

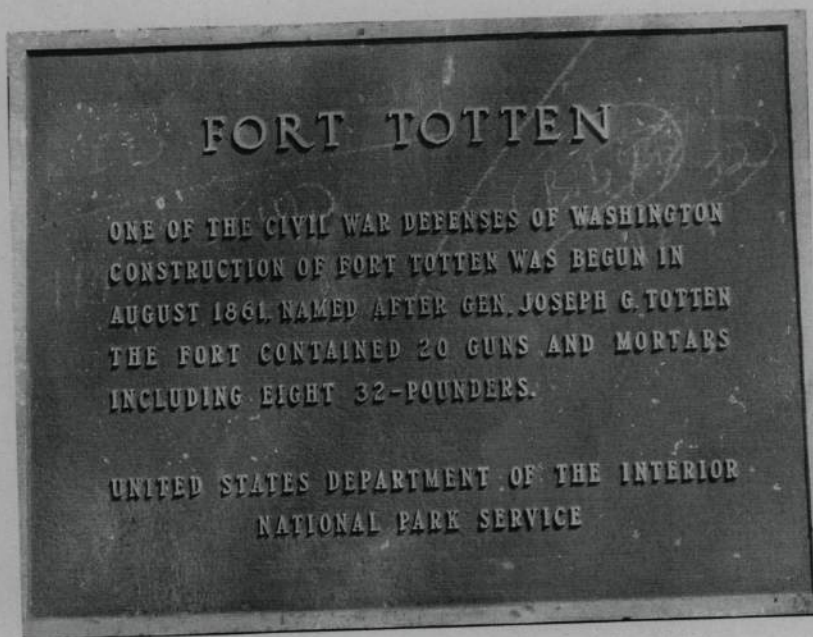
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ACS
2010

Archaeological Monitoring Results
North Park at Fort Totten
Queens, New York

NYC Department of Parks & Recreation
Capital Projects Division
Contract #Q-458-407M

January, 2010



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ACS
◆ Archaeological Consulting Services ◆

**Archaeological Monitoring Results
North Park at Fort Totten
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**NYC Department of Parks & Recreation
Capital Projects Division
Contract #Q-458-407M**

by

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and
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of

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January, 2010

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Abstract

This report contains the results of archaeological monitoring services conducted by ACS (Archaeological Consulting Services) during the months of September through October, 2008 and February through March, 2009. The project calls for the monitoring of construction activities related to the creation of North Park at Fort Totten in Queens, New York. A prior archaeological assessment survey for the project had identified three sensitivity areas through historic background research, all affiliated with the historic military operations of the fort. The three site areas were identified as: 1) the Battery King; 2) Fourth Hospital; and 3) Ordinance Storehouse site areas. Until recently, the project area contained residential housing for military personnel of Fort Totten, with project site plans calling for the demolition of 19 of these structures and subsequent landscaping efforts including grading. ACS was on site to conduct archaeological monitoring during impacts to the subsurface contexts of the project area during demolition and construction within the three sensitivity areas, including the excavation and identification of water mains, grading of the southern part of the project area, and excavation conducted for the installation of an underground fuel tank.

ACS was approached to perform archaeological monitoring services by Tucci Equipment Rental Corp, primary contractor for the development of the park from Bronx, New York. Tucci provided ACS with the New York City Parks contract and site plans for the project, and protocols for archaeological monitoring were established at two meetings with the project resident director from the Capital Projects Division. Given the ownership of the project area by NYC Parks, the project is subject to review by the Landmarks Preservation Commission (LPC). LPC was consulted prior to the project and during the performance of monitoring.

Formerly farmland, Fort Totten was launched as a military site during the Civil War. Several hospitals were constructed at the fort, the fourth and final one operated within the project area between at least 1890 and 1910. There were also ancillary structures at the site, including a death house and ambulance shed. The 1871 mortar battery, or "Battery King" was constructed near the northwest part of the project area, and an 1890 ordinance store house was located near the southern boundary of the project area. These facilities were all abandoned during the early 20th Century, and the more recent military housing complex was built in 1959. Prior archaeological studies have mostly taken place to the south of the project area in other parts of Fort Totten, although a few tests within the current project area have mostly revealed modern debris.

During archaeological monitoring, many parts of the project area revealed considerable subsurface disturbance, much of which was related to the construction of the former military housing complex. The foundations of the houses extend several feet below the surface and are connected by a complex of subsurface utility lines. Given 50 years of recovery, there was often a restratified dark brown to dark yellowish brown surface layer of fine sandy loam, overlying a deep yellowish brown to dark yellowish brown fine sandy loam subsoil.

Exposure of subsurface contexts did not reveal any direct features associated with the Battery King, Fourth Hospital, or Ordinance Storehouse site areas. One stone wall section exposed near the Fourth Hospital site area was consistent with contemporaneous architecture of older existing buildings at the fort, but was clearly a dislocated section in fill context. Another concrete platform observed in the Ordinance Storehouse site area was revealed to be a relatively recent structure, likely related to the presence of a former fuel tank. Two bottle dump features were also exposed, one in the northwest part of the project area, the other in the northeast part of the project area. Each contained rich deposits of early to mid-20th Century bottles and other artifacts. Historic artifacts were mostly limited to domestic household ceramic and glass wares, with a highest concentration in the vicinity of former house site #423 in the Fourth Hospital site area.

Recommendations call for the continued requirement of archaeological monitoring for any future subsurface disturbance from construction or landscaping activities at the King Battery, Fourth Hospital, or Ordinance Storehouse sites. The Fourth Hospital site area as originally defined should be expanded east to include the former Death House and Ambulance Shed sites as identified on historic maps, and should incorporate the vicinity of former house site #423 where the historic artifact cluster was located. Features and immediately surrounding areas associated with the dislocated stone wall section, the concrete platform, or the two bottle dumps do not require further conservation efforts.

Project Summary

Project Name: North Park at Fort Totten, Queens, New York.

Project Purpose: To investigate possible cultural resources which may be impacted by the demolition of military housing and landscaping involved with the creation of North Park.

Project Funding: New York City Department of Parks, Capital Projects Division, Queens, New York.

Project Location: Northern end of Fort Totten, Queens, New York.

Project Size: Overall section granted by U.S. Department of Defense is approximately eight acres.

Investigation Type: Archaeological monitoring.

Investigation Methods: Construction monitoring.

Dates of Investigation: August, 2008 through March, 2009.

Performed by: ACS (Archaeological Consulting Services), 10 Stonewall Lane, Guilford, Connecticut 06437-2949, (203) 458-0550 (telephone), (203) 672-2442 (fax).

Principal Investigators: Gregory F. Walwer, Ph.D., and Dorothy N. Walwer, M.A.

Submitted to:

New York City Department of Parks (Vincent Alfano - Capital Projects), Olmsted Center, Flushing Meadows Corona Park, Queens, NY 11368, (718) 760-6601.

New York Office of Parks, Recreation and Historic Preservation (Douglas Mackey, Staff Archaeologist), Pebbles Island, P.O. Box 189, Waterford, NY 12188-0189, (518) 237-8643.

Reviewing Agency:

Landmarks Preservation Commission (Amanda Sutphin, Staff Archaeologist), Municipal Building, One Centre Street, 9th Floor, New York, NY 10007, (212) 669-7823.

Recommendations:

Archaeological monitoring for any future subsurface disturbance of the Battery King, Fourth Hospital, or Ordinance Storehouse sensitivity areas as defined by prior assessment survey. Also, archaeological monitoring for any future subsurface disturbance of extended parts of the Fourth Hospital site, including the historic death house and ambulance shed site areas, and a 50-foot radius about the southwest corner of former house #423 where historic artifacts were recovered in higher concentrations. No further conservation efforts are warranted for the concrete platform exposed at the Ordinance Storehouse site area, the dislocated stone wall feature recorded at the Fourth Hospital site area, or the two 20th Century bottle dump features.

Acknowledgements

Archaeological Consulting Services is indebted to the following people whose assistance helped to make the execution of this project more accessible and thorough:

Dr. Amanda Sutphin, Staff Archaeologist for the Landmarks Preservation Commission (LPC), New York, New York. ACS thanks Dr. Sutphin for providing access to important cultural resource management research sources and for providing consultation for the duration of the project.

Mr. Vincent Alfano, New York City Department of Parks, Capital Projects Division. ACS thanks Mr. Alfano for coordinating the overall project.

Mr. John Godek, Resident Engineer for the New York City Department of Parks, Capital Projects Division. ACS thanks Mr. Godek for coordinating archaeological monitoring and construction efforts.

Tucci Equipment Rental Corp of Bronx, New York. ACS thanks Tucci for working with ACS in the field and for providing a cooperative spirit with respect to archaeological monitoring requirements.

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CHAPTER 1: INTRODUCTION

Project Description

This report regards the performance of archaeological monitoring services at Fort Totten in Queens, New York. Fort Totten is a New York City Landmark and historic military base in the northeast part of Queens, portions of which are currently being utilized for various civic purposes. The northern end of the base recently contained a housing complex built in the late 1950s, and is now owned by the New York City Department of Parks and Recreation (NYC Parks). Current plans call for the creation of a landscaped park, named "North Park", following the demolition and removal of 19 of these structures. Three other houses in the southern part of the housing complex will be renovated and used for future government offices.

ACS was contacted to perform archaeological monitoring services by Tucci Equipment Rental Corp of the Bronx, which is the primary contractor. Construction monitoring follows the recommendations of a prior archaeological assessment survey conducted by independent archaeologist Dr. Joan Geismar, who identified three areas in the housing complex that could contain important historic archaeological contexts: 1) the eastern end of the Battery King in the northwest part of the complex; 2) the Fourth Hospital and associated outbuildings towards the center of the complex; and 3) an Ordinance Storehouse facility in the southern part of the complex. Because of the possibility that the historic hospital grounds could have associated interred human remains, the scope of work for monitoring included a forensic anthropology component.

Archaeological monitoring was conducted during several construction tasks of the project, including the excavation and identification of water mains supplying the former housing complex, grading in the southern part of the project area, and excavation conducted for the installation of an underground fuel tank. ACS provided the monitoring services intermittently between the months of September, 2008 and March, 2009. Given the ownership of the land by NYC Parks, the monitoring services and subsequent report is subject to review by the New York City Landmarks Preservation Commission (LPC). The monitoring methods and reporting format follow guidelines issued by the LPC regarding cultural resource surveys for New York City.

Background

The study by Dr. Geismar for the project area was conducted in 2007. That assessment survey noted prior archaeological studies performed at various locations in Fort Totten, and it is a combination of these surveys that has provided the historic background for the current project. Fort Totten is a peninsula that juts north from the mainland into Long Island Sound, and resides across the narrow part of the sound from historic Fort Schuyler in Throgs Neck. Together, these forts were designed to provide protection for New York City from the east. The peninsula that contains Fort Totten was originally known as Thorne's Point in the early 17th Century, named after owner William Thorne whose family owned it for nearly 150 years. In the late 18th

Century, it passed to the Wilkins family, and then in the early 19th Century to Charles Willets who named it Willets Point and used the bulk of the property as a nursery. Willets also built a Greek Revival house on the property before his death in 1832. The property then changed hands once more until being purchased in pieces by the U.S. government.

In 1862, construction of the military base began. Over the course of the next 25 years, several hospital facilities were constructed at the base - the last fourth and last one between 1886 and 1890 within the project area near recent house #425, and functioned as such until at least 1910. Historic documentation confirms that this facility relied on privies, a number of which could still be preserved within the current project area. Outbuildings associated with the hospital to the east included a "Death House" and "Ambulance Shed" according to historic maps, raising the concern for the possibility that human remains or partial remains could be present on the grounds, extending as far east as house #408 and #511. The "Battery King" was a mortar battery constructed in 1871, containing deep pits housing mortar guns near the northwest part of the project area, likely just west of house #505 and #506. By 1936, these mortar pits had been converted into bomb shelters, the subsurface remains of which may still exist. Finally, an "Ordinance Store House" was built by 1890 in the vicinity of house #430, although it is not known when that part of the facility was terminated.

The housing complex was built in 1959 at a time when federal funding was being used to boost military housing throughout the country. The military base is now utilized by a number of government organizations, including the U.S. Army, U.S. Coast Guard, NYC Fire Department, Eastern Paralyzed Veterans Association, and NYC Parks. The Fort Totten Battery in general was designated as a NYC Landmark in 1974, while the Fort Totten Historic District of older buildings to the south of the project area was designated in 1999. While archaeological testing has revealed valuable information in other parts of Fort Totten, only a minimal amount of subsurface testing has been conducted within the current project area, limited to a few tests in the vicinity of house #406 and #407 where mostly modern debris was recovered, and near #507 where a concrete feature was recorded. Archaeological monitoring for the current project allowed for a crude, yet broad review of subsurface conditions for the bulk of the North Park area.

Field Conditions

Archaeological monitoring was concentrated in the three areas designated in the prior assessment survey as archaeologically sensitive. At the northwest part of the project area, monitoring was limited to the excavation of water mains near house #505 and #506 near the eastern end of the Battery King area. Water main excavations were also monitored towards the center of the project area near house #512 and #513; and #423, #424, #425, #426, and #427; while ACS additionally requested monitoring near house #511 and #408 to the east in order to include grounds possibly associated with the outbuildings of the hospital in this area. ACS also monitored extensive grading activity that extended from around house #424 in the hospital area to the southwest near house #427 near the ordinance area. To the southeast of house #427 in the ordinance area, ACS also monitored excavations for the installation of an underground fuel tank.

Field conditions were variable during construction and monitoring, ranging from dry late summer conditions in September, to very cold conditions with frozen soil in January and February. Soil conditions were variable throughout the complex, but generally included some form of a restratified dark brown to dark yellowish brown surface layer of fine sandy loam to variable depths, followed by a deep yellowish brown to dark yellowish brown fine sandy loam subsoil. In lower lying areas, the subsoil often graded into a silt loam, with some lenses or pockets of clay loam. The silt loam and clay loam was occasionally mottled with gray. The restratified upper soil context relates directly to landscaping and construction of the housing complex roughly 50 years ago.

The assessment of mostly disturbed conditions for the upper soil context of the project area is confirmed by artifact content, with modern materials frequently found in upper subsoil contexts, as well as occasional historic pieces found in the surface layer. As expected, more substantial disturbances occurred within close proximity to the recent structures. The "Capehart" houses of the project area contain cinderblock "pier" foundations, and while not representing full basement foundations, have impacted the subsurface to a depth of several feet. Additional disturbances were caused by the network of underground utilities throughout the complex, including water mains and copper lateral lines, PVC drainage pipes, the former underground fuel tank, steam pipes, and sewage lines - with sewage and drainage lines and the former fuel tank commonly contained within trenches of imported gravelly or sandy fill. Other subsurface disturbances to variable depths include those caused by the construction or installation of telephone poles, road ways and parking areas, and various landscapings.

Analysis

There were no positively identified prehistoric features or artifacts identified during the monitoring survey. Fragments of charcoal were recovered in various parts of the project area, but mostly in conjunction with modern material and not in association with potential prehistoric material. There were several quartz pieces recovered during the survey that could represent lithic debitage from the manufacture of stone tools, although a lack of distinctive lithic reduction traits suggests they are more likely related to fracturing by natural and/or historic to modern cultural forces. Subsurface testing in other parts of the Fort Totten facility have revealed a very light density of prehistoric lithic debitage and related materials.

There were no major historic feature contexts encountered during the monitoring survey, although an exploratory trench excavated in an effort to locate a water main near house #424 did reveal a mixed context of historic and modern artifacts, fill features, and a dislocated section of a masonry wall cut by backhoe excavation. Bound by mortar, two stones from the dislocated wall section were inspected and revealed roughly coursed textures and sizes similar to the stones used in other foundations of late 19th Century buildings at the fort. The dislocated wall section may ultimately relate to the contemporaneous construction of the final hospital building at Fort Totten.

To the south, adjacent to house #430 and #431, the deep excavation trench for the new underground fuel tank revealed fill deposits related to an earlier fuel tank that had been removed. About eight feet below the surface, an edge of a concrete platform was observed in the western

trench wall. Initially, there was concern that the feature could be related to the historic ordinance structure located in this vicinity, but a close inspection of the feature revealed cross-hatched rebar that is mid to late 20th Century in origin, as well as threaded tie-rods likely related to the housing of the former tank.

Portions of two substantial trash dump features were exposed in the northwest corner and northeast corner of the current project area. Each contained a similar array of material, and appear to represent intentional trash disposal for the base prior to the construction of the homes in 1959. Distinctive items recovered from the trash dumps include ironstone and whiteware ceramic plates and fragments, an alarm clock, and a heavily oxidized 1939 New York Worlds Fair license plate. There was also a high density of bottles recovered from the two features, including an unusually high proportion of whole to nearly whole specimens.

NYC Parks authorized ACS to conduct a separate analysis of the bottle collection from the two trash features, which contained a relatively rare assemblage of early to mid 20th Century glass bottles covering a broad range of product types, and with a remarkable array of unique specimens and only a few duplicates recovered. The bottle collection dates mostly to the 1930s through 1950s. The vast majority of the bottles are 20th Century in origin, as revealed by vertical mold seams that extend fully through the finish, as well as suction scars on the bases that indicate modern, fully automated bottle manufacturing techniques. Some of the bottles still contain traces of product residue, intentionally left where possible in the event that further analysis is warranted.

Another area revealed a high concentration of historic artifacts, but not within any distinctive feature context. The southwest corner of house #423 is at the heart of an area, roughly 100 feet in diameter, containing a high density of historic artifacts. Much of this area has been impacted by the house itself and its associated utilities, although surrounding areas, particularly in subsoil contexts, hold the potential for *in situ* deposits to be represented. The representative household wares are much more varied than for the rest of the project area, including creamware, whiteware, red earthenware, porcelain, buff stoneware, ironstone china, and gray stoneware, representing a span of at least the late 18th through mid-19th centuries. More diagnostic ceramic pieces include the creamwares and the transfer-printed whitewares that help define this estimated time range of occupation. Other materials recovered from this area include an array of domesticated mammal remains, often with butcher's saw cut ends; quahog clam shells; and glass bottle fragments. Variable interpretations of the assemblage include that it represents agrarian occupation of the property before it was a fort, or that the early household wares could represent a curated collection of wares utilized by on-site hospital staff in the late 19th Century.

ACS also noted a large array of modern materials recorded, but not collected, given a lack of substantial archaeological value. Structural materials noted in trenches around the houses include brick, road asphalt, concrete, wire nails, window glass, milled wood, asphalt shingles, linoleum, ceramic tile, and drainage pipe fragments. Household materials include whitewares, ironstone china, porcelain, and beverage bottle glass. Various glass marbles and plastic toys were recorded, especially near the former playground area.

Recommendations

Recommendations based on the results of archaeological monitoring at the North Park section of Fort Totten basically follow those of the prior assessment study, calling for archaeological monitoring of any substantial subsurface activity in three areas representing the projected locations of the Battery King, Fourth Hospital, and Ordinance Storehouse site areas. The Fourth Hospital site area as defined in the prior assessment survey may not have extended far enough east to have enveloped the death house and ambulance shed which were associated with the hospital, thus that sensitivity zone should include the area between house #511 and #408. No further conservation effort is warranted for the concrete platform feature exposed near the ordinance area since it is modern in construction, nor for the bottle dump features in the northwest and northeast parts of the project area which have been sufficiently sampled to provide data regarding product use and consumption at Fort Totten in the early to mid-20th Century. The stone wall feature found near house #424 is interesting in that it may relate to the former hospital, although it is a dislocated section that may have derived from an original location closer to house #425, and further conservation for that segment is unwarranted. One area of particular concern includes the southwest corner of house #423, and at least a 100-foot diameter area containing artifacts dating from the late 18th through mid-19th centuries. Possibly relating to the use of the site before the military presence, this area may contain valuable information regarding early settlement in the area, and should therefore be subject to archaeological monitoring and possible reconnaissance subsurface testing if this area is to be substantially impacted by future developments, as determined by the Landmarks Preservation Commission (LPC).

CHAPTER 2: BACKGROUND

Environmental Setting

The project area is located in the Borough of Queens, New York (Figures 1 and 2). Fort Totten is in the northeast part of Queens, just east of the Throgs Neck Bridge (Figure 3). The overall fort complex is 136 acres. It is on a small peninsula landform that juts north into the Long Island Sound, flanked on the west and east by the smaller Little Bay and Little Neck Bay, respectively. The ridge that forms the peninsula is a terminal moraine associated with the last Wisconsinan glacial period. The resulting thick till is on the order of 30 to 150 feet deep. Projected soils at Fort Totten include Montauk silt loam that typically has a surface layer of dark grayish brown silt loam, followed by a yellowish brown silt loam subsoil that grades sandier with depth; and Riverhead-Plymouth soils with a surface layer of brown sandy loam overlying strong brown or yellowish brown sandy loam subsoil (Bienenfeld and Leininger 1998:6). Some of the land to the south had been historically infilled where there were once wetlands. The central ridge of the peninsula reaches a height of 68 feet above mean sea level. The peninsula was historically known for its owners prior to the fort, including Thorne's Point, Wilkins Point, and then Willets Point. The current project area is approximately eight acres in the northern part of the fort complex, where 19 existing military housing structures were demolished for the creation of North Park (Figure 4). Until the recent demolition of the military residential structures, the bulk of the project area consisted of maintained grass with landscaped plantings around the buildings, although historically the project area would have had a hardwood forest cover before it was cleared and used as a nursery and possibly other agricultural concerns.

Historic Setting

The history of Fort Totten has been summarized in a fairly comprehensive survey performed just over ten years ago (Bienenfeld and Leininger 1998), and more recently in an assessment survey for the North Park project (Geismar 2007). There is also a thorough coverage of its history as it relates to architecture in the survey leading to the designation of the Fort Totten Historic District that includes the project area (Pearson 1999).

Before the arrival of Europeans, the Willets Point peninsula was part of Munsee-speaking Indian tribal territory. Only a few prehistoric sites have been recorded within a mile of the project area, including a Woodland era shell midden in Bayside where recovered artifacts include ceramic sherds, bone, and projectile points; and at other locations on the Hutchinson River and Long Island Sound.

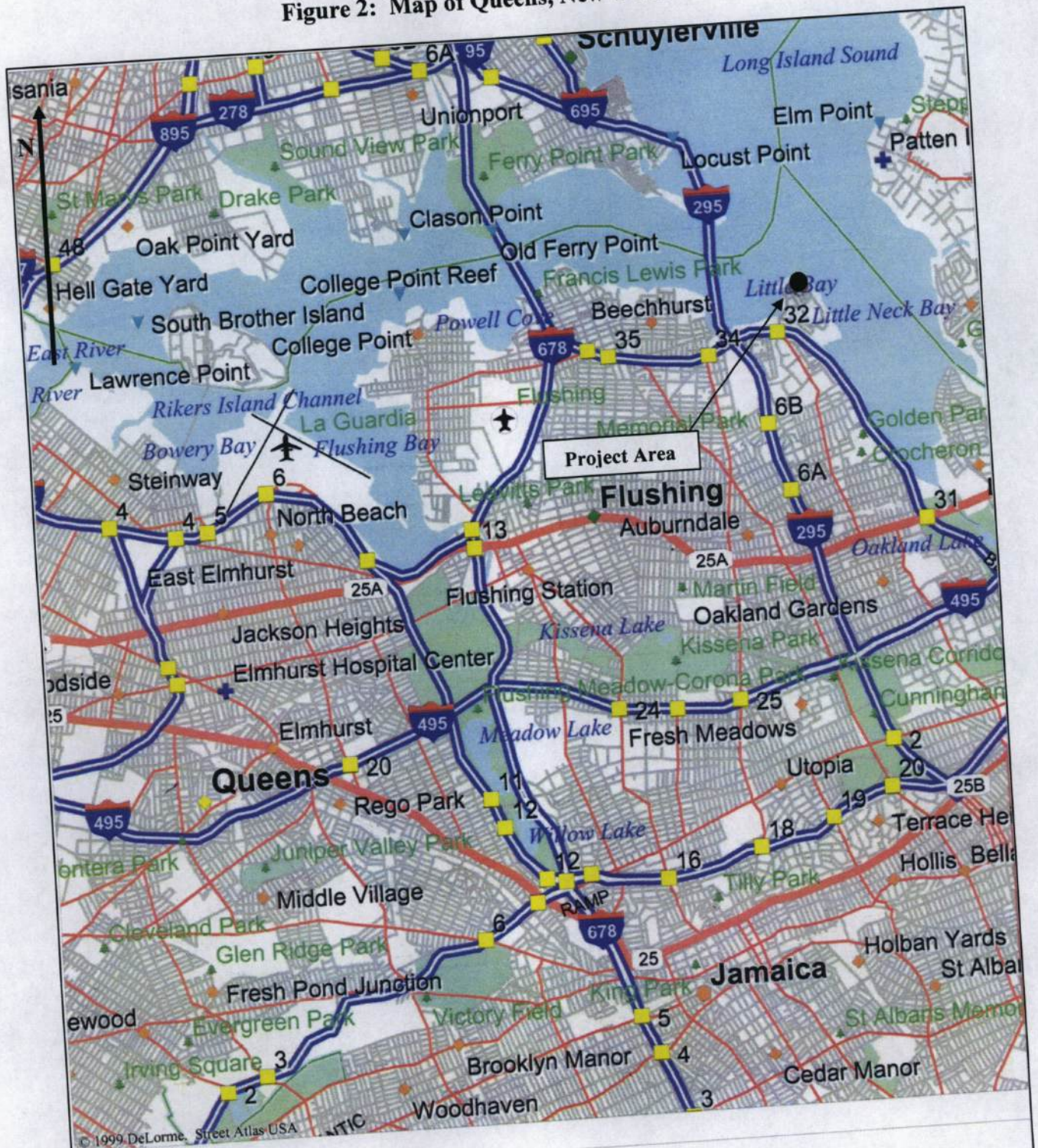
The Willets Point name of the landform derives from Charles Willets who purchased the property in 1829, and who built a Greek Revival house that was later moved to Murray Avenue. The original location of that house is thought to have been in the northern part of the peninsula just north of the project area (Bienenfeld and Leininger 1998). Prior to this, the peninsula belonged to the Thorne and then Wilkins families. William Thorne received the land from the

Figure 1: Map of New York



Figure 1: Map of New York showing project location in New York City.

Figure 2: Map of Queens, New York



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Scale 1:87,500 (at center)

2 Miles

2 KM

- Local Road
- Major Connector
- State Route

LEGEND:

- CL - CONTRACT LIMIT LINE & CONSTRUCTION FENCE, EXCEPT WHERE NOTED
- CF - CONSTRUCTION FENCE WHERE OFFSET FROM CLL
- PL - PROPERTY LINE
- - AREA OF ARCHAEOLOGICAL SENSITIVITY
- - EXISTING TREE - DREFINE INDICATED
- - REMOVE EXISTING TREE
- - REMOVE EXISTING TREE STUMP
- - TEMPORARY WOODEN TREE GUARD
- - CHAIN LINK FENCE
- - REMOVE CHAIN LINK FENCE
- - REMOVE CONCRETE CURB AND TIMBER EDGE
- - SAW CUT
- - BUILDING TO BE REMOVED
- - BUILDING TO REMAIN
- - REMOVE ASPHALT PAVEMENT
- - REMOVE CONCRETE PAVEMENT AND STAIRS
- - REMOVE IN PRESENCE OF SITE ENGINEER
- - HAND EXCAVATE WITHIN LIMIT OF CANOPY
- - WATER MAINHOLE
- - SINKER MAINHOLE
- - NO MARKING MAINHOLE
- - DRAIN
- - MONITORING WELL
- - UTILITY POLE
- - REMOVE UTILITY POLE
- - GUY WIRE
- - TRANSFORMER FOUND IN RECORD DRAWINGS, NOT IN FIELD
- - ELECTRICAL MAINHOLE
- - LIGHT POLE
- - REMOVE & SALVAGE LIGHT POLE
- - TRAFFIC SIGN
- - REMOVE TRAFFIC SIGN
- - FIRE HYDRANT
- - REMOVE FIRE HYDRANT
- - WATER VALVE

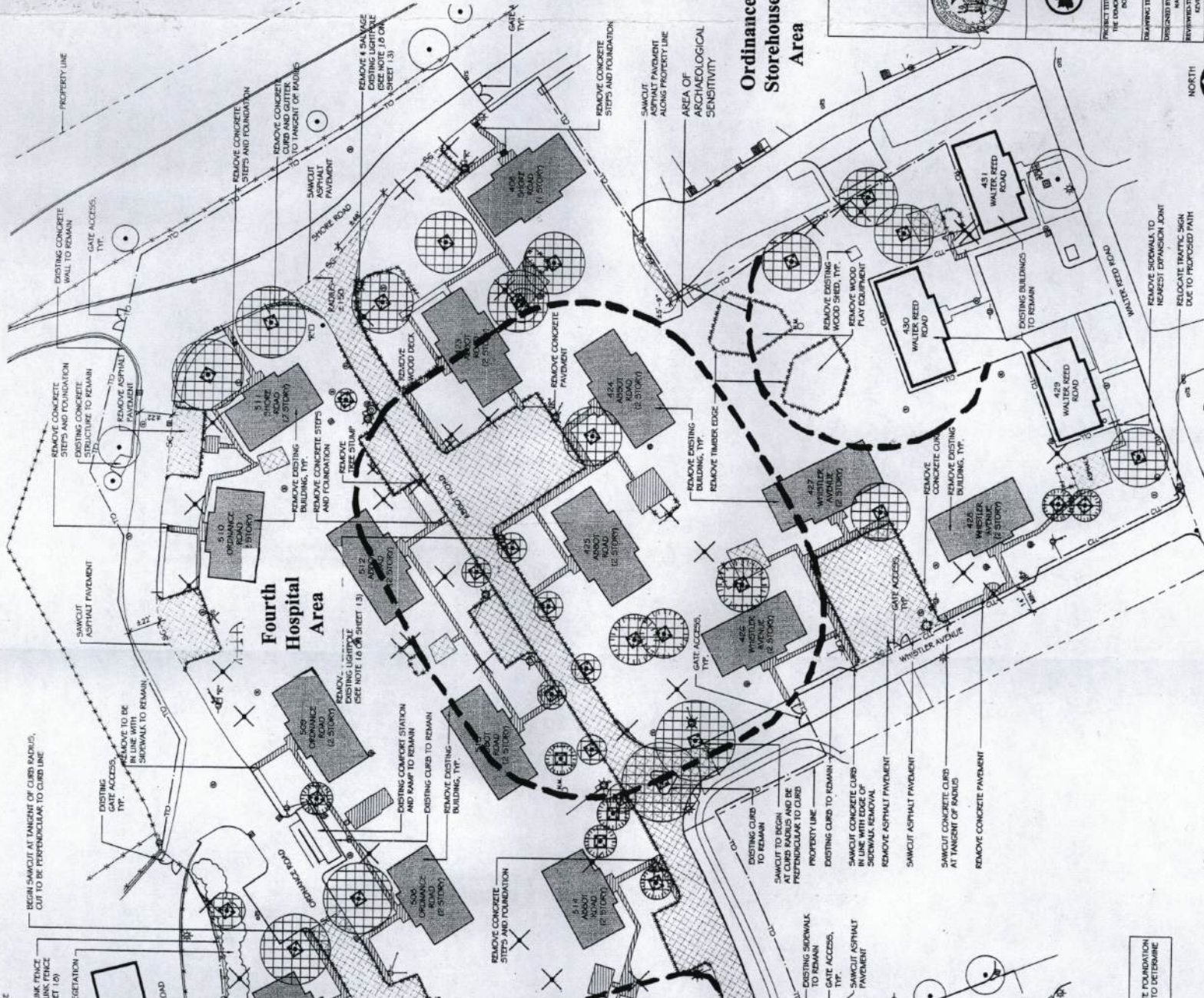
SEE SHEET 6 FOR TREE TYPES
 SEE SHEET 13 FOR REMOVALS NOTES & SCHEDULE, ORDNANCE & ARCHAEOLOGICAL MONITORING NOTES
 SEE SHEETS 10 & 11 FOR UTILITY REMOVALS
 SEE SHEETS 14 TO 17 FOR BUILDING REMOVALS

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PROJECT TITLE: SITE REMOVALS PLAN
DESIGNED BY: NANCY OWENS
REVIEWS/TEAM LEADER: TRACY KOWALSKI
APPROVED BY: KEVIN CARNA, P.E.
APPROVED BY (CITY): JOHN J. MADOLE, P.E.
CONTRACT NO.: 0405-0704



Scale: 1" = 100'

Dutch in 1639, and it remained in his family until 1788 when Ann Thorne was married to William Wilkins. The bulk of the property was used for agricultural purposes before it became a military fort, and more specifically as a nursery during ownership by Charles Willets. Land speculator George Irving purchased the property before selling it to the U.S. government in 1857.

The origins of the fort is its establishment in 1857 for the protection of New York Harbor, which was to be performed in tandem with Fort Schuyler across the sound in the Bronx. Original plans for the fort, which commenced construction in 1862 with the casemated fortification at the northern end of the peninsula and a Quartermaster's Wharf into Little Bay, were never fully completed. But the fort became an important site for the training of Army engineers and research in military technology and medicine, including experimentation with search lights, electrification, and artillery fire control. The lack of completion of original plans was attributed to advances in military technology during the Civil War that made them obsolete. The General Grant Hospital was built at the southern end of the fort in 1865, and had over 1,400 beds. Shortly after the war, three of four Army companies of engineers were sent to the fort because of its superior storage facilities. Tracings of a map of 1866 show the pentagonal fortification just north of the project area, but no structures within or near the project area with the exception of one small structure near the southern boundary (Bienenfeld and Leininger 1998:12). Built in 1871, a map from 1879 (Bienenfeld and Leininger 1998:15) confirms the Battery King in place adjacent to the northwest corner of the project area near buildings #505 and #506, as well as two smaller structures in the vicinity of what is labelled as the Ordinance Storage site area. The mortar battery had four six to eight-foot deep pits that held as many as eight 15-inch guns. After 1886 and by 1890 (Bienenfeld and Leininger 1998:16), the fourth hospital structure was constructed towards the center of the project area near building #425, and two smaller structures labelled as the "Death House" and "Ambulance Shed" were located immediately to the east in an area between buildings #511 and #408. By 1890, the ordinance storehouse was in place near the southern boundary of the project area near building #430 (see Figure 5).

The most prolific time of construction was between 1885 and 1914 when most of the historic structures at Fort Totten were built. Many of the structures were built to house military officers and soldiers, although during this period there were also upgrades to batteries and other fortifications, the installation of torpedo buildings, and reconfiguration of the parade grounds. Upgrades to the batteries include the Battery King adjacent to the project area. Originally named the "Fort at Willets Point," in 1898 Fort Totten was renamed in honor of Major General Joseph G. Totten who was instrumental in developing the historic Third System of American coastal military fortifications. Maps from 1904 and 1910 show the Fourth Hospital still in place, including smaller outbuildings representing the death house and ambulance shed to the east, as well as newer surrounding officer quarters which have since been razed or relocated.

Construction at the fort slowed in the period following the onset of World War I, as war technology was rendering updated aspects of the fort more and more obsolete. It continued to be used for training, engineering, and experimentation, however. By 1928, historic maps show that the Fourth Hospital structure and associated outbuildings were no longer present, but other small structures had been built immediately to the north. Before being filled over, the Battery King was converted into a bomb shelter in the 1930s, with subterranean magazine spaces and communications galleries fitted out for use as bombproof command posts.

Figure 5: Historic Map of the Project Area

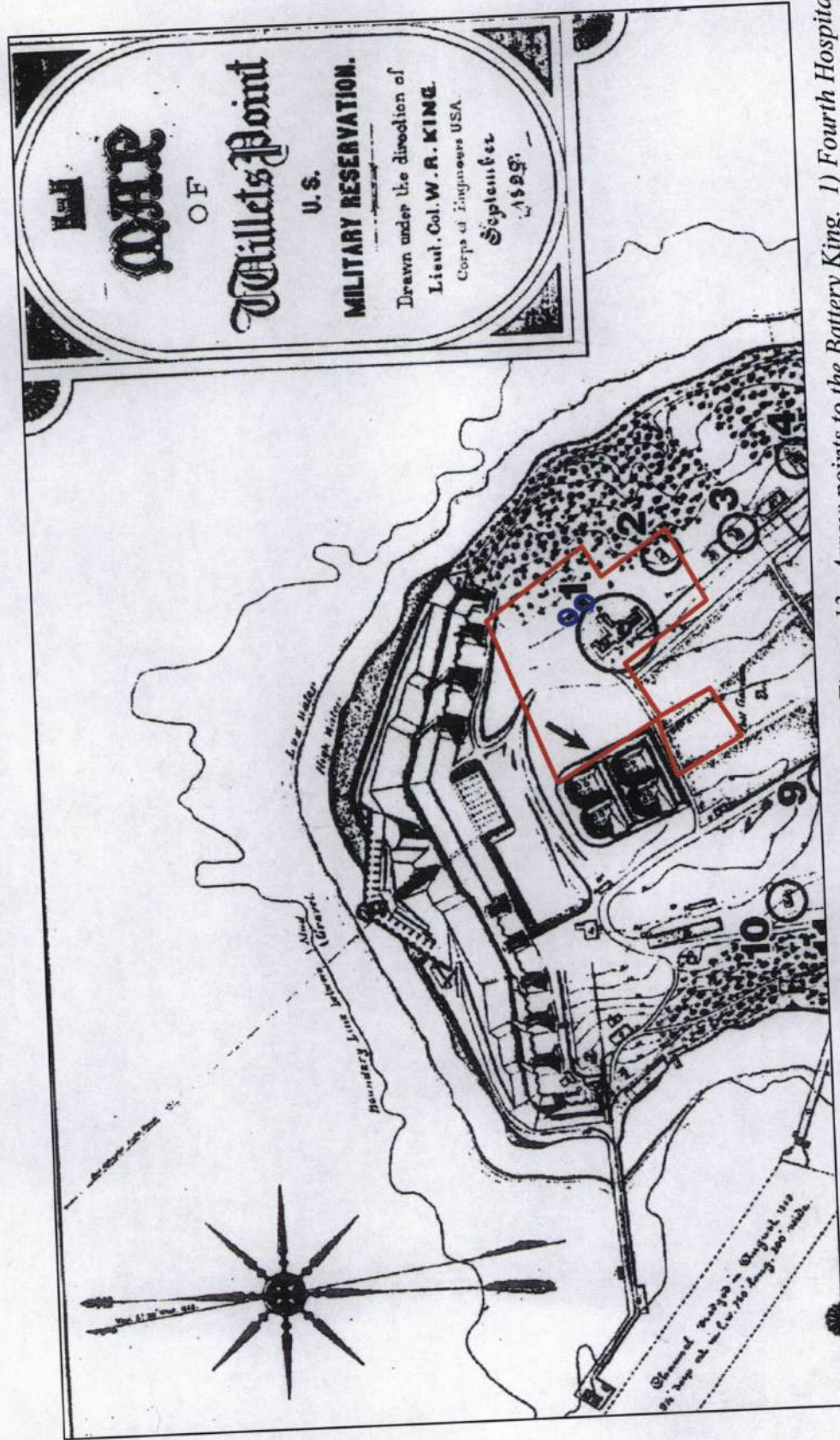


Figure 5: From King 1890, as annotated by Geismar 2007: Figure 13. Arrow points to the Battery King. 1) Fourth Hospital; 2) Ordnance Store House. Two small outbuildings lying immediately to the east of the hospital were labeled "Death House" and "Ambulance Shed" (highlighted in blue). Red line is approximate project area boundaries.

Later in the 20th Century, following World War II, the ownership and use of the fort complex splintered, with the Army Reserve operating a regional support command in 1968, the United States Coast Guard taking over a part of the facility in 1969, and more recently sections being used by the New York Fire Department and Parks Department. The residential houses that occupy the project area were built around 1959. The Fort Totten Battery was designed as a NYC Landmark in 1974, and in 1999 the Fort Totten Historic District was formally designated and included the current project area. Currently, the facility is being utilized by the U.S. Army, U.S. Coast Guard, NYC Fire Department, Eastern Paralyzed Veterans Association, and NYC Parks which is overseeing the current project.

Prior Cultural Resource Studies

The first major cultural resource study of Fort Totten was conducted by Louis Berger and Associates (1986). The study was performed as an overview and management plan, with sensitivity areas assigned for the facility. The next most comprehensive archaeological survey of Fort Totten was conducted just over ten years ago following many of these sensitivity guidelines (Bienenfeld and Leininger 1998). The reconnaissance survey concentrated on the open parade ground, but also included other areas. There were only minor traces of prehistoric artifacts recovered, the rest consisting of historic to modern material. In that survey, the sensitivity for the project area is deemed low because of disturbance from fort construction activities, with a higher sensitivity noted for the parade ground and other areas to the south. A Phase II investigation of a site in the southern part of the fort identified it as a Late Woodland component (Leininger and Bienenfeld 1999).

For subsurface testing in the Phase I survey at Fort Totten, the project area was segmented into six sections, A through F, with Sections A, B, and F revealing potentially significant features. Only Section F included part of the current project area, in the vicinity of building #505 and #506 which are close to the former Battery King located immediately to the west, with testing extended east into the current project area around building #507 and #514. Historic artifacts recovered at Section F include mostly whiteware ceramic fragments, window glass, glass vessel fragments, cut and wire nails, mortar, and brick fragments. The only potential feature found in this area was a large hollow concrete block to the east of building #507 that was thought to possibly be associated with the Battery King, although it is some distance to the east of the main battery facility according to historic maps, and may be related to smaller ancillary structures depicted on early 20th Century maps or the 20th Century housing complex. The followup intensive Phase II archaeological survey of the parade ground in Sections A and B determined two sites eligible for the National Register of Historic Places (NRHP), including structural remains from the post-Civil War era, and the possible remains of a late 19th Century storehouse (Leininger and Bienenfeld 1999).

A relatively small survey was conducted for the main water-front battery at the northern end of the fort complex (Stone 2005). The survey anticipated the possibility of prehistoric cultural resources. Only five subsurface shovel tests were conducted, in the vicinity of planned fence posts and gate posts. No significant cultural resources were identified during the survey.

Another cultural resource survey concentrated on the historic structures at Fort Totten (Pearson 1999). The Fort Totten Historic District was designed in 1999, and has over 100 buildings and structures built between the 1830s and 1960s. The earliest building at the fort complex is an 1829 Greek Revival structure built by Charles Willets, later moved and renovated in a Gothic Revival style to house the commanding officer. Another substantial structure is the fireproof torpedo storehouse, built between 1871 and 1879, and is the oldest brick structure at the fort. The oldest frame structure is a Queen Anne style building built in the early 1880s to serve as an early photographic laboratory. Many more buildings constructed as a result of Congressionally authorized boards (Endicott - 1886; Taft - 1906) are utilitarian brick structures bearing Romanesque or Queen Anne details, including torpedo storehouses and laboratories, and later Colonial Revival structures. A number of concrete batteries were also constructed or updated at this time, including the Battery King which is mostly contained beneath a baseball field adjacent to the northwest corner of the project area. Other structures from the period include officers mess and club building, brick barracks around the parade ground, fire engine house, guardhouse, commissary storehouse, Quartermaster's storehouse, bakery, ordinance structures, a gymnasium, and housing for commissioned and non-commissioned officers. A Colonial Revival structure to the east of the parade ground on Shore Road was built in 1906 and served as a hospital, and was then enlarged in 1911-1912. Construction at Fort Totten slowed considerably between the two world wars, but included a neo-Georgian brick-style building for the YMCA built in 1926-1927, with more Colonial Revival structures built in the 1930s. The military housing complex that occupies the specific project area is a group of "Capehart Houses," named after Senator Homer Capehart who initiated a program allowing private contractors to build houses on military sites.

The most recent survey conducted at the fort was an assessment survey for the creation of North Park (Geismar 2007), but is more extensive and summarizes the archaeological sensitivity of the entire facility as revealed by prior cultural resource studies and a review of relevant literature. The survey notes three sensitivity areas, including 1) Battery King; 2) Fourth Hospital; and 3) Ordinance Storehouse sites (see Figure 4). The Battery King was predominantly located to the west of the project area near buildings #505 and #506, although one concrete feature located to the east near #507 possibly indicates that ancillary structural features could be present within the project area. The Fourth Hospital sensitivity area is depicted as being centered around building #425, although important associated features that could be beyond the sensitivity envelope include the death house, ambulance shed, and privies which were still in use after nearby parts of New York had already developed a sanitary wastewater system. The Ordinance Storehouse was located in the southern part of the project area in the vicinity of building #430. The original Willets house was constructed in the northern part of the peninsula before being moved and reconstructed at its current location on Totten Avenue, but various analyses suggest the original location may have been further to the north of the project area. Recommendations of the report call for archaeological monitoring at the three stated sensitivity areas.

CHAPTER 3: METHODOLOGY

Monitoring Protocol

After consulting with the Landmarks Preservation Commission (LPC) and the New York City Parks - Capital Projects Division management team, it was agreed that a monitoring protocol would be followed for the project. That protocol stemmed from a combination of service requirements indicated in the New York City Department of Parks & Recreation, Capital Projects Division contract specifications (Contract No. Q-458-407M: Item No. 110 - Archaeological Monitoring; Item No. 111 - Forensic Anthropological Testing), pages 446-450. Archaeological monitoring per the contract was defined as "archaeological investigations, including, but not limited to research, field survey drawings, report writing, monitoring during construction operations, processing of artifacts, and the production of the final report."

The project called for a principal investigator, project manager, and conservator, as performed by ACS Director, Dr. Gregory F. Walwer, and field technician, as performed by ACS staff. With a specialization in cemeteries and burial practices, Dr. Walwer also served as forensic anthropologist for the project. While archaeological monitoring was generally required for the purposes of identifying any important features and / or artifacts related to the historic military use of the fort, forensic anthropological expertise was also determined as necessary given the possibility of human remains associated with the hospital site whose ancillary structures included a "death house" and "ambulance shed."

The monitoring team was to supervise all subsurface excavation as specified on plans, which showed the three sensitivity areas (Battery King, Fourth Hospital, Ordinance Storehouse), and as directed by the resident engineer, particularly where subsurface excavations were greater than 18 inches. ACS was not present for the removal of above-ground structures, nor the removal of subsurface foundations. ACS requested that the Fourth Hospital sensitivity area be expanded east to accommodate the appearance of ancillary structures on historic maps. The protocol in general called for further investigation if potentially significant archaeological remains were encountered, with the principal investigator to consult with LPC regarding further conservation. With regards to encountering any human remains, the contract called for *in-situ* examination and conservation of any primary burials, followed by either analysis or repatriation depending on the determination of appropriate action by LPC and Parks. Other specific monitoring and reporting protocols follow guidelines issued by LPC (2002) and the New York Office of Parks, Recreation and Historic Preservation (1994, 2005).

Field Methodology

ACS conducted the monitoring of construction and landscaping activities using two staff members. On occasion, staff members had to monitor two different areas when excavations were occurring in different sensitivity areas simultaneously. Any features exposed during excavation were cleaned, identified, and photo-documented. For deep trenches to expose utility lines,

surface conditions for each trench were noted prior to excavation, including any signs of natural or cultural disturbance. Standardized test forms were used to record information such as soil types encountered, their depths, any bags for soil samples or artifacts collected, and any comments pertaining to unique conditions encountered. Recovered artifacts were provenienced according to nearest building, or landscape area otherwise. Material that could be positively identified as modern debris was merely noted and left in place.

Laboratory Procedures

Processing

Processing procedures include those involving cleaning, labelling, conservation, and documentation, as required by the LPC (2002) and OPRHP (1994, 2005). A daily record of soil sample and artifact bags retrieved from the field was maintained in the laboratory. Cleaning procedures depend upon material type. Ceramics, glass, lithic artifacts, and well preserved bone and shell are washed in warm water and scrubbed with plastic brushes. Heavily rusted artifacts are dry-brushed lightly with a soft wire brush. Non-rusted metal artifacts, wood, and poorly preserved bone and shell are cleaned with a dry, soft plastic brush. Charcoal or burnt wood is separated and dry-brushed if necessary. Artifacts cleaned with water are dried on plastic trays, while those processed dry are bagged separately. All artifacts are given new zip-lock bags, fresh tags, and significant artifacts are bagged separately according to material type. In the case of this study, labelled bags are given abbreviated codes for project area (NYQFT), building or landform name, and feature context or layer below surface by Roman numeral (e.g. II). Highly significant artifacts are additionally labelled with India ink covered by an acetate solvent nail-polish, or given a separate labelled bag if labelling jeopardizes the integrity of the material or its potential to be studied in the future. Labelled artifacts bear an abbreviated indication of provenience. At the end of the project, all artifacts are being conserved by ACS, but are available for professional study or submission to appropriate repository.

Analysis

Analysis of artifacts in terms of individual identification are performed with the use of identification guide books, type collections (where possible), past experience, and standardized forms. The artifacts are separated by material type, with each material analyzed for designated variables. The variables selected for each material type reflect their significance in terms of identifying chronological and cultural demarcations, as well as variables which may ultimately shed light on the dynamics of the cultural behavior with which they were associated.

ACS has generated standardized data forms for lithic materials, faunal remains, and ceramics. This obviously does not exhaust the potential range of material types, however it covers those which are most often preserved or which show the greatest degree of variability through time and across space. Variables assessed for all materials include those of material type, horizontal and vertical provenience, weight, and for those other than modern debris, shell, or metal - color and condition or portion present. Lithic artifacts are analyzed for variables of raw material type and texture, manufacturing method, stage in the reduction sequence (including

tool type where applicable), presence of heat treatment, indications of use and curation efforts, as well as those involving metric dimensions (size and weight). Ceramic materials are analyzed for variables of raw material or ware type, inclusions or tempering, manufacturing method, firing method, surface treatment, thickness, rim and vessel diameters, container volume, decoration, and maker's marks. Shell is analyzed for species and weight. Finally, bone is analyzed for taxonomic classification, element, age, sex, seasonality, human modification, exposure to heat, and possible use as tools. Weight measurements of all artifacts are made to the nearest 0.1 gram using an Acculab V-1200 electronic balance. Metric measurements are made with the use of electronic calipers.

A special analysis was conducted for the 210 whole to nearly whole bottles collected during the survey, each given a unique accession number. The bottles were analyzed by 17 variables - six metric variables, and eleven descriptive variables such as color, type, shape, and finish, as well as variables related to manufacturer and product. The latter information was particularly accessible given the abundance of embossed identification lettering and maker's marks, as well as occasional patent numbers. This information, in conjunction with information revealed by mold seam traces and other manufacturing characteristics, allowed for the establishment of estimated date ranges for the bottle assemblage.

Soil samples are analyzed for standard variables of color, texture, and pH. Color is measured along the variables of hue or color, value or shade, and chroma or degree of saturation. The standardized Munsell charts also provide names of colors which may be universally recognized. Texture is assessed based on behavior in hand samples as indicated by standard soil science manuals. pH is assessed by the use of soil testing kits. Additionally, those samples which are predominantly sand are analyzed for sorting, sphericity and roundness, and size, all of which help indicate the type of environment and the degree of energy in which they were deposited.

For purposes of the general report, architectural features and prehistoric sites as a whole are analyzed in terms of their capacity to explain cultural and historic phenomena, and tend to involve a less standardized procedure based on examining similar case studies. Analysis will frequently involve factors such as the spatial distribution, density, and association of artifacts within a site. Copies of all field records, the final report, analysis raw data sheets, and a 3.5" floppy disk with the raw data stored in standardized Excel formats are stored with the artifacts assemblages, and are available for review upon request.

CHAPTER 4: RESULTS

Field Conditions

ACS performed the on-site construction monitoring during two principal periods - September through October, 2008 and January through February, 2009. Climatic conditions were typically warm for the fall field season and cold for the winter field season, the latter affecting the ability for scanning through back fill piles for artifacts. For the fall field season, all 19 of the buildings slated for demolition were still standing, with the only subsurface impacts consisting of telephone pole removals and excavation for subsurface utility main lines and valves. Water main excavations were particularly extensive in the vicinity of buildings #512 and #513; and #423, #424, #425, #426, and #427. During the winter field season, all of the buildings had been removed, and foundations had also been reportedly removed without impacting surrounding subsurface contexts. ACS observed the excavation and installation of new drainage features in the northwest and northeast corners of the project area, the grading of the southern part of the project area that was most extensive from about #424 west to #427, and the excavation of a large pit for the installation of a new fuel tank in the southern boundary area near buildings #430 and #431 (Figure 6). The project area dips gently from north to south. The surface for much of the project area consisted of maintained grass cover for the earlier field season, with virtually no vegetation by the winter field season except for isolated trees.

Subsurface conditions for the bulk of the project area were expectedly disturbed. Given the age of the buildings and landscaped areas in excess of 50 years, however, some restratification of soil layers was evident throughout much of the project area. Typical soil profiles for exposed trenches included a surface layer of dark brown to dark yellowish brown fine sandy loam followed by a yellowish brown to dark yellowish brown fine sandy loam subsoil (Appendix A). Lower lying areas exhibited silt loam subsoils with pockets of clay loam that were often mottled with gray. Recall from the background research section that two major soil types were identified at Fort Totten, which included a Montauk silt loam and Riverhead-Plymouth soils. The former has a projected profile of dark grayish brown silt loam overlying a yellowish brown silt loam, while the latter soil typically has a surface layer of brown sandy loam overlying strong brown to yellowish brown sandy loam. Thus the bulk of the project area is more in line with the Riverhead-Plymouth soils, particularly higher lying areas in the northern part of the project area, although lower lying areas often reflect ideal Montauk soil types. It is likely that the true soil conditions at Fort Totten are more highly interdigitated and complex than historically mapped. The widespread disturbance of subsurface conditions within the project area to a depth of at least several feet was visibly confirmed by the presence and exposure of structural foundations, as well as a complex network of underground utility lines and a frequent mix of historic and modern artifacts to considerable depths below the surface. The complex network of utility lines include copper water, iron steam, stoneware drainage, and PVC sewage pipes, often different in alignment than offered by old site plans of the property. Where sewage lines left the buildings, there was often concrete junction boxes and gravel fill. Other impacts to subsurface contexts include telephone poles, roads and road beds, landscaped plantings, and the former fuel tank location in the southern boundary area.

LEGEND:

- CL - CONTRACT LIMIT LINE & CONSTRUCTION FENCE, EXCEPT WHERE NOTED
- C - CONSTRUCTION FENCE WHERE OFFSET FROM CL
- P - PROPERTY LINE
- L - CHAIN LINK FENCE
- T - DISTINGUISHING TREE - OUTLINE INDICATED
- W - TEMPORARY WOODEN TREE GUARD
- H - HAND EXCAVATE WITHIN LIMIT OF CANOPY
- S - SILT FENCE
- I - INLET PROTECTION, CATCH BASIN, SILT SACK
- E - STABILIZED CONSTRUCTION ENTRANCE
- M - SENSOR MANHOLE
- W - WATER MANHOLE
- N - NO MARKING MANHOLE
- D - DRAIN
- M - MONITORING WELL
- U - UTILITY POLE
- G - GUY WIRE
- T - TRANSFORMER FOUND IN RECORD DRAWINGS, NOT IN FIELD
- E - ELECTRICAL MANHOLE
- L - LIGHT POLE
- F - FIRE HYDRANT
- W - WATER VALVE
- B - BUILDING TO REMAIN

Suggested Expansion of Fourth Hospital Sensitivity Area

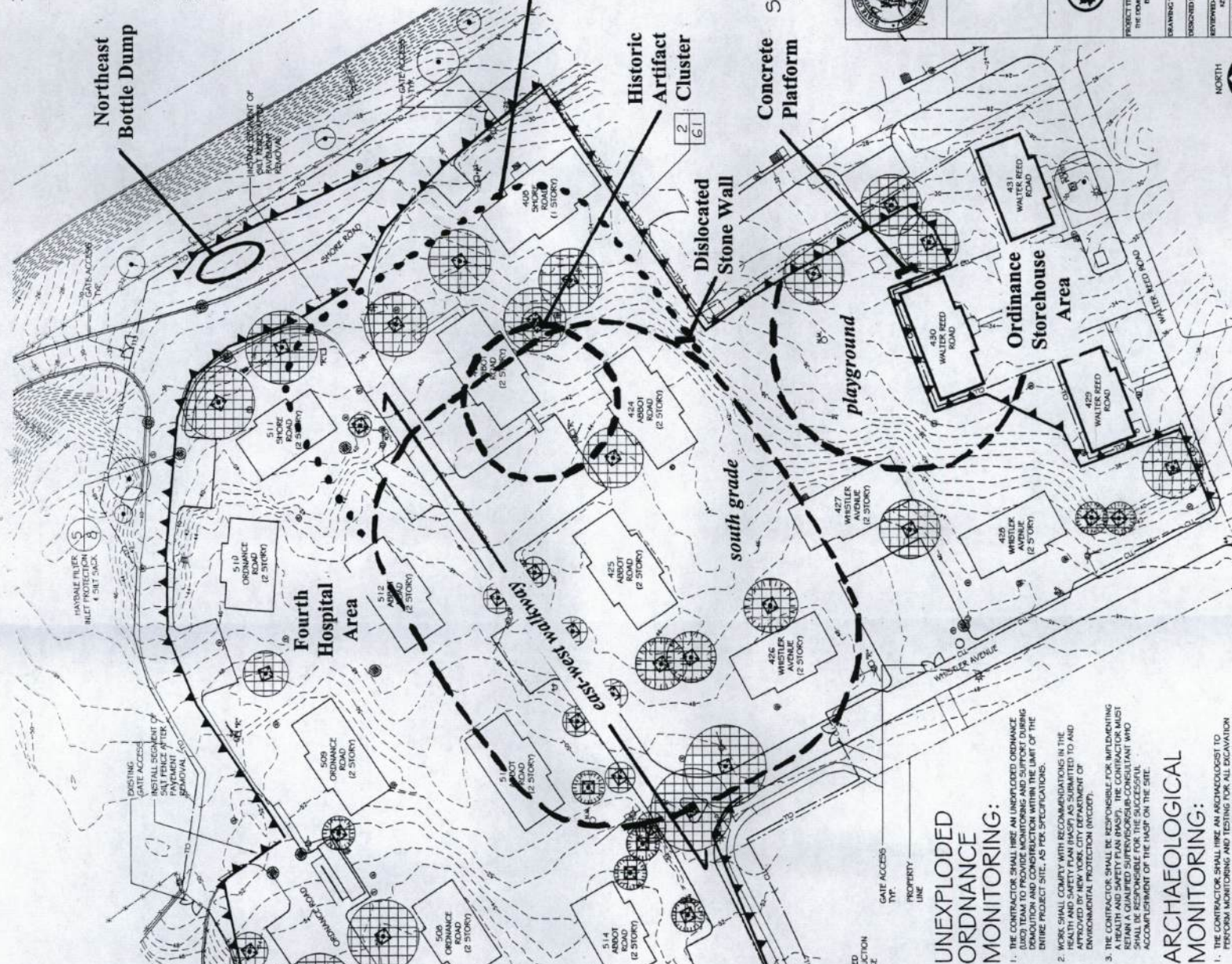
SEE SHEET 8 FOR SOIL EROSION AND SEDIMENT CONTROL NOTES & DETAILS



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PROJECT TITLE	SOIL EROSION & SEDIMENT CONTROL PLAN
THE REMEDIATION OF UNEXPLODED ORDNANCE AND THE CONSTRUCTION OF A PROPOSED LANDSCAPE AT FORT TOTTEN BOUNDARY BY THE CROSS STREET AND LINDEN GARDEN SOUND	
DRAWING TITLE	SOIL EROSION & SEDIMENT CONTROL PLAN
DESIGNED BY	UNIVERSITY OF THE STATE OF NEW YORK COLLEGE OF FORESTRY
CHECKED BY	DAVID CAROLAN, EA
DATE	07/14/14
APPROVED/DIRECTOR	DAVID CAROLAN, EA
CONTRACT NUMBER	0408-447M
THE ABOVE DOCUMENTS DO NOT IN ANY WAY RELEASE THE CONSULTANT FROM ITS RESPONSIBILITIES	



UNEXPLODED ORDNANCE MONITORING:

1. THE CONTRACTOR SHALL HIRE AN UNLICENSED ORDNANCE (UDO) TEAM TO PROVIDE MONITORING AND SUPPORT DURING DEMOLITION AND CONSTRUCTION THAT EXCEEDS TWO ENHANCED PROJECT SITES, AS PER SPECIFICATIONS.
2. WORK SHALL COMPLY WITH RECOMMENDATIONS IN THE UNEXPLODED ORDNANCE MONITORING PLAN APPROVED BY NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NYCEDP).
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A HEALTH AND SAFETY PLAN (HASP). THE CONTRACTOR MUST RETAIN A QUALIFIED SUPERVISOR(S)-CONSULTANT WHO SHALL BE RESPONSIBLE FOR THE SUCCESSFUL ACCOMPLISHMENT OF THE HASP ON THE SITE.

ARCHAEOLOGICAL MONITORING:

1. THE CONTRACTOR SHALL HIRE AN ARCHAEOLOGIST TO PERFORM MONITORING AND TESTING FOR ALL EXCAVATION DURING DEMOLITION AND CONSTRUCTION THAT EXCEEDS TWO ENHANCED PROJECT SITES, AS PER SPECIFICATIONS.



Historic Cultural Resources

Structures and Features

There were no definitive traces of any of the historic structures depicted on historic maps as being within or near the project area observed during monitoring. Anticipated structural remains include those belonging to the Battery King in the northwest part of the project area near houses #505 and #506; the Fourth Hospital structure towards the center of the project area near house #425; and the Ordinance Storehouse in the southern part of the project area near house #430. There were also no observed traces of the Death House or Ambulance Shed that would have been located between house #408 and house #511.

The major structural features of the project area are the "Capehart" homes that formed the housing complex (Figures 7 and 8). The structures date to about 1959, and were built to accommodate senior officers of the facility and their families. The 19 structures are duplexes, and arranged in clusters to enclose open lawns. Each bears a concrete foundation on the order of several feet below the surface, lower walls constructed of brick, and upper portions now vinyl-sided and reflecting renovations conducted in the 1980s. The term Capehart refers to the Senator whose legislative efforts called for the construction of military housing by private contractors.

Near the southern boundary of the project area where three of the Capehart houses will be converted into functioning offices for the facility, a new fuel tank was planned to be installed. The excavation for the tank was large, at about 12 by 24 feet and set parallel to the eastern wall of building #430 (Figure 9). About seven and one-half feet below the surface, the edge of a concrete platform was encountered in the west side wall (Figure 10). The 3/8-inch rebar used for its construction contains cross-hatched reinforcing ridges that reveal its modern origin. Threaded tie rods about 5/8-inch in diameter were also present, with site engineers suggesting the platform relates to an earlier fuel tank since removed.

To the southeast of the former Fourth Hospital, an excavation trench for a water line revealed a dislocated section of a wall near building #424 (Figures 11 and 12). Bound by mortar, it was constructed of coursed stone, and appeared similar to the foundation stones used in various late 19th to early 20th Century structures at the facility. The wall section was found in a highly disturbed context that indicates fill was used to raise the surface grade in this area. It is possible that the wall section belonged to the Fourth Hospital building, although its dislocated state conforms well with other indications that the building was located further to the northwest and centered on #425.

Two subsurface features identified during construction monitoring consist of bottle dumps (Figures 13 and 14). The first was discovered near the northeast corner of the project area in a trench up to nine feet deep where a large concrete stormwater basin was being installed to the east of Shore Road. A similar, but smaller feature was located towards the northwest corner of the project area within five feet of a smaller road and two feet below the surface. Both contained a variety of artifacts and deposits of coal and ash, but were particularly striking because of the density of whole bottles uncovered. The bottles date to the early to mid-20th Century, and reflect trash disposal prior to the construction of the Capehart houses. A variety of other artifacts were recovered with the bottles, including a 1939 World's Fair license plate.

Figure 7: Capehart House



Figure 7: Southeast view of a "Capehart House" at Fort Totten. Building #430 is on the left, former playground is in the center, remains of a razed building in the foreground.

Figure 8: Capehart House Foundation

Figure 8: Typical for the Capehart houses, the pier foundations of cinderblock reached a depth of several feet below the surface. Note the utility line exposed at the bottom of the trench extending from the south foundation wall of building #508, set within a gravelly fill. A complex network of utility lines connected the 19 houses within the project area. Scale bar 5 feet.



Figure 9: Fuel Tank Excavation



Figure 9: West view of the excavation for the underground fuel tank adjacent to building #430 (in background). Note the flooding within the cribbing. The profile of the west wall of the excavation pit shows extensive fill layers associated with prior construction activity.

Figure 10: Concrete Platform



Figure 10: West view of the concrete platform exposed in the fuel tank excavation pit at about 7.5 feet below the surface. A close inspection of the feature revealed modern rebar and threaded rods that may have been used to secure a former tank since removed. Scale bar 5 feet.

Figure 11: Excavation Trench



Figure 11: East view along an excavation trench placed near building #424. A dislocated stone wall section was exposed in the trench that contains multiple layers of fill. One vertical stone face is visible in the south wall near the lower right corner of the picture. Scale bar in feet.

Figure 12: Stone Wall Section



Figure 12: Part of the stone wall section removed from the excavation trench above. The two coursed stones are bound by mortar, and resemble foundation stone used in other late 19th to early 20th Century architecture at Fort Totten. Scale bar in feet.

Figure 13: Northeast Bottle Dump



Figure 13: Northeast view of the northeast bottle dump feature, visible in the eastern wall of the trench several feet below the surface. Overall depth of the trench is approximately 9 feet, excavated for the installation of a drainage system.

Figure 14: Northwest Bottle Dump



Figure 14: The much smaller and shallower northwest bottle dump feature was exposed near the northwest corner of the project area (fence and road in background). Scale bar 5 feet.

Another area of highly concentrated historic artifacts was noted near the southwest part of building #423. Within a diameter of about 100 feet, excavations at this area revealed a variety of late 18th through 19th Century materials, but often in mixed contexts with modern material and in disturbed soil contexts.

Artifacts

There were 650 historic artifacts recovered during the survey (Appendix B). Artifacts were collected from throughout the project area, although the highest density of material was collected from the two bottle dump features (BD-NE, BD-NW). Another notable concentration of material was collected in the vicinity of house #423 which would have been in the southeast part of the projected Fourth Hospital site area. Artifact proveniencing by area was approximate given the coarseness of construction activity that exposed the material, particularly grading and filling activity towards the end of the project that related to working the surface to landscape architectural plan specifications. Broad artifact classes include structural materials (n=16 / 2.5%), household ceramics (n=235 / 36.2%), household glass items (n=280 / 43.1%), faunal remains (n=80 / 12.3%), and personal items (n=39 / 6.0%).

Despite the intensive collection of materials, it must be noted that the relative count of artifacts is severely affected by the integrity of individual artifact classes and categories. For instance, glass bottle fragments constituted significant proportions of the assemblage, with the material being highly fragmented through time and likely at a higher rate than other materials based on proportions of refitting pieces. Also, some categories of materials may be severely under or over-represented due to the irretrievability of highly fragmented items, including shell which was often represented only by small flecks too fine to collect during monitoring. In several cases where a single material was found at a location in relatively large quantities or in highly fragmented conditions (e.g. shell), only samples were taken. Also, some classes of material were largely dismissed as they mostly related to the late historic use of the project area for housing, in particular modern brick and window glass fragments and the great majority of other structural materials encountered, as well as various deposits of coal and ash that accompanied the bottle dump features and were encountered in other areas. Given the nature of construction monitoring and the stated purpose of identifying material possibly related to the three military sites or prior components, there was a substantial collection bias towards highly diagnostic material. Also, some materials were merely recorded but left in place when they were obviously modern in origin (e.g. styrofoam, plastic). Within each major material class of recovered items, mutually exclusive individual categories were devised on the basis of frequency, material, and function, as described below.

Only selected samples of structural materials were collected, given the massive amount of modern structural materials attributed to the demolition of the 19 Capehart houses. Major types of structural materials include modern red bricks and brick fragments, milled wood, asphalt shingles, vinyl siding, window glass fragments, conduits, insulated wire, utility pipe fragments, insulation, and other materials clearly related to the demolished houses. Collected structural material was limited to 16 pieces, including a large metal spike from building #427, a heavily oxidized metal handle from the northwest bottle dump, another valve handle from #511, a heavy rubber cap (possible telephone receiver cap) from the northeast bottle dump, a casement window

crank handle from #431, a brass radiator vent bearing a patent number dating to 1938 from a walkway established through the northern half of the project area, porcelain door knobs from #427 and the northeast bottle dump, a slate fragment from #424 that could represent the roof of an earlier structure, and two heavily oxidized metal fragments from building #423. None of the structural materials was definitively historic, and most likely relate to the construction or use of the military housing complex.

Diagnostic household ceramics provided some chronological information regarding site occupation that indicates a component preceding the military housing complex may be present, particularly in the vicinity of building #423. Here there were three fragments of creamware recovered, with a broad date range of 1769 to 1820 in North American contexts (Noel-Hume 1970:126). Another creamware rim fragment from #508 is shell-edged and scalloped with a green hand-painted border having an earlier projected date range of 1759-1775. Also, three out of eight yellowware fragments were recovered from #423, with these thicker utilitarian wares having a date range of 1827 and 1922. Two of 14 stoneware fragments and two of five redware fragments also came from #423, and while not readily dated, likely originate from the 19th to early 20th Century. A base fragment of a stoneware jar from the northeast bottle dump has blue underglaze partial lettering indicating the "Lambrecht Butter" brand, available after 1909.

