer for manhole			
D1	1	0-5	10YR 3/2 sandy loam			
	II	5-19	10YR 5/3 loamy silt			
	III	19-37	7.5YR 4/3 clay silt			
D2	1	0-4	10YR 3/2 sandy loam			
	II	4-17	10YR 5/3 silty loam	glass; brick and mortar debris (discarded)		
	II	17-71	10YR 4/2 silty sandy loam	brick and wood rubble (discarded)		
		71	terminated at a large stone and brick debris impas	se		
D3	1	0-6	10YR 4/2 sandy loam			
	II	6-21	10YR 5/3 loamy silt	2 redware sherds		
	III	21-40	7.5YR 4/3 clay silt			
D4	1	0-12	10YR4/2 sandy loam			
		12	excavation halted at concrete sidewalk			
D5	I	0-3	10YR 3/2 sandy loam			
	II	3-22	10YR 4/3 clay silt			
	III	22-44	7.5YR 4/3 clay silt			

	Appendix C-1: Administrative Core Shovel Test Summary				
STP#	Stratum	Depth (cm)	Soil Description	Artifact Summary/Notes	
E1	1	0-2	10YR 4/3 sandy loam		
	II	2-18	10YR 4/4 sandy clay		
	III	18-23	10YR 5/1 sand with 10 % pebble inclusions		
	IV	23-40	7.5YR 4/4 silty clay with 10% pebble inclusions		
E2	1	0-8	10YR 3/3 sandy loam		
	II	8-24	5 YR 4/6 clay sand		
	III	24-32	10YR 4/3 clay silt		
E3	1	0-3	10YR 2/2 sandy loam		
	II	3-20	10YR 4/3 sandy loam		
	III	20-37	10YR 4/4 silty clay		
	IV	37-50	7.5YR 5/6 silty clay		
	II	4-17	10YR 3/4 loamy silt		
	III	17-30	5 YR 5/6 silty clay		
E5	1	0-13	10YR 3/2 sandy loam		
	II	13-39	10YR 4/4 sandy clay loam		
	III	39-48	5 YR 4/6 clay sand		
F1			Not excavated - large stone mound		
F2	1	0-5	10YR 4/3 sandy loam		
	II	5-37	10YR 4/4 sandy clay loam		
	III	37-47	7.5YR 4/4 silty clay		
F3	1	0-4	10YR 3/2 sandy loam		
	II	4-28	7.5YR 4/6 clay sand		
	III	28-40	5 YR 4/6 clay sand		
	IV	40-50	10YR 4/4 sandy clay		
F4			Not excavated - concrete roadway		
F5	I	0-3	10YR 3/2 sandy loam		
	II	3-27	10YR 4/4 sandy clay loam	metal handle	
	III	27-40	5 YR 4/6 clay sand		

	Appendix C-1: Administrative Core Shovel Test Summary				
STP#	Stratum	Depth (cm)	Soil Description	Artifact Summary/Notes	
G1	1	0-4	10YR 3/2 sandy loam		
G2	1	0-1	10YR 3/2 silty loam		
	11	1-11	10YR 3/4 silty loam		
	III	11-31	5 YR 5/6 silty clay		
G3	1	0-4	10YR 3/2 silty loam		
		4	excavation halted at concrete sidewalk		
G4	1	0-3	10YR 3/2 sandy loam		
	11	3-6	10YR 3/4 silty loam		
		6	excavation halted at concrete sidewalk		
G5	1	0-6	10YR 3/2 loam		
	II	6-26	10YR 4/3 silty loam	glass	
	III	26-52	10YR 5/3 mottled with 10YR 5/4 loamy silt		
	IV	52-58	7.5YR 4/6 clay sand		
G6	I	0-5	10YR 3/2 sandy loam		
	II	5-13.5	10YR 4/3 loamy silt		
	Ш	13.5-38	7.5YR 4/6 clay sand with 10YR 5/6 sandy clay		
G7			Not excavated - located on stone mound 13' above	e concrete curb	
H1	I	0-5	10YR 3/2 silty loam		
	II	5-10	10YR 5/3 silty loam		
	Ш	10-37	7.5YR 5/6 silty clay		
H2	I	0-3	10YR 3/2 silty loam		
	II	3-16	10YR 5/3 silty loam	1 whiteware sherd	
	III	16-38	7.5YR 5/6 silty clay		
H3	I	0-5	10YR 3/2 silty loam		
		5	excavation halted - located atop concrete sidewalk	·	
H4	1	0-20	10YR 3/2 sandy loam		
	II	20-35	10YR 4/4 sandy clay loam	1 window glass fragment	
	III	35-65	5 YR 4/6 clay sand		

	Appendix C-1: Administrative Core Shovel Test Summary					
STP#	Stratum	Depth (cm)	Soil Description	Artifact Summary/Notes		
H5			Not excavated - located atop stone, brick, and mo	Not excavated - located atop stone, brick, and mortar rubble		
H6			Not excavated - located atop stone, brick, and more	rtar rubble		
H7			Not excavated - located atop stone, brick, and more	rtar rubble		
H8	1	0-4	10YR 3/2 sandy loam			
	П	4-14	10YR 4/4 sandy clay loam	2 window glass fragments		
	III	14-23	10YR 5/1 sand with concrete			
	IV	23-37	10YR 2/1 asphalt and rubble			
	V	37-45	7.5YR 6/1 concrete and rubble			
	VI	45-50	5 YR 4/6 clay sand			
I1	1	0-3	10YR 3/2 sandy loam			
	II	3-11	10YR 4/3 loamy silt	glass, 1 Prosser button		
	III	11-35	7.5YR 4/4 clay sand			
12	1	0-4	10YR 3/2 sandy loam			
	II	4-14	10YR 4/3 loamy silt	glass, 1 whiteware sherd		
	III	14-40	7.5YR 4/4 clay sand			
13			Not excavated - roadway			
14	1	0-10	10YR 3/2 sandy loam			
	П	10-34	10YR 4/3 loamy silt	glass		
	III	34-45	7.5YR 6/6 clay silt			
15	1	0-3	10YR 3/2 sandy loam			
	II	3-40	10YR 3/2 sandy loam	brick, glazed brick, and mortar rubble (discarded)		
16	1	0-6	10YR 3/2 sandy loam			
	II	6-40	10YR 4/3 loamy silt	glass, ceramic		
	Ш	40-52	7.5YR 6/6 clay silt			
17	1	0-2	10YR 3/2 sandy loam			
	П	2-9	10YR 4/3 loamy silt			
	Ш	9-20	10YR 5/6 silty sand	brick fragments (discarded)		

	Appendix C-1: Administrative Core Shovel Test Summary					
STP#	Stratum	Depth (cm)	Soil Description	Artifact Summary/Notes		
	IV	20-33	10YR 5/2 sand	late historic glass; brick, mortar, fire brick, and cement (discarded)		
18	1	0-13	10YR 3/2 sandy loam			
	II	13	excavation halted at concrete impasse			
J4	1	0-3	10YR 3/2 silty loam			
	II	3-30	10YR 4/3 silty loam	small charcoal fragment(discarded)		
	III	30-51	7.5YR 4/4 sandy silty loam			
J5	1	0-5	10YR 3/2 silty loam			
	II	5-20	10YR 4/3 silty loam	clay sewer pipe fragment		
	III	20-47	7.5YR 5/4 silty loam			
J6	1	0-4.5	10YR 3/2 silty loam			
	II	4.5-33	10YR 4/3 silty loam	bone, window glass, earthenware ceramics		
	III	33-50	7.5YR 5/6 clay silty loam			
J7	1	0-3.5	10YR 3/2 silty loam			
	II	3.5-23	10YR 4/6 and 10YR 4/4 silty loam	brick fragments (discarded)		
	III	23-30	10YR 3/4 sandy silty loam	brick and stone rubble (discarded)		
		30	excavation halted at angular stone rubble impasse			
J8	1	0-1	10YR 3/2 silty loam			
	II	1-15	10YR 4/3 silty loam			
	III	15-30	10YR 3/4 silty loam	stone and brick fragments (discarded)		
	IV	30-39	10YR 5/6 silty loam			
K5	1	0-5	10YR 3/2 silty loam			
	II	5-50	10YR 5/3 silty loam	glass, ceramic		
		50	excavation halted - fill related to manhole 5 ft nor	th		
К6			Not excavated - located atop metal and 20th c. trash deposit			
K7	1	0-6	10YR 3/2 silty loam			
	П	6-12	10YR 5/3 silty loam	glass, nail		
	III	12-34	7.5YR 5/6 silty clay			

	Appendix C-1: Administrative Core Shovel Test Summary				
STP#	Stratum	Depth (cm)	Soil Description	Artifact Summary/Notes	
K8	I	0-2	10YR 3/2 sandy loam		
	II	2-11	10YR 5/3 silty loam	2 glass shards	
	III	11-33	7.5YR 5/6 silty clay		
К9			Not excavated - located atop concrete tank		

		Appendix	C-2: Cemetery Area Shovel 1	Test Summary
STP#	Stratum	Depth (cm)	Soil Description	Artifact Summary/Notes
C-STP 1	1	0-3	10YR 3/2 sandy loam	
	П	3-8	10YR 4/3 loamy clay	
	Ш	8-35	7.5YR 5/6 clay	
C-STP 2	I	0-6	10YR 2/1 sandy loam	
	П	6-26	10YR 4/3 loamy silt	3 window glass fragments
	Ш	26-59	7.5YR 5/4 silty clay	
C-STP 3	1	0-8	10YR 2/1 sandy loam	
	П	8-36	10YR 4/4 loamy silt	
	Ш	36-50	7.5YR 5/6 silty clay	

## Appendix D – Artifact Summary

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
1	5		1	Architectural	Window Glass	Glass				clear							
1	1	7/11/2014	1	Household	Tableware, General	Refined Earthenware	Whiteware	Indeterminate				body		1815 - present	ware	Azizi et al 1996	
1	3		1	Household	Tableware, General	Porcelain		Indeterminate				body					indeterminate porcelain type, very small fragment
1	2		1	Indeterminate	Indeterminate	Refined Earthenware		Slip Decorated		brown		fragment					possibly tile, piping, or hollowware ceramic
1	6		1	Indeterminate	Bottle	Common Glass		Indeterminate		aqua	Indeterminate	base	Mold Blown, Indeterminate				footed base, molded bottom (machine or mouth blown)
1	7		1	Indeterminate	Indeterminate	Rubber						complete					rubber ring 1"(2.54 cm) diameter with interior fibers - gasket?
1	4		1	Indeterminate	Indeterminate	Milk Glass						fragment		1743 - present	material	Miller et al 2000	very small fragment, probably hollowware or glass insulator
10	1	7/2/2014	1	Architectural	Nail, Tack	Metal						complete	Indeterminate				
10	3	7/2/2014	6	Architectural	Window Glass	Glass				colorless		fragment	Indeterminate				
10	2	7/2/2014	1	Indeterminate	Hollowware	Coarse Earthenware	Redware	Unglazed				base					
11	1	7/2/2014	18	Architectural	Window Glass	Glass				clear							
11	2	7/2/2014	2	Indeterminate	Rubber	Rubber											unidentifiable rubber frags; discarded
12	1	7/2/2014	1	Architectural	Nail	Metal						fragment	Indeterminate				heavily rusted
12	3	7/2/2014	1	Household	Container Glass	Common Glass				dark green		body	Indeterminate				very small shard
12	2	7/2/2014		Household	Hollowware	Porcelain	Unidentified Porcelain					body					
13	2	7/2/2014	1	Architectural	Window Glass	Glass				colorless		fragment	Indeterminate				
13	1	7/2/2014	7	Indeterminate	Indeterminate	Metal						fragment s					heavily rusted, curved, metal fragments
14	2	7/2/2014	1	Indeterminate	Indeterminate	Metal						fragment					heavily rusted

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
14	1	7/2/2014	1	Ornament/De corative	Flower Pot	Coarse Earthenware	Redware	Unglazed				rim					
15	1	7/2/2014	1	Indeterminate	Handle	Metal						complete					heavily rusted, roundish; possible drawer pull, bucket handle, or other kind of handle
16	2	7/3/2014	1	Household	Hollowware	Porcelain	Bone China	Undecorated				rim		1795- present	ware	Miller et al 2000	
16	1	7/3/2014	1	Indeterminate	Hook	Metal											rusted, maybe a hanging hook
16	3	7/3/2014	1	Personal	Smoking Pipe	Clay	White Ball Clay	Molded Pattern			Geometric Pattern	pipe stem fragment					mouthpiece, cross hatched pattern, 5/64" bore hole
17	1	7/8/2014	1	Architectural	Window Glass	Glass				clear		fragment					
18	1	7/8/2014	1	Architectural	Window Glass	Common Glass				aqua		fragment					
19	2	7/8/2014	1	Clothing	Button	Porcelain				white		complete		1840 - 1960	material	Sprague 2003	Prosser button with 4 holes
19	1	7/8/2014	1	Household	Bottle	Common Glass				green		base	Indeterminate				light green, metallic residue possibly from pontil? Form and color makes pontil unclear
2	38	6/30/2014	1	Architectural	Window Glass	Glass				clear							heat-damaged glass
2	39	6/30/2014	10	Architectural		Refined Earthenware				white		fragment s					white undecorated tile
2	70	6/30/2014	9	Architectural	Window Glass	Glass				clear		Ì		İ			
2	71	6/30/2014	6	Architectural	Tile	Refined Earthenware				white							white square tile
2	28	6/30/2014	2	Architectural	Window Glass	Glass				clear							
2	29	6/30/2014	1	Architectural	Window Glass	Glass				aqua							
2	48	6/30/2014	1	Faunal	Bone	Bone						mammali an long bone					mammal long bone (probably pig radius)
2	49	6/30/2014	1	Faunal	Shell Fragment	Shell						clam					half of clam
2	20	6/30/2014	7	Household	Container Glass	Glass				clear		finish		1910 - present	form	www.sha.org/ bottle/	external thread wide-rim finish

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
2	21	6/30/2014	1	Household	Container Glass	Glass				clear		finish		1910 - present	form	www.sha.org/ bottle/	thin external thread wide-rim finish
2	15	6/30/2014	2	Household	Bottle	Glass		Embossed		clear	bells	body and base		1893 - ?	form		machine made, embossed with 3- part bells or similar decorative objects
2	22	6/30/2014	1	Household	Jar, Apothecary	Glass				clear		body, neck and finish		1882 - 1950	form	www.sha.org/ bottle/	4 panel/square body, evidence of metal closure (lightening style closure)
2	19	6/30/2014	1	Household	Bottle	Glass				clear		neck					machine made neck with finish not extant
2	18	6/30/2014	1	Household	Bottle	Glass				clear		neck and finish					brandy finish, machine made
2	16	6/30/2014	1	Household	Bottle, Liquor	Glass		Embossed		clear		body					"GIN" embossed on paneled/square vessel
2	46	6/30/2014	1	Household	Flatware	Ironstone	Ironstone/St one China	Painted		yellow, brown, black	Geometric Pattern	body		1840 - present		Miller et al 2000	yellow band with brown and black outlined diamonds at marley
2	14	6/30/2014	1	Household	Bottle	Glass		Embossed		clear	Geometric Pattern	body					crosshatch embossing
2	13	6/30/2014	5	Household	Bottle, Milk	Glass		Embossed		clear		body		1	decorati on	http://www.dai rylea.com/Abo utUs/History.a spx	Embossed various portions of "DAIRYLEA" League formed 1907, under DLCA 1923 (see ref)
2	12	6/30/2014	7	Household	Bottle, Milk	Glass		Embossed		clear		body		1907/192 3 - ?	decorati on	http://www.dai rylea.com/Abo utUs/History.a spx	

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
2	24	6/30/2014	1	Household	Bottle, Milk	Glass				clear		finish		1886 - ?		Miller et al 2000	
2	17	6/30/2014	3	Household	Bottle	Glass				clear		neck and finish					partially mended; brandy finish, machine made
	25	6/30/2014		Household	Bottle	Glass				blue		body					
	26	6/30/2014	2	Household	Bottle	Glass				green		body					
	27	6/30/2014	4	Household	Bottle	Glass				amber		body					
2	32	6/30/2014	1	Household	Bottle	Glass		Embossed		aqua		base					machine made suction scar, 4 embossed on base
	34	6/30/2014		Household	Container Glass		Camival Glass	Molded Pattern			Geometric Pattern	rim				Miller et al 2000	possible pitcher with molded geometric body and iridescent appearance
2	35	6/30/2014	2	Household	Bottle, Milk	Glass		Embossed		clear		body		1907/192 3 - ?	on	rylea.com/Abo	Heat damaged fragments, embossed various portions of "DAIRYLEA DAIRYMEN'S League CO-OPERATIVE ASSOCIATION INC." League formed 1907, under DLCA 1923 (see ref)
2	36	6/30/2014	3	Household	Container Glass	Glass				clear		body					unidentifiable heat- damaged glass
2	40	6/30/2014		Household	Mug		White Granite	Stamped		white		base and body		1916 - present	on	kpa.proboards .com/thread/2 62	thick base as foot around bottom, stamped "New York City Property 1930" around "Jackson Vitrified China" on base. 1930 date or pattern? JVC founded 1916 Falls Creek, PA.
2	41	6/30/2014	2	Household	Mug	Ironstone	White Granite					rim		1870 - 1930		Miller et al 2000	possibly top portion to cat. 40

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
2	42	6/30/2014	2	Household	Bowl	Ironstone	White Granite					body and rim		1870 - 1930	ware	Miller et al 2000	
2	43	6/30/2014	1	Household	Coffee Cup	Ironstone	White Granite	Molded Pattern			Geometric Pattern	body and rim		1842 - 1930	ware	Miller et al 2000	coffee mug with simple geometric paneling on handle
2	10	6/30/2014	1	Household	Bottle	Glass		Embossed		green		base					"BRANCA" on base
2	45	6/30/2014	1	Household	Flatware	Ironstone	Ironstone/St one China	Painted		green	Banded	base, body, and rim		1840 - present	decorati on	Miller et al 2000	2 green bands at rim, one at marley
2	44	6/30/2014	4	Household	Flatware	Ironstone	White Granite							1870 - 1930	ware	Miller et al 2000	
2	60	6/30/2014	2	Household	Indeterminate	Glass				clear	Paneled	body					paneled with 6 uneven sides
2	69	6/30/2014	1	Household	Container Glass	Glass				clear		finish	Mold Blown, Machine	1893 - ?	finish	Miller et al 2000	wide mouth with threads
2	52	6/30/2014	3	Household	Bottle, Milk	Glass		Embossed		clear		body	Mold Blown, Machine	1907/192 3 - present	decorati on	rylea.com/Abo utUs/History.a	Embossed various portions of "DAIRYLEA DAIRYMEN'S League CO-OPERATIVE ASSOCIATION INC." League formed 1907, under DLCA 1923 (see ref)
2	68	6/30/2014	1	Household	Container Glass	Glass				aqua		finish					wide mouth container
2	67	6/30/2014	1	Household	Indeterminate	Glass		Molded Pattern		light green	Banded	body		1840 - 1940	color	www.vaseline glass.org	horizontal molded bands, probably Vaseline/uranium glass based on color
2	66	6/30/2014	1	Household	Indeterminate	Glass				aqua		body		Ì			
2	65	6/30/2014	2	Household	Bottle	Glass				amber		body					
2	64	6/30/2014	1	Household	Bottle	Glass				clear		neck and finish					1" (2.54cm) diameter wide beam finish with tapering off mold seam
2	63	6/30/2014	1	Household	Bottle	Glass				clear		finish	Mold Blown, Machine	1899 - ?	form	Miller et al 2000	mold seam at broken finish,

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
																	relatively small diameter (.7"[1.77 cm])
2	73	6/30/2014	1	Household	Hollowware	Ironstone	White Granite					handle		1870 - 1930		Miller et al 2000	robust cup handle
2	61	6/30/2014	11	Household	Indeterminate	Glass				clear		body					unidentifiable thick container/vessel glass
2	72	6/30/2014	2	Household	Hollowware	Ironstone	White Granite			white		body and rim		1870 - 1930		Miller et al 2000	straight rim
2	59	6/30/2014	1	Household	Indeterminate	Glass				clear		body and rim					straight rim without lip, wide mouth - wide-rim glass container/drinking vessel?
2	58	6/30/2014	2	Household	Bottle	Glass				clear		neck and finish	Mold Blown, Machine	1899 - ?	form	2000	Partially mended; machine made with "clubsauce" style finish
2	57	6/30/2014	1	Household	Bottle	Glass		Embossed		clear		base					Machine made base embossed "MICA" and "NEAPOLI" and "6". Probably Minneapolis.
2	37	6/30/2014	2	Household	Container Glass	Glass				aqua							unidentifiable heat- damaged glass
2	51	6/30/2014	2	Household	Bottle, Milk	Glass				clear		neck and finish	Mold Blown, Machine	1886 - ?		Miller et al 2000	
2	55	6/30/2014	1	Household	Indeterminate	Glass		Embossed		clear	Floral	body					machine made with body seam, floral embossed design
2	54	6/30/2014	1	Household	Bottle	Glass		Embossed		clear		body					small fragment with "N S" embossed remnant
2	53	6/30/2014	2	Household	Bottle, Milk	Glass		Embossed		clear		base	Mold Blown, Machine		decorati on	utUs/History.a spx	style of bottles

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																	ASSOCIATION INC." League formed 1907, under DLCA 1923 (see ref). Retain "ONE QUART" and parts of patent info in embossed mark. Machine made base suction mark.
2	62	6/30/2014	4	Household	Drinking Vessel	Glass		Molded Pattern		clear		body					molded with repeating ridges - probably drinking vessel
2	2	6/30/2014	1	Household	Bottle	Glass		Molded Pattern		clear	Paneled		Mold Blown, Machine	1893 - ?		2000	machine made with crystalline shape made by pentagonal panels, 9 embossed on base
2	9	6/30/2014	1	Household	Tumbler	Glass				clear		base and body					tall glass tumbler without extant identifiers
2	8	6/30/2014	1	Household	Flask	Glass		Embossed		clear			Mold Blown, Machine				flask shaped base with D inside diamond - Dominion Glass Co., operating 1928 - 1970s
2	7	6/30/2014	1	Household	Bottle	Glass		Embossed		clear			Mold Blown, Machine			2006	Embossed on side "ONE Q(uart)" with Owens OI mark on base from Plant 17 - Clarion, PA, in operation 1932 - present.
2	6	6/30/2014	1		Container Glass	Glass		Embossed		clear		base					1306 embossed on base to be read from inside - probably tumbler/drinking vessel

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2	5	6/30/2014	3	Household	Bottle	Glass				clear		base					bottle base frags without extant marking
2	3	6/30/2014	1	Household	Bottle	Glass		Embossed		clear		base	Mold Blown, Machine	1923 - c.1982	decorati on	www.sha.org/ bottle/	HA form = Hazel- Atlas Glass Co.
2	1	6/30/2014	1	Household	Bottle	Glass		Embossed		clear		base and body	Mold Blown, Machine	1923 - c. 1982		www.sha.org/ bottle/	machine made with side seams, HA and 8 2 8 9 embossed on base. HA form = Hazel-Atlas Glass Co.
2	4	6/30/2014	1	Household	Container Glass	Glass		Embossed		clear		base	Mold Blown, Machine	1893 - ?		Miller et al 2000	machine made, octagonal/chamfer ed shape with 1 8 6 embossed on base
2	74	6/30/2014	2	Indeterminate	Indeterminate	Copper Alloy											furniture detail or metal bracket
2	11	6/30/2014	7	Indeterminate	Container Glass	Glass						body					paneled vessel shapes, too small to ID
2	30	6/30/2014	1	Indeterminate	Glass Fragment	Glass				clear							4.75" (12 cm) long, .25" (.6 cm) wide long thin glass tube. Possibly very thin syringe/irrigator, straw, or stirrer
2	31	6/30/2014	1	Indeterminate	Indeterminate	Milk Glass				white				1743 - present		Miller et al 2000	
2	47	6/30/2014	85	Indeterminate	Container Glass	Glass				clear		body					unidentifiable body glass hollowware shards
2	23	6/30/2014	3	Lighting	Lamp Glass	Glass				clear		İ		Ì			
2	50	5/13/2014	7	Medical	Bottle, Medicine	Glass		Embossed		clear		complete	Mold Blown, Machine	1899 - ?	form	Miller et al 2000	Machine made with machine re- inforced extract finish
2	56	6/30/2014	1	Medical	Flask	Glass		Embossed		clear	graduated	body	Mold Blown, Machine	1900 - 1950	decorati on	www.sha.org/ bottle/	Graduated marks (24, 26,) along side
2	33	6/30/2014	1	Medical	Bottle, Medicine	Glass		Embossed		amber		complete vessel		1899 - ?	form	Miller et al 2000	machine made with seam from

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																	base to finish, suction scar on base with "33 S 8" embossed, narrow re-inforced extract finish
20	1	7/8/2014	1	Household	Tableware, General	Refined Earthenware	Whiteware			blue	Indeterminate	body		1815 - present	ware	Azizi et al 1996	indeterminate thick blue glazed pattern
20	2	7/8/2014	1	Indeterminate	Bottle	Common Glass				aqua		base	Mold Blown, Indeterminate				circular or ovoid small-medium medicine/liquor/oth er bottle
21	1	7/8/2014	3	Architectural	Window Glass	Glass				clear		fragment					
21	2	7/8/2014	1	Household	Stemware	Glass				clear		stem					blob-shaped portion of glass stem with broken off cup and foot
22	1	7/8/2014	1	Household	Hollowware	Coarse Earthenware	Redware					body					unglazed; possibly tile or flowerpot
23	3	7/8/2014	1	Indeterminate	Indeterminate	Iron											highly oxidized long nail, spike, or bar
23	1	7/8/2014	2	Indeterminate	Container Glass	Glass				clear		body	Indeterminate				very small body frags
23	2	7/8/2014	1	Indeterminate	Container Glass	Glass		Molded Pattern		clear	Ribbed	body	Mold Blown, Indeterminate				vertical ribs on body of a glass bottle or dish
24	1	7/8/2014	1	Architectural	Pipe, Sewer/Water	Stoneware		Salt-Glazed		brown		fragment					very thick sewer or water pipe fragment
25	4	7/8/2014	2	Architectural	Window Glass	Glass				clear		fragment					
25	5	7/8/2014	1	Faunal	Bone	Bone						long bone					medium mammal long bone straight head
25	3	7/8/2014	1	Household	Hollowware	Stoneware	Salt Glazed, Brown Bodied	Salt-Glazed	Slip Decorated	brown exterior, reddish beige slip interior		body		1800 - 1930	ware	Azizi et al 1996	small sherd, possibly medium bottle
25	2	7/8/2014	2	Household	Tableware, General	Refined Earthenware	Whiteware					body		1815 - present	ware	Azizi et al 1996	indeterminate form

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25	1	7/8/2014	1	Household	General	Refined Earthenware	Whiteware	Molded Pattern	Scalloped	blue	Shell Edge, Indeterminate	rim		1815 - 1895			indeterminate shell edge pattern on small sherd
26	1	7/8/2014	1	Household	Indeterminate	Refined Earthenware	Whiteware					unknown fragment					
27	2	7/8/2014	1	Architectural	Window Glass	Glass				clear		fragment					
27	1	7/8/2014		Household	Indeterminate	Glass		Molded Pattern		clear	Ribbed	fragment	Indeterminate				angular glass stopper or stemware fragment
28	3	7/8/2014	1	Household		Common Glass		Embossed		amber	Lettering	body	Mold Blown, Machine				"TUR" and stippling from machine left on glass
28	2	7/8/2014	1	Household		Common Glass		Molded Pattern		aqua	Geometric Pattern	body	Mold Blown, Indeterminate				large vertical, rounded panels around body
28	1	7/8/2014	1	Household		Refined Earthenware	Whiteware			light green		body		1815 - present	ware	Azizi et al 1996	light mint green glazed, dense body
29	1	7/11/2014	1	Household	Flatware	Ironstone	Hotel Ware	Painted		green	Banded	rim		1860 - present	ware	Azizi et al 1996	2 bands at rim, 1 band at marley
3	6	7/2/2014	1	Architectural	Window Glass	Common Glass				aqua							clean broken irregular/squiggly edges may indicate intentional shaping to fit into decorative piece
3	7	7/2/2014	3	Architectural	_	Refined Earthenware				white		fragment					plain white tile
3	8	7/2/2014	1	Faunal	Bone	Bone						long bone					medium mammal long bone fragment, blunt butcher cut at end
3	10	7/2/2014	2	Faunal	Shell Fragment	Shell						oyster					oyster shell halves
3	9	7/2/2014	1	Faunal	Shell Fragment	Shell						clam					half clam shell
3	2	7/2/2014	1	Household	Bottle, Milk	Glass		Embossed		clear		body	Mold Blown, Machine	1886 - present		Miller et al 2000	"MEN'S" intact, probably Dairymen's Coop bottle.
3	3	7/2/2014	1	Household	Bottle	Glass				clear		body					

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3	4	7/2/2014	1	Household	Bottle	Common Glass				aqua		body					no extant decoration
3	5	7/2/2014	1	Lighting	Lamp Glass	Glass				clear		body					very thin curved glass
3	1	7/2/2014	1	Medical	Bottle, Medicine	Common Glass		Embossed		green		complete vessel	Mold Blown, Machine	1889 - present	form	bottle/	complete bottle with liquid within (double sealed) and intact metal cap; continuous thread screw top; "SQUIBB" on shoulder, "MADE IN USA" on base
30	1	7/8/2014	1	Household	Tableware, General	Refined Earthenware	Whiteware					body		1815 - present	ware	Azizi et al 1996	form indeterminate
31	2	7/8/2014	1	Architectural	Window Glass	Glass				clear		fragment					
31	1	7/8/2014	3	Indeterminate	Container Glass	Common Glass				green		body	Indeterminate				small fragments of thin bright green glass
32	1	7/8/2014	1	Architectural	Tile	Coarse Earthenware				green	Ribbed	fragment					mint green coloring scored to create ribbed lines
32	2	7/8/2014	2	Architectural	Window Glass	Glass				clear		fragment					
33	1	7/8/2014	1	Indeterminate	Bottle	Glass		Molded Pattern		clear		body	Mold Blown, Indeterminate				paneled body fragment, probably flask or liquor/medicine ovoid bottle shape
34	2	7/8/2014	1	Architectural	Nail	Iron						complete	Cut				flat head atop flat cut nail
34	1	7/8/2014	7	Architectural	Brick, Fragment	Coarse Earthenware	Buff bodied			beige		fragment					buff colored brick remnants from partially hollow (firebrick?) bricks found within 20th c buildings/debris on site
35	1	7/8/2014	1	Architectural	Window Glass	Glass				clear		fragment					
36	1	7/8/2014	1	Architectural	Window Glass	Glass				clear		fragment					
37	1	7/2/2014	1	Architectural	Window Glass	Common Glass				aqua		fragment					
37	2	7/2/2014	1	Architectural	Window Glass	Glass						fragment					

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38	1	7/8/2014	1	Household	Saucer	Ironstone	Ironstone/St one China	Stamped		grey	Lettering	complete		1916 - 1952	on	acompany.co m/index.html	Stamp reads "N.Y. CITY PROPERTY CARR CHINA CO. 1929" Carr China Company operating dates 1916-1952
38	2	7/8/2014	1	Medical	Bottle, Medicine	Common Glass		Embossed		blue/coba It	Lettering	base and body	Mold Blown, Machine	1891 - 1956		ssbottlemarks .com/bromo- seltzer-cobalt-	EMERSON DRUG CO BROMO- SELTZER, producing bromo seltzer 1891 – c.1956. "I I" on base.
4	170	7/8/2014	1	Architectural	Brick, Fragment	Coarse Earthenware		Stamped			Lettering	fragment					coarse, irregular matrix with "N" remaining at end of original maker's mark stamp
4	99	7/7/2014	1	Architectural	Tile	Milk Glass				white		fragment		1743 - present		Miller et al 2000	very large (>6" [15 cm] long) tile
4	150	7/7/2014	2	Architectural	Tile	Refined Earthenware				white		fragment					undecorated white tile
4	97	7/7/2014	9	Architectural	Window Glass	Common Glass				aqua		fragment					
4	148	7/8/2014	1	Architectural	Tile	Coarse Earthenware	Red Bodied					fragment					1" (2.54 cm) thick red flat tile
4	169	7/8/2014	1	Electrical	Fuse	Aluminum		Stamped				fragment					aluminum ring stamped "KIRKMAN ENGINEERING" around partially intact mica sheet resistor from end of fuse
4	139	7/7/2014	1	Faunal	Bone	Bone											unidentified bone fragment
4	138	7/7/2014	2	Faunal	Bone	Bone											Mammal bone fragments, possible scapula
4	137	7/7/2014	2	Faunal	Bone	Bone											Mammal, likely pelvic bone fragments

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4	135	7/7/2014	2	Faunal	Indeterminate	Indeterminat e				white, yellow							Possibly coral, calcined, white with banding, yellow at the end
4	134	7/7/2014	10	Faunal	Clam Shell	Shell											Clam shell and clam shell fragments
4	136	7/7/2014	1	Faunal	Bone	Bone						Rib					Fragmented rib, mammal
4	133	7/7/2014	14	Faunal	Oyster Shell	Shell											
4	29	7/7/2014	1	Household	Bottle, Milk	Glass		Embossed		clear	Lettering	base	Mold Blown, Machine	1929 - 1956		Toulouse 2001	large base with D, with Owens OI in diamond with no plant # extant due to breakage, 2 listed right of OI mark.
4	104	7/7/2014	1	Household	Hollowware	Ironstone	Hotel Ware					Handle		1860- pres		Azizi et al 1996	
4	105	7/7/2014	5	Household	Flatware	Ironstone	Hotel Ware					Body		1860- pres		Azizi et al 1996	Minor black and blush discoloration, possibly due to extreme heat / fire
4	108	7/7/2014	1	Household	Flatware	Porcelain		Molded Pattern	Scalloped			Rim					Scalloped rim sherd with molded line that follows the scalloping, grey and blush discoloration, possibly from extreme heat/fire
4	106	7/7/2014	4	Household	Flatware	Ironstone	Hotel Ware					Base		1860- pres		Azizi et al 1996	Black discoloration on bottom of base
4	28	7/7/2014	2	Household	Bottle, Milk	Glass		Embossed		clear	Lettering	base	Mold Blown, Machine	1889 - present	object	Miller et al 2000	large base with D, with 3 E 0 within the raised large D on base.
4	30	7/7/2014	4	Household	Bottle, Milk	Glass		Embossed		clear	Lettering	base	Mold Blown, Machine	1886 - present	object	Miller et al 2000	large base with D, no interior of D or other base marks. HTC mark along side of base (cannot find which

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																	producer used this mark). REGISTERED around base. Likely matches/ D signifies Dairylea Cooperative, first used 1923, like other bottles found on site.
4	27	7/7/2014	1	Household	Jar	Glass				clear		body and closure	Mold Blown, Machine	1869 - 1970		bottle/	Mason jar with intact metal screw lid with milk glass lid liner and rubber gasket
4	31	7/7/2014	15	Household	Bottle, Milk	Glass		Embossed		clear	Lettering	body	Mold Blown, Machine	I	decorati on	http://www.dai rylea.com/Abo utUs/History.a spx	Embossed various portions of "DAIRYLEA DAIRYMEN'S League CO-OPERATIVE ASSOCIATION INC." League formed 1907, under DLCA 1923 (see ref)
4	32	7/7/2014	1	Household	Bottle	Glass		Embossed		clear	Lettering	base	Mold Blown, Machine	1929 - 1956			12-sided panels at base, with 2 (diamond Owens OI mark) 2 above 9.
4	26	7/7/2014	1	Household	Bottle, Condiment	Glass		Embossed		clear	Lettering		Mold Blown, Machine	1923 - 1982		bottle/	octagonal paneling around body with long neck and club sauce finish. Round base stamped HA K - 216 12. HA = Hazel-Atlas Glass Co c1923-1982. Ketchup bottle shape.
4	103	7/7/2014	2	Household	Hollowware	Ironstone	Hotel Ware					Rim, body,han dle		1860- pres		Azizi et al 1996	Body sherds with handle/handle attachment

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4	110	7/7/2014		Household	Flatware	Ironstone	Hotel Ware					Body		1860- pres		Azizi et al 1996	
4	109	7/7/2014	2	Household	Flatware	Ironstone	Stone China, Decorated	Painted	Gilding	red,pink, green,blu e,yellow	Floral	Rim					Partially mend, poly chrome floral pattern, red band, gilding around rim
4	111	7/7/2014	3	Household	Flatware	Ironstone	Hotel Ware							1860- pres		Azizi et al 1996	yellow/brown discoloration
4	107	7/7/2014	9	Household	Flatware	Ironstone	Hotel Ware					Rim		1860- pres		Azizi et al 1996	
4	10	7/2/2014	1	Household	Jar	Glass		Embossed		clear		complete	Mold Blown, Machine	1923 - 1982	decorati on	www.sha.org/ bottle/	base shows HA Hazel-Atlas Glass Co. mark with "H - 686 12" (30 cm) Threaded, unground wide rim
4	44	7/7/2014	1	Household	Jar	Glass				clear		body and finish	Mold Blown, Machine	1910 - present	finish	www.sha.org/ bottle/	wide mouth, non- ground, externally threaded continuous thread finish on medium size jar. Heat damaged.
4	33	7/7/2014	1	Household	Bottle	Glass		Embossed		clear	Lettering	base	Mold Blown, Machine	1923 - 1982	decorati on	www.sha.org/ bottle/	Hazel-Atlas Glass Co HA mark with 2-1-686 on base of medium size round base
4	1	7/2/2014	1	Household	Bottle	Glass		Embossed		clear		complete	Mold Blown, Machine	1903 - 1929	marking	www.sha.org/ bottle/	complete large bottle with club sauce finish, Square Owens O with 9 and 8 embossed on base. Predates Owens-Illinois era.
4	2	7/2/2014	1	Household	Bottle, Beer/Soda	Common Glass		Embossed		green	Embossed	·	Mold Blown, Machine	1910 - present		www.sha.org/ bottle/	soda/beer shape with machine- made crown finish, embossed "27 S" over line on base (1927?)
4	4	7/2/2014	1	Household	Bottle, Beer/Soda	Glass		Embossed	Molded Pattern	clear	Lettering	complete	Mold Blown, Machine	1910 - present	II.	www.sha.org/ bottle/	molded vertical lines on bottle, center band reads

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																	"G. DeBELLIS 309 E. 106th ST NEW YORK", at base: "CENTENTS 61/2 OZ REGISTERED". American Bottler Vol. 8 lists J DeBellis soda bottler at nearby address in 1908.
4	5	7/2/2014	1	Household	Bottle	Glass		Embossed	Molded Pattern	clear	Lettering	complete	Mold Blown, Machine	1929 - 1956		Toulouse 2001	Owens of III. scar and mark on base with 3 and unclear date-side mark. Molded band at base and shoulder, thick club sauce finish
4	7	7/2/2014	1	Household	Jar	Glass		Embossed		clear	Lettering	complete	Mold Blown, Machine	1923 - 1982		www.sha.org/ bottle/	ATLAS STRONG SHOULDER MASON" embossed on body, base shows HA Hazel-Atlas Glass Co. mark with 9. Threaded, unground wide rim
4	3	7/2/2014	1	Household	Bottle, Beer/Soda	Common Glass		Embossed		green		complete	Mold Blown, Machine	1910 - present		www.sha.org/ bottle/	soda/beer shape with machine- made crown finish, embossed "26 S" over line on base (1926?). Remnant of paper label on neck.
4	9	7/2/2014	1	Household	Jar	Glass		Embossed		clear		complete	Mold Blown, Machine	1893 - present		Miller et al 2000	base embossed: P-619 8 . Small size jar with simple wide finish, possible cap seat.
4	102	7/7/2014	3	Household	Hollowware	Ironstone	Hotel Ware					Rim		1860- pres		Azizi et al 1996	contain black discoloration
4	11	7/2/2014	1	Household	Bottle, Condiment	Glass		Embossed		clear	Lettering	complete	Mold Blown, Machine	1929 - 1956		Toulouse 2001	Small wide-mouth, unground, externally

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																	threaded jar. Base embossed: 9 HELLMANN'S BLUE RIBBON REGISTERED 2 (diamond Owen's OI mark) 1.
4	15	7/3/2014	1	Household	Bottle, Milk	Glass		Embossed		clear	Lettering	complete	Mold Blown, Machine	1889 - present	finish	Miller et al 2000	Cap seat finish, embossed on sides: "K.KOSLOW & SON PORT RICHMOND S.I.""REGISTERE D 50"Å.B.C.2". 3 pronged diamond shape on base with 8 stamped atop.
4	16	7/3/2014	2	Household	Bottle	Common Glass				amber		complete	Mold Blown, Machine	1899 - present		Miller et al 2000	Mended. Narrow externally threaded finish on medium-large bottle, machine suction scar without embossed letters/number on base
4	17	7/7/2014	1	Household	Jar	Common Glass		Embossed		aqua	Lettering	complete	Mold Blown, Machine		on	http://www.gla ssbottlemarks .com/ball- perfect- mason-jars/	externally threaded wide mouth finish, "Ball PERFECT MASON" on body, 3 or B mark on base.
4	100	7/7/2014	1	Household	Bowl	Porcelain	Hotel Ware	Stamped				Base, Body, Rim		1952	ion -	http://carrchin acompany.co m/index.html	Nearly complete, Stamp reads "N.Y. CITY PROPERTY CARR CHINA CO. 1929" Carr China Company operating dates 1916-1952
4	20	7/7/2014	1	Household	Bottle, Beer/Soda	Common Glass		Embossed		aqua	Lettering	base and body	Mold Blown, Machine				paneled body above round base, "STATEN

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
																	ISLAND" embossed around base. No marks on bottom.
4	21	7/7/2014	2	Household	Bottle	Glass				clear		complete	Mold Blown, Machine	1900 - 1925	finish	www.sha.org/ bottle/	mended. collared ring finish on flask shaped bottle. Alcohol or medicine? Machine suction scar on base without marking.
4	101	7/7/2014	2	Household	Hollowware	Ironstone	Hotel Ware					Rim		1860- pres		Azizi et al 1996	Rim sherds partially mend, Blush, blue, rust colors on body possibly from heat damage
4	8	7/2/2014	1	Household	Jar	Glass		Embossed		clear		complete	Mold Blown, Machine	1920 - present		www.sha.org/ bottle/	Mason jar with wide, unground threaded opening. Base embossed: "370 - 6"
4	68	7/7/2014	2	Household	Bottle	Glass		Embossed		clear	Lettering	body	Mold Blown, Machine	1929 - 1956		Toulouse 2001	Partially mended. On body: MANUFACTUREDOWENS ILLINOIS = post 1929 O-I date.
4	129	7/7/2014	3	Household	Hollowware	Refined Earthenware	Pearlware	Painted		Blue	Floral	Rim		1815- 1830		Miller et al 2000	Rim sherds, partially mend, Blue painted floral pearlware
4	77	7/7/2014	2	Household	Bottle	Glass		Embossed	Molded Pattern	clear	Lettering	base and body	Mold Blown, Machine	1923 - 1982		www.sha.org/ bottle/	Base stamped K- 216 19 HA = Hazel-Atlas Glass Co. C1923 -1982.
4	76	7/7/2014	4	Household	Bottle	Glass		Embossed	Molded Pattern	clear	Lettering	base and body	Mold Blown, Machine	1876 - present		www.sha.org/ bottle/	Partially mended. 10-sided paneling. WAYNE in floral circle at neck, below: "TRADEMARK REGISTERED US PAT. OFF."

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
																	around base: "DO NOT(refill)" "WAYNEY" "GREENPOINT" Probably Wayne County Produce Co. cider/vinegar bottle, Greenpoint, Long Is, NY
4	75	7/7/2014	1	Household	Bottle	Glass				clear		base and body	Mold Blown, Machine				unmarked side of base and body of medium/large bottle, evidence of machine suction scar barely extant on base
4	74	7/7/2014	1		Bottle	Common Glass				green		body	Indeterminate				thick-walled bottle glass
4	73	7/7/2014	1	Household	Jar	Glass				clear		neck	Indeterminate				broken off neck with wide shoulder, wide opening tapering in mock appearance of a lid over a wider- mouth vessel
4	72	7/7/2014	1	Household	Jar	Glass				clear		neck	Indeterminate				square body with wide mouth; broken, possibly re-ground above break just above neck. Repurposed small mason type jar?
4	56	7/7/2014	1	Household	Drinking Vessel	Common Glass				pink		base	Indeterminate		glass type		Depression glass with wide base, container or drinking vessel
4	69	7/7/2014	2	Household	Bottle, Milk	Glass		Embossed		clear	Lettering	body	Mold Blown, Machine	1886 - present		bottle/	portion of "D"on base, on body near base: " QUART LIQUID" "A.B.C. 2"

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
4	132	7/7/2014	2	Household	Canning Jar Lid	Milk Glass		Embossed				Rib and Body		1869- 1970		a.org/bottle/ty ping.htm	Embossing reads "BOYD'S GENUINE PORCELAIN CAP" center of the cap has the number "5". Partially mended
4	58	7/7/2014	1	Household	Tea Pot	Coarse Earthenware	Jackfield Type			black		spout		1740 - 1850	ware	Azizi et al 1996	4 holes at spout base for tea straining
4	116	7/7/2014	1	Household	Hollowware	Ironstone	Hotel Ware	Painted		Green		Rim		1860 - present		1996	Painted green on top side , underside rim appears to be worn, possible lid
4	125	7/7/2014	1	Household	Hollowware	Ironstone		Gilding		Metalic		Rim					Rim sherd likely tea cup with guilding around the outter edge, brown discoloration
4	34	7/7/2014	1	Household	Bottle	Glass		Embossed		clear	Lettering	base	Mold Blown, Machine				medium-large size base with 15 10 marked inside machine suction scar
4	123	7/7/2014	1	Household	Hollowware		Salt Glazed, Gray/Buff Bodied	Molded Pattern				Rim and body					Molded rim fragment
4	122	7/7/2014	2	Household	Tea Cup	Porcelain		Printed		Pink, orange, purple, green, yellow	Floral	Body, Rim, Handle					Body of the tea cup with part of the handle and poly chrome floral pattern, partially mends
4	121	7/7/2014	1	Household	Hollowware	Porcelain						Rim					rim sherd from saucer
4	120	7/7/2014	2	Household	Saucer	Porcelain		Stamped	Gilding	Red		Base,Bod y, Rim					Porcelain tea saucer with gilding around the base. Red partial makers mark on the back likely says "German or

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
																	Germany" and the number "70". Partially mends
4	70	7/7/2014	2	Household	Bottle, Milk	Glass		Embossed		clear	Lettering	body	Mold Blown, Machine	1886 - present	object	www.sha.org/ bottle/	partially mended. Squared lettering on body: "CARAC""ONE QUART LIQUID" with HTC mark (cannot find source) on side.
4	98	7/7/2014	6	Household	Flower Pot	Coarse Earthenware	Red Bodied					body and rim					medium/large pot
4	163	7/7/2014	1	Household	Pot	Tin	Enamelware			white		complete					medium 4.5"(11.4cm) diameter enameled tin pot or cook bucket with remnants of wire bucket-style handle
4	162	7/7/2014	1	Household	Mug	Tin	Enamelware			white		complete					enameled small mug with metal handle
4	158	7/7/2014	1	Household	Jar	Glass		Molded Pattern		clear		body and finish	Mold Blown, Indeterminate	1910 - present	finish	www.sha.org/ bottle/	highly heat damaged/melted wide-mouth, non- ground, externally threaded mason type jar
4	156	7/7/2014	8	Household	Bottle	Common Glass				amber		body	Mold Blown, Indeterminate				thin walled amber body glass
4	155	7/7/2014	20	Household	Jug	Common Glass				amber		body	Mold Blown, Machine				thick body glass, likely belongs to Cat. 153-4 vessel.
4	154	7/7/2014	3	Household	Jug	Common Glass		Molded Pattern		amber	Lettering	body and finish	Mold Blown, Machine	1889 - present	finish	www.sha.org/ bottle/	"(ONE GA)LLON" embossed near shoulder, loop handle at neck, continuous thread finish on much narrower closure. Likely part of cat. 153 vessel.

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4	144	7/7/2014	1	Household	Spoon	Copper Alloy						Complete					spoon, oxidized
4	153	7/7/2014	5	Household	Jug	Common Glass		Molded Pattern		amber	Lettering	base and body	Mold Blown, Machine	1929 - 1956		Toulouse 2001	"14 (diamond Owens OI) 0" embossed on base, very wide (~6" [15cm]), thick body
4	130	7/7/2014	2	Household	Hollowware	Refined Earthenware	Pearlware	Painted		Blue	Floral	Rim		1815- 1830			Rim sherds, partially mend, Blue painted floral pearlware
4	143	7/7/2014	1	Household	Fork	Copper Alloy						Complete					Fork, oxidized
4	131	7/7/2014	1	Household	Hollowware	Refined Earthenware	Pearlware	Painted		Blue		Body		1815- 1830		Miller et al 2000	Body Sherd, Blue painted floral pearlware
4	141	7/7/2014	1	Household	Salt shaker	Copper Alloy											Metal screw top for a condiment shaker
4	93	7/7/2014	1	Household	Tumbler	Glass				clear		body and rim	Mold Blown, Indeterminate				wide tumbler body with straight rim
4	92	7/7/2014	1	Household	Tumbler	Glass				clear		body and rim	Mold Blown, Indeterminate				narrow tumbler body with straight rim
4	91	7/7/2014	2	Household	Tumbler	Glass				clear		base and body	Mold Blown, Indeterminate				undecorated tumbler, narrowing slightly toward base
4	90	7/7/2014	2	Household	Bottle	Glass		Molded Pattern		clear	zig zag	body	Mold Blown, Indeterminate				internal zig-zag lines across whole extant body, but smooth exterior
4	88	7/7/2014	2	Household	Drinking Vessel	Glass		Molded Pattern		clear	Paneled	rim	Mold Blown, Indeterminate				tumbler or similar medium drinking cup with 8 panels with arched tops ending in wide circular rim with hashes etched or molded around outside
4	87	7/7/2014	5	Household	Drinking Vessel	Glass		Molded Pattern		clear	Paneled	body and rim	Mold Blown, Indeterminate				tumbler or similar medium drinking

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
																	cup with 8 panels with arched tops ending in wide circular rim
4	124	7/7/2014	1	Household	Handle	Stoneware	Salt Glazed, Gray/Buff Bodied					Handle					
4	152	7/7/2014	1	Household	Bottle	Common Glass				amber		neck and finish	Mold Blown, Indeterminate				large (>1" [2.54cm]) simple patent finish
4	41	7/7/2014	1	Household	Bottle, Milk	Glass				clear		body and finish	Mold Blown, Machine	1886 - present		Miller et al 2000	wide mouth patent finish milk bottle with square body
4	48	7/7/2014	3	Household	Bottle, Milk	Glass				clear		neck	Mold Blown, Machine	1886 - present		Miller et al 2000	unmarked milk bottle necks
4	49	7/7/2014	4	Household	Dish	Glass		Molded Pattern	Scalloped	clear	Star/Asterisk	base and body					medium size oval glass dish with starburst design molded under base, scalloped rim
4	117	7/7/2014	1	Household	Flatware	Ironstone	Hotel Ware	Stamped		Green		Body, Rim and Base		at the	ion - Stampe d Makers	taurantwareco llectors.com/f orums/misc.p hp?do=page&	idenifies the plate sherd as being created at the
4	126	7/7/2014	1	Household	Flatware	Ironstone		Gilding		Metalic		Rim					Rim sherd with guilding around the edge, possible tea saucer
4	51	7/7/2014	1	Household	Bottle	Common Glass				aqua		neck and finish	Mold Blown, Indeterminate	1850 - 1940		www.sha.org/ bottle/	club sauce style finish
4	52	7/7/2014	1	Household	Bottle	Common Glass				aqua		neck	Mold Blown, Indeterminate				medium-large bottle neck with mold seam
4	46	7/7/2014	5	Household	Bottle, Milk	Glass				clear		neck and finish	Mold Blown, Machine	1889 - 1960		www.sha.org/ bottle/	milk bottles with cap seat or common sense finish

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4	45	7/7/2014	7	Household	Jar	Glass				clear		finish	Mold Blown, Machine	1910 - present	finish	www.sha.org/ bottle/	wide mouth, non- ground, externally threaded interrupted thread finish on medium size jar. Heat damaged.
4	55	7/7/2014	3	Household	Drinking Vessel	Common Glass		Molded Pattern	Etched	pink	Floral	base and body	Mold Blown, Indeterminate	1920 - 1945	glass type	www.ndga.net	partially mended. Depression glass molded into paneled squares around body with floral etching, flat base.
4	43	7/7/2014	3	Household	Jar	Glass				clear		finish	Mold Blown, Machine	1910 - present	finish	www.sha.org/ bottle/	wide mouth, non- ground, externally threaded continuous thread finish on medium size jar
4	113	7/7/2014	1	Household	Flatware	Ironstone	Hotel Ware	Painted		Green		Rim, base body		1860 - present		Azizi et al 1996	Green Striping around rim, Likely Jackson Vitrified China, thick base at foot around the bottom
4	42	7/7/2014	1	Household	Bottle	Glass				clear		body and finish	Mold Blown, Machine	1850 - 1940	finish	www.sha.org/ bottle/	wide mouth, grooved patent finish bottle, probably milk bottle
4	47	7/7/2014	1	Household	Bottle, Milk	Glass		Embossed		clear	Lettering	neck and finish	Mold Blown, Machine	1889 - 1960	finish	www.sha.org/ bottle/	milk bottle with cap seat or common sense finish, embossed "5C"on neck
4	36	7/7/2014	2	Household	Bottle	Glass				clear		base	Mold Blown, Machine				medium bases with suction scars but no extant embossing/marks
4	35	7/7/2014	1	Household	Bottle	Glass		Embossed		clear	Lettering	base	Mold Blown, Machine				medium size round bottle with 8 extant embossing on base

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4	112	7/7/2014	1	Household	Flatware	Ironstone	Hotel Ware	Stamped		Green		Base			Decorat ion	http://fallscree	Thick base sherd stamped "New York City Property 1930" around "Jackson Vitrified China" on base. 1930 date or pattern? JVC founded 1916 Falls Creek, PA.
4	119	7/7/2014	2	Household	Flatware	Ironstone	Hotel Ware					Base and Body		1860 - Present		Azizi et al 1996	Partially mend
4	118	7/7/2014	1	Household	Flatware	Ironstone	Hotel Ware	Stamped		Green		Base		1860 - Present		Azizi et al 1996	Partial makers mark stamp reads "& K., -V , A.", yellow/brown discoloration
4	115	7/7/2014	1	Household	Flatware	Ironstone	Hotel Ware	Painted		Green		Rim		1860 - present		Azizi et al 1996	Small rim sherd with green striping, likely Jackson Vitrified China
4	37	7/7/2014	1	Household	Bottle	Glass				clear		base	Mold Blown, Machine				very thick (~.5"[1.2cm]) base with suction scar but no extant embossing/marks
4	38	7/7/2014	1	Household	Bottle, Milk	Glass		Embossed		clear	Lettering	base	Mold Blown, Machine	1889 - present	object	Miller et al 2000	large base with D, with 3 E 1 within the raised large D on base.
4	54	7/7/2014	1	Household	Bottle, Beer/Soda	Common Glass		Embossed		aqua	Lettering	base	Mold Blown, Machine				embossed around side of base: CONTENTS 6 1/2 FLU. O(Z) REGISTERED
4	114	7/7/2014	2	Household	Flatware	Ironstone	Hotel Ware	Painted		Green		Rim, base body		1860 - present		Azizi et al 1996	Green Striping around rim, Likely Jackson Vitrified China, partially mend
4	53	7/7/2014	1	Indeterminate	Bottle	Common Glass		Embossed		aqua	Lettering	base	Mold Blown, Machine				oblong bottle with 3 at side of base, indeterminate function/final shape

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4	79	7/7/2014	1	Indeterminate	Bottle	Common Glass				aqua		body	Indeterminate				unmarked medium/large bottle shard
4	50	7/7/2014	4	Indeterminate	Bottle	Glass		Embossed		clear	Lettering	body and finish	Mold Blown, Indeterminate	1890 - 1920		www.sha.org/ bottle/	brandy/wine finish on medium ovoid medicinal or liquor bottles, marked "ONE (PINT?)" at shoulder
4	66	7/7/2014	1	Indeterminate	Bottle	Glass		Embossed		clear	Lettering	body	Mold Blown, Indeterminate	1905 - present		www.sha.org/ bottle/	Internally molded volume measures, no units extant, with 1 by base. Unknown if liquor or medical bottle
4	71	7/7/2014	5	Indeterminate	Bottle	Glass		Embossed		clear	Lettering	body	Mold Blown, Indeterminate				indeterminate embossed letters on body
4	65	7/7/2014	1	Indeterminate	Bottle	Glass		Embossed		clear	Lettering	body	Mold Blown, Indeterminate				"TIV" extant on body
4	78	7/7/2014	89	Indeterminate	Bottle	Glass				clear		body	Indeterminate				unmarked medium/large bottle shards
4	67	7/7/2014	1	Indeterminate	Bottle	Glass		Embossed		clear	Lettering	body	Mold Blown, Indeterminate				ovoid shape with "T" on body
4	140	7/7/2014	1	Indeterminate	Indeterminate	Bakelite		Molded Pattern			Lettering						Molded cap/top with the letters "PCP Co", bakelite, possibly ink bottle cao
4	166	7/8/2014	1	Indeterminate	Bell	Iron						fragment					Highly oxidized. Probably cap/hood to a bell. Alternatively could be convex cap to piping or infrastructural element.
4	161	7/7/2014	1	Indeterminate	Bottle	Common Glass				blue/coba It		body	Indeterminate				highly heat damaged/melted indeterminate shard
4	160	7/7/2014	7	Indeterminate	Bottle	Glass				clear		body	Indeterminate				highly heat damaged/melted

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																	indeterminate bottle forms
4	159	7/7/2014	1	Indeterminate	Bottle	Glass				clear		neck and finish	Mold Blown, Indeterminate				highly heat damaged/melted brandy finish liquor or medical bottle
4	39	7/7/2014	1	Indeterminate	Bottle	Glass		Embossed		clear	Lettering	base	Mold Blown, Machine				very small, ~1" (2.54cm)diameter bottle with B embossed on base. May be medicine or perfume/similar small vial
4	149	7/8/2014	5	Indeterminate	Indeterminate	Iron						fragment					unidentifiable thin metal, degraded fragments - DISCARDED
4	85	7/7/2014	10	Indeterminate	Bottle	Glass				clear		base	Mold Blown, Machine				ovoid bottles of indeterminate usage with machine suction scars on bases, no extant markings
4	96	7/7/2014	5	Indeterminate	Indeterminate	Glass		Molded Pattern		clear	Other	complete	Mold Blown, Indeterminate				3.5"(8.9cm) high, 1.5" (3.8cm) wide squared, hollow object with flat round base, internally molded vertical bars on 2 sides of interior, rounded lip at top. Large candlestick holder? Vase?
4	80	7/7/2014	1	Indeterminate	Flask	Glass		Embossed		clear	Lettering	base and body	Mold Blown, Machine			Toulouse 2001	Flask with 6 (Owens diamond OI mark) 1 on suction-marked base
4	89	7/7/2014	2	Indeterminate	Drinking Vessel	Glass		Molded Pattern		clear	Paneled	body	Indeterminate				indeterminate function oblong paneled shards

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
4	86	7/7/2014	18	Indeterminate	Bottle	Glass				clear		body	Mold Blown, Indeterminate				ovoid bottle/flask remnants without extant markings
4	64	7/7/2014	1	Indeterminate	Bottle	Glass		Embossed		clear	Lettering	body	Mold Blown, Machine	1905 - present	II.	bottle/	multiple dashes for measurements of volume grading on body (no unit extant)
4	84	7/7/2014	2	Indeterminate	Bottle	Glass		Embossed		clear	Lettering	base	Mold Blown, Machine		decorati on		MADE IN USA on 2 ovoid bases
4	83	7/7/2014	1	Indeterminate	Bottle	Glass		Embossed		clear	Lettering	base	Mold Blown, Machine	1918 - 1937	II.	bottle/	Ovoid shape. Indeterminate numbering above capstan symbol, 78 numbering below symbol. Capstan = Capstan Glass Co. 1918-1937.
4	82	7/7/2014	1	Indeterminate	Bottle	Glass		Embossed		clear	Lettering	base	Mold Blown, Machine	1918 - 1937		bottle/	Partially mended, ovoid shape. 3 and Capstan symbol above 10 B on base. Capstan symbol = Capstan Glass Co., 1918 - 1937.
4	81	7/7/2014	1	Indeterminate	Bottle	Glass		Embossed		clear	Lettering	base	Mold Blown, Machine	1923 - 1982			ovoid base with dot over HA (Hazel - Atlas Glass Co.) over 3 production stamp.
4	40	7/7/2014	1	Indeterminate	Bottle	Glass				clear		base	Indeterminate				very small, less than 1" (2.54cm) diameter bottle/vial with very simple patent finish, no extant mold seams. May be medicine or perfume/similar vial
4	62	7/7/2014	1	Indeterminate	Bottle	Glass		Embossed		clear	Other	body	Mold Blown, Machine				bells embossed around broken-off panel on circular

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
																	bottle. Unknown if food/liquor or medical
4	60	7/7/2014	1	Indeterminate	Bottle	Glass		Embossed		clear	Lettering	body	Mold Blown, Machine	I	decorati on	www.sha.org/ bottle/	HALF (Pint? Quart?) volume measure, unknown if food/liquor or medicinal bottle
4	59	7/7/2014	1	Indeterminate	Bottle	Glass		Embossed		clear	Lettering	body	Mold Blown, Machine			www.sha.org/ bottle/	(O)NE PINT volume measure, unknown if food/liquor or medicinal bottle
4	128	7/7/2014	2	Indeterminate	Hollowware	Milk Glass						Body		1743 - Present		Miller et al 2000	
4	63	7/7/2014	1	Indeterminate	Bottle	Glass		Embossed		clear	Lettering	body	Mold Blown, Machine	I	decorati on	www.sha.org/ bottle/	multiple (non- extant) OZ measurements of volume grading on body
4	57	7/7/2014	3	Indeterminate	Glass Fragment	Common Glass				pink		body	Indeterminate	I	glass type		indeterminate Depression glass shards
4	25	7/7/2014		Manufacturing  Medical	Crucible  Bottle,	Coarse Earthenware				blue/coba		rim	Indeterminate				Coarse bodied, ~3" (7.6cm) diameter, thick- walled rounded object with 1"central, long gap. Ground flat in portions of outside, smooth interior with metallic deposits. If not crucible, perhaps rolling pin or sturdy tool with large central dowel?  Likely from Cat. 23
4	25	7/7/2014	4	Medical	Medicine	Glass				lt		body	indeterminate				or 24 bottles or similar type
4	23	7/7/2014	1	Medical	Bottle, Medicine	Common Glass		Embossed		blue/coba It	Lettering	neck and finish	Mold Blown, Indeterminate	1889 - present	finish	www.sha.org/ bottle/	Continuous externally threaded finish, "SQUIBB"on

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
																	shoulder area. Intact cork within neck - re-corked after opening or closure had cork under screw cap?
4	19	7/7/2014	1		Bottle, Medicine	Glass		Embossed		clear	Lettering	complete	Mold Blown, Machine	1929 - 1956		Toulouse 2001	Very small with small base and larger oval body shape, externally threaded narrow mouth screw top with intact metal screw cap. On both sides of body: "THE BAYER COMPANY INC" On base: 6 (Owens diamond OI) 1
4	142	7/7/2014	2	Medical	Test Tube	Glass				Clear							Test tube with .7" (2cm) diameter, partially mends, Clear thin glass
4	22	7/7/2014	3		Bottle, Medicine	Common Glass				blue/coba lt		body and finish	Molded	1911 - present	finish		lug/interrupted external thread finish, likely a Bromo-Seltzer bottle based on small size and color
4	151	7/7/2014	1	Medical	Bottle, Medicine	Common Glass		Molded Pattern		amber	Ribbed	neck and finish	Mold Blown, Machine	1889 - present		www.sha.org/ bottle/	Small bottle, continuous external narrow mouth threaded finish with remnants of metal capping at opening. Ribbed vertical lines molded across extant body
4	24	7/7/2014	1	Medical	Bottle, Medicine	Common Glass		Embossed		blue/coba It	Lettering	neck and finish	Mold Blown, Indeterminate	1889 - present		www.sha.org/ bottle/	Fairly large size. Continuous externally threaded finish,

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
																	"SQUIBB"on shoulder area. Intact metal cap in place.
4	6	7/2/2014	1	Medical	Bottle, Medicine	Glass		Embossed		clear	Lettering	complete	Mold Blown, Machine	1929 - 1956			ovoid large medical bottle with chamfered edged on 2 sides, sharp shoulder, reinforced extract finish with machine seam, fancy 3 followed by "viii"(38?) on chamfered side. Base marked: ÖWENS 6 (diamond O-I) 0, with 4 dots around date-side 0.
4	95	7/7/2014	1	Medical	Vial	Glass				clear		body and rim	Indeterminate				2"(5cm) wide straight-walled large vial/vessel with pour spout molded by pushing down rim to form lip.
4	18	7/7/2014	1	Medical	Bottle, Medicine	Common Glass		Embossed		green	Lettering	complete	Mold Blown, Machine	1889 - present		bottle/	Continuous screw finish, narrow mouth. "SQUIBB" on shoulder area, oblong octagonal paneled body, "MADE IN USA 5"on base.
4	12	7/3/2014	1	Medical	Bottle, Medicine	Glass				clear		complete	Mold Blown, Machine	1910 - present	finish		small, paneled with 8 sides, wide externally threaded machine made finish
4	13	7/3/2014	1	Medical	Bottle, Medicine	Glass		Embossed		clear	Lettering	complete	Mold Blown, Machine	1899 - present		bottle/	B and 1 embossed on base, externally threaded with intact screw top metal cap and liquid within

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
4	14	7/3/2014	1	Medical	Bottle, Medicine	Common Glass		Embossed		amber	Lettering	complete	Mold Blown, Machine		manufa cture, finish		Wide mouth non- ground machine made externally threaded finish. Base: "KRUSCHEN SALTS" with 14 (diamond Owens O-I) 1 above 3. Kruschen Salts popular constipation relief/curative from France 1920s-30s.
4	61	7/7/2014	1	Medical	Bottle, Medicine	Glass		Embossed		clear	Lettering	body	Mold Blown, Machine			www.sha.org/ bottle/	SQUIBB on shoulder.
4	127	7/7/2014	1	Personal	Jar	Milk Glass		Embossed			Lettering	Base		1893- 1950	Compa ny	a.org/bottle/ty ping.htm	Daggett & Ramsdell began producing cold cream in 1893 followed by other cosmetics. Milk glass was used btwn 1890-1950 as ointment/cream jars, likely a cold cream jar base
4	167	7/8/2014	1	Personal	Bead	Plastic				red		complete					oblong, slightly rectangular shape
4	94	7/7/2014	1	Sanitary	Soap Dish	Glass		Molded Pattern		clear	Other	base	Mold Blown, Indeterminate				thick molded base with tall lumps molded inside facing up for soap to rest upon
4	164	7/8/2014	1	Tack	Bit	Iron						complete	Hand Wrought				Horse bit for use with bridle. Consists of central bit bar attached to two bars with surrounding iron circles to prevent overshifting. Oxidized.
4	168	7/8/2014	I .	Tools & Equipment	Washer	Copper Alloy						complete					~.5"(1.7cm) long washer or connection piece

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
																	for piping or small toolwork
4	165	7/8/2014		Tools & Equipment	Machete	Iron						complete	Indeterminate				13.5" (34cm) long blade with 6"(15cm) two-piece sabre style handle and cross pins. Blade widens from 2.5" (6.3cm) to nearly 4" (10cm) at end. Alternatively may be very large meat cleaver.
4	147	7/7/2014		Tools & Equipment	Battery	Indeterminat e						Complete		1890- 1950		acs/en/educat ion/whatische mistry/landma	Carbon core of what was likely a dry cell battery, likely a carbon alloy, very dense, possible copper alloy cap with some corrosion
4	146	7/7/2014		Tools & Equipment	Battery	Indeterminat e		Stamped				complete		1890- 1950		acs/en/educat ion/whatische mistry/landma rks/drycellbatt ery.html	Carbon core of what was likely a dry cell battery, stamped "GERMANY", likely a carbon alloy, very dense, possible copper alloy cap with some corrosion
4	145	7/7/2014	1	Tools & Equipment	Hose Nipple	Brass						Complete					2.1"(5.5 cm) long, .7"(2cm) diameter, threaded at both ends
5	2	7/2/2014	1	Architectural	Window Glass	Glass				colorless		fragment	Indeterminate				
5	1	7/2/2014	1	Household		Common Glass				green		body	Indeterminate				small glass fragment
5	4	7/2/2014		Household		Glass		Embossed		colorless	Lettering	body	Mold Blown, Indeterminate				"_5 T" are only text visible on fragment
5	3	7/2/2014		Indeterminate	Glass	Glass				colorless		fragment	Indeterminate				
5	6	7/2/2014	1	Indeterminate	Hollowware	Milk Glass						body		1743- present		Miller et al 2000	

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
5	5	7/2/2014	1	Indeterminate	Indeterminate	Refined Earthenware	Whiteware					body		1815- present	ware		extremely small sherd
6	5	7/2/2014	1	Architectural	Window Glass	Glass				colorless		fragment					
6	3	7/2/2014		Architectural	Window Glass	Glass				clear							
6	5	7/2/2014	2	Faunal	Bone	Bone						long bone					medium mammal long bone frags
6	4	7/2/2014	1	Fuel	Coal Fragment	Coal											discarded
6	2	7/2/2014	1	Household	Bottle	Glass				clear		body					no extant decoration
6	1	7/2/2014	1	Household	Bottle	Common Glass				aqua		shoulder	Mold Blown, Machine				sharp shoulder intact
6	6	7/2/2014	1	Household	Bottle	Common Glass				Aqua		base	Mold Blown, Indeterminate				
6	2	7/2/2014	1	Household	Hollowware		Nottingham Type			dark brown		body		1683- 1810	ware		
6	4	7/2/2014	1	Indeterminate	Hollowware	Milk Glass						fragment		1743- present	material	Miller et al 2000	
6	1	7/2/2014	1	Indeterminate	Hollowware	Refined Earthenware	Whiteware					body		1815- present	ware		
6	3	7/2/2014	1	Indeterminate	Hollowware	Porcelain	Unidentified Porcelain					body					very thick, small sherd
6	7	7/2/2014	1	Indeterminate	Indeterminate	Rubber						ring					ring of fibrous material with rubber coating, possible a bottle gasket or similar
7	2	7/2/2014	1	Indeterminate	Hollowware	Coarse Earthenware	Redware	Unglazed				body					
7	1	7/2/2014	1	Indeterminate	Hollowware	Stoneware	Unidentified Stoneware			yellow		body					thick-walled sherd with pale yellow interior and exterior
8	17	7/2/2014	3	Architectural	Brick, Fragment	Coarse Earthenware				red		fragment					coarse inclusions, mortar remnants, evidence of heat/fire
8	1	7/2/2014	1	Household	Bottle, Milk	Glass				clear		rim	Mold Blown, Machine	1886 - present	object	Miller et al 2000	machine made finish
8	3	7/2/2014	1	Household	Jar	Glass				clear		shoulder and rim	Multi-Part Mold	1858 - 1910	finish	Miller et al 2000	jar with wide, ground rim finish without threading

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
8	15	7/2/2014	1	Household	Lid	Milk Glass		Embossed		white	Lettering		Mold Blown, Machine	1970	object		canning jar lid liner embossed "BOYL"
8	4	7/2/2014	2	Household	Jar	Glass				clear		rim	Mold Blown, Machine	1910 - present		2000	small jars with external wide, non- ground, threaded finish with machine mold seams
8	5	7/2/2014	1	Household	Jar	Glass				clear		rim	Mold Blown, Machine	1910 - present		2000	large, shouldered jar with external wide, non-ground, threaded finish with machine mold seams
8	6	7/2/2014	1	Household	Bottle	Glass		Embossed		clear		body					"DO" "Pure" "Wh" embossed on side with overlapping, studded circle design
8	2	7/2/2014	3	Household	Bottle	Glass				clear		base	Mold Blown, Machine	1893 - present		2000	machine made with suction scar on base, ovoid shape approaching rectangular
8	14	7/2/2014	1	Household	Bottle	Common Glass				amber		body					
8	12	7/2/2014	1	Household	Bottle	Glass		Embossed			Lettering	body	Molded				"ONE QUART" near apparent base
8	10	7/2/2014	2	Household	Bottle	Glass				clear		neck	Molded				
8	7	7/2/2014	3	Household	Bottle, Milk	Glass		Embossed		clear		body	Mold Blown, Machine	1907/192 3 - ?	decorati on	rylea.com/Abo utUs/History.a spx	Two "D"s and "O-OPE" on body in different fonts, matches design seen in FS 1 "DAIRYLEA DAIRYMEN'S League CO-OPERATIVE ASSOCIATION INC." League formed 1907,

UNIT FS	CATALOG NUMBER	DATE	QUANTITY	CATEGORY	OBJECT	MATERIAL	WARE TYPE	DECORATION I	DECORATION II	COLOR	PATTERN	FORM	MANUFACTURE	DATE RANGE	DATED BY	REFERENCE	NOTES
																	under DLCA 1923 (see ref)
8	11	7/2/2014	1	Household	Bottle	Glass		Embossed			Figure	body	Mold Blown, Machine				overlapping circular coins with face on bigger/more visible "coins"
8	9	7/2/2014	2	Household	Bottle	Common Glass				amber		body					
8	8	7/2/2014	10	Household	Bottle	Glass				clear		body					
8	13	7/2/2014	1	Household	Bottle	Glass		Embossed			Dot	body	Mold Blown, Machine	1893 - present		www.sha.org/ bottle/	ripples formed by dots on exterior
8	16	7/2/2014	4	Indeterminate	metal	metal						indetermi nate					highly rusted small metal fragments - discarded
9	6	7/8/2014	2	Architectural	Nail	Iron						fragment	Indeterminate				highly oxidized
9	7	7/8/2014	1	Clothing	Shoe	Leather						upper fragment					leather uppers from shoe with eyelet holes
9	2	7/8/2014	1	Household	Bottle	Glass		Embossed		clear	Lettering	body	Mold Blown, Machine				remnants of lettering, perhaps S wrapped around an I
9	1	7/8/2014	2	Household	Flatware	Porcelain						rim					no extant decoration, discolored from iron oxide
9	3	7/8/2014	1	Household	Tumbler	Glass						body and rim	Indeterminate				straight-walled with slightly inwardly rolled lip
9	4	7/8/2014	1	Household	Bottle, Beer/Soda	Common Glass		Embossed		green	Lettering	base	Mold Blown, Machine	1905 - present		www.sha.org/ bottle/	"98 AJ" and start of volume designation around body near base
9	5	7/8/2014	9	Indeterminate	Bottle	Glass						body	Mold Blown, Indeterminate				ovoid-shaped bottle glass, unknown if liquor, medical, etc.

Appendix E – Nancy Owens Studio Landscape Plan, September 15, 2014

## Nancy Owens Studio LLC

#### THE LANDMARK COLONY

#### LANDSCAPE IMPROVEMENTS FOR THE COLONY MEADOW

September 15, 2014

Nancy Owens Studio LLC is proposing the following landscape improvements for the Colony Meadow (the cemetery and associated areas):

- 1. Meadow Grasses a mixture of low-maintenance grasses an perennials will be planted in areas where existing trees make a natural clearing.
- 2. Clearing, cutting, ground preparation invasive shrubs and vines will need to be removed. Up to XXX inches of existing topsoil should be removed as it contains the seeds of invasive plants such as Oriental Bittersweet, Japanese Honeysuckle and Porcelainberry. These aggressive plants will reestablish and inhibit the growth of proposed native plants unless the seeds are removed.
- 3. Tree Planting large trees are proposed on the northern edge of the cemetery area to encourage a planted visual buffer between the houses on Walcott Avenue and the site.
- 4. Tree Removals the existing trees within the confirmed boundary of the cemetery form a native woodland of black oaks, red oaks, sweetgums, red maples and silver maples. There are 10-15 trees in this area that should be removed as they are dead or leaning heavily. These trees can be cut off at the stump to avoid disturbance to the subsurface.
- 5. Fence Replacement the perimeter fence around the site will be replaced. On the northern edge of the cemetery between the Farm Colony property and the residential properties on Walcott Avenue there will be a 6'O chain link fence with footings. Along the property line at Walcott Avenue will be a metal picket fence with piers that will be constructed outside the confirmed boundaries of the cemetery.

### Nancy Owens Studio LLC

LANDSCAPE ARCHITECTURE • URBAN DESIGN

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6. Pathways – an informal path is proposed within the cemetery area that connects with sidewalks on the site. It will be constructed from woodchips/mulch to mitigate impact on the subsoil and contribute to a larger goal of permeable surfaces.

Appendix F – Unanticipated Discovery Plan (UDP)

#### Version 12/03/14

#### APPENDIX F

# AVOIDANCE, MONITORING AND UNANTICIPATED DISCOVERIES PLAN

Landmark Colony (LPC #LP-01408)
Staten Island, Richmond County, New York

#### Prepared by:

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Carol S. Weed
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December 2014

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#### 1. INTRODUCTION

This Avoidance, Monitoring, and Unanticipated Discoveries Plan (UDP) is in support of the proposed development of the former New York City Farm Colony parcel, located in a portion of Block 1955, Lot 1, on Staten Island, Richmond County, New York (the Project). At present, the parcel is owned by the City of New York (NYC) and is managed by NYC Department of Citywide Administrative Services (DCAS). NFC Associates, LLC (the Proponent) is developing plans for the re-use of the facility grounds and, in some cases, buildings.

The NYC Farm Colony is a designated New York City Landmarks Preservation Commission (LPC) Landmark (LPC #LP-01408). Archaeological features are known or assumed to be present based on historic documentation and field observations. These features include an historic cemetery.<sup>1</sup>

This UDP addresses three issues: 1) avoidance of the cemetery (aka, potters field) delineated on a 1911 topographic survey map; 2) archaeological monitoring in specific areas of the Project; and 3) treatment of unexpected archaeological finds, including artifacts, archaeological features, and human skeletal remains. While this plan is applicable to all site development actions, including pre-construction permitting actions and post-construction remediation, specific parts of it are applicable only to the cemetery area and its associated design buffer.

Pre-construction preparation activities include the below-ground removal of vegetation elements such as root balls, roots and runners, removal of the vegetation debris if that involves ground disturbance, and ground excavation for vegetation plantings. Excavations include but are not limited to removal of tree and plant root balls and plant runners, existing soil horizons, and cultural debris embedded in the ground. Archaeological monitoring of these actions is restricted to the cemetery and the design buffer. The Archaeological Monitor's role and responsibilities are discussed below.

The UDP includes four sections: Contractor Personnel Training; Avoidance; Monitoring Procedures, and Unanticipated Finds Procedures. Each section describes the actions needed if particular situations occur in particular parts of the Project. It is recommended that the UDP be appended to any eventual Project Construction Plan for contractor use.

#### 2. CONTRACTOR PERSONNEL TRAINING

The Proponent will assure that all involved personnel, including contractors, are aware of this UDP and, as needed, trained in the procedures to be followed in the event of discovery of unanticipated archaeological materials. The training will include information on the various types of cultural materials, features, and skeletal remains that may occur in

<sup>&</sup>lt;sup>1</sup> Greiger, Lisa, Alyssa Loorya, and Carol S. Weed. 2014 (October). Phase IA/IB Archaeological Assessment, NYC Farm Colony (LPC #LP-01408), Staten Island, Richmond County, New York. Report prepared by VHB, New York, New York for NFC Associates, Inc., Staten Island, New York.

the Project. Trainees will be instructed that if items of consequence are observed they must stop work immediately and contact their immediate supervisor. Their immediate supervisor is charged with notifying the Contractor's Lead Environmental Inspector (LEI) or equivalent who, in turn, will notify the Proponent's Project Manager, LPC, and others as noted below.

#### 3. AVOIDANCE

LPC has determined that the location of the historic cemetery and its design buffer is subject to disturbance during various proposed Project actions. These proposed actions are outlined in the landscape plan prepared by Nancy Owens Studios dated September 15, 2014.<sup>2</sup> The individual archaeological features identified within the cemetery and immediately adjacent to it in the buffer will be avoided and protected either with fencing or the use of cover fill. The locations of these features are shown on Figure 3.2 and presented in Table 3.2 in the main text. Protection will be in place prior to and during vegetation clearance and removal, new plantings, and construction of the pathway, the proposed memorial site, and the permanent fence.

The cemetery boundary and the exterior boundary of the 50-foot wide buffer adjacent to the cemetery boundary will be marked in the field with metal staking, orange erosion fencing, or other appropriate markings by the civil surveyors prior to field activities. The Archaeological Monitor will confirm in the field that all archaeological features delineated during the Phase I archaeological work have been included within the delimited boundaries.

No ground clearance will be permitted within the cemetery or the cemetery design buffer except as delineated in the Owens 2014 plan. If modifications to the Owens plan are needed, those modifications will be characterized in writing and the amended plan submitted for review by LPC prior to implementation. The mapped locations of the cemetery, the cemetery design buffer, and the surface archaeological features within these areas will be added to the construction package maps. The individual features will be labelled "sensitive features."

#### 4. MONITORING PROCEDURES

The Project will provide this UDP and its procedures to potential Project Contractors during the bid processes. It will be the Contractor's responsibility to engage the Archaeological Monitor (AM) and to identify a relief AM. Both the AM and the relief AM will meet the qualification standards as set forth in 36 CFR 61 for a Principal Investigator. The credentials for both Archaeological Monitors must be approved by the Proponent's Project Manager (PM) and the LPC.

 $<sup>^2</sup>$  Nancy Owens Studio LLC. 2014 (September 15). The Landmark Colony Landscape Improvements for the Colony Meadow. Submitted to LPC for review.

The Archaeological Monitor will be at the Project site for the following events: kick-off meeting with Project Manager and the Contractor's Lead Environmental Inspector (LEI) or equivalent; Contractor personnel training; and all contractor actions within the historic cemetery and its buffer that involve ground disturbance or the removal of archaeological Feature 1. The Archaeological Monitor also will be on-call but not on-site during ground preparation in the Administrative Core in the event that archaeological features such as privies or cisterns are revealed.

Ground disturbance actions include re-contouring, existing infrastructure removal including historic fence and utility lines, emplacement of new surface or subsurface infrastructure or plantings, and landscaping activities involving ground disturbance. The relief AM will attend both the kick-off meeting and the Contractor personnel training session.

The Archaeological Monitor will report directly to the Project Manager and the LPC. The AM will coordinate daily with the Contractor's LEI. It will be the responsibility of the LEI to report any suspected cultural resource finds or features to the AM if the monitor is elsewhere on the Project site when an Unanticipated Discovery is initially identified or avoidance procedures have to be implemented.

When on-site, the Archaeological Monitor will file a daily log entry. The entry will detail the date, time period worked, weather conditions, the work completed, and any unanticipated finds identified. The log entry will be submitted to the Contractor's Lead Environmental Inspector and the Project Manager. The log entry will be supported by up to five (5) photographs showing the day's conditions and finds, if any, and a map showing the day's work areas.

It is understood that the Archaeological Monitor has the right of stop work. He/she, however, may issue this order only after discussion with the LEI or, in his/her absence, the Project Manager and LPC.

#### 5. UNANTICIPATED DISCOVERY PROCEDURES

#### **5.1. CULTURAL MATERIALS**

Unanticipated cultural materials take several forms. These include clusters of artifacts, historic and Native American features such as foundations, cellar holes, privies, wells, cisterns, fire pits (aka hearths), storage pits, and surface pits. If a member of the construction work force believes she/he has encountered such cultural materials, they will be required to follow the steps outlined below.

1. The person noting the cultural material should stop work immediately and notify their supervisor promptly.

- 2. The field supervisor(s) will direct that all ground disturbing activity within 100 feet of the find will be stopped until notified that work can recommence. The area of the cultural material will be clearly marked with flagging or safety fencing.
- 3. The field supervisor(s) will immediately notify the Contractor's LEI or equivalent. The LEI will immediately notify the Archaeological Monitor, if not already present, the Project Manager, and LPC. The AM will complete on-ground evaluation of the find within 24 hours of notification. The AM will document the find, photograph it, and submit a letter report to LPC, the Project Manager, and the LEI within two (2) working days of the initial find. The letter report will detail the find, the AM's response to it, and the AM's conclusions concerning the find.
- 4. In the event that the cultural material is determined not to represent a cultural resource and the LPC concurs, the Archaeological Monitor will advise the Project Manager that the stop-work order can be removed.
- 5. In the event that the cultural material is determined to be a cultural resource, the Project Manager and the Archaeological Monitor will present a scope of work (SOW) to LPC that outlines the method for evaluating the cultural resource, determining its significance, and the Project's effect on it.
- 6. In the event that an SOW is presented for review, the LPC will have three (3) business days following their confirmation of receipt of notification to comment upon the work plan. If the Project does not receive written comment from the LPC in that time frame, it will commence the fieldwork as outlined in the SOW.
- 7. All work at the cultural resource will be confined to the Project's area of direct effect. If the resource is found in an open trench, the Project can continue with construction activities including backfilling as soon as the Archaeological Monitor advises the Project that the site evaluation work is complete.
- 8. The Archaeological Monitor will provide a written report of findings within three (3) business days of the completion of fieldwork. The report will detail the scope of work, the findings, and provide a recommendation as to the potential eligibility of the resource. The report will be transmitted to the LPC within one (1) business day of its receipt by the Project. The LPC will have five (5) business days following their confirmation of receipt of the report to respond to the conclusions of the report. If the resource has been recommended not eligible, the Project will re-commence construction work in the area of the find (if not in a trench) after five (5) business days.
- 9. In the event that the resource is recommended potentially eligible by the Archaeological Monitor or by LPC, the Project in concert with LPC will prepare a plan for the mitigation of the cultural resource. A formal data recovery plan will be prepared and submitted to LPC. The LPC will have three (3) business days following confirmation of receipt of the plan to respond to the data recovery plan. If LPC provides no input on the plan in three (3) business days, then the Project will commence data recovery.

10. The Project will request that LPC review in the field the results of the field investigations at their conclusion. If the LPC representative concurs that no further field investigation is warranted, then the Project will submit a letter to the LPC stating that all fieldwork has been completed to the LPC's satisfaction and request that she/he sign a statement to the effect. The Archaeological Monitor will submit a management summary detailing the results of the data recovery operation within three (3) business days of the completion of fieldwork. The Project will ask LPC to allow the Project to recommence construction work in the area of the cultural resource. The letter also will outline the reporting schedule for the data recovery report.

#### 5.2. HUMAN SKELETAL MATERIAL

This Project does not cross federal or tribal lands and is therefore not subject to compliance with the Native American Graves Protection and Repatriation Act (NAGPRA). It, however, does fall within an area of archaeological sensitivity and within the living space of a known historical farmstead. The following procedures will be implemented by the Archaeological Monitor or the Project's Lead Environmental Inspector (LEI) for dealing with any suspected human remains that may be encountered during Project construction.

- 1. In the event that suspected human remains are discovered, the Archaeological Monitor or the LEI will stop work immediately. The AM or the LEI will notify the Project Manager, the LPC, the City of New York Department of Citywide Administrative Services (DCAS), the City of New York Office of the Medical Examiner (ME), and the City of New York Police Department (NYPD). A reasonable effort will be made to protect human remains from further damage or intrusion. No bones or associated artifacts will be removed until the NYPD, LPC, and the ME have released the site for subsequent archaeological investigation.
- If Native American or Historic archaeological cultural materials are present, then the Project Manager will coordinate with LPC to determine which Native American Tribes should be notified of the burial. No further work will be done at the burial site until the notifications have been made.
- 3. If the NYPD, ME, and LPC determine that the burial is an archaeological feature, arrangements will be made by the Project Manager for a physical anthropologist or bioarchaeologist to document the physical remains. This step may involve uncovering the skeleton if the necessary measurements cannot be taken in the field. It also may be necessary to expand the excavation to facilitate viewing the skeleton in situ and determine the context. Full excavation and/or removal of the remains will not occur until the appropriate Native American representatives are notified and have had an opportunity to comment. Any field methodology proposed will be conducted in consultation with LPC. Tables of skeletal attributes, and/or computer programs such as FORDISC, should be consulted to compare the skeletal measurements with existing human populations. If the measurements match those for Native American

populations, or if there is doubt as to ancestry, they will be assumed to be Native American. Human remains found within prehistoric contexts will be assumed to be Native American, unless skeletal or site information strongly suggests otherwise.

- 4. In consultation with the involved Native American groups and LPC, the Project will determine if the construction plan can be altered in such a way as to avoid the burial site. If no practicable or feasible alteration can be made, all involved parties will be consulted about the removal and/or reburial of the human remains.
- 5. If the human remains are determined to be other than Native American, avoidance is still the preferred option. If avoidance is not possible, then the local municipality will be notified and discussions will occur with all constituencies (such as descendants or landowners) regarding removal and reburial of the remains.
- 6. All actions will be summarized in a report that the Project will submit to the LPC and the other involved parties.

#### 6. NOTIFICATION LIST

The following notification list should be used in the event of unanticipated discoveries:

#### Landmark Colony Project Manager

**TBD** 

#### City of New York Landmarks Preservation Commission (LPC)

Municipal Building
One Centre Street – 9<sup>th</sup> Floor
New York, New York 10007
Amanda Sutphin, Director of Archaeology
212.669.7823
asutphin@lpc.nyc.gov

#### City of New York Citywide Administrative Services

Municipal Building
One Centre Street
New York, New York 10007
Joey Kara Koch, Deputy Commissioner
212.386.0268
jkoch@dcas.nyc.gov

#### City of New York Office of the Medical Examiner

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