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# PHASE IB ARCHAEOLOGICAL FIELD INVESTIGATIONS BLOCK 170, 101 – 117 WORTH STREET NEW YORK, NEW YORK

# DRAFT

Prepared for:

Allee King Rosen and Fleming, Inc. 117 East 29<sup>th</sup> Street New York, New York

Prepared by:

URS Corporation 561 Cedar Lane Florence, New Jersey 08518

June 2003

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### Prepared by:

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#### ABSTRACT

This report details the findings of Phase IB archaeological investigations conducted by URS Corporation (URS) of the eastern end of Block 170, 101 – 117 Worth Street, located in the borough of Manhattan. URS performed these investigations for Allee, King, Rosen & Fleming, Inc. Work was initiated in response to the proposed development of a new residential structure with retail commercial space and two basement levels. A previous Phase IA documentary study of the project area had revealed that basements and sub-cellars existed beneath late-nineteenth-century (circa 1879 – 1885) and twentieth-century buildings that once covered the project area. In addition, soil borings encountered foundations at depths of 18 to 20 feet below present-day street level. The borings indicated that rubble fill ranged in thickness from 18.5 to 23.5 feet across the project area and rested on a natural silty/sandy stratum. The study concluded that this stratum could potentially be sensitive for tanneries and potteries, which were once located near the Collect Pond; for features associated with the African-American presence in the area; and for early-nineteenth-century home lot features. In addition, given the project area's proximity to the National Historic Landmark African Burial Ground, there was a remote possibility of encountering undocumented burials.

Phase IB subsurface testing consisted of both machine-excavated test trenches and hand-excavated test units, as well as monitoring of construction activities. The test trenches were utilized to determine the presence or absence of early intact surfaces, foundations, and/or shaft features within the project area. Test units were then used to further investigate potential intact surfaces and features encountered during trench excavation. The archaeological monitoring of construction activities afforded a wider exposure of the project area than otherwise provided by the excavation of test units and test trenches. The investigation identified two sections of intact stone walls associated respectively with the Broadway Tabernacle Church (1835 – 1857) and a late-nineteenth-century commercial building, along with the truncated remains of a midnineteenth-century well and a buried Holocene surface.

#### **ACKNOWLEDGEMENTS**

The helpful cooperation of several people outside of URS Corporation's Archaeology and Historic Architectural Group facilitated the successful completion of this project and report. URS appreciates the knowledge, support, interest, and commitments of the numerous individuals and organizations involved in this effort. Special appreciation and recognition is extended to Claudia Cooney of Allee, King, Rosen & Fleming, Inc., for her constant support and assistance during the project. Specific thanks go to the Forest City Ratner Companies, particularly to Steven Spiro, Michael Carter (no longer with the company), and Robert Sandrip for their help and logistical support throughout the entire project. Finally, grateful acknowledgments go to Douglas Mackey of the New York State Office of Parks, Recreation, and Historic Preservation and Amanda Sutphin of the New York City Landmarks Preservation Commission for providing important oversight roles and responding in a timely fashion to all requests for consultation and guidance.

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#### I. INTRODUCTION AND PROJECT DESCRIPTION

URS Corporation (URS) conducted Phase IB cultural resource investigations on the eastern end of Block 170, 101 - 117 Worth Street, located in the borough of Manhattan (Figure 1.1). The proposed Worth Street & Foley Square Development site is bounded by Catherine Lane to the north, Lafayette Street to the east, Worth Street to the south, and Broadway to the west (Figure 1.2). The site is to be the location of a new residential structure with retail commercial space and two basement levels. The New York City Landmarks Preservation Commission (LPC) and the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) recommended a Phase IA documentary study of the project area due to its proximity to the National Historic Landmark African Burial Ground and the potential for eighteenth- and nineteenth-century cultural remains. The Phase IA study, performed by Historical Perspectives, Inc. (HPI), determined that basements and sub-cellars existed beneath late-nineteenth-century (circa 1879 – 1885) and twentieth-century buildings that once covered the project area (Schneiderman-Fox 2001). In addition, soil borings encountered foundations at depths of 18 to 20 feet below present-day street level. The borings indicated that rubble fill ranged in thickness from 18.5 to 23.5 feet across the project area and rested on a natural silty/sandy stratum. The proposed excavations for the new structure would extend between 0.5 to six feet below the existing fill levels. Results of the study suggested that this stratum is potentially sensitive for tanneries and potteries (once located near the Collect Pond), for features associated with the African-American presence in the area, and for early-nineteenth-century domestic, yard-area features. In addition, given the proximity of the African Burial Ground, a remote possibility of encountering undocumented burials existed. The purpose of the study was to identify any cultural resources in the project's area of potential effects (APE), defined as the structure's footprint, and to establish. in a preliminary fashion, the extent, age, integrity, and National Register eligibility of any such resources (see Figure 1.2).

URS performed all work pursuant to the National Historic Preservation Act of 1966, as amended; the Advisory Council on Historic Preservation's "Protection of Historic Properties" (36 CFR part 800, December 2000). In addition, the Stage IB investigation was conducted according to the State Environmental Quality Review Act (SEQR), Sections 3-0301(1)(b), 3-0301(2)(m) and 8-0113, Part 617, as amended, June 2000. The investigation was also performed pursuant to the 1993 City Environmental Quality Review (CEQR) Technical Manual for such projects, as well as within New York City Landmarks Commission guidelines. Subsurface testing and archaeological monitoring was conducted from June 13 to December 28, 2002. Mr. Edward M. Morin, RPA, served as the project's Principal Investigator. Ms. Bonnie Gustav, Ph.D., served as the research team's Physical Anthropologist. Mr. Jeffrey Harbison, Field Supervisor, supervised the fieldwork with the assistance of Christine Flaherty, Carolyn Nakamura, Karl Franz, John Gill, Meta Janowitz, Amanda Norbury, Drew Oberholtzer, and Bernard Slaughter. Ingrid Wuebber directed and reported on the detailed historical research. Mr. George Miller, Laboratory Director, conducted the artifact analysis and reported on the results. Lynda Bass and Scott Hood prepared graphics for the report, and Paul Elwork edited the text for style and content. Consultants undertook some specialized studies related to the project: Joseph Schuldenrein of Geoarcheology Research Associates conducted a study of local pedological conditions and Karl Reinhard of the University of Nebraska conducted a parasitological study of suspected privy soils.