The most common household ceramic wares present in the project area are those still manufactured today, including whitewares, ironstone china, and porcelain, although some of the representative pieces are clearly historic in origin. The 98 whiteware fragments recovered during monitoring broadly date to after 1820 (Noel-Hume 1970:130) as potters began to perfect the whitening of the glaze that had been targeted for many years by those seeking to imitate the appearance of china. Some fragments bearing blue underglaze transfer-printed designs, including two pieces from #423, one piece from #431, and six sherds from the northeast bottle dump, likely dating to between 1830 and 1860. Another piece from the northeast bottle dump has a rarer red transfer-printed design with a more restricted date range of popularity between 1830 and 1850. Other hand-painted whiteware fragments, including a couple from nearby building #424 and the northeast bottle dump have a similar date range of popularity that extended a little later into the late 19th Century. Fragments bearing polychrome overglaze decal decorations include those from #423 and the northeast bottle dump, all post-dating 1897. Many more whiteware fragments are clearly modern, with a variety of brightly colored glazes that are frequently less crackled.

The majority of 38 ironstone china pieces collected during monitoring are undecorated, and were commonly manufactured from about 1813 to 1900 or later (Noel-Hume 1970:131; South 1977:211), with a peak of popularity between 1840 and 1890. An ironstone china plate fragment from the northeast bottle dump bears a maker's mark of "GREENWOOD CHINA, TRENTON, N.J.," with this manufacturer first impressing its maker's mark on ironstone china in 1886 (Lehner 1988:180). Where decorations occur on ironstone china pieces, they are often scalloped rims or an embossed decoration on the interior border as present pieces from the south grade and playground areas. The porcelain fragments are more difficult to date as many styles and forms were imitated through time, with this ware represented by 61 collected pieces. An "EMPRESS CHINA, JAPAN" maker's mark on a piece from the playground area is likely early to mid-20th Century, with an early manufacture date of 1895 but this was a more popular imported brand immediately after World War II. Eleven refitting fragments of soft-paste

porcelain recovered from the northeast bottle dump are red-glazed with black lettering, "PEPPER." Some of the finer porcelain pieces recovered bear gold overglaze decoration, including several tea cup fragments from the northeast bottle dump area.

The household glass category includes 280 pieces, just over one-half the entire artifact assemblage, and partly reflects a bias in collection that targeted the many whole vessels exposed in trenches placed in the northwest and northeast corners of the project area. Of the 280 pieces, the vast majority (258) are bottles or jars, while the other 22 collected pieces reflect other possible vessel forms. A white glass piece from #423 has a partial handle remaining; a piece from #427 is a rim fragment bearing shell-edged decoration; a white glass piece from #505 bears green paint decoration; a pressed flat glass piece with embossed decoration came from the northeast bottle dump area; and other fluted or ribbed glass pieces also came from the northeast bottle dump area. Rim fragments from a Depression era (1925-1945) green glass set from the northeast bottle dump include portions of a pitcher and saucer. Other pieces collected during monitoring are less distinctive or melted and could represent either bottles or other vessel forms. Of the 258 glass bottle items, 210 are whole vessels documented in detail (Appendix C), and summarized in the next section below. For the 48 recovered bottle fragments, they feature characteristics of the whole bottle assemblage.

There were 80 pieces collected within the faunal category, including 47 bone fragments and 33 pieces of shell. None of the identifiable bone fragments were human in origin. Nine of the identifiable bone clearly originates from domestic cow, or *Bos taurus*. Prominent examples include those from the northeast bottle dump feature, such as tibia, rib, vertebra, pelvis, and left femur fragments. The majority bear saw-cut and/or butcher cut marks, and the presence of pelvis may indicate on-site butchery relative to standard grocery store cuts of today. Other bone from the northeast bottle dump feature include a left humerus and distal tibia from an undetermined medium-sized mammal, and a distal left tibia and distal left humerus from a domestic cat (*Felis catus*). The cat bones likely reflect domestic pets at the facility, with many strays also evident at the time of field work. A proximal tibia from an Eastern Cottontail rabbit (*Sylvilagus floridanus*) was also found in the playground area, and likely reflects a vestigial occupation common in human-cleared areas. The shell was found widely distributed throughout the project area, and almost in equal amounts for northern quahog (*Mercenaria mercenaria*) (n=13) and eastern oyster (*Crassostrea virginica*) (n=15). Although these were common food sources throughout the region by the mid-19th Century, they also occur naturally in the bays and Long Island Sound, and thus could be natural ecofacts.

Personal items account for 39 artifacts in the project assemblage. Of these, 16 are toys, and of the toys, seven are white or colored glass marbles. The toys were naturally found in higher concentrations around the playground. Many are plastic, and some have embossed dates in the 1980s and 1990s. Other personal items were found mostly at the playground or broader south-grade area, and include two stainless steel spoons, a blue and yellow glass bead, a 1950 Roosevelt dime, plastic combs and brush, a heavily oxidized metal alarm clock, fragments of shoe leather, a metal snap, and several medicinal items. A bird-shaped red earthenware ocarina whistle was recovered from the northwest bottle dump. Non-bottle medicinal items include an eye dropper glass tube and plastic cap, and an S&D knob bearing a chemical insignia that dates to after 1982. Another highly diagnostic artifact from the northeast bottle dump area is a heavily oxidized 1939 World's Fair New York license plate.

Glass Bottle Assemblage

There were 210 whole or nearly whole glass bottles and jars collected during archaeological monitoring, the majority at the northwest (n=56) and northeast (n=148) bottle dump sites. A number of colors are represented in the assemblage, including blue, white, amber to brown, and green to olive, but clear glass bottles dominate, numbering 140 or exactly two-thirds the assemblage. There is somewhat of a correlation between color, shape, and function, with many of the blue bottles being cylindrical or round medicinal bottles (Figure 15); many of the brown to amber bottles being rectangular medicinal bottles with closed orifices (Figure 16); green and olive bottles often being round beverage containers (Figure 17); and short white bottles being cylindrical to ovate cosmetic containers with wide orifices. The clear bottles and jars were designed for a great number of functions, but food and condiments dominate (Figure 18). Many of the white and blue bottles with open orifices are better classified as jars, with either threaded screw cap or helical jug enclosures for lids.

The chronological assessment of the bottle assemblage was possible from various lines of evidence, including manufacturer's marks, brand names, and technological attributes. The vast majority are modern, in that they exhibit attributes of a fully mechanized bottle manufacturing process, including vertical mold seams through the finish and suction scars on the base indicating an origin after 1903 (Yount 1971:100; Miller and Sullivan 1984:93). Technologically, only three bottles from the assemblage had applied lips that bear a maximum late date of manufacture of about 1910, including those from building #423, #431, and the northeast bottle dump. Even these are clear-colored, with federal laws of 1880 prohibiting the disguise of consumable products with deeply colored glass, and indicating these pieces likely originate from the end of the 19th or beginning of the 20th Century. Disregarding these three pieces, the next earliest maximum late date of manufacture is 1938. The known early dates of manufacture start in 1903 with the modern manufacturing attributes, and are as high as 1945 with a Fairmount Glass maker's mark of an "F" inside a hexagon. Where the full range of pieces is known (n=103), mean dates range between 1928 and 1947.5, with an average mean date of 1944.5 (5.6 standard deviation). The average known early date of manufacture (n=200) is 1918.3 (13.5 standard deviation), while the average known late date of manufacture (n=106) is 1958.4 (12.9 standard deviation). These average dates of 1918 through 1958 may offer the best approximation of date range for the bulk of the bottle assemblage, with the latter date conforming very well with the known construction date of the housing complex in 1959 that presumably would have put an end to garbage disposal at the site. The mean date range of 1928 to 1948 may offer the best approximation of the height of disposal activity at the site, essentially enveloping the Depression era and World War II when on-site disposal may have been at a peak for economic reasons.

Manufacturer's marks occurred on many pieces, and were most often sourced through Julian Toulouse's comprehensive treatise on bottle makers (1971). Anchor Hocking bottles, with a date range of 1937 to 1977, are marked with an "H" superimposed on an anchor. Ball jars were typically used for fruit and other foods, marked by an italicized "Ball" that was frequently underlined, with a very broad date range. Brockway bottles from the site are marked with both a "B" in a circle and the underlined brand name. There are two Capstan Glass bottles, bearing an anchor mark and used for food or fruit. Carr-Lowrey made cosmetic bottles, with the characteristic "C" superimposed on an "L" in use between 1920 and 1963. The single Fairmount Glass Works bottle mentioned above features an "F" in a hexagon and has a relatively tight date

range of 1945 to 1960. Two Glenshaw Glass bottles have an early manufacturing date of 1932, featuring a square "G" in a square. A number of Hazel-Atlas bottles were found, featuring a maker's mark of an "H" over an "A", and a date range of 1923 to 1964. Illinois Glass was the most prominent manufacturer, with 62 pieces in the assemblage and a broad date range of 1929 to 1958 for its "I" in a diamond and oval mark. Some brand names and design patents raised the lower date limits slightly on some of the Illinois Glass pieces, including two Hellmann's Mayonnaise jars at 1930; three ovate condiment jars at 1932; a "Joseph E. Seagram & Sons" liquor bottle at 1934; a "Mar-O-Oil" bottle at 1936; and a Crosse and Blackwell condiment bottle at 1938. Two Knox Glass Bottle Company bottles date to after 1924, with one containing a "K" in a keystone, the other bearing the name "Knoxall". Three Maryland Glass Corp bottles date to after 1916 and bear an "M" in a circle, manufactured for Emerson Bromo-Seltzer. Two Metro Glass bottles bear an "M" in a keystone and date to 1935 to 1949, another example of a bottle mark with a relatively tight date range. Two more bottles made by Reed Glass feature an "R" inside a triangle and a date range of 1927 to 1956. A Swindle Bros. bottle has an "S" in a circle with a date range of 1920 to 1959. One Thatcher Glass bottle has a "T" over an "MC", and was manufactured for Sheffield Milk, with a projected date range of 1923 to 1949. Finally, five Whitall-Tatum bottles bearing a "WT" inside a triangle have a very tight date range of 1935 to 1938.

A number of product brands mentioned above were helpful for narrowing the date range of collected bottles. Other brands with broader ranges or undetermined date ranges include 3 in One Oil; Astring-O-Sol mouthwash; Best Foods; Blue Label Ketchup; Burnett's Medicine; Citrate Magnesia solution; Cleveland Musterole; Coca-Cola; Disney; Dorothy Gray Cream; Fitch Barber product; French Beverages; Glover's Imperial Medicine; Gulden's Mustard; Heinz condiments; Jergen's lotion; Kelly Dry; Kreml Shampoo; Odo-Ro-No Ice; Pluto Water; Pond's cream; Pride of the Farm Tomato Catsup; Pure Olive Oil; Puritan baked beans; Sambo Chocolate Milk; Sauer's Extracts; Squibb medicine; Three Feathers Whiskey; Umberto Olive Oil; Vernonville Farms milk; Vick's Vaporub; and Wilbert's Javex (bleach).

Figure 15: Cylindrical Blue Medicinal Bottles and Jars



Figure 15: From left to right: Vicks Vaporub; Emerson Drug Co. Bromo-Seltzer (small, made by Maryland Glass); Emerson Drug Co. Bromo Seltzer (large, made by Maryland Glass); another Maryland Glass bottle; and a smaller Vicks Vaporub jar.

Figure 16: Rectangular Brown Medicinal Bottles



Figure 16: From left to right: Multi-sided Squibb bottle has a design patent dating to 1932 (made by Brockway Glass); Glover's Imperial Medicine (veterinary) bottle made by Whitall-Tatum between 1935 and 1938; tapered bottle made by Illinois Glass; square bottle made by Illinois Glass, oxidized screw cap attached; smaller Squibb bottle made by Anchor-Hocking after 1937; Burnett's medicine bottle made before 1946; small square Knox Glass bottle made between 1924 and 1968; and another bottle made in the "USA".

Figure 17: Round Green / Olive Beverage Bottles

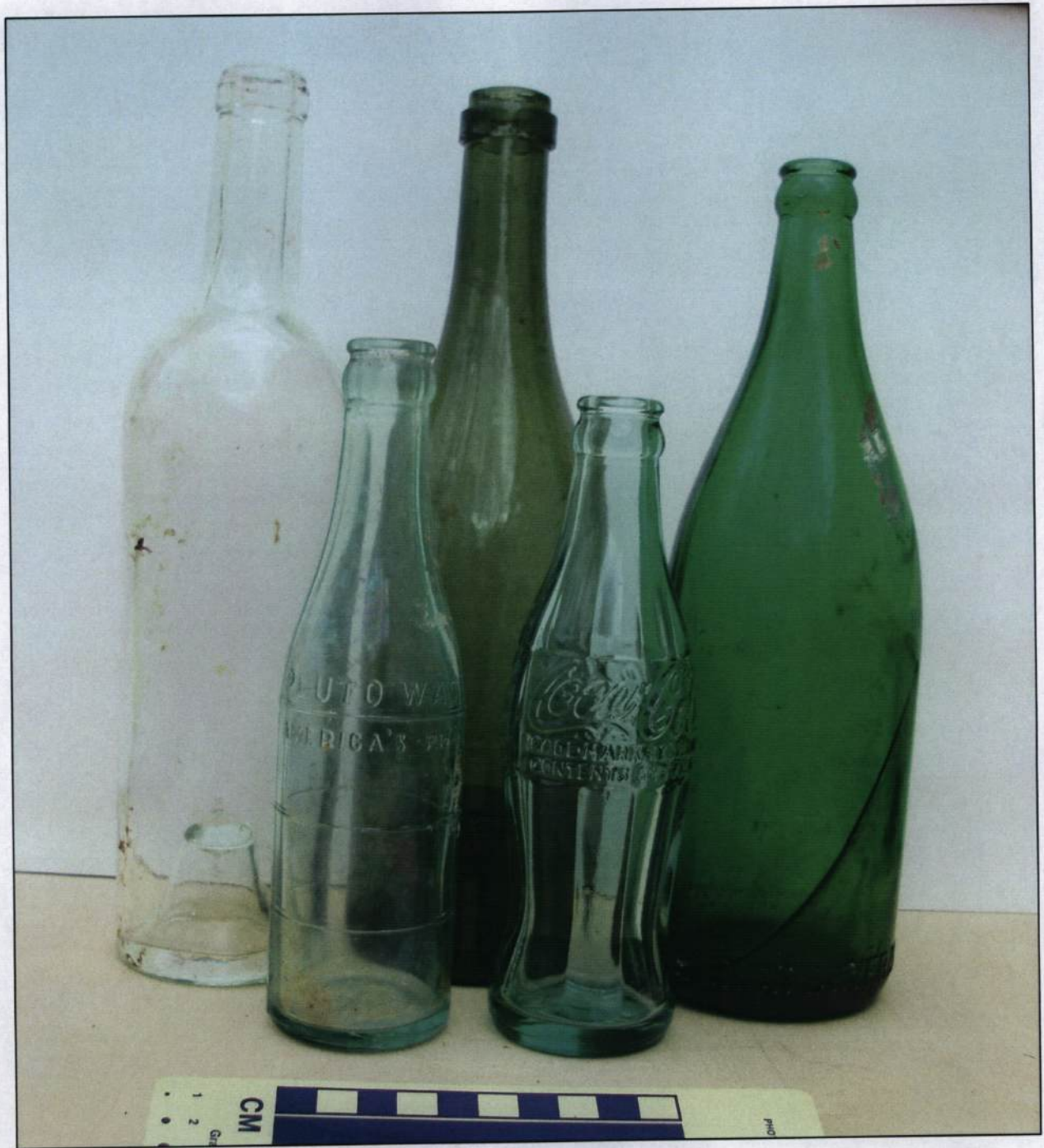


Figure 17: From left to right: green tinted wine bottle; "Pluto Water" bottle; olive wine bottle; 6 ½ fluid ounce Coca-Cola bottle; and a "French Beverages" bottle with traces of a paper label.

Figure 18: Clear Food Bottles and Jars

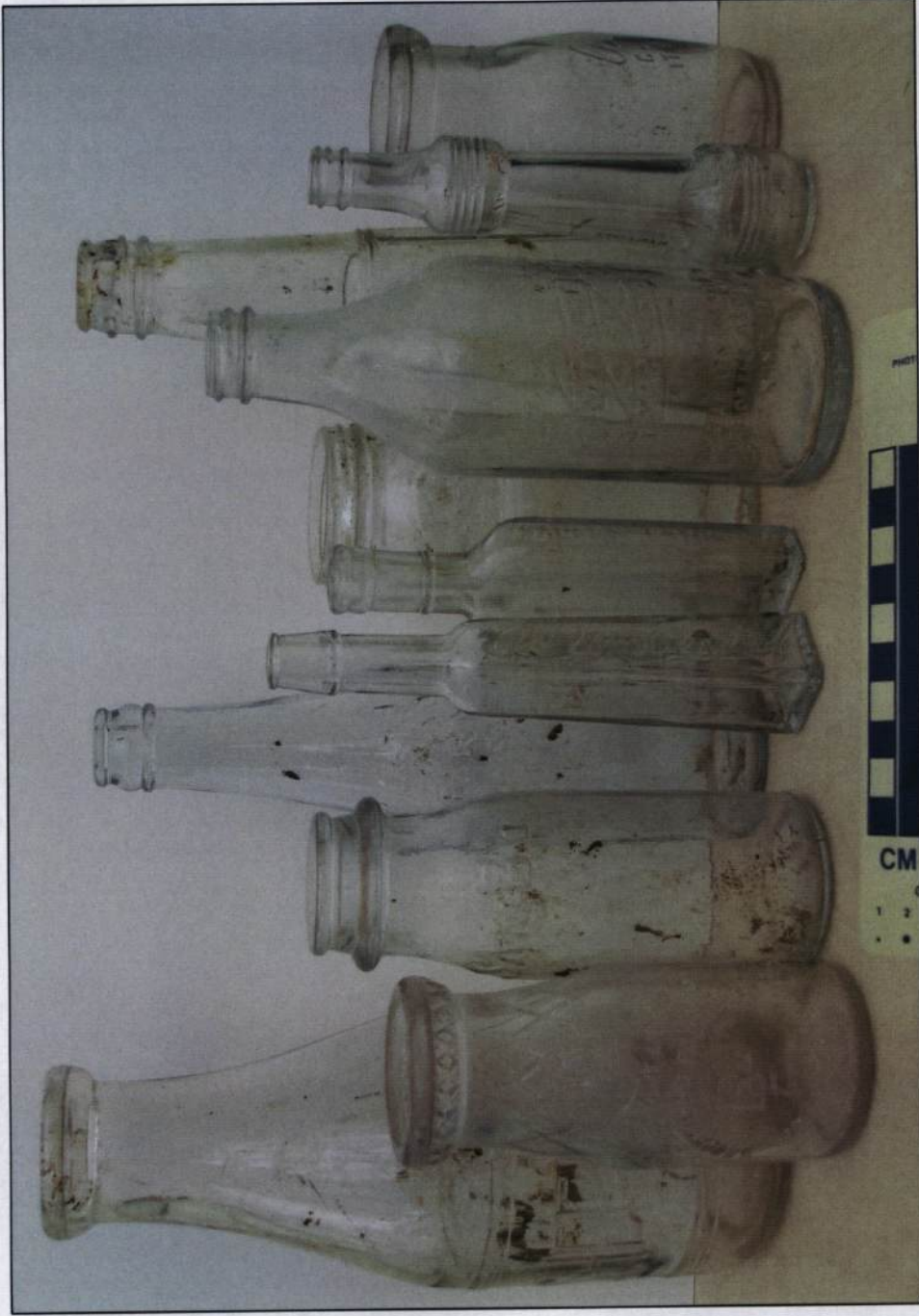


Figure 18: From left to right: Sheffield milk jar made by Thatcher Glass between 1923 and 1949; smaller Brookfield Farms milk jar made by Illinois Glass; SamBo chocolate milk bottle; "Pride of the Farm Catsup" bottle made by Whitall-Tatum between 1935 and 1938; a Re-Umberto olive oil bottle made by Anchor Hocking between 1937 and 1977; a "Sauer's Extracts" bottle made by Illinois Glass; a jar featuring Disney characters; a "Citrate Magnesia" bottle made by Illinois Glass; a multi-sided and tapered Blue Label ketchup bottle made by Illinois Glass; another tall, round olive oil bottle; and a small Vernonville Farms milk jar made after 1933.

CHAPTER 5: CONCLUSION

Cultural Resource Summary

Background research indicated the possibility that subsurface structural remains and artifacts related to three historic sites could be encountered in the project area during construction monitoring. The Battery King was located adjacent to the northwest corner of the project area near buildings #505 and #506, and was a late 19th Century concrete mortar battery that has since been infilled. Towards the center of the project area, the Fourth Hospital site was built in the late 1880s, located approximately by building #425 according to historic maps. There were also ancillary structures called a Death House and Ambulance Shed on one historic map located to the east of the hospital, probably between buildings #408 and #511. The third site consists of an Ordinance Storehouse located towards the southern end of the project area near building #430. No positive traces of these structural sites were observed during monitoring, nor any artifacts that could be positively associated with these former structures.

Several features were identified during monitoring. Towards the southeast corner of the project area near building #430 and in the vicinity of the original Ordinance Storehouse site, a concrete platform was exposed nearly eight feet below the surface. Original concerns that the platform could be related to the storehouse site were readily dismissed based on rebar type, with threaded tie rods likely associated with a former underground fuel tank. A small stone wall section was also observed near building #424, near the southeast part of the projected Fourth Hospital site. The roughly coursed stones match some of the surrounding late historic buildings that date to the late 19th through early 20th centuries, although the mortared wall section appeared to be dislocated from its original site and was in a deep fill context related to prior landscape grade and fill activity - probably for the construction of the military housing complex. The other two features consist of bottle dumps, one in the northwest corner of the project area, the other in the northeast part of the project area.

There were 650 historic artifacts collected during monitoring, provenienced to nearest building or general construction area. The highest concentration of historic artifacts, other than the two bottle dumps, came from the vicinity of building #423 located near the southeast part of the projected Fourth Hospital site area. Here there was a high concentration of historic ceramics recovered, including creamware, yellowware, stoneware, ironstone china, and whiteware, as well as several saw-cut bone fragments and household glass items. The late 18th to mid 19th Century material suggests the presence of a site that predates the hospital or other military components, and may relate to an earlier house when the property was used as a farm. Alternatively, the artifacts may relate to conserved materials used in the early operations of the hospital.

About one third of the collected artifacts consist of whole or nearly whole bottles, mostly collected from the two bottle dump features. Maker's marks and brand names on many of the bottles aided in the chronological assessment of the assemblage. A mean date study of the bottle assemblage suggests a date range of the 1920s through 1950s, with the most active dumping occurring during the Depression and World War II when there may have been economic incentive to keep trash disposal on site. Other artifacts recovered from the two features confirm the general date range, as punctuated by the presence of a 1939 World's Fair license plate.

Recommendations

There were no positive traces of prehistoric activity recorded during construction monitoring. The site provided an advantageous and commanding view of surrounding water critical for resource extraction, but the project area is relatively distant from the nearest fresh water sources. Prehistoric material has been found at other locations at the fort facility, and closer to the former wetlands that once occupied the southern end of the property. Any aspect of short-term resource procurement sites have likely been eradicated, thus ACS recommends no further conservation efforts for potential prehistoric cultural resources in the project area.

Much of the project area has been disturbed due to the construction of the military housing complex, although deeper deposits containing remains of the three historic sites could still be present, thus ACS maintains the recommendations of the prior assessment study that any substantial impact to the subsurface context of the three historic site areas warrants archaeological monitoring. For the Fourth Hospital Site, this sensitivity area should be expanded east to include the former location of buildings #411 and #508 in order to accommodate the Death House and Ambulance Shed sites that appear on historic maps. Further conservation is also recommended for the area encompassing the historic artifact cluster at building #423 where any substantial subsurface impacts should be accompanied by archaeological monitoring, and possibly preceded by archaeological reconnaissance testing as determined by the Landmarks Preservation Commission (LPC).

Various subsurface features recorded during monitoring do not require further conservation efforts. The concrete platform revealed near the southeast corner of the project area near the Ordinance Storehouse site likely relates to a former underground fuel tank, and thus lacks antiquity or unique characteristics warranting further conservation. The stone wall section recorded near building #424 may in fact be related to the nearby Fourth Hospital site, although the uncovered wall section is dislocated from its original provenience and was extracted from a deep fill context. The two bottle dump features bear good integrity, although a sufficient sample of this relatively recent resource was extracted to allow for detailed study, and no further conservation efforts are required.

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Appendix A: Soil Profiles

Trench Area	Layer I Color	Layer I Texture	Layer I Depth"	Layer II Color	Layer II Texture	Layer II Depth"	Layer III Color	Layer III Texture	Layer III Depth"	Comments
423 (SW corner)	10YR3/4	fsl	8	10YR4/4	fsl	23	---	---	---	Layer II mottled
423 (30' S of 423)	10YR3/4	fsl	14	10YR4/4	fsl	39	---	---	---	Layer IV 2.5Y4/2 to 43", Layer V 10YR4/6 (mottled) fsl to 62"+
423 (west side)	Parking lot concrete		18	10YR4/4	fsl	26	2.5Y3/1	fsl	34	Layer II with asphalt, dislocated stone wall section
424	10YR4/3	sloam	6	10YR5/4	sloam	31	10YR4/6	sloam	36+	
426 (NE corner)	10YR3/4	fsl	6	10YR4/4	fsl	13	---	---	---	
426 (north side)	10YR3/4	fsl	6	10YR2/2	fsl	9	10YR3/4	fsl	18	Layer IV 10YR4/4 fsl to 39", Layer V 7.5YR 4/4 and 4/6 sloam to 61"+
426 (NW corner)	10YR3/2	fsl	14	10YR3/4	fsl	32	7.5YR4/6	sloam	69	Layer III mottled with 10YR5/6
427 / 428	10YR4/3	sloam	7	10YR4/6	sloam	36	10YR5/6	sloam	48+	Layer III mottled with 10YR5/1 (gray)
431 (east trench)	10YR4/4	fsl	14	10YR4/3	fsl	32	10YR3/1	clay loam	39	Layer IV 10YR4/2 wet clay loam to 42"
431 (south trench)	7.5YR4/6	sand	18	7.5YR3/1	lsand	24	10YR4/2	scl	31	Layer IV 7.5YR4/6 clay loam to 36", V 2.5YR4/3 scl 40", VI Gley 4/10 clay
505 / 507	10YR4/4	fsl	29	10YR6/3	sand fill	48	10YR4/4	fsl	52+	
508 (south side)	10YR3/4	fsl	8	10YR4/4	fsl	19	10YR4/6	fsl	40	Layer III mottled with 10YR4/4
509	10YR3/4	fsl	5	10YR4/4	fsl	37	10YR6/6	fsl	46	Layer III with pockets of sand
510	10YR3/4	fsl	8	10YR4/4	fsl	39	10YR4/4	sand	51	Layer III with gravel and PVC pipe
511	10YR4/4	fsl	24	10YR4/6	fsl	45	7.5YR4/6	sloam	57	Layer II mottled
513 (east wall)	10YR3/4	fsl	5	10YR4/4	fsl	54	---	---	---	Layer II with pockets of asphalt and coal ash deposits
513 (NW corner)	10YR3/4	fsl	7	10YR4/6	fsl	15	10YR4/4	fsl	27	Layer II mottled
514 (NW corner)	10YR3/4	fsl	8	10YR4/4	fsl	18	10YR4/6	fsl	26	Layer IV 10YR5/6 sloam to 37"
514 (north)	10YR3/4	fsl	6	10YR4/4	fsl	22	10YR5/6	sloam	51	
Oil Tank Excavation	10YR3/4	fsl	6	10YR5/6	fsl	5/6	10YR2/1	fill	48	Layer IV 10YR4/4 clay loam to 78", Layer V 2.5Y5/1 clay loam to 85"+

Abbreviations:

- fsand - fine sand
- fsl - fine sandy loam
- grv - dense gravel; gravel, gravelly
- lfs - loamy fine sand
- lsand - loamy sand
- mtld - mottled
- prof - profile
- rck - rock, rocky
- scl - sandy clay loam
- sl - sandy loam
- sloam - silt loam
- unc - unconsolidated sediments
- wtr - standing water

Appendix B: Features and Artifacts by Test Unit

Building # or Area Features and Artifacts

423

- 1 fragment red earthenware, 5.5g.
- 1 fragment red earthenware, 1.0g.
- 2 fragment creamware, 3.0mm max thickness, 3.1g. (1762-1820)
- 1 fragment creamware, 5.6mm max thickness, 1.2g. (1762-1820)
- 2 fragments whiteware, 3.3mm max thickness, 5.3g. (>1820)
- 1 rim fragment whiteware plate, plain rounded rim, 2.4mm max thickness, 1.3g. (>1820)
- 1 base fragment whiteware plate, with foot ring, 2.5mm max thickness, 3.1g. (>1820)
- 1 fragment whiteware, 0.7g. (>1820)
- 1 base fragment whiteware with traces of blue underglaze decoration on exterior, 5.7mm max thickness, 15.0g. (>1820)
- 1 fragment whiteware with red glaze on interior and exterior, burnt, 2.7mm max thickness, 1.7g. (>1820)
- 1 fragment whiteware with blue underglaze decoration, 5.4mm max thickness, 1.6g. (>1820)
- 1 rim fragment whiteware with polychrome decoration on interior, plain rounded rim, 3.2mm max thickness, 1.1g. (>1820)
- 1 rim fragment whiteware with polychrome decal decoration, plain rounded rim, 3.0mm max thickness, 6.7g. (>1897)
- 2 fragments whiteware with blue transfer-printed decoration on interior, burnt, possible burnt whiteware, 4.7mm max thickness, 14.7g. (1830-1860)
- 4 fragments whiteware, burnt, 45.0g.
- 1 rim fragment whiteware with blue glaze on interior and exterior, plain rounded rim, 4.0mm max thickness, 5.3g. (>1820)
- 1 rim fragment whiteware with blue glaze on interior and exterior, scalloped border, 3.7mm max thickness, 3.0g. (>1820)
- 1 base fragment whiteware plate with blue glaze on interior and exterior, partial foot ring, 3.7mm max thickness, 4.2g. (>1820)
- 1 rim fragment whiteware with red transfer-printed decoration on interior, plain rounded rim, 2.5mm max thickness, 2.2g. (1830-1850)
- 1 fragment whiteware with green glaze on interior and exterior, 3.3mm max thickness, 6.6g. (>1820)
- 1 rim fragment ironstone china plate, 7.5mm max thickness, 22.1g. (1813-1900+)
- 1 rim fragment ironstone china, plain rounded rim, 2.0mm max thickness, 14cm rim diameter, 5.0g. (1813-1900+)
- 1 fragment ironstone china, burnt, 9.7mm max thickness, 12.2g. (1813-1900+)
- 1 rim fragment glazed buff stoneware with exterior molded decoration, 13.6mm max thickness, 36.8g.
- 2 rim fragments porcelain, plain rounded rim, 8.7mm max thickness, 20.0g.
- 1 base fragment porcelain, with foot ring, 4.6mm max thickness, 10.4g.
- 1 rim fragment porcelain saucer with black and gold annular rim decoration on interior, plain rounded rim, with partial foot ring, 2.3mm max thickness, 5.5g.
- 1 base fragment porcelain with blue glaze on exterior, 2.7mm max thickness, 4.7g.
- 1 rim fragment soft-paste porcelain, plain rounded rim, 2.4mm max thickness, 2.2g.
- 3 base fragments soft-paste porcelain plate, with foot ring, 2.6mm max thickness, 47.0g.
- 2 fragment soft-paste porcelain, 7.3mm max thickness, 45.9g.
- 2 fragments porcelain, 4.8mm max thickness, 3.1g.
- 1 rim fragment yellowware, scalloped rim, 4.4mm max thickness, 4.8g. (1827-1922)
- 2 base fragments yellowware, with partial foot ring, 5.9mm max thickness, 22.0g. (1827-1922)

Appendix B: Features and Artifacts by Test Unit, continued

<i>Building # or Area</i>	<i>Features and Artifacts</i>
423	<ul style="list-style-type: none"> 1 rim fragment gray stoneware vessel with recessed exterior groove under rim, squared rim, 5.3mm max thickness, 17.2g. 1 base fragment buff stoneware with brown glaze, 4.9mm max thickness, 19.2g. 1 base fragment white glass jar, 5.1mm max thickness, 11.1g. 1 fragment white glass vessel with vertical mold seam, 3.6mm max thickness, 10.9g. 1 base fragment white glass jar, with embossed characters on base, 5.1mm max thickness, 9.6g. 1 fragment white glass vessel, with partial handle, 6.0mm max thickness, 19.3g. 1 fragment blue glass bottle, 4.1mm max thickness, 5.8g. 2 base fragments white glass jar, 10cm base diameter, 10.6mm max thickness, 68.4g. 1 fragment clear glass, melted, 30.6g. 1 heavily oxidized wire nail, 90.6mm max shaft length, 5.9mm max shaft diameter, 20.6g. (>1850) 2 fragments oxidized metal, 1.0g. 1 medial fragment large mammal ulna, saw cut with cut marks, 18.5g. 1 medial fragment ulna indeterminate large mammal, saw cut both ends, 74.7g. 1 fragment indeterminate large mammal rib, saw cut both ends, 31.7g. 3 fragments indeterminate large mammal bone, 9.5g. 4 fragments Northern Quahog (<i>Mercenaria mercenaria</i>), 11.1g. 1 blue glass marble with air bubbles, 15.6mm max diameter, 5.0g. 1 white glass marble, 25.4mm diameter, 21.4g.
424	<ul style="list-style-type: none"> 1 rim fragment whiteware with hand-painted blue and brown decoration, plain rounded rim, 4.4mm max thickness, 1.5g. (1830-1865+) 1 fragment whiteware with hand-painted blue decoration, 3.3mm max thickness, 0.4g. (1830-1865+) 1 fragment round mica disc, 0.4mm max thickness, 26.7mm diameter, 0.2g. 1 fragment slate, 18.9g. 8 fragments indeterminate medium mammal bone, 5.7g. 1 fragment Northern Quahog (<i>Mercenaria mercenaria</i>), 10.2g.
426	<ul style="list-style-type: none"> 1 fragment ironstone china, 3.8mm max thickness, 3.0g. (1813-1900+) 1 rim fragment gray stoneware with brown glaze, 3.3g. 1 fragment heavily oxidized cuprous metal snap, 10.9mm exterior diameter, 4.4mm interior diameter, 0.7g. 1 fragment Northern Quahog (<i>Mercenaria mercenaria</i>), 0.6g.
427	<ul style="list-style-type: none"> 1 white porcelain knob, with articulated oxidized metal fastener, 57.1mm diameter, 24.7mm thick, 128.3g. 1 rim fragment ironstone china, scalloped edge, 2.7mm max thickness, 2.9g. (1813-1900+) 1 rim fragment white glass, with embossed shell-edged decoration on interior and exterior, 4.2mm max thickness, 6.3g. 1 clear glass bottle base, with suction scar, cup bottom mold seam, with embossed characters on base "QUALITY 17 56 Duraglas...", embossed characters on side "MH 38735...", 7.6mm max thickness, 44.4g. (>1903) 1 heavily oxidized metal spike, 144.5mm max length, 16.1x12.1mm shaft width, 85.8g.

Appendix B: Features and Artifacts by Test Unit, continued

Building # or Area Features and Artifacts

- 427/428
- 1 fragment glazed buff stoneware, 6.9mm max thickness, 6.7g.
 - 1 rim fragment ironstone china, plain rounded rim, 14cm rim diameter, 3.4mm max thickness, 12.4g. (1813-1900+)
 - 1 fragment porcelain, 1.5mm max thickness, 0.7g.
 - 2 fragments whiteware, 7.8mm max thickness, 20.6g. (>1820)
 - 1 fragment whiteware with blue transfer-printed decoration, 0.2g. (1830-1860)
 - 1 rim fragment ironstone china flatware, scalloped-edged, with embossed decoration on border, 3.2mm max thickness, 0.6g. (1813-1900+)
 - 1 fragment ironstone china, 4.3mm max thickness, 5.6g. (1813-1900+)
 - 1 fragment white glass jar finish, with beaded collar, 3.5mm max thickness, 5.3g.
 - 1 fragment clear glass bottle with embossed characters "...OF...S...", vertical mold seam, 3.8mm max thickness, 30.0g.
 - 2 fragment indeterminate mammal bone, 0.6g.
 - 10 fragments Eastern Oyster (*Crassostrea virginica*), 6.9g
 - 1 fragment Northern Quahog (*Mercenaria mercenaria*), 3.5g.
- 428
- 2 (refit) rim fragments buff salt-glazed stoneware, 30cm rim diameter, 6.2mm max thickness, 61.2g.
 - 1 fragment aqua-tinted glass bottle, 4.1mm max thickness, 5.7g.
 - 1 fragment Northern Quahog (*Mercenaria mercenaria*) shell, 4.1g.
 - 1 fragment Northern Quahog (*Mercenaria mercenaria*) shell 1.2g.
 - 2 fragments Eastern Oyster (*Crassostrea virginica*), 1.2g.
 - 1 fragment Eastern Oyster (*Crassostrea virginica*) shell 5.5g.
- 431
- 1 fragment red earthenware, 1.4g.
 - 1 fragment whiteware with dark blue transfer-printed decoration on interior, crackled glaze, 3.2mm max thickness, 4.1g. (1830-1860)
 - 1 scalloped rim fragment whiteware with embossed floral decoration on interior, and traces of gold overglaze, 4.0mm max thickness, 4.4g.
 - 1 fragment whiteware, 0.5g. (>1820)
 - 1 rim fragment whiteware, plain rounded rim, crackled glaze, burnt, 5.8g. (>1820)
 - 1 rim fragment ironstone china with combination of polychrome hand-painted and transfer-printed decoration on interior border and gold overglaze, 3.6mm max thickness, 3.3g. 1 rim fragment ironstone china, possible chamber pot, with everted plain rounded rim, embossed floral decoration, 22cm rim diameter, 5.5mm max thickness, 90.6g. (1813-1900+)
 - 1 rim fragment ironstone china, plain rounded rim, 5.8mm max thickness, 2.6g. (1813-1900+)
 - 2 fragments ironstone china, 6.1mm max thickness, 4.1g. (1813-1900+)
 - 1 base fragment ironstone china, 14cm base diameter, 5.7mm max thickness, 45.8g. (1813-1900+)
 - 1 rim fragment ironstone china, plain rounded rim, with brown annular decoration, 3.6mm max thickness, 4.6g. (1813-1900+)
 - 1 base fragment stoneware, 5.2mm max thickness, 44.2g.
 - 1 rim fragments soft-paste porcelain, plain rounded rim, 6.0mm max thickness, 18.2g.
 - 1 rim fragment soft-paste porcelain with red floral transfer-printed decoration on interior, plain rounded rim, 4.3mm max thickness, 12.4g.
 - 1 fragment porcelain with partial maker's mark on exterior, 2.2mm max thickness, 1.3g.
 - 1 fragment porcelain with foot ring, 3.7mm max thickness, 24.7g.

Appendix B: Features and Artifacts by Test Unit, continued

<i>Building # or Area</i>	<i>Features and Artifacts</i>
431	<ul style="list-style-type: none"> 1 base fragment clear glass bottle, with suction scar, with embossed decoration, 9.0mm max thickness, 24.8g. 1 fragment white glass jar, 30.2mm max height, 6.2mm max thickness, 33.3g. 1 fragment light blue glass, 5.4mm max thickness, 15.9g. 1 fragment white glass, 5.7mm max thickness, 1.3g. 1 fragment green glass bottle, 4.1mm max thickness, 8.9g. 1 fragment metal casement window crank handle, 58.0g. 1 clear glass marble with yellow tiger's eye decoration on interior, 15.7mm diameter, 5.2g. 1 fragment indeterminate bone, 0.8g. 1 fragment Northern Quahog (<i>Mercanaria mercanaria</i>) shell, 1.8g. 1 white glass marble with dark reddish brown cat's eye decoration, 16.1mm max diameter, 5.6g.
505	<ul style="list-style-type: none"> 1 fragment white glass with green paint on exterior, 5.6mm max thickness, 5.8g. 1 fragment slate, 8.4g.
505 (NW Bottle Dump)	<ul style="list-style-type: none"> 1 fragment red earthenware Ocarina Wind Instrument, with holes and impressed characters "MADE AUSTRIA, EWA, VIENNA, C1", 35.7g. 2 fragments yellowware, 5.6mm max thickness, 7.0g. (1827-1922) 3 (refit)rim fragments whiteware dish with polychrome annular transfer-printed decoration on interior, gold overglaze on rim, 3.7mm max thickness, 48.5g. (>1820) 3 rim fragments whiteware, 3.5mm max thickness, 20.3g. (>1820) 6 fragments buff earthenware dish with light brown glaze on interior and exterior and combed exterior decoration, 3.9mm max thickness, 54.4g. 1 fragment soft-paste porcelain with dark green annular decoration, 5.1mm max thickness, 8.2g. 1 base fragment clear glass bottle base, suction scar, 14.1mm max thickness, 269.3g. (>1903) 1 base clear glass bottle, with embossed character on base, 3.1mm max thickness, 99.1g. 1 base fragment clear glass bottle, with embossed "H over A" Hazel Atlas maker's mark on base, 3.5 mm max thickness, 74.0g. (1923-1964) 1 fragment heavily oxidized metal handle, 22.4g. 3 fragments shoe leather with articulated metal grommets, 4.2g. 1 fragment black plastic knob, with threading on interior and embossed decoration on face of a hand holding a chemist's tube and characters "S & D", 17.7mm diameter, 7.5mm max thickness, 1.7g. 1 medial fragment large mammal (<i>Bos taurus</i>) fused radius/ulna, saw cut, cut marks, gnaw marks, 61.1g. 1 medial fragment large mammal (<i>Bos taurus</i>) indeterminate bone, saw cut, 82.1g.
508	<ul style="list-style-type: none"> 1 rim fragment green shell-edged creamware, scalloped, impressed lines, 0.6g. (1759-1775) 1 base fragment clear square glass bottle, suction scar on base, with embossed characters "KK", "PATD", "3", 4.3mm max thickness, 11.7g. (>1903) 1 fragment blue chalk, 0.2g.

Appendix B: Features and Artifacts by Test Unit, continued

<i>Building # or Area</i>	<i>Features and Artifacts</i>
509	1 base fragment whiteware, crackled glazed, with partial foot ring, 3.3g. (>1820)
511	1 fragment blue-tinted porcelain, 4.7mm max thickness, 6.1g. 1 heavily oxidized metal valve handle, ~97.8mm diameter, ~17.0mm thickness, 271.0g.
511 (NE Bottle Dump)	1 rim fragment red earthenware, rounded rim, 10.6mm max thickness, 23.5g. 1 rim fragment red earthenware flower pot with green glaze on exterior, 5.6mm max thickness, 190.6g. 1 canister lid whiteware, yellow glaze and hand-painted polychrome (black, red) decoration on exterior, 14.5cm diameter, 176.4g. 1 scalloped and shell-edged rim fragment whiteware with yellow glaze and polychrome floral decal on interior, foot ring, 3.0mm max thickness, 12.5g. (>1897) 1 base fragment whiteware with red glaze on interior and exterior, embossed characters on base "U.S.A...", 3.3mm max thickness, 8.9g. (>1820) 2 rim fragments whiteware with pink glaze and polychrome floral decoration on interior, plain rounded rim, 4.0mm max thickness, 21.8g. (>1820) 1 rim fragment whiteware with green floral decoration on interior, plain rounded rim, 3.0mm max thickness, 2.6g. (>1820) 4 fragments whiteware teacup with red, black, and yellow hand-painted decoration on exterior, 4.0mm max thickness, 9.1g. (1830-1865+) 1 rim fragment whiteware with red, black, and yellow hand-painted annular decoration on exterior, plain rounded rim, 3.8mm max thickness, 3.0g. (1830-1865+) 1 scalloped edged rim fragment whiteware, red and green floral decoration on interior, rounded rim, crackled glaze, burnt, 3.7mm max thickness, 9.3g. (>1820) 1 fragment whiteware, crackled glaze, burnt, 4.1mm max thickness, 4.9g. (>1820) 1 rim fragment whiteware, geometric and floral polychrome transfer-printed decoration on interior, plain rounded rim, crackled glaze, 3.7mm max thickness, 8.4g. (>1820) 6 fragments whiteware with dark blue transfer-printed decoration, 2.6mm max thickness, 16.9g. (1830-1860) 3 rim fragments whiteware with dark blue transfer-printed decoration, plain rounded rim, 3.4mm max thickness, 31.2g. (1830-1860) 1 rim fragment whiteware with traces of decoration on interior, plain rounded rim, 5.1mm max thickness, 3.8g. 1 rim fragment whiteware dish, crackled glaze, 7.6mm max thickness, 116.1g. (>1820) 1 base fragment whiteware with polychrome (red, green, yellow) decal on interior, 4.8mm max thickness, with foot ring, 21.4g. (>1897) 1 base fragment whiteware, crackled glaze, 4.5mm max thickness, 15.4g. (>1820) 2 fragments whiteware with hand-painted polychrome (red, black, yellow) decoration, 3.8mm max thickness, 9.3g. (1830-1865+) 1 base fragment whiteware with blue maker's mark on base "ESTABLISHED 1899 HOUSE OF BLUE WILLOW MADE IN JAPAN", 2.1mm max thickness, 10.8g. (>1899) 1 base fragment whiteware with polychrome (yellow, green, orange) decal decoration on interior, 4.5mm max thickness, 22.4g. (>1897) 1 rim fragment whiteware plate with blue glaze on interior and exterior, 2.6mm max thickness, 16cm diameter, 8.8g. (>1820) 1 fragment whiteware canister lid, 115.2mmx115.7mm, mm max thickness, 265.0g. (>1820)

Appendix B: Features and Artifacts by Test Unit, continued

<i>Building # or Area</i>	<i>Features and Artifacts</i>
511 (NE Bottle Dump)	<ul style="list-style-type: none"> 1 base fragment whiteware flower pot with articulated drainage plate, dark reddish brown glaze on interior and exterior, embossed decoration on exterior, 4.2mm max thickness, 161.3g. (>1820) 1 rim fragment whiteware, pink glaze with polychrome (red, blue, yellow) floral decal decoration on interior, 24cm diameter, 4.6mm max thickness, 35.7g. (>1897) 1 fragment whiteware tile, 27.7g. 1 fragment whiteware with embossed decoration on interior, with foot ring, 4.9mm max thickness, 21.5g. (>1820) 1 base fragment whiteware with blue underglaze maker's mark on base "...US, ...CMT, ...OW", 3.3mm max thickness, 7.8g. (>1820) 1 base fragment whiteware with dark green maker's mark on base "TA..., SM..., T...", 2.6mm max thickness, 18.3g. (>1820) 1 fragment whiteware with traces of polychrome (red and black) decoration, embossed decoration on interior, foot ring, 3.3mm max thickness, 4.7g. (>1820) 1 rim fragment whiteware with blue and dark green hand-painted floral decoration on interior and dark green annular decoration on interior boarder, foot ring, 5.3mm max thickness, 24cm diameter, 29.0g. (1830-1865+) 1 base fragment whiteware with dark blue transfer-printed decoration on interior, foot ring, 3.7mm max thickness, 4.4g. (1830-1860) 1 rim fragment whiteware, scalloped rim, impressed decoration on interior border, 3.6mm max thickness, 6.6g. (>1820) 1 rim fragment whiteware saucer with polychrome (red, green) transfer-printed floral decoration, foot ring, 3.4mm max thickness, 31.5g. (>1820) 1 base fragment whiteware with polychrome decal decoration on interior, foot ring, 3.8mm max thickness, 27.5g. (>1897) 1 base fragment whiteware with red transfer-printed decoration interior, 5.2mm max thickness, 22.9g. (1830-1850) 1 rim fragment whiteware saucer, with red annular decoration on interior, foot ring, 3.3mm max thickness, 28.6g. (1830-1860) 1 rim fragment yellowware with annular blue decoration on exterior, burnt, 4.6mm max thickness, 20cm rim diameter, 31.1g. (1827-1922) 1 base fragment yellowware with foot ring, 6.9mm max thickness, 129.9g. (1827-1922) 1 fragment yellowware, 8.7mm max thickness, 28.7g. (1827-1922) 1 base fragment grey salt-glazed stoneware jar, 5.9mm max thickness, 52.8g. 1 base fragment ironstone china, 4.7mm max thickness, 19.8g. 1 fragment buff earthenware with dark brown interior glaze, green and brown underglaze decoration on exterior, 8.2mm max thickness, 15.9g. 1 rim fragment whiteware, with traces of transfer-printed decoration on interior, burnt, 3.6mm max thickness, 10.5g. (1830-1850) 11 (refit) fragments soft-paste porcelain pepper shaker with red glaze on exterior and black glaze characters on exterior "PEPPER", 2.3mm max thickness, 166.6g. 1 rim fragment stoneware with collared rim and blue annular decoration on exterior, 5.3mm max thickness, 25.8g. 1 base fragment buff stoneware with dark brown glaze on interior and dark green glaze on exterior, 10.5mm max thickness, 48.2g. 1 stoneware jar, 54.6mm height, 47.8mm diameter, 47.5mm rim diameter, 3.9mm max thickness, possible cosmetic, 68.5g. 1 base fragment stoneware jar with blue underglaze characters on exterior "Lam..., BUTTE..., 'Famous for its Fla..., NEW YORK - NEW JERS...", 6.7mm max thickness, (Lambrecht Butter), 139.3g. (>1909)

Appendix B: Features and Artifacts by Test Unit, continued

<i>Building # or Area</i>	<i>Features and Artifacts</i>
511 (NE Bottle Dump)	<p>1 ironstone china plate, with maker's mark impressed on base "GREENWOOD CHINA, TRENTON, N.J.", foot ring, 23cm diameter, 6.6mm max diameter, 740.2g. (>1886)</p> <p>1 rim fragment ironstone china plate, black transfer-printed decoration on interior rim, black maker's mark "...HOTEL CHINA, ...RY PATTERN", with foot ring, 18cm diameter, 4.7mm max thickness, 143.4g. (1813-1900+)</p> <p>2 rim fragments ironstone china with black and red annular decoration on interior, plain rounded rim, 2.8mm max thickness, 21.8g. (1813-1900+)</p> <p>3 rim fragments ironstone china, 4.6mm max thickness, 44.0g. (1813-1900+)</p> <p>1 fragment ironstone china, 3.8mm max thickness, 2.2g. (1813-1900+)</p> <p>1 fragment ironstone china with polychrome floral decoration on interior, with foot ring, 3.2mm max thickness, 17.0g. (1813-1900+)</p> <p>1 fragment ironstone china teacup with articulated handle, 5.0mm max thickness, 8cm diameter, 78.2g. (1813-1900+)</p> <p>1 fragment ironstone china, 3.3mm max thickness, 4.9g. (1813-1900+)</p> <p>1 rim fragment porcelain teacup with transfer-printed polychrome decoration on exterior and gold overglaze on exterior, 8cm diameter, 4.7mm max thickness, 17.7g.</p> <p>1 rim fragment porcelain, 16cm diameter, 8.7g.</p> <p>1 base fragment porcelain with transfer-printed red decoration gold overglaze decoration on interior, foot ring, 2.5mm max thickness, 17.5g.</p> <p>1 rim fragment ironstone china plate with dark green annular band decoration on interior, 5.4mm max thickness, 20cm diameter, 23.4g. (1813-1900+)</p> <p>1 fragment porcelain handle, with gold overglaze on exterior, 3.8g.</p> <p>1 rim and handle fragment porcelain teacup, dark blue annular decoration on exterior and handle, plain rounded rim, 3.1mm max thickness, 12.9g.</p> <p>1 fragment porcelain with articulated squared handle, gold overglaze on handle, 2.3mm max thickness, 22.3g.</p> <p>1 rim fragment porcelain with polychrome, floral decoration on interior, 2.5mm max thickness, 3.4g.</p> <p>1 fragment porcelain with iridescent glaze on exterior, 2.3mm max thickness, 6.1g.</p> <p>1 fragment soft-paste porcelain dish, squared rim with handle, brown glaze on exterior, white glaze on interior, 5.0mm max thickness, 119.5g.</p> <p>1 fragment soft-paste porcelain with light blue glaze on interior and exterior and painted characters on exterior "...ar...", 3.6mm max thickness, 6.3g.</p> <p>1 rim fragment porcelain teacup with shell edging, gold overglaze annular decoration and polychrome floral decoration on exterior, 10cm rim diameter, 1.7mm max thickness, 5.7g.</p> <p>1 fragment porcelain with polychrome floral decoration on exterior, 5.0mm max thickness, 28.4g.</p> <p>1 fragment porcelain with dark blue transfer-printed decoration on interior, with partial foot ring, 3.1mm max thickness, 7.3g.</p> <p>1 fragment porcelain, gold overglaze decoration, 2.7mm max thickness, 9.5g.</p> <p>1 fragment porcelain toilet lid, 16.1mm max thickness, 178.5g.</p> <p>1 rim fragment majolica-like stoneware, mottled greenish brown glaze, (possible flower pot) 12.9mm max thickness, 163.8g.</p> <p>1 base fragment soft-paste porcelain with red underglaze maker's mark on base "PAINTED, JAPAN", 3.8mm max thickness, 21.3g.</p> <p>1 fragment soft-paste porcelain, 3.9mm max thickness, 10.1g.</p> <p>1 rim fragment white porcelain saucer, with pressed decoration on interior, 4.5mm max thickness, 14cm diameter, 30.9g.</p>

Appendix B: Features and Artifacts by Test Unit, continued

<i>Building # or Area</i>	<i>Features and Artifacts</i>
511 (NE Bottle Dump)	<ul style="list-style-type: none"> 1 rim fragment soft-paste porcelain bowl, traces of polychrome floral decoration along interior rim, 3.6mm max thickness, 22cm diameter, 35.4g. 1 base fragment soft-paste porcelain tea cup with partial handle, traces of glaze decoration on exterior, 3.0mm max thickness, 8.2g. 1 rim fragment soft-paste porcelain lid, traces of hand-painted polychrome (yellow, red, green), decoration on exterior, 2.8mm max thickness, 4.8g. 1 rim fragment soft-paste porcelain mug, 6.2mm max thickness, 10cm diameter, 50.4g. 1 rim fragment porcelain saucer with dark blue transfer-printed decoration on interior, partial foot ring, 1.8mm max thickness, 2.6g. 1 porcelain vessel, possible lamp base, with light blue glaze, 80.8mm max height, 90.9mm max width, 207.1g. 1 fragment porcelain knob, 4.2g. 1 fragment clear glass bottle finish, with vertical mold seams through lip, threaded finish, 75.0mm neck height, 44.7mm neck diameter, 35.9mm interior rim diameter, 139.9g. (>1903) 1 amber cylindrical glass with articulated heavily oxidized metal shaft, 30.3mm max diameter, 93.6g. 1 fragment clear decorative flat glass with embossed decoration on one side, 4.1mm max thickness, 37.2g. 1 fragment glass eye dropper shaft, 69.7mm max length, 8.2mm max diameter, 1.8g. 1 plastic eye dropper cap, with screw threading on interior, 23.1mm diameter, 1.9g. 1 fragment white glass, 4.1mm max thickness, 13.0g. 1 rim fragment white glass, fluted decoration on exterior, 4.4mm max thickness, 10.3g. 1 base fragment white glass vessel, 6.1mm max thickness, 55.9g. 1 fragment white flat glass with ribbed decoration on one side, possible tile, 7.0mm max thickness, 33.0g 1 green-tinted glass jar lid, 20.8mm height, 76.7mm base diameter, 58.9mm neck diameter, 56.0mm internal rim diameter, with embossed Hazel-Atlas (H over A) maker's mark on interior, depression glass, 132.2g. (1923-1964) 1 rim fragment green glass pitcher with spout, depression glass, 2.1mm max thickness, 35.5g. (1925-1945) 1 rim fragment green glass saucer, depression glass, 16cm diameter, 3.0mm max thickness, 62.2g. (1925-1945) 2 fragments green and white glass handle, 11.2mm max diameter, 25.0g. 1 fragment white glass cosmetics jar, with embossed Hazel-Atlas (H over A) maker's mark on base, helical lugs finish, 73.3mm height, 89.3mm diameter, 329.9g. (1923-1964) 1 base fragment clear glass bottle, with embossed characters on base "15, 38, H 426, 7...", 83.8mm x 72.7mm max width, 2.7mm max thickness, 452.3g. 1 fragment clear glass bottle finish, 2 jug handles on the neck, threaded finish with mold seam through finish, 10.6mm neck height, 34.7mm neck diameter, 26.3mm internal rim diameter, 210.9g. (>1903) 1 fragment clear glass bottle finish, jug handle on the neck, threaded finish, mold seam through finish, 14.0mm neck diameter, 35.3mm neck diameter, 24.2mm internal rim diameter, 193.7g. (>1903) 1 fragment clear glass bottle finish, seam through lip, beaded collar, rounded lip, 25.3mm neck height, 25.1mm neck diameter, 15.8mm internal rim diameter, 79.5g. (>1903)

Appendix B: Features and Artifacts by Test Unit, continued

<i>Building # or Area</i>	<i>Features and Artifacts</i>
511 (NE Bottle Dump)	<ul style="list-style-type: none"> 1 fragment clear glass bottle finish, seam through lip, beaded collar, rounded lip (cork), 25.1mm neck height, 21.3mm neck diameter, 13.4mm internal rim diameter, 25.7g. (>1903) 1 base fragment clear glass bottle, with characters on base "84...8, 3", 487.4g. 1 base fragment clear glass bottle, with characters on base "6, 0 inside square, 8, 10", 419.1g. 1 rim fragment pressed glass with yellow paint decoration on exterior, 3.2mm max thickness, 2.7g. 1 fragment cobalt blue glass bottle finish, threaded finish, mold seam through finish, 30.2mm neck diameter, 22.9mm interior rim diameter, 30.7g. (>1903) 1 clear glass bottle base, with embossed characters on base "OLDMR.BO..., R174, 12, 8, PAT APR FOR, FINE LIQU...", 4.5mm max thickness, 59.4g. 1 fragment amber glass bottle finish, threaded finish, vertical mold seam through finish, 33.5mm neck height, 22.7mm neck diameter, 16.3mm interior rim diameter, 38.5g. (>1903) 1 clear glass tube with cork, 74.7mm length, 8.8mm diameter, 0.5mm thickness, 4.8g. 1 fragment clear glass light bulb tube with filament and wiring, 1.0mm max thickness, 9.0g. 1 base fragment clear glass bottle with embossed characters on base "...PAT 94824", 4.0mm max thickness, 22.0g. 1 base fragment clear glass bottle with embossed characters on side "PLAT NUM", "PLAT NUM", and "3" on base, 43.3mm x 17.2mm, mm max thick, 32.3g. 1 clear glass bottle finish, beaded collar, vertical mold seam through lip, 317mm neck height, 41.4mm neck diameter, 35.2mm interior rim diameter, 40.2g. (>1903) 1 fragment clear glass bottle finish, vertical mold seam through lip, 17.5mm neck height, 26.1mm neck diameter, 18.4mm interior rim diameter, 33.9g. (>1903) 1 base fragment white glass jar, with embossed characters on base "Dorothy Gray, MADE IN U.S.A.", 58.8mm diameter, 6.8mm max thickness, 92.2g. 1 base fragment clear oval glass bottle, (probable nail polish) with pressed ribbing decoration, 39.9mm x 24.0mm, 3.7mm max thickness, 30.8g. 1 oxidized light bulb, 83.9mm total length, 24.2mm metal screw height, with painted decoration on bulb exterior, 59.3mm glass bulb diameter, 26.8mm metal screw diameter, 34.8g. 1 fragment highly oxidized metal alarm clock, 1023.0g. 2 fragments indeterminate brass, 15.8g. 1 fragment heavily oxidized metal teaspoon, 150.0mm length, 28.3g. 1 fragment indeterminate material, black, bullet shaped, with bore hole, 41.1g. 1 fragment blue plastic comb, with embossed characters "MADE IN USA", 13.9g. 1 fragment brown plastic toothbrush handle, with painted characters on handle "H, STERILIZED, MADE IN USA, MASSO, REG U.S. PAT ...S, MADE BY PROPYLACTIC, BRURM CO.", 10.4g. 1 fragment wood brush handle, 17.9g. 1 fragment black rubber cap with hole in center, threaded on interior, 69.4mm diameter, 45.6g. 1 fragment rubber ball, 47.5mm diameter, 49.1g. 1 medial fragment large mammal (<i>Bos taurus</i>) bone, saw cut, gnaw marks, 72.9g. 1 medial fragment large mammal bone, saw cut, 140.0g. 1 medial fragment large mammal (<i>Bos Taurus</i>) tibia, saw cut, 66.5g. 2 medial fragment indeterminate large mammal bone, saw cut, 27.9g. 1 medial fragment large mammal rib, 4.4g.

Appendix B: Features and Artifacts by Test Unit, continued

<i>Building # or Area</i>	<i>Features and Artifacts</i>
511 (NE Bottle Dump)	<ul style="list-style-type: none"> 1 fragment indeterminate mammal bone, calcined, 5.8g. 5 medial fragments indeterminate large mammal bone, 51.8g. 1 medial fragment large mammal (<i>Bos taurus</i>) rib, burnt, 21.7g. 1 medial fragment large mammal (<i>Bostaurus</i>) rib, saw cut, 23.6g. 1 medial fragment medium mammal rib, 1.6g. 1 proximal fragment medium mammal left femur, unfused, 17.5g. 1 fragment large mammal (<i>Bos taurus</i>) vertebra, 9.4g. 1 medial fragment large mammal (<i>Bos taurus</i>) pelvis, 34.0 1 medial fragment large mammal (<i>Bos taurus</i>) pelvis, 55.8 1 proximal fragment large mammal (<i>Bos taurus</i>) left femur, 74.1 1 medial fragment medium mammal bone, 29.2g. 2 fragments medium mammal, saw cut, 9.6g. 1 distal fragment medium mammal tibia, unfused, saw cut, 18.3g. 1 proximal fragment medium mammal (<i>Felis catus</i>) left tibia, unfused, 8.3g. 1 distal fragment medium mammal left humerus, 2.1g. 1 distal fragment medium mammal (<i>Felis catus</i>) left tibia, 7.3g. 2 fragments Northern Quahog (<i>Mercanaria mercanaria</i>) shell, 63.0g. 1 fragment white glass marble with green and yellow decoration, 15.7mm diameter, 5.1g. 1 blue and white glass marble, 15.7mm diameter, 5.2g.
513	<ul style="list-style-type: none"> 2 rim (refit) fragments ironstone china deep dish, plain rounded rim, partial foot ring, 7.4mm max thickness, 30cm rim diameter, 322.0g. (1813-1900+) 2 fragment ironstone china, with partial foot ring, 7.1mm max thickness, 46.8g. (1813-1900+)
514	<ul style="list-style-type: none"> 1 fragment whiteware, with black underglaze decoration, crackled glaze, 3.4mm max thickness, 1.4g. (>1820)
E-W Walkway	<ul style="list-style-type: none"> 1 base fragment ironstone china with light blue glaze, 5.5mm max thickness, 46.2g. (1813-1900+) 1 rim fragment porcelain, with black annular decoration on interior, plain rounded rim, burnt, 28cm rim diameter, 4.5mm max thickness, 7.8g. 1 fragment soft-paste porcelain with blue transfer-printed decoration on interior, with partial foot ring, 3.0mm max thickness, 2.9g. 1 fragment whiteware with dark blue transfer-printed decoration, 6.2mm max thickness, 12.5g. (1830-1860) 1 rim fragment whiteware with dark blue transfer printed decoration on interior, plain rounded rim, 2.8mm max thickness, 2.0g. (1830-1860) 1 base fragment blue glass bottle, with embossed character "M" on base, 5.6mm max thickness, 35.5g. 1 brass radiator air vent with engraved characters on shaft "PAT.NO.2106512-2276, No 7 AUTO-VENT®, MF'DFOR BELL & GOSSETT CO., MORTON GROVE, ILLINOIS., OE71", 53.1mm base diameter, 8.3mm base thickness, 44.6mm shaft diameter, 74.8mm shaft length, 208.6g. (Patent Date 1938)

Appendix B: Features and Artifacts by Test Unit, continued

<i>Building # or Area</i>	<i>Features and Artifacts</i>
Oil Tank Trench	<ul style="list-style-type: none"> 1 fragment ironstone china, 7.8mm max thickness, 7.7g. (1813-1900+) 1 rim fragment whiteware with polychrome decoration, burnt, plain rounded rim, 2.9mm max thickness, 1.0g. (>1820) 1 base fragment aqua tinted glass bottle, 8.5mm max thickness, 63.1g. 1 base fragment clear glass bottle with embossed decoration and characters on base "37", 2.2mm max thickness, 31.7g. 1 fragment clear glass stirring stick, 7.2mm shaft diameter, 9.4g. 4 fragments Northern Quahog (<i>Mercanaria mercanaria</i>) shell, 59.6g.
Playground Area	<ul style="list-style-type: none"> 1 base fragment porcelain, with maker's mark on base "EMPRESS CHINA", "JAPAN", with partial foot ring, 3.3mm max thickness, 15.2g. (1900-1950) 1 base fragment whiteware, 9.7mm max thickness, 27.5g. (>1820) 1 fragment whiteware with dark blue underglaze decoration, 1.6g. (>1820) 1 scalloped-edged rim fragment ironstone china, with white glaze and embossed floral annular decoration, 6.6mm max thickness, 7.6g. (1813-1900+) 1 base fragment white glass jar, 34.8mm height, 49.7mm max width, 10.6mm neck height, 47.1mm base diameter, 44.5g. 1 proximal fragment Eastern Cottontail rabbit (<i>Sylvilagus floridanus</i>) tibia, 7.2g. 1 white glass marble with green tiger's eye decoration, 15.8mm diameter, 5.5g. 1 stainless steel teaspoon, with engraved characters on handle "OXFORD HALL ® STAINLESS JAPAN", 159.5mm length, 33.3g. 1 plastic trophy emblem with pool table decoration, 14.9g. 1 plastic figurine toy, 22.1g. 1 plastic figurine toy, with impressed characters "F31", "CHINA", "M.I. 1987", 10.7g. 1 plastic McDonalds French fry toy, with embossed characters on base "1987 McDonald's Corporation Made in China", 18.0g. 1 purple plastic toy, 1.8g. 1 fragment metal toy car with characters on base "404, MERCEDES 280 SL, MADE IN HOLLAND", 28.5g. 1 fragment metal toy car with characters on base "HOT WHEELS MATTEL INC 1983 MALAYSIA", 46.6g.
South Grade Area	<ul style="list-style-type: none"> 1 fragment whiteware with blue transfer-printed underglaze decoration, 3.4mm max thickness, 2.1g. (1830-1860) 1 rim fragment whiteware with hand-painted decoration on interior, 2.9mm max thickness, 1.4g. (1830-1865+) 1 rim fragment whiteware with blue annular decoration on exterior, probable cup, mm max thickness, 1.7g. (1830-1860) 1 rim fragment whiteware with traces of poly chrome (red/green) decoration on interior, 9.4g. (>1820) 2 fragments ironstone china with embossed floral green hand-painted decoration on exterior, 2.9mm max thickness, 12.9g. (1813-1900+) 1 rim fragment ironstone china with scalloped border, 6.1mm max thickness, 17.3g. (1813-1900+) 1 fragment soft-paste porcelain with scalloped rim, blue hand-painted decoration on interior, 3.0mm max thickness, 2.6g. 1 rim fragment soft-paste porcelain mug, with dark green underglazed characters on exterior "...MY...DEPARTMENT", 5.3mm max thickness, 25.9g.

Appendix B: Features and Artifacts by Test Unit, continued

Building # or Area Features and Artifacts

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| South Grade Area | <ul style="list-style-type: none"> 1 rim fragment soft-paste porcelain saucer, with dark green annular decoration on interior, 14cm max diameter, 3.2mm max thickness, 8.1g. 1 base fragment white glass bottle, 51.7mmx 21.1mm max diameter, 3.41mm max thickness, 63.0g. 1 base fragment white glass jar with pressed geometric decoration on exterior, 12.7mm max thickness, 58.4g. 1 base fragment white glass jar, 8.6mm max thickness, 30.2g. 1 fragment clear glass with white and red paint decoration, 3.0mm max thickness, 5.8g. 1 base fragment clear glass bottle with embossed characters on base "S...ORE", 10.1mm max thickness, 92.6g. 1 base fragment aqua-tinted glass bottle with embossed characters on base "9, C", 9.2mm max thickness, 66.3g. 1 fragment blue and yellow glass bead, 28.1mm x 21.4mm, 16.3g. 1 white glass marble with yellow tiger's eye decoration, 15.5mm diameter, 5.0g. 1 US Roosevelt dime, "LIBERTY", "IN GOD WE TRUST", "1950", "UNITED STATES OF AMERICA", "ONE DIME", "E. PLURIBUS UNUM", 17.8mm diameter, 1.1mm thickness, 2.6g. (1950) 1 fragment metal toy, 2.6g. 1 plastic figure toy, with molded characters "UNCLE FESTER, THE ADDAMS FAMILY T.M. & 1991, PARAMOUNT PICTURES", 16.7g. 1 fragment plastic bowl, discarded. |
| Walkway/Grade Area | <ul style="list-style-type: none"> 1 fragment whiteware, with foot ring, 5.5mm max thickness, 45.0g. (>1820) 1 fragment whiteware, burnt, with dark blue transfer-printed decoration on interior, foot ring, 4.6mm max thickness, 15.0g. (1830-1860) 1 fragment whiteware, embossed decoration on exterior and traces of hand-painted decoration on interior, 3.4mm max thickness, 4.3g. (1830-1865+) 1 fragment white glass cap, with screw threads, embossed characters on exterior "0, 4, 16...", 24.1g. 1 fragment clear glass bottle base, 6.3mm max thickness, with embossed characters on base "A, 7K67...", 41.8g. 1 fragment clear glass bottle finish, applied lip with collar, 44.3mm neck height, 28.6mm neck diameter, 13.6mm interior neck diameter, 52.2g. (<1910) 1 green glass marble with light green tiger's eye decoration on interior, 14.7mm diameter, 4.2g. 3 fragments Eastern Oyster (<i>Crassostrea virginica</i>) shell, 0.8g. 1 fragment Northern Quahog (<i>Mercanaria mercanaria</i>) shell, 2.9g. |

Appendix C: Bottle Assemblage

Acc #	Area	Color	Type	Body Shape	Weight	Height	Width 1	Width 2	Neck Height	Neck Diam	IRD	Finish	Early Date	Late Date	Maker
1	NW	Clear	Condiment	Broad shoulder, panelled	241.6	127.2	76.6	68.9	16.4	55.7	48.7	Cap	1938	1958	Illinois Glass
2	NW	Clear	Milk	Milk jar	227.8	135.7	60.5		30.3	44.2	41.8	Cap insert	1933	1986	
3	NW	Clear	Food / fruit	Cylindrical jar	255.8	129.3	73.3		16.5	53.8		Jar screw cap	1937	1977	Anchor Hocking
4	NW	Clear	Food / fruit	Cylindrical jar	132	91.8	53.1		14.3	47.4	40.6	Cap	1929	1958	Illinois Glass
5	NW	Clear	Medicine	Rectangular	268.5	152.1	74.2	40	20.8	16.7	4.4	Threaded	1929	1958	Illinois Glass
6	NW	White	Cosmetic	Ovate	94.1	49.3	35.2	45.5	10.7	30.8	25.4	Threaded	1903		
7	NW	White	Cosmetic	Cylindrical	75.2	52.5	38.4		13.4	39.1	30.2	Threaded	1903		
8	NW	Clear	Condiment	Ovate jar	129.2	88.3	59		13.9	46.5	38.3	Jar screw cap	1903	1958	Illinois Glass
9	NW	Clear	Condiment	Square jar	122.7	85	49.1	48.8	22.7	43	36.6	Helical lugs	1930	1925	Brockway Glass
10	NW	Clear	Food	Rectangular	139.6	144.5	49.2	34.2	23.1	18.9	11.9	Threaded	1925	1958	Illinois Glass
11	NW	Clear	Food	Square jar	274.5		61.5	60.6				Cap	1929		
12	NW	Clear	Food / fruit	Ovate jar	274.9	101.3	91.5		24.6	57.1	50.8	Cap or cap insert	1903		
13	NW	Clear	Food / fruit	Cylindrical jar	243.7	96.4	86.2		19.9	53.5	43.9	Wired lid	1918	1938	Capstan Glass
14	NW	Clear	Condiment	Round	331.2	227.7	61.8		21.3	27.5	16.5	Cap	1935	1938	Whitall-Tatum
15	NW	Clear	Cosmetic	Rectangular tapering	152.7	150	64.3	32.4	17.1	23.9	15	Threaded	1903		
16	NW	Clear	Food / fruit	Cylindrical jar	132.4	92	53.5		20.3	46.9	39.5	Cap	1929	1958	Illinois Glass
17	NW	Clear	Food / fruit	Miniature	26.4	63.1	26.8	13.7	12.6	12.5	6.6	Threaded	1929	1958	Illinois Glass
18	NW	Clear	Food / fruit	Cylindrical jar	177.6	113	60.6		23.1	40.7	32.8	Jar screw cap	1903		
19	NW	Clear	Food / fruit	Cylindrical jar	129.5	91.4	54.6		16.6	47.7	38.7	Cap	1929	1958	Illinois Glass
20	NW	Clear	Food / fruit	Cylindrical jar	262.4	131.4	79.4		25.4	66.4	59.9	Jar screw cap	1903		
21	NW	Clear	Food / fruit	Cylindrical jar	127.9	90.9	53.1		16	47.3	39.5	Cap	1929	1958	Illinois Glass
22	NW	Clear	Condiment	Square, one round shoulder	383.5	144.2	93.3	67.6	21.7	25.1	17.8	Threaded	1903		
23	NW	Clear	Condiment	Round, tall	124	161.1	39.7		17.3	17.3	11.9	Threaded	1903		
24	NW	Clear	Milk	Cylindrical jar	179.6	101.8	64.4		15.5	57.1	48.3	Cap	1929	1958	Illinois Glass
25	NW	Clear	Milk	Milk jar	230.2	136.2	60.8		28.9	44.8	41.7	Cap insert	1927	1954	Illinois Glass
26	NW	Clear	Food / fruit	Cylindrical jar	234.8	125.9	71.4		17.9	53.4	46	Wired lid	1937	1977	Anchor Hocking
27	NW	Clear	Food / fruit	Cylindrical jar	271.8	133.3	80.1		23.2	64.7	60	Jar screw cap	1918	1938	Capstan Glass
28	NW	Clear	Food / fruit	Round	441.8	241.1	89.3		23.8	25.3	15.6	Cap	1929	1958	Illinois Glass
29	NW	Aqua tint	Wine	Round push-up	685	301	76.4		28.9	28.9	18.5	Cork	1903		
30	NW	Clear	Condiment	Multi-sided	347	243.7	62.3		29.5	26.1		Cap	1903		
31	NW	Clear	Condiment	Cylindrical jar	531.2	194.5	91.1		27.7	64.8	59.7	Jar screw cap	1903	1958	Illinois Glass
32	NW	Clear	Condiment	Multi-sided tapering	328.3	233.7	66.8		25.4	31.1	19.8	Threaded	1929	1949	Metro Glass
33	NW	Clear	Liquor	Round	559.5	287	86.7		97.5	27.5	17.6	Threaded	1935		
34	NW	Clear	Liquor	Flask	455.8	220.2	100.6	45.5	57.5	26.6	22.2	Cork	1903		
35	NW	Clear	Condiment	Square jar	252.4	122.5	71.4	77.2	15.1	58.1	50.2	Cap	1903		
36	NW	Clear	Food	Broad shoulder	131.8	109.3	45		33.5	33.1	30.6	Cap	1903		
37	NW	Clear	Food	Ovate jar	244.3	140.1	86	58.9	24.3	53.1	46.9	Cap	1903		
38	NW	Clear	Condiment	Cylindrical jar	199.6	95.8	74.8		12.1	47.6	41.2	Neck lugs	1903		
39	NW	Clear	Condiment	Square jar	329.2	121.7	78.7	79	17.3	59.7	52.6	Helical lugs	1903		
40	NW	Brown / Amber	Household	Cylindrical	527.4	246.8	93.7		22.5	22.2	12.1	Cork	1929	1958	Illinois Glass
41	NW	Brown / Amber	Medicine	Multi-sided flask	364.5	171	83.4	56.8	27.3	25.7	18	Threaded	1932		Brockway Glass
42	NW	Blue	Medicine	Cylindrical	100.4	102.3	41.7		20.2	25.6	19	Neck lugs	1916		Maryland Glass Corp
43	NW	Dark olive	Wine	Round push-up	992.4	302.4	87.7		61.8	30.5	16.8	Cork			
44	NW	Dark olive	Wine	Round push-up	1082.8	304.1	88.7		65.9	30.6	17.4	Cork			
45	NW	Green	Household	Triangular	14.5	48.6	18.5		9.3	11.5	7.6	Cap	1903		
46	NW	Green	Beverage	Round	665	289	81.6		61.6	25.7	16.4	Cap	1929	1958	Illinois Glass
47	NE	Clear	Milk	Milk jar	629.8	241.9	94.2		57.8	45.5	41.8	Cap insert	1923	1949	Thatcher Glass
48	NE	Clear	Fruit	Multi-sided jar	296.3	156.8	59.8		24.2	58.1	53.1	Jar screw cap	1923	1964	Hazel-Atlas Glass
49	NE	Clear	Beverage	Round	859.4	279.4	88.4		59.6	25	17.7	Cap	1903		
50	NE	Clear	Food / fruit	Square jar	278.9	176.8	56.6	59.7	18.8			Cap insert	1903	1988	Ball Bros.
51	NE	Clear	Condiment	Cylindrical jar	176	150.7	45.4		16.2	40.9	33	Jar screw cap	1903		
52	NE	Aqua tint	Condiment	Ovate jar	276.9	155.7	69.8	36.4	43.9	43.5	35.6	Helical lugs	1929	1958	Illinois Glass
53	NE	Clear	Liquor	Rectangular	501.1	207.8	87.1	49.4	38.5	27.3	18.4	Threaded	1934	1958	Illinois Glass
54	NE	Clear	Condiment	Multi-sided jar	252.8	158.6	58.5	43.8	38.8	41.2	36.1	Jar screw cap	1929	1958	Illinois Glass
55	NE	Clear	Liquor	Flask	377.9	211.2	100	49.2	56.5	25.1	18.8	Threaded	1930	1960	
56	NE	Clear	Milk	Milk jar	258.4	159.3	58.1		36	43.7	31.5	Cap insert	1903		
57	NE	Aqua tint	Beverage	Round	312	108.6	57.1		52.4	25.7	16.3	Cap	1903	1958	Illinois Glass
58	NE	Aqua tint	Beverage	Multi-sided jar	242.9	156.8	59.1	43.6	38.5	41.3	34.4	Jar screw cap	1929	1958	Illinois Glass
59	NE	Dark olive	Beverage	Round	399.3	228.7	63.6		68.4	25.6	15.8	Cap	1903	1956	Reed Glass
60	NE	Green	Beverage	Rectangular, chamfered	104.8		35.9	31					1927		
61	NE	Dark green	Beverage	Round	265	195.9	53.4		50.1	25.8	16	Cap	1903		

Appendix C: Bottle Assemblage

Acc #	Area	Color	Type	Body Shape	Weight	Height	Width 1	Width 2	Neck Height	Neck Diam	LRD	Finish	Early Date	Late Date	Maker
62 NE	Brown / Amber	Brown / Amber	Liquor	Round	576.7	286.9	87.8		87.8	28.4	19.7	Cork	1929	1958	Illinois Glass
63 NE	Brown / Amber	Brown / Amber	Beverage	Round	199.6	188.2	67.3		17.6	25.4	17.9	Cap	1929	1958	Illinois Glass
64 NE	Clear	Clear	Condiment	Multi-sided	254.4	214.2	51		36.7	27.1	16.8	Threaded	1929	1958	Illinois Glass
65 NE	Clear	Clear	Medicine	Round	338.9	194.7	67.3		30	24.9	17.3	Threaded	1929	1958	Illinois Glass
66 NE	Clear	Clear	Condiment	Multi-sided	239.5	209	51.2		49.2	27.1	16.8	Threaded	1937	1977	Anchor Hocking
67 NE	Clear	Clear	Condiment	Multi-sided	368.6	243	62.9		71.7	27.5	16.4	Cap	1929	1958	Illinois Glass
68 NE	Clear	Clear	Condiment	Multi-sided	296	210.1	64.8		28.4	27.3	16.9	Cap	1929	1958	Illinois Glass
69 NE	Clear	Clear	Condiment	Rectangular	166.5	156.1	56.9	38.4	28.1	22.1	14.3	Threaded	1925		Brockway Glass
70 NE	Clear	Clear	Condiment	Multi-sided	323.5		63.5								
71 NE	Clear	Clear	Condiment	Ovate jar	340.5	182.6	78.1	53	21.5	54	44.8	Jar screw cap	1932	1958	Illinois Glass
72 NE	Clear	Clear	Medicine	Rectangular	304.7	186.1	72.9	46.6	36.6	24.8	16	Cork	1903		
73 NE	Green	Green	Beverage	Round	874.4	281.2	88.5		66.7	28.8	16.8	Cap	1929	1958	Illinois Glass
74 NE	Amber	Amber	Beverage	Round	214.2	173.6	68.6		19.6	25.6	17	Cap	1929	1958	Illinois Glass
75 NE	Aqua tint	Aqua tint	Condiment	Round	210	161	55.6	40.9	37.2	38.7	30.2	Helical lugs	1932	1956	Reed Glass
76 NE	Green	Green	Wine	Multi-sided jar	155.1	188.9	36.2	31	53.8	30.8	20.9	Jar screw cap	1927		
77 NE	Dark olive	Dark olive	Wine	Round	707.6	305.2	81.3		96.6	28.8	17.3	Cork	1937	1977	Anchor Hocking
78 NE	Brown / Amber	Brown / Amber	Medicine	Cylindrical	659.2	254.4	85.1		31.2	23.4	13.5	Cork	1929	1958	Illinois Glass
79 NE	Green	Green	Beverage	Round	411.9	246.4	65.7		66.2	26.1	15.8	Cap	1929	1958	Illinois Glass
80 NE	Clear	Clear	Condiment	Rectangular	255.4		61.2	42.4	32.5	23.1	11.7	Threaded	1905	1990	Fairmount Glass Works
81 NE	Aqua tint	Aqua tint	Condiment	Sinusous	141.3	158	58.7	29.3	32.5	17.9	11.7	Threaded	1903		
82 NE	Clear	Clear	Condiment	Ovate jar	266.4	128.9	86.3	71.9	22.9	55.7	54.9	Cap insert	1945		
83 NE	Clear	Clear	Condiment	Multi-sided	220.8	156.1	49.2		31.5	35.4	27.5	Cap insert	1937	1977	Anchor Hocking
84 NE	Clear	Clear	Condiment	Round, broad shouldered jar	266.4	139.7	80		24.8	31.7	54.3	Helical lugs	1920	1959	Swindell Bros.
85 NE	Clear	Clear	Condiment	Rectangular jar	219.8	144.3	63.6	34.2	17	33.7	27.9	Helical lugs	1932	1958	Illinois Glass
86 NE	Clear	Clear	Condiment	Ovate jar	210.4	128.5	59.3	43.7	17	50.1	40.9	Jar screw cap	1929	1958	Illinois Glass
87 NE	Clear	Clear	Liquor	Kidney	273.4	169.6	82.3	34.3	27.9	26.1		Threaded	1929	1958	Illinois Glass
88 NE	Clear	Clear	Beverage	Round	796.7	296.4	88.4		65	25.6	15	Cap	1929		
89 NE	Clear	Clear	Beverage	Flask	302.8		81.3	38.4	54.4	17.8	10.5	Cork	1937	1977	Anchor Hocking
90 NE	Clear	Clear	Condiment	Square, tall	112.7	173.6	32.2	32.1	21.3	25.1	15.3	Cap	1903	1937	Anchor Hocking
91 NE	Clear	Clear	Beverage	Multi-sided, ovoid	330.2	242.2	79.2		32.7	25.8	16.8	Cap	1932		Illinois Glass
92 NE	Clear	Clear	Beverage	Round	811.4	300.1	87.5	26.6	40	18.2	10.5	Threaded	1929	1958	Illinois Glass
93 NE	Brown / Amber	Brown / Amber	Beverage	Rectangular, tapered	133.6	149	49.6		25.3	25.3	19.2	Threaded	1903	1977	Anchor Hocking
94 NE	Brown / Amber	Brown / Amber	Beverage	Round	294.5		71.4	41.9	32.3	26.1	71.8	Cap	1903		
95 NE	Brown / Amber	Brown / Amber	Liquor	Flask	219.2	173.9	70.3		43.1	25	14.7	Cap	1903	1958	Illinois Glass
96 NE	Green	Green	Beverage	Round	694.4	297.4	81.2		77.4	26.6	18.3	Cork	1929		
97 NE	Dark olive	Dark olive	Wine	Round push-up	610.1	300.2	79.9		18	69.2	71.8	Cap	1903		
98 NE	Brown / Amber	Brown / Amber	Food	Ovoid jar	411	119.3	106.2		26.1	82	66.6	Cap insert	1903		
99 NE	Clear	Clear	Condiment	Cylindrical jar	295.2	109.1	76	29.4	17.7	20	15.2	Helical lugs	1931		
100 NE	Clear	Clear	Condiment	Multi-sided	89.7	114.4	46.2		26.1	50.5	45.4	Helical lugs	1937	1977	Anchor Hocking
101 NE	Clear	Clear	Condiment	Ovate jar	279.2	174.6	68.5	48.9	15.4	55.7	54.7	Cap insert	1903		
102 NE	Clear	Clear	Condiment	Ovate jar	265.5	126.5	82.8	71.6	23.4	46.6	37.8	Jar screw cap	1903		
103 NE	White	White	Cosmetic	Round jar	126.2	40.8	53.3	33.5	9	21.1	15.8	Threaded	1903		
104 NE	Clear	Clear	Cosmetic	Multi-sided	169.4	146.5	60.6		18.9				1903		
105 NE	Clear	Clear	Condiment	Rectangular	127.4	50.2	32.5		27.9	27.5	16.1	Cap	1929	1958	Illinois Glass
106 NE	Clear	Clear	Condiment	Multi-sided	386.8	244.7	61.4		13.3	59.7	53.4	Jar screw cap	1937	1977	Anchor Hocking
107 NE	Clear	Clear	Food / fruit	Cylindrical jar	293.3	133.2	76.3	61.6	28.6	34.7	27.3	Helical lugs	1929	1958	Illinois Glass
108 NE	Clear	Clear	Food / fruit	Ovate jar	417.3	193.9	83.3		17.4	66.3	58.2	Jar screw cap	1923	1964	Hazel-Atlas Glass
109 NE	Clear	Clear	Beverage	Ovoid jar	381.3	116.7	105.6		28.5	26	16.5	Cap	1903		
110 NE	Clear	Clear	Beverage	Round	894.5	283.6	88.2		18.9	53.6	44.9	Wired lid	1903		
111 NE	Clear	Clear	Food / fruit	Cylindrical jar	236.5	125.3	71.4		41.1	24.5	18.6	Threaded	1923	1964	Hazel-Atlas Glass
112 NE	Clear	Clear	Condiment	Round	136	126.6	56.9		45	19.2	12	Cork	1929	1958	Illinois Glass
113 NE	Clear	Clear	Condiment	Rectangular	141.2	152.5	46.8	19.9	47.2	30.5	22.6	Threaded	1903		
114 NE	Clear	Clear	Condiment	Multi-sided	350.7	233.5	63		23.2	21.7	15.5	Threaded	1903		
115 NE	Clear	Clear	Cosmetic	Cylindrical	188.8	140.9	54.8		40.5	24.6	19.3	Threaded	1923	1964	Hazel-Atlas Glass
116 NE	Clear	Clear	Cosmetic	Cylindrical	136.2	127.6	56.4		18.5	21.4	12.1	Threaded	1929	1958	Illinois Glass
117 NE	Clear	Clear	Medicine	Conical	135.9	136.1	55.6	33.5	26.5	23	15.7	Helical lugs	1903		
118 NE	Clear	Clear	Medicine	Kidney	151.5	141.8	53.9	27.7	30.1	27.5	16.6	Cap	1935	1938	Whitall-Tatum
119 NE	Clear	Clear	Condiment	Round	334.5	226.6	61.6		9.7	46.6	39	Helical lugs	1903		Hazel-Atlas Glass
120 NE	White	White	Cosmetic	Cylindrical jar	107.2	40.7	53.1	40.2	12.6	34.5	26	Jar screw cap	1929	1958	Illinois Glass
121 NE	Clear	Clear	Cosmetic	Cylindrical jar	80.4	59.1	40.2		7.7				1903		
122 NE	White	White	Cosmetic	Round, short	46.2	19.8	39.6			34	26.1	Helical lugs	1903		

Appendix C: Bottle Assemblage

Acc #	Area	Color	Type	Body Shape	Weight	Height	Width 1	Width 2	Neck Height	Neck Diam	IRD	Finish	Early Date	Late Date	Maker
123	NE	White	Cosmetic	Ovate jar	106.8		46.8	38.3				Jar screw cap	1920	1963	Carr-Lowrey
124	NE	White	Cosmetic	Ovate jar	105.3		46.8	38.4				Jar screw cap	1920	1963	Carr-Lowrey
125	NE	White	Cosmetic	Ovate jar	101.7		45.6	34.7				Jar screw cap	1903		
126	NE	Clear		Rectangular	31	72.4	29.6	18.1	13.2	13.6	8	Threaded	1903		
127	NE	White	Cosmetic	Cylindrical jar	186.1		58.8					Jar screw cap	1903		
128	NE	Clear	Cosmetic	Cylindrical jar	107.2		54.2					Jar screw cap	1903		
129	NE	White	Cosmetic	Square	228.4		52.1	51.3				Jar screw cap	1903		
130	NE	White	Cosmetic	Cylindrical jar	180.9		48.6					Jar screw cap	1903		
131	NE	White	Cosmetic	Cylindrical jar	123.3	50.4	49		10.7	44.4	37.2	Helical lugs	1903		Illinois Glass
132	NE	Brown / Amber		Cylindrical jar	170.7		47.5					Jar screw cap	1929		
133	NE	White	Cosmetic	Round jar	197.5	52	56.7		13.5	53.8		Jar screw cap	1903		
134	NE	White	Cosmetic	Cylindrical jar	79.6	52.2	38.8		13.6	39.2		Jar screw cap	1903		
135	NE	Clear	Cosmetic	Cylindrical jar	64.9	62.2	49		40.6	40.6		Jar screw cap	1903		
136	NE	White	Cosmetic	Ovate jar	568.3	89.7	97.4	85.7	12.1	85.4		Jar screw cap	1903		
137	NE	White	Cosmetic	Ovate jar	160.8	56.3	60.5	49.4	11.2	48.2		Threaded	1903		
138	NE	Clear		Rectangular	72.1		39.1	20.2					1934		
139	NE	Clear	Cosmetic	Round jar	120.7	53.8	66.4		12.6	44.6		Jar screw cap	1934		Ball
140	NE	Clear	Fruit	Cylindrical jar	210.6	82.5	72.4		16.6	66.1		Jar screw cap	1903		
141	NE	Clear	Cosmetic	Round jar	73.9	48.6	41.4		10.1	38.9		Jar screw cap	1903		
142	NE	Brown / Amber		Square	53.7	76.3	30	29.8	12.3	17		Threaded	1924	1968	Knox Glass Bottle Company
143	NE	Clear		Cylindrical jar	74.7		49.1			39.8		Jar screw cap	1903		
144	NE	Clear		Tumbler	209.8	97.6	62		16.9	64.9		55.5 Cap	1929	1958	Illinois Glass
145	NE	Clear		Cylindrical jar	130.7	92	54.3		15.7	46.1		39 Cap	1929	1958	Illinois Glass
146	NE	Brown / Amber		Cylindrical jar	31.5	55.4	25.7		12.2	23.6		14.3 Threaded	1925		Brockway Glass
147	NE	Clear	Cosmetic	Rectangular	38.7	63.3	34.4	23	13.8	14.7		4.4 Threaded	1903		
148	NE	Clear	Food / fruit	Square jar	117.2	83.5	49.5	49.3	14.1	43.5		35 Helical lugs	1930		Ball
149	NE	Clear	Cosmetic	Rectangular	14.4	46.4	30.8	12.9	12.2	9.2		6.1 Threaded	1903		
150	NE	Clear	Condiment	Ovate jar	208.6	127.9	58.2	43.7	20.6	50.3		41.5 Jar screw cap	1932	1958	Illinois Glass
151	NE	Clear		Tumbler	172.1	94.5	52.8		15.5	59.5		47.9 Cap	1929	1958	Illinois Glass
152	NE	Blue	Medicine	Cylindrical jar	89.2	43.9				36.3		Jar screw cap	1903		
153	NE	Blue	Medicine	Round jar	124.8	83.4	55.3		18.5	45.7		37.2 Jar screw cap	1903		
154	NE	Clear	Cosmetic	Round	145.8	136	49.4		38.6	20.1		5.6 Threaded	1929	1958	Illinois Glass
155	NE	Clear		Rectangular	46	95.3	32.9	21.5	17.7	16.4		9.1 Threaded	1925		Brockway Glass
156	NE	Clear		Cylindrical	61.1	85.2	33.4		13.1	16.1		11.5 Threaded	1903		
157	NE	Clear		Conical	31.2	69.9	34.9		10.2	12.8		7 Threaded	1903		
158	NE	Clear		Cylindrical jar	180	102.3	64.2		16.9	54.9		49 Cap	1929	1958	Illinois Glass
159	NE	Black		Rectangular jar	264.4	100.3	60.7	51	13.2	47.2		35.1 Jar screw cap	1903		
160	NE	Clear		Round	88.9	64.8	45.1		18.8	14.8		11.2 Applied	1910		Maryland Glass Corp
161	NE	Blue		Cylindrical	127.2	119.8	48.6		18.8	21.5		15.3 Threaded	1937	1977	Anchor Hooking
162	NE	Clear	Food / fruit	Cylindrical jar	214.1	112.2	61.4		13.3	49.8		43.3 Jar screw cap	1929	1958	Illinois Glass
163	NE	Brown / Amber		Square	188.7	110.4	47.3	47.8				Threaded	1916		Illinois Glass
164	NE	Brown / Amber		Cylindrical	116.6	108	45		20.7	20.6		13.9 Threaded	1929	1958	Illinois Glass
165	NE	Clear	Cosmetic	Rectangular	109.9	110.5	56.1	29.4	18.7	13.8		8.2 Threaded	1920	1963	Carr-Lowrey
166	NE	Clear	Food / fruit	Square jar	112.8	83.4	50.1	50	14.6	43.9		35.5 Helical lugs	1903		Ball
167	NE	Blue	Medicine	Cylindrical jar	40.6	65.5	29		14.4	19.7		14.2 Neck lugs	1916		Maryland Glass Corp
168	NE	Blue	Medicine	Cylindrical jar	77	61.8	44.1		18.6	36.7		31.7 Jar screw cap	1903		
169	NE	Clear		Cylindrical jar	131.1	105.8	43.3		10.6	38.8		31.7 Jar screw cap	1903		
170	NE	Brown / Amber		Rectangular, tapered	63		32.7	17.3		15.1		Threaded	1929	1958	Illinois Glass
171	NE	Clear		Rectangular	45.8	86.9	33.8	24.4	21.8	16.2		10.1 Cork	1935	1938	Whitall-Tatum
172	NE	Brown / Amber		Cylindrical	65.5	95.6	31.3		12.4	29.6		19 Threaded	1925		Brockway Glass
173	NE	Clear		Cylindrical jar	153.1	126.1	42.6		14.7	35.5		27.8 Jar screw cap	1903		
174	NE	Clear		Cylindrical jar	128.6	91.1	53.7		14.8	45.5		39.5 Cap	1929	1958	Illinois Glass
175	NE	Brown / Amber		Rectangular	93.6	101.5	47.7	29.9	18.6	24.2		17.2 Threaded	1935	1938	Whitall-Tatum
176	NE	Clear		Round	192.8		72.3						1931	1958	Illinois Glass
177	NE	Clear		Cylindrical jar	121.3	91.8	53.3		16.1	45.1		39.2 Cap	1929	1958	Illinois Glass
178	NE	Brown / Amber	Medicine	Multi-sided flask	160.6	127.4	65.1	35.7	16.4	21.3		16.3 Threaded	1937	1977	Anchor Hooking
179	NE	Brown / Amber	Medicine	Rectangular	81.5	112.8	41.8	24.8	19.9	17.3		11.5 Threaded	1929	1958	Illinois Glass
180	NE	Clear		Tumbler	145.7	94.7	54.6		17.4	56.6		50.7 Cap	1923	1964	Hazel-Atlas
181	NE	Clear		Cylindrical	112.2	82.2	42		20.2	30.2		20.1 Cork	1929	1958	Illinois Glass
182	NE	Clear		Cylindrical jar	129.2	91.7	53.6		14.4	46.2		39.2 Cap	1929	1958	Illinois Glass
183	NE	Clear		Cylindrical jar	181	114	53		15.4	44.7		33.7 Helical lugs	1929	1958	Illinois Glass

Appendix C: Bottle Assemblage

Acc #	Area	Color	Type	Body Shape	Weight	Height	Width 1	Width 2	Neck Height	Neck Diam	IRD	Finish	Early Date	Late Date	Maker
184	NE	Clear	Condiment	Barrel jar	172.5	95.9	58.1		17.7	44.9		35.6 Jar screw cap	1929	1958	Illinois Glass
185	NE	Clear	Condiment	Square jar	207.8	101.2	62.8	61.9	14.6	52.5		44.1 Helical lugs	1930	1958	Illinois Glass
186	NE	Clear		Cylindrical jar	128.3	92.1	54.6		16.2	46		39.5 Cap	1929	1958	Illinois Glass
187	NE	Clear		Rectangular	135.4	143.3	48.2	36	19.6	20.1		13.4 Threaded	1924		Knox Glass Bottle Company
188	NE	Clear		Round	133	108.8	38.2		33	32.1		24.8 Cap insert	1903		
189	NE	Brown / Amber	Medicine	Rectangular	296.2	173	59.1	42.4	29	23.6		5.8 Threaded	1935	1938	Whitall-Tatum
190	NE	White	Cosmetic	Cylindrical jar	150.8		53.4					Jar screw cap	1903		
191	NE	Brown / Amber		Cylindrical	50.8		40						1929	1958	Illinois Glass
192	NE	Clear		Cylindrical jar	106.5	108.5	37.4		16	32.8		27.9 Jar screw cap	1923	1964	Hazel-Atlas
193	NW	Clear		Round jar	216.3	114.7	64.8		17.6	55.2		45.8 Jar screw cap	1929	1958	Illinois Glass
194	NW	White	Cosmetic	Round jar	62.8	26.7	47.8		10.8	29.1		22.1 Jar screw cap	1903		
195	NW	Brown / Amber		Round jar	70.1	62.6	48.8		19.6	40.6		29.5 Jar screw cap	1903		
196	NW	Clear		Cylindrical jar	312.8	121.5	93.8	54.2	17.5	21.8		16.3 Threaded	1903		
197	NW	Clear		Square	119	128	42.1	41.9	28.3	20.4		13.5 Threaded	1903		
198	NW	Green tinted	Beverage	Round	401.8	199.5	59.2		19.6	25.7		16.8 Cap	1903		
199	NW	Green		Cylindrical	41.4	65.2	27.9		12.4	21.1		14.6 Threaded	1929	1958	Illinois Glass
200	NW	Clear		Round	328.8	183.6	62.1		46.8	35.8		24.8 Threaded	1903		
201	NW	Clear		Rectangular jar	278.2	151.4	63.4	61.3	19.3	51.3		46.1 Jar screw cap	1928		
202	NW	Clear		Multi-sided	17.5	38.3	26.7		11.3	8.9		4.6 Threaded	1903		
203	431	Clear		Cylindrical jar	118	118.3	39.8		19.9	36.9		29.6 Cap	1935	1949	Metro Glass
204	431	Clear		Kidney	72.4	101.4	46.6	27.7	24.4	17.5		10.6 Applied	1910		
205	SG	Brown / Amber	Medicine	Rectangular	26.6	55.8	21.6	21.4	13.6	15.7		10.3 Threaded	1903		
206	EW	Clear		Triangular	38.7	43.4	37.9		13.2	16.9		12 Helical lugs	1923	1964	Hazel-Atlas
207	NE	Clear		Irregular	83.7	113.1	43.1	26.6	14.6	17.4		11.5 Threaded	1936	1958	Illinois Glass
208	NE	Clear		Conical	60.8	73.6	41.7		12.7	14.7		10.1 Cork	1923	1964	Hazel-Atlas
209	423	Clear		Round	37.3	61.8	29.2		23.7	22.6		16.4 Threaded	1903		
210	423	Clear		Kidney	42	90.5			24.8	21		9.4 Applied	1910		

Appendix C: Bottle Assemblage

Acc #	Area	Maker's Mark	Product	Character, Comments
1	NW	I in diamond and oval	Crosse and Blackwell Company condiment	DES. PAT. 108594, 49, 2
2	NW	V	Milk	Vernonville FARMS INC., NEW YORK CITY, NY
3	NW	H on anchor	Food / fruit	P-43, 6, 8; articulated oxidized jar lid
4	NW	I in diamond and oval	Mouthwash	20, 1
5	NW	I in diamond and oval	Pond's cream	ASTRINGO-SOL, BOTTLE MADE IN U.S.A., 7, 12; articulated plastic cap
6	NW	I in diamond and oval	Cosmetic	POND'S, 1
7	NW	I in diamond and oval	Coniment	MUSTERO[L], CLEVEL[AND]; partial paper label
8	NW	I in diamond and oval	Heilmann's Mayonnaise	11
9	NW	B in circle	Food	C1416, BEST FOODS DES. PAT. 80918, 67; paper label for Heilmann's mayonnaise
10	NW	I in diamond and oval	Food / fruit	3w, 5
11	NW	I in diamond and oval	Food / fruit	842-1; embossed leaf decoration on body
12	NW	Anchor	Food / fruit	12 AP, 9
13	NW	WT in triangle	Ketchup	PRIDE OF THE FARM TOMATO CATSUP, 23, 9
14	NW	WT in triangle	Cosmetic	
15	NW	I in diamond and oval		
16	NW	I in diamond and oval		
17	NW	I in diamond and oval		
18	NW	None		
19	NW	I in diamond and oval		
20	NW	Keystone		
21	NW	I in diamond and oval		
22	NW	I in diamond and oval		
23	NW	I in diamond and oval		
24	NW	I in diamond and oval		
25	NW	IG		
26	NW	H on anchor		
27	NW	Anchor		
28	NW	I in diamond and oval		
29	NW	None		
30	NW	IR		
31	NW	I in diamond and oval		
32	NW	M in keystone		
33	NW	7 in triangle		
34	NW	illegible		
35	NW			
36	NW			
37	NW			
38	NW			
39	NW			
40	NW			
41	NW			
42	NW			
43	NW			
44	NW			
45	NW			
46	NW			
47	NE	T over MC		
48	NE	H over A		
49	NE	G in square		
50	NE	Ball, underlined		
51	NE			
52	NE	I in diamond and oval		
53	NE	I in diamond and oval		
54	NE	I in diamond and oval		
55	NE			
56	NE			
57	NE			
58	NE			
59	NE			
60	NE			
61	NE			

Appendix C: Bottle Assemblage

Acc #	Area	Maker's Mark	Product	Characters, Comments
62	NE	I in diamond and oval	Three Feathers Whiskey Beverage	FEDERAL LAW FORBIDS SALE OR RE-USE OF THIS BOTTLE, D682, 57-8; embossed three feather design, partial paper label
63	NE	I in diamond and oval	Beverage	69, 15.; swirled stippled design on body and base
64	NE	I in diamond and oval	H.J. Heinz condiment	16, H.J. HEINZ CO., PATD, 251, 11, 9
65	NE	I in diamond and oval	Magnesium citrate solution	SOLUTION, CITRATE MAGNESIA, DOSE ADULTS ONE HALF TO ONE BOTTLE AS DESIRED, CHILDREN IN PROPORTION TO AGE, 12, 4, 2
66	NE	H on anchor	Condiment	H251, GSO
67	NE	I in diamond and oval	Condiment	95, 6, 9581
68	NE	I in diamond and oval	Condiment	49, 15
69	NE	Brookway, undefined	Condiment	3vi, 2
70	NE	None	Condiment	H 255, 6, S, F
71	NE	I in diamond and oval	Condiment	DES PAT 865665, 40, 15; partial aluminum foil label
72	NE	None	Medicine	FRENCH BEVERAGES, NEW YORK, N.Y., CONTENTS 1 PT. 12 FL. OZ., REGISTERED, 1101-1; partial painted label
73	NE	G in square	Beverage	40, 5; stipple design on body and base
74	NE	I in diamond and oval	Beverage	
75	NE	Square G in square	Condiment	1246
76	NE	R in triangle	Wine	8, L748
77	NE	H on anchor	Medicine	0
78	NE	I in diamond and oval	Beverage	73738, 6
79	NE	I in diamond and oval	Beverage	31, 4
80	NE	I in diamond and oval	Condiment	45
81	NE	P in circle	Condiment	208, partial articulated oxidized metal cap
82	NE	None	Condiment	700
83	NE	F in hexagon	Condiment	872, 37
84	NE	H on anchor	Liquor	PAT APPLIED FOR, 88, 46
85	NE	S in circle	Beverage	11
86	NE	I in diamond and oval	Condiment	DES PAT 86565, 29, 14
87	NE	I in diamond and oval	Liquor	HALF PINT, FEDERAL LAW FORBIDS SALE OR RE-USE OF THIS BOTTLE, D683, 56-7
88	NE	I in diamond and oval	Beverage	CONTENTS 1 PT. 13 FL. OZ., 38, 2, G75; partial aluminum foil label, stipple design on body
89	NE	I in diamond and oval	Re Umberto Olive Oil	9; natural texture decoration on body
90	NE	H on anchor	Kelly Dry	Re Umberto, PEER - AMID BOTTLES, REG U.S., PAT. OFF., L-549, 6, 4
91	NE	I in diamond and oval	Beverage	E1249, 49, 5; embossed leaf texture and stipple design on body
92	NE	Square G in square	Liquor	KELLY DRY, CONTENTS 1 PT. & 13 FL. OZ., 529-1; stippled decoration on body, traces of aluminum foil label
93	NE	I in diamond and oval	Liquor	49, 12
94	NE	illegible character in triangle	Beverage	203, 10, 4, 9
95	NE	H on anchor	Liquor	6760, 6, 6; articulated plastic screw cap
96	NE	I in diamond and oval	Liquor / wine	5Z
97	NE	I in diamond and oval	Puritan baked beans	4/5 QUART, WP - 5472, 99
98	NE	None	Condiment	PURITAN, Puritan (underlined), REG U.S. PAT. OFF., ORIGINAL DUTCH OVEN BAKED BEANS, DES PAT APPLIED FOR, 6
99	NE	illegible character in circle	Condiment	2
100	NE	H on anchor	Dorothy Gray Cream	PAT. 83892
101	NE	None	Condiment	5, 6, 4928
102	NE	None	Condiment	700
103	NE	None	Food / fruit	MADE IN U.S.A.
104	NE	None	Food / fruit	CAVALIER, 4 OZ., L, 3
105	NE	I in diamond and oval	Condiment	Finish missing
106	NE	H on anchor	Food / fruit	12, 5, 12
107	NE	I in diamond and oval	Beverage	DES. PAT 99639, P41
108	NE	I in diamond and oval	Food / fruit	26, 7
109	NE	H over A	Beverage	5035, 3
110	NE	G in square	Food / fruit	FRENCH BEVERAGES, NEW YORK, N.Y., CONTENTS 1 PT. 12 FL. OZ., REGISTERED, 1107-2
111	NE	H over A	Condiment	illegible characters on base
112	NE	I in diamond and oval	Sauer's Extracts	6, K, 7550
113	NE	I in diamond and oval	Condiment	SAUER'S EXTRACTS
114	NE	None	Condiment	KREML SHAMPOO, R.B. SEMLER, INC., NEW YORK, U.S.A., 6 OZ. FL.; articulated with plastic screw cap
115	NE	None	Medicine	IK7550; stippled base
116	NE	H over A	Medicine	POUR HERE, 3iv, OWENS, 15, 8
117	NE	I in diamond and oval	Ketchup	REM
118	NE	None	Cosmetic	PRIDE OF THE FARM TOMATO CATSUP, 9, 29
119	NE	WT in triangle	Cosmetic	1; traces of residue
120	NE	H over A	Cosmetic	12, 6, 95, 4
121	NE	I in diamond and oval	Cosmetic	16; articulated partial threaded oxidized metal cap
122	NE	I in diamond and oval	Cosmetic	

Appendix C: Bottle Assemblage

Acc #	Area	Maker's Mark	Product	Characters, Comments
123	NE	C on L	Cosmetic	WOODBURY, 9, 2; articulated with heavily oxidized metal screw cap
124	NE	C on L	Cosmetic	WOODBURY, 9, 78; articulated with heavily oxidized metal screw cap
125	NE	None	Pond's cream	POND'S, 23, 2; articulated with partial metal screw cap
126	NE	[JB]	Cosmetic	3SS, 1; articulated with plastic screw cap
127	NE	None	Cosmetic	14; articulated with partial metal screw cap
128	NE	None	Cosmetic	Radiating design on base, articulated metal screw cap
129	NE	None	Cosmetic	2; articulated with partial metal screw cap
130	NE	None	Cosmetic	12; articulated with oxidized metal screw cap
131	NE	None	Cosmetic	DELV; articulated with partial metal screw cap
132	NE	I in diamond and oval	Jergens Lotion	11, 4; palinated, articulated with oxidized metal screw cap
133	NE	None	Cleveland Musterole	JERGENS, 13
134	NE	None	Pond's cream	CLEVELAND MUSTEROLE
135	NE	None	Pond's cream	CHESEBROUGH MFG. CO. CD., NEW YORK
137	NE	None	Pond's cream	POND'S, 16
138	NE	None	Cosmetic	DES. PAT. 94824
139	NE	None	Fruit	U.S. PAT'D 92185, MADE IN U.S.A.
140	NE	Ball, underlined	Cosmetic	Ball, 5
141	NE	K in keystone	Cosmetic	MYSTIC; body swirled rib design, base cross-hatched design, partial articulated metal screw cap
142	NE			3
143	NE			CHESEBROUGH MFG. CO. CD., NEW YORK; articulated metal screw cap
144	NE	I in diamond and oval		45, 9
145	NE	I in diamond and oval		39, 12; petinated
146	NE	B in circle		1
147	NE	Ball, underlined	Cutex nail product	LZ; CUTEX on plastic screw cap
148	NE	None	Best Foods food / fruit	BEST FOODS, DES. PAT. 80918, 8704, 3
149	NE	None	Nail polish	PAT., 5; articulated with plastic screw cap and applicator brush
150	NE	I in diamond and oval	Condiment	DES PAT 86565, 28, 12
151	NE	I in diamond and oval	Vick's Vaporub	38, 16
152	NE	4-pronged W	Vick's Vaporub	VICK'S VAPORUB; articulated with partial metal screw cap
153	NE	Triangle	Vick's Vaporub	VICK'S VAPORUB
154	NE	I in diamond and oval	Fitch barber product	Fitch, 79, 1
155	NE	Brockway, underlined		10; articulated with plastic screw cap
156	NE	None		2; articulated with plastic screw cap
157	NE	None		20
158	NE	I in diamond and oval		39, 12
159	NE	None		Eched swirl design on body
160	NE	None		138
161	NE	M in circle	Food / fruit	4
162	NE	H on anchor		DES. PAT 99639, P40, 10, 6
163	NE	I in diamond and oval		49, 3
164	NE	I in diamond and oval		78
165	NE	C on L	Jergens Lotion	JERGENS LOTION, 3; articulated with plastic screw cap
166	NE	Ball, underlined	Food / fruit	8704, 11
167	NE	M in circle	Emerson Bromo-Seltzer	EMERSON BROMO-SELTZER, EMERSON DRUG CO, 49
168	NE	4-pronged W	Vick's Vaporub	VICK'S VAPORUB
169	NE	None		593-8; partial articulated metal screw cap
170	NE	I in diamond and oval		49; articulated with oxidized metal screw cap
171	NE	WT in triangle		USA, 3, 8
172	NE	B in circle		1
173	NE	None		494, 7
174	NE	I in diamond and oval		20, 1
175	NE	WT in triangle		2 1/2 OZ., 36, 6, 3; articulated with partial metal screw cap
176	NE	I in diamond and oval		DES. PAT. 85379, 29, 15
177	NE	I in diamond and oval		30, 19
178	NE	H on anchor	Medicine	SQUIBB, DESIGN PAT 87401, BOTTLE MADE IN U.S.A., 18, 9
179	NE	I in diamond and oval	Burnett's medicine	BURNETT, BOSTON, 6, 2
180	NE	I in diamond and oval		37, 16
181	NE	H over A		78, 8
182	NE	I in diamond and oval		28; petinated
183	NE	I in diamond and oval		

Appendix C: Bottle Assemblage

Acc #	Area	Maker's Mark	Product	Characters, Comments
184	NE	I in diamond and oval	Condoment	26, 1
185	NE	I in diamond and oval	Hellmann's Mayonnaise	C1292, DESIGN PATENT 80918, 24, 3
186	NE	I in diamond and oval		39, 16
187	NE	Knoxall		3iv, 9; articulated with plastic screw cap
188	NE	None		6
189	NE	WT in triangle	Glover's Imperial Medicine	GLOVER'S IMPERIAL MEDICINE, NEW YORK, H. CLAY GLOVER CO., 6 1/2 FL OZ
190	NE	I in diamond and oval	Dorothy Gray Cream	Dorothy Gray, MADE IN U.S.A.; articulated with oxidized metal screw cap
191	NE	H over A		7, 216-6, 1
192	NE	I in diamond and oval		5147-2
193	NW	H over A		Premier, 47, 9; traces of painted label
194	NW	I in diamond and oval	Odo-Ro-No Ice	Plastic screw cap with characters "ODO-RO-NO, Ice, CHECKS PERSPIRATION, STOPS BODY ODOR"
195	NW	None		CHESEBROUGH MFG CO CD, NEW YORK, 10; traces of residue
196	NW	None		1
197	NW	None		W.D. CO., GN
198	NW	None	Coca-Cola	Coca-Cola, TRADEMARK REGISTERED IN U.S. PATENT OFFICE, 6 1/2 FL. OZS., NEW YORK, NY, 1
199	NW	I in diamond and oval		7; articulated with plastic screw cap
200	NW	S	Disney	traces of painted label
201	NW	None		PAT APPLIED FOR, 6; Disney characters embossed below shoulder
202	NW	None		decorative fluting on body
203	431	M in keystone		28003, 6
204	431	cf acorn	Medicine	amethyst-linted
205	SG	illegible character in circle		USA
206	EW	H over A		I
207	NE	I in diamond and oval	Mar-O-Oil	MAR-O-OIL, SUPER FOAMY, DES. PAT 102283, MADE IN U.S.A.
208	NE	H over A		8K, 4844
209	423			
210	423			