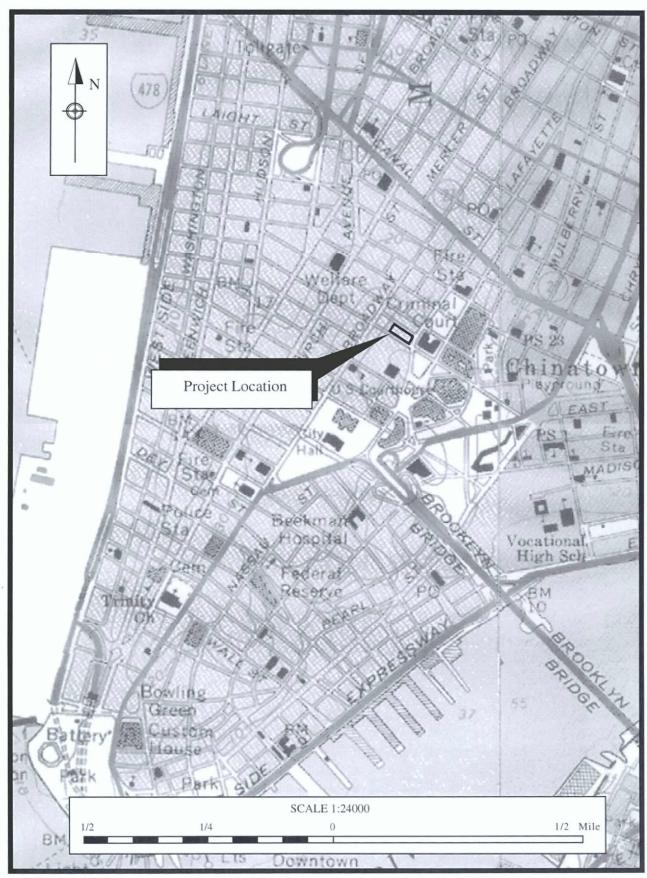


Figure 1.1 Project Area Location Map (Source: Portion of 7.5 Min. Topographic Map, Jersey City, New Jersey and Brooklyn, New York Quadrangles, Maptech 1981).

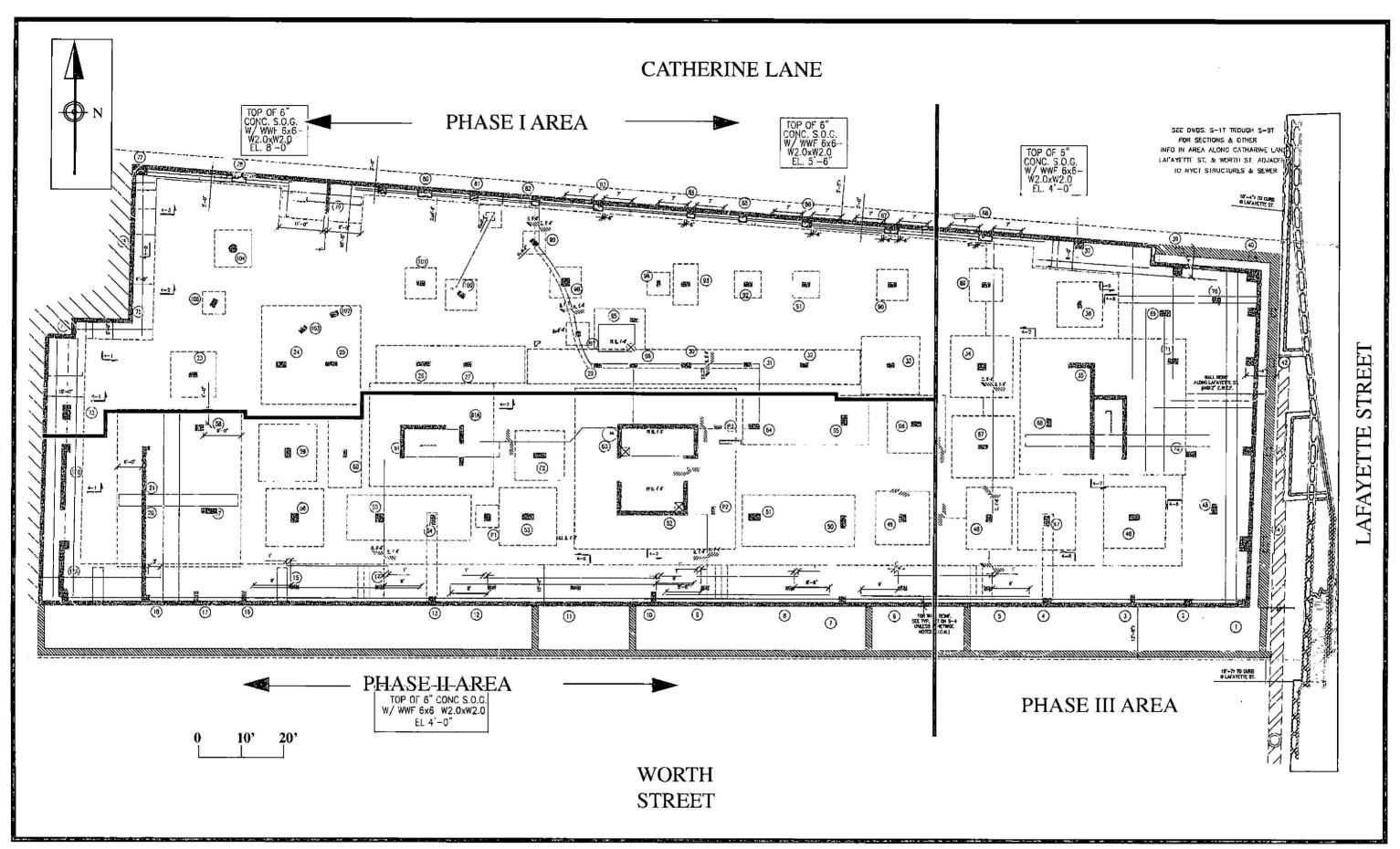


Figure 1.2 Area of Potential Effects, 101-117 Worth Street Project Site.

#### II. METHODS AND PROCEDURES

#### HISTORIC RESEARCH

URS conducted specific historical background research for Lot 20 in order to provide a historic context to aid in the interpretation of a sandstone-lined shaft feature (Feature 4) uncovered in Lot 20 during investigations. Research also focused on furnishing information regarding several bottle manufacturers associated with bottles recovered in the shaft. The New York Historical Society and the New York Public Library provided historical maps of the Worth Street area. Data from directories and census records was gathered at the New York Public Library, New York Historical Society, the Northeast Regional Branch of the National Archives, and the New Jersey State Library, where such information is available on microfilm and microfiche. Additional sources, especially concerning the Broadway Tabernacle Church, were gleaned from the New York Public Library.

#### ARCHAEOLOGICAL INVESTIGATIONS

Archaeological testing procedures, based on the results of the Phase IA documentary study, were outlined in a Scope of Work (SOW) submitted by HPI to both the OPRHP and the LPC (Historical Perspectives, Inc. 2001). As a component of the testing protocol, a physical anthropologist was on site at all times during archaeological investigations and the monitoring of subsurface construction activities. The possibility of burials associated with the nearby African Burial Ground—present within the project area—necessitated the physical anthropologist's presence. The SOW proposed that the archaeological testing be staged by dividing the project site into three areas (see Figure 1.2). Since the removal of the modern demolition/rubble debris began in the north section (Phase I Area) of the site, this area would first undergo Phase IB field investigations. Upon completion testing in the northern section (Phase I Area), the southern section (Phase II Area) was tested. Finally a 100-foot section at the eastern end (Phase III) of the site served as a staging area and access point to the site (see Figure 1.2).

Initial investigations in the north portion (Phase I Area) of the site consisted of removing late-nineteenth-to-early-twentieth-century basement structures and associated rubble fill to the top of each basement's expected slab floor (see Figure 1.2). Archaeological personnel from HPI monitored fill removal activities to ensure that no inadvertent impacts occurred to potentially intact cultural resources. Results of the monitoring quickly indicated the presence of slab floors within only a small portion of the Phase I Area, and that a two-to-three-foot layer of compacted fill rested on apparently undisturbed sandy subsoil. Therefore, the testing procedure was altered, leaving this layer of fill as a cushion to protect any potential intact deposits from the weight and tracks of the backhoe. A series of trenches were then mechanically excavated: one east/west trench was placed across the center of the site, followed by six north/south trenches spaced at 20-to 45-foot intervals. Hand-excavated test units were also utilized to investigate potential intact deposits or features.

Test trenches were mechanically excavated in one-foot arbitrary levels within natural strata to the proposed depth of construction disturbance. Fill deposits of recent origin or formerly subjected to extensive disturbance were not screened, though diagnostic artifacts were retained on a selective basis. OSHA trenching guidelines were strictly followed in order to ensure crew safety. Test units were excavated in natural strata, and all soils were screened through ¼-inch-mesh hardware cloth. Soils from both the trenches and units were described using the Munsell color system and standard texture classifications. All artifacts recovered during screening were retained, with the exception of bulk materials such as concrete rubble, brick, large metal objects, ash coal, cinders, slag, etc. In the case of such materials, a sample was described and weighed from each provenience and the remainder quantified and discarded in the field. Recovered artifacts were bagged according to their unique provenience and transported to the Florence, New Jersey laboratory for processing, conservation, and analysis. Soil profiles, cultural features, etc. were described, photographed on black-and-white print, digital, and color-slide film, and illustrated in engineer's scale, using tenths of feet in plan and vertical perspective, as appropriate.

Special safety precautions were required in order to protect the crew during the excavation of the shaft feature and its associated builder's trench. These precautions followed OSHA 1926, Subpart P, as the soils surrounding the feature consisted of unstable sand deposits. A combination of both soil removal (at the required 1.5:1 foot OSHA ratio for Type C soils) and shoring was used to ensure crew safety. A registered professional engineer reviewed the design for the proper slope and shoring system, which consisted of a timber box (Plate 2.1). A winch and pulley system was utilized to safely remove excavated soils for screening. In addition, several well points were drilled in the vicinity of the feature in order to prevent the soil at the base of the shoring from slumping into the excavation area. The conglomerate of Forest City Ratner Companies was responsible for installing and maintaining the timber shoring and wellpoint systems. Since the excavation of Trench 2 bisected the feature along its east/west axis, the feature's exposed south wall profile was drawn and excavated in arbitrary levels of 0.6 feet within identified fill deposits. After the placement of shoring along its south face, the north half of the feature was excavated to a depth of three feet and profiled. The south half of the feature was subsequently excavated. Shoring was then erected and excavation proceeded in the same manner to the base of the feature. A 50-milliliter parasitological sample was collected from each stratum. The presence of parasites would identify the feature as a privy and provide data on the overall health of the resident population.

Revisions to the original testing protocol were required due to safety concerns regarding the removal of fill along the southern boundary of the Phase II Area. Previous historical background research indicated that a number of vaults extended beneath the sidewalk adjacent to Worth Street. In addition, the excavation of the first 168 feet for the new building's foundation footings would extend below the base of the extant brick foundation walls associated with late-nineteenth-to-early-twentieth-century buildings. Therefore, the erection of wall lagging and tiebacks was required in order to prevent the potential collapse of the sidewalk and portions of Worth Street during the removal of fill in a staged approach from this area. Fill removal consisted of excavation to an approximate depth of 10 feet across the entire Phase II Area, followed by the construction of wall lagging and a series of tiebacks to support the exposed brick foundation wall (Plate 2.2). This process was repeated until the excavation reached a depth of feet above mean sea level (amsl). At this point, a 15-foot-wide trench was excavated to mean

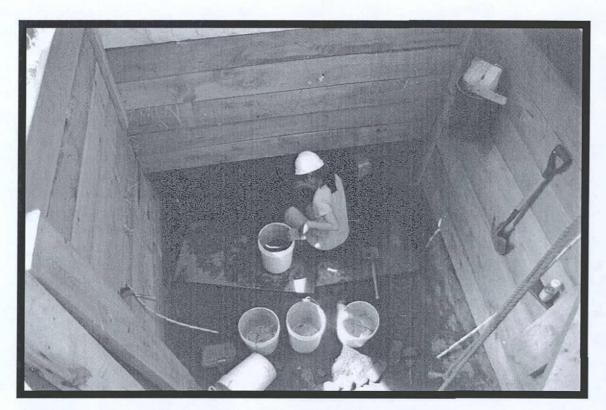


Plate 2.1 Timber Shoring for Excavation of Shaft Feature.



Plate 2.2 Lagging Wall and Tieback Support System for Southern Boundary of Project Area, View Looking Southwest.

sea level in combination with wall lagging and tiebacks for the new foundation footings. This new requirement would prevent four of the north/south cross trenches from being extended to the site's southern boundary. Therefore, in consultation with the OPRHP, the excavation of the footings for the perimeter foundation wall in both the Phase II and Phase III Areas—along with a number of footings for column supports within the entire site—would be archaeologically monitored to ensure against adverse impacts to any intact cultural resources from construction activities (Plate 2.3). This method also afforded a wider exposure of the project area than otherwise provided by the excavation of test units and test trenches.

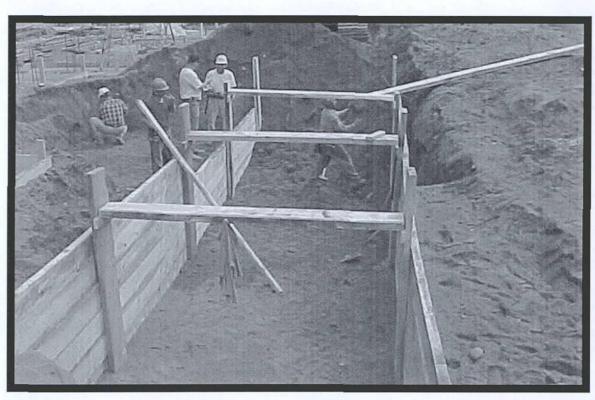


Plate 2.3 Monitoring of Footing Excavation for Column Supports, View Looking East.

## III. PREHISTORIC AND HISTORIC BACKGROUND

#### PREHISTORIC OVERVIEW

The geoarchaeological assessment of the Worth Street Site identified a buried soil at the interface of glacial deposits and post-1800 historic fill. This paleosol began to form circa 8300 – 6800 years before present (B.P.) and has the potential to contain preserved archaeological deposits (Appendix A: 20, 31). During this time, a spring-fed stream ran through the area; its banks and surrounding level surfaces would have been attractive to pre-European populations (Appendix A: 28).

Archaeological traces of settlement in the greater New York City area extend back to the Paleoindian period, circa 11,000 to 10,000 B.P. (Cantwell and Wall 2001:40ff). Settlement continued throughout the ensuing Archaic and Woodland periods, accompanied by a steady increase in population. Pre-European sites on Manhattan are not common, however, as subsequent development has obliterated them.

The geoarchaeological investigations revealed deposits from the Middle Archaic to the Contact periods might be found in the paleosol identified at the site (Appendix A: 20, 31). By the time of the Middle Archaic, people systematically exploited the coastal resources of Manhattan. The Middle Archaic sites found in the lower Hudson Valley area are, for the most part, shell middens whose compact nature and waterfront location protected many from destruction during eighteenth- and nineteenth-century development (Cantwell and Wall 2001:54). Many of the Late Archaic sites in the area are also shell middens (Cantwell and Wall 2001:57), although intact Archaic sites of any period are scarce in New York City. The available evidence suggests that by the Late Archaic, people had established seasonal rounds (Cantwell and Wall 2001:59). Large groups occupied base camps during the summer; groups split up during other seasons to visit smaller hunting, fishing, or plant procurement stations. This pattern continued throughout the ensuing Transitional and Early and Middle Woodland periods.

Agriculture became established in the Northeast during the Late Woodland period (post 1000 A.D.), but the timing of the subsistence switch by coastal peoples from complete dependence on hunting and gathering to mixed foraging and agriculture is a matter of debate among archaeologists. By the time of European settlement in the early seventeenth century, native people kept well-established fields in which they grew the triad of corn, beans, and squash along with some other domesticated plants. The Munsees—part of a larger group now called the Delaware or Lenape—occupied Lower Manhattan in the early seventeenth century. (Cantwell and Wall 2001). Small permanent communities characterize the Munsee settlement pattern, along with temporary sites for the collection of particular resources (Cantwell and Wall 2001:114). The Munsees farmed on a small scale, but also utilized the plant and animal resources of the land. Early writers described their fields and the large palisaded settlements that accompanied them (e.g. Van der Donck 1968), but archaeologists do not agree as to the temporal depth of this village-settlement pattern. Some see the pattern as extending back for several hundred years; others see it as a response to European trade (Cantwell and Wall 2001:94 – 95).

The paleosol identified at the Worth Street Site is analogous to a deposit identified at another site in Lower Manhattan, the MCC Tunnel on Pearl Street (Schuldenrein 2002:27 and Figure 7). No prehistoric artifacts were recovered from the MCC Tunnel (Appendix A: 29). No intact prehistoric deposits were found at the Five Points and African Burial Ground Sites, in the neighborhood of Worth Street (Cheek in press; Yamin 2000). Indeed, no intact prehistoric contexts have been found at any of the sites excavated in Lower Manhattan in the past 25 years, although scattered pre-Contact artifacts have been recovered, generally from soils used for fill (Cantwell and Wall 2001).

#### HISTORIC OVERVIEW

The Worth Street Site occupies an area historically outside the city of New York until the eighteenth century. New York traces its history back to the Dutch West India Company's establishment of Fort Amsterdam at the southern tip of Manhattan in 1625. Company farms, or bouwerijen, were laid out. Bowery Lane (now The Bowery) was the only road leading out of New Amsterdam, and was improved as far as the farm of Peter Stuyvesant. Stuyvesant's farm became the site of Bowery Village, in the vicinity of present-day East 10<sup>th</sup> Street and Second Avenue (Jenkins 1913:70, 73, 94).

The Dutch maintained control over Manhattan until its conquest by the English in 1664. The Dutch colonial government had set aside common land on a wide plateau nearly one-half mile north of the tip of Manhattan. The Common (now City Hall Park) was intended as a communal pasture for livestock (Figure 3.1). North and east from the Common, the ground sloped into a valley of streams and marshes. A spring fed a five-acre freshwater pond known as Collect Pond (the Worth Street Site lies near the western edge of this pond). Hills, some as high as one hundred feet, dotted the landscape (Historical Perspectives, Inc. 2001:8; Milne 2000:15).

The English confirmed most private property ownership dating from the period of Dutch rule. A mixed ethnic population of English, Dutch, Huguenots, Jews, and African-Americans distinguished the renamed New York City from other colonial cities. By the beginning of the eighteenth century, nearly a third of New York's citizens were employed in industries associated with the urban maritime/commercial economy. The city supported a diverse range of occupations and specialized craftsmen (Wilkenfeld 1973:29 – 30).

New Yorkers defined the northern extent of their slowly expanding city by demolishing the palisade along Wall Street in 1699 and building a new palisade in 1745 on the north side of the Common, slightly north of present-day Chambers Street. City fathers used the area between the Common and the Collect Pond for civic events, such as executions. An African-American burial ground was established here in the 1720s, and the city built an Almshouse in this area in 1735 (Harris et al. 1993:3).

The Collect Pond area began attracting industry in the 1690s when tanneries relocated here. Its southern and eastern banks were soon lined with furnaces, potteries, breweries, tanneries,

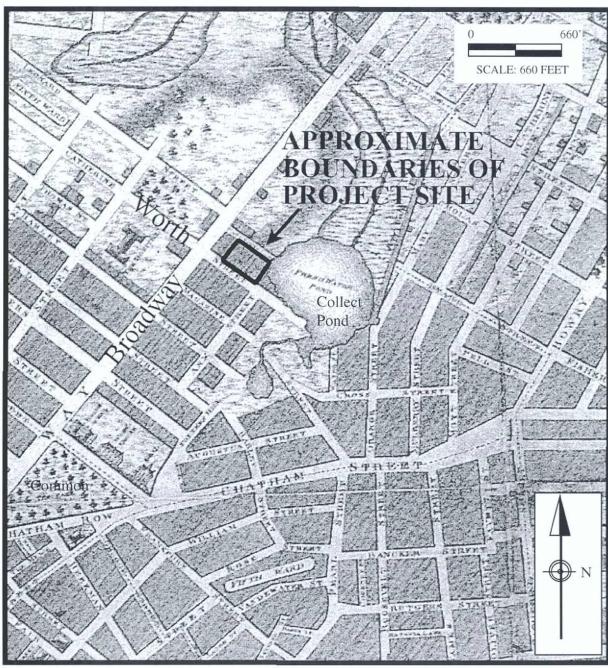


Figure 3.1 Taylor-Roberts Plan of the City of New York, 1797 (Historical Perspectives, Inc., 2001).

ropewalks, and slaughterhouses, taking advantage of the Pond's proximity to Bowery Lane, the road to Boston. Not surprisingly, the water once extolled as the finest in the city was unfit to drink by 1785 (Milne 2000:20).

The British occupied New York City for seven years following George Washington's evacuation of Manhattan Island in 1776. Depredations were particularly severe for those living on the city's outskirts. Large sections of Manhattan were denuded to supply the British army with firewood; homes and livestock were confiscated. Two disastrous fires left Broadway below Wall Street in ruins (Smith 1972:5, 50).

The British Army evacuated New York in 1783, setting off an economic boom. The city was virtually rebuilt within a short period of time and land values increased exponentially. Between 1783 and 1785, the area around the Collect Pond, including the Worth Street Site, was laid out in a street grid. The hills along Broadway were leveled and used to fill the low-lying ground around the Collect Pond. The need for a regulated system of streets and avenues culminated in the Commissioner's Plan of 1811. The plan imposed a grid system over the city without regard for topographic features. Thus, extensive grading and filling, removal of large rocks and boulders, and razing houses not oriented to the grid changed the landscape of the project area (Commissioners of New York State 1811).

By 1797, Worth Street, then referred to as Catharine Street, had been laid out west from the Collect Pond. Anthony Street (renamed Worth Street in 1835) was officially opened as part of the regulated street grid in 1819 (Stokes 1918 [III]:1,012; Stokes 1922 [IV]:992; Taylor-Roberts 1797). With the pond and swampy ground filled in and streets newly opened up, the area began to attract a combination of industrial, commercial, and residential development. The increasing tide of European immigrants and growing numbers of free blacks created the demand for working-class rental housing close to the docks and major industries (Milne 2000:26 – 28).

When Anthony Street (now Worth Street) was laid out to the intersection of Orange (now Baxter) and Cross (later Park) Streets, the Five Points intersection was created. Five Points quickly became one of the city's most unsanitary neighborhoods. Reports of overflowing privies and excessive amounts of animal manure and residential trash lead city officials to pass sanitary regulations. Efforts to improve sanitary conditions did not ameliorate Five Points growing reputation for licentiousness. Worth Street west to Broadway was dotted with saloons called "porter houses" or "grog shops." Lurid stories in the penny press bolstered Five Point's reputation for vice and crime. Inevitably, religious missionaries and social reformers targeted the Five Points neighborhood (Milne 2000:32 – 34).

The decades following the Civil War saw slight improvements occurring in the Five Points neighborhood regarding sanitary conditions and tenement housing. Charitable organizations and missions helped reduce poverty and stabilize the neighborhood. Newer immigrants from Italy, Eastern Europe, and China replaced Irish and German inhabitants. Five Points continued to be perceived as the worst neighborhood in New York, and reformers campaigned to clear it away. The city began razing the neighborhood in 1897 and urban renewal projects continued to affect the district until the 1960s (Milne 2000:67, 88 – 89).

#### BLOCK 170, LOT 20 HISTORY

In a previous study, HPI investigated the chain of ownership of the project area located in Block No. 170. HPI traced the project area back to 1646, when it was part of Jan Jansen Damen's Calck (sic) Hook Farm (Stokes 1922 [VI]: 82, 83, as cited in Historical Perspectives, Inc. 2001:11). Gaps in the land records obscure the property title during the first half of the eighteenth century; however, by the 1770s, it became the property of the Reverend Henry Barclay. Barclay's widow Mary sold the project area to Egbert Benson, Richard Harrison, and John Watts, Jr. in 1787 (New York Deed Book 46:135; WPA Deed Index Volume 19, Blocks 165 – 175, as cited in Historical Perspectives, Inc. 2001:12).

An undated manuscript map showing part of Henry Barclay's estate includes the project area in a tract bounded by Broadway, Lafayette Street, Duane Street, and Catharine Lane. This map may be one of the earliest renderings of the subdivision of the city block occupied by the project area. Five lots were created within the 116 feet fronting on the Broadway side of the block between Anthony Street and Catharine Lane. Each lot was approximately 23.2 feet wide and 100 feet long. The 85 feet of frontage on the Ann Street (now Lafayette) side of the block was divided into four lots, each approximately 21.25 feet wide by 100 feet long. The remaining part of the block lying between Anthony Street and Catharine Lane was divided into eight lots, each approximately 25 feet wide (Anonymous 1800 – 1850; Nichols 1940:60).

The project area appears to have remained unimproved until the 1790s, when it may have been at least partially developed. Lot 20 was located at the edge of a large meadow (Figure 3.2) in an area outside the urban core. A spring nearby provided the only source of untainted fresh water for city residents. The Collect Pond, as the spring was known, extended to the corner of Lafayette Street and Catharine Lane (Plate 3.1). By 1785, however, the Collect Pond had also become contaminated. The stench of this "common sewer" must have severely inhibited residential development in the area. Between 1808 and 1815, the city put thousands of sailors and laborers idled by the Embargo Act to work filling in the pond (Gandy 2002:24; Holmes 1865). Tax records dating to 1808 indicate that taxes were being paid on houses and personal property on the block, including Lot 20 (Historical Perspectives, Inc. 2001:15).

In his book about Broadway, *The Greatest Street in the World*, author Stephen Jenkins discovered that only one house occupied the block between Anthony Street and Catharine Lane prior to 1800. The house was located on the northeast corner of Broadway and Anthony Street and owned by a brewer named Snyder. Snyder's widow married Anthony Steenbach, who took over the brewery in partnership with James Brown. Brown's house occupied the southeast corner of Broadway and Anthony Street. Jenkins writes that by 1810, several fine residences had been built on Broadway between Anthony Street and Catharine Lane (Plate 3.2) (Jenkins 1911:164).

In 1835, leaders of the Free Church Movement in New York City selected Lot 20 as the site to build a church. They knew they would need a large edifice to accommodate the crowds flocking to hear the father of modern evangelism, Charles Finney. A lawyer by training, Finney was

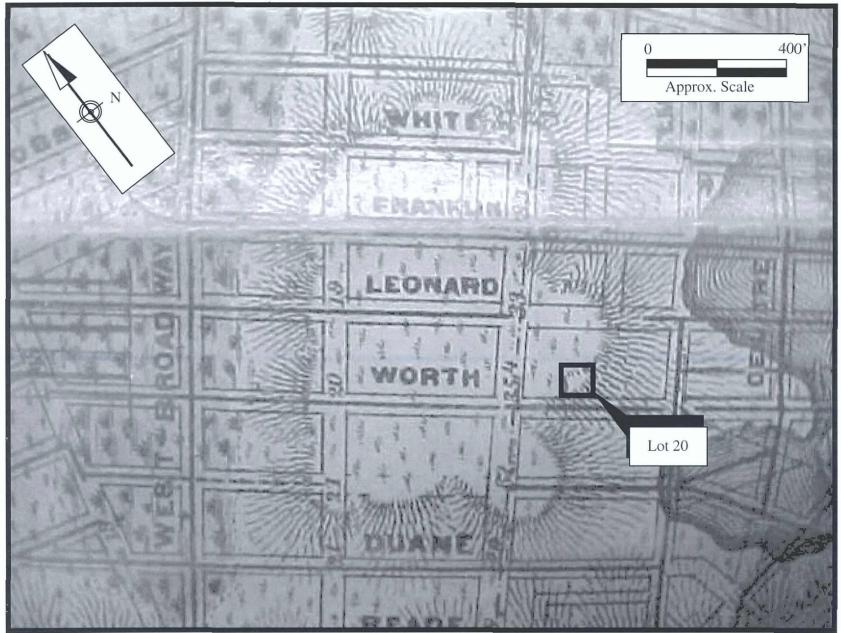


Figure 3.2 Topographical Map of the Project Area, 1865 (Source: Viele 1865). Note the presence of a sewer line in Worth Street.



Plate 3.1 Collect Pond (Source: Jenkins 1911:85).

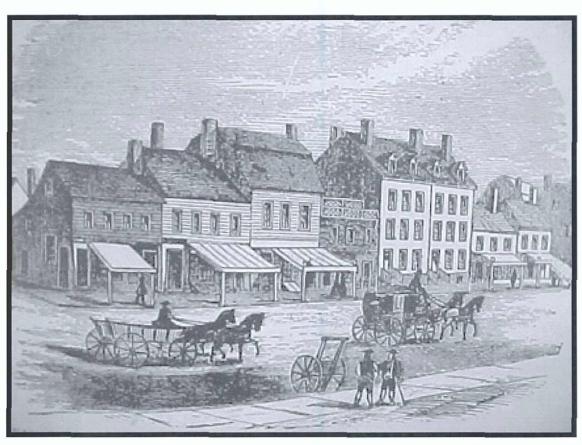


Plate 3.2 East Side of Broadway, One Block South of the Project Area, 1807 (Source: Jenkins 1911:161).

converted to evangelical Christianity in 1821. Immediately after his ordination as a Presbyterian minister in 1824, he became an itinerant revivalist in upstate New York. He became a leader of the New School Movement, what he viewed as an intelligent religious approach to the social, economic, and commercial problems of an expanding America. The abolition of slavery was a cornerstone of this movement (Nichols 1940:45 – 48).

In 1829, a committee of the city's leading merchants, lead by Lewis and Arthur Tappan, invited Charles Finney to establish a Free Church in New York. These business leaders were active in a combination of religious and social reforms. The Tappan brothers believed that by establishing a church that did not charge membership fees, a greater cross section of society would receive spiritual enlightenment. Free Church leaders felt they could do the most good by drawing in residents of the commercial district and the nearby poorer neighborhoods (Nichols 1940:49). Finney drew such large crowds to his meetings that the First Free Presbyterian Church of the City of New York was organized in the summer of 1830. One of Finney's assistants was invited to be the pastor. So many people wanted to hear them preach, meetings were moved to New York's largest auditorium, Broadway Hall, two blocks above Canal Street. New York apparently had no halls large enough to contain the number of people anxious to hear the evangelical preachers of the Second Great Awakening (Nichols 1940:51).

Cholera struck the city in the summer of 1832. A good portion of Lower Manhattan's population left town. Finney himself contracted the disease and did not recover enough to preach until the following spring. In October 1833, Finney left New York to take up a church in New Orleans. Other leaders of the New School were soon arriving in New York to fill the void and organize congregations. By 1835, five Free Churches had been established in the city, generally drawing their congregations from the middle and lower classes. This type of church was especially attractive to single young men with no stated place to worship and visitors staying in hotels (Nichols 1940:54; Ward 1901:84).

Free Church leaders resolved to build a church large enough to house their growing congregations and invited Charles Finney back to become its pastor. Lots 108, 109, 110, and 111 of Block 170 were purchased from the Peter Lorillard estate. When combined, these lots became a 100-foot-square building lot (now Lot 20), extending from Anthony Street to Catharine Lane about 100 feet east of Broadway. Construction of the Broadway Tabernacle began in May 1835. The cost of the land and initial construction came to \$66,500. To pay for its construction and maintenance, the church would function as a sort of convention hall rented out to different religious, musical, and social organizations (Nichols 1940:58; Ward 1901:28).

Joseph Ditto, a local carpenter, built the church according to Charles Finney's specifications (New York Daily Times, April 27, 1857, 4:5-6). Finney chose a tent-like design reminiscent of revival meetings. Seating was arranged in a circle with a multi-tiered balcony running the entire way around the walls. The auditorium could easily seat 2,500 people, but had a maximum capacity of 4,000. The pulpit sat on a great square platform surrounded by the audience. For the interior, Finney incorporated all the design elements lacking in the many buildings in which he had preached. He selected the interior decoration, acoustics, lighting, and the placement of the organ and choir seating (Plate 3.3). The church included a lecture room for Finney's theology students, extra meeting rooms, and Bible schoolrooms (Nichols 1940:58-59).

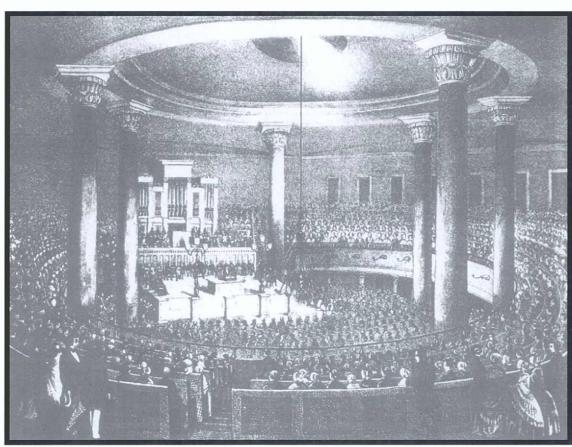


Plate 3.3 Interior of the Broadway Tabernacle Church (Source: Thompson 1857).

The walls and roof of the Broadway Tabernacle had been completed when rumors began to spread that the church would have racially integrated seating. An arsonist set fire to the building and responding firemen refused to put out the blaze. Construction continued and the church was completed in April 1836 (Ward 1901:29).

A side entrance led onto Anthony Street, but the main entrance was located at 340 Broadway (Figure 3.3). The church leased the four-story building at 340 Broadway. Visitors to the Tabernacle passed through a ground-level arcade into a courtyard, approximately 25 feet wide by 50 feet deep, at the church's front entrance (Plate 3.4) (Chalmers 1935:n.p; Perris 1853). Rent paid by tenants of the upper floors of 340 Broadway nearly paid for the entire lease (Ward 1901:28).

When the Broadway Tabernacle was built in the mid-1830s, this section of Broadway between City Hall and Canal Street was the most active part of the expanding city (Broadway Tabernacle Church 1860:5). The Tabernacle had the best auditorium in New York, with the exception of Castle Garden on the Battery. The Tabernacle was the venue chosen by the most important speakers of the day, including reformers Frederick Douglass, William Lloyd Garrison, Lucretia Mott, Henry Ward Beecher, and Lucy Stone, literary figures such as Ralph Waldo Emerson and E.P. Whipple, and adventurers such as Elisha Kent Kane (Ward 1901:79).

The Broadway Tabernacle was organized as a Congregationalist church when it opened for worship in 1836. Three years later, a Free Church congregation joined the Broadway Tabernacle, and it was converted to a Presbyterian Church. The Tabernacle quickly got into financial trouble. Encumbered by a debt of \$50,000, the congregation did not have the money to pay their annual ground rent or the gas bill (Ward 1901:35). On July 6, 1840, the Tabernacle was sold under foreclosure of mortgage and the Presbyterian congregation disbanded. David Hale purchased the building for \$35,000 and a new Broadway Tabernacle Church was formed under Congregational auspices. The Broadway Tabernacle Society operated the building under a lease until they purchased it outright in 1845 (Broadway Tabernacle Church 1860:5).

By the 1850s, the city's march uptown had drawn the center of commercial activities up to 14<sup>th</sup> Street. The Tabernacle's pastor, Joseph Thompson, still believed the location of the Tabernacle was convenient to professional and commercial visitors. He therefore refused an offer made in 1853 to buy the Broadway Tabernacle for \$150,000. The neighborhood, however, went into decline and property values fell. In January 1857, John J. Phelps, a banker and president of the Lackawanna Railroad, offered \$122,000 for the Tabernacle; the offer was accepted (Nichols 1940:107). The last service was held on Worth Street on Sunday, April 26, 1857. Two hundred former and current members of the choir—for which the church was renowned—and a general reunion of all those connected to the church over the preceding two decades were invited. At least 4,000 people attended the last service (New York Daily Times, April 27, 1857, 4:5 – 6). The congregation moved to a new gothic-style Broadway Tabernacle built uptown on Broadway and 34<sup>th</sup> Street (Broadway Tabernacle Church 1860:8).

In mid-April, the New York Daily Times reported that John J. Phelps would begin tearing down the Tabernacle building on May 1, 1857. A store with 70 feet of frontage on Broadway and a depth of 200 feet, with an ell on Worth Street, was planned for the site (New York Daily Times,

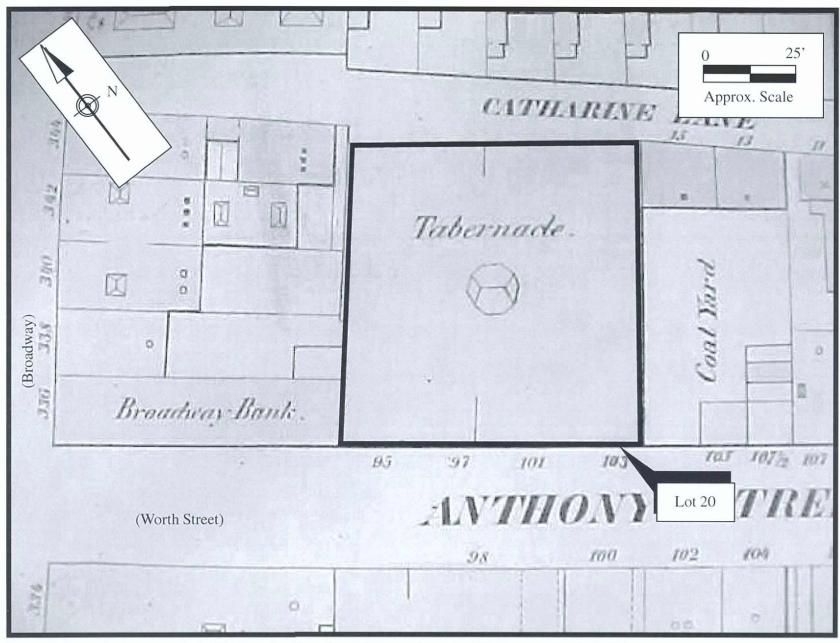


Figure 3.3 Project Area in 1853, Showing Broadway Tabernacle on Lot 20 (Source: Perris 1853).

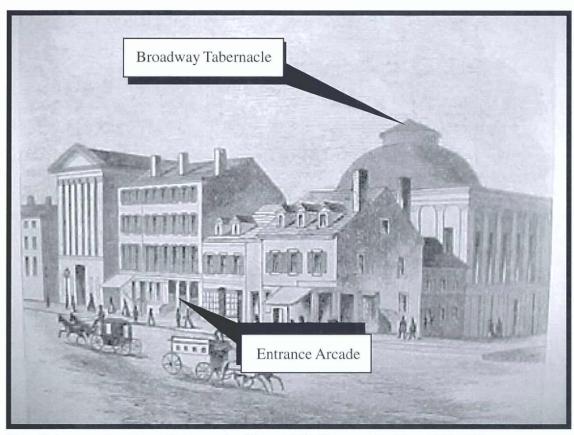


Plate 3.4 Broadway Tabernacle, Circa 1850 (Source: Jenkins 1911:184).

April 14, 1857, 5:4-5). Phelps reportedly rented out the Tabernacle for miscellaneous events. Safety complaints were made, and the building was torn down (Nichols 1940:108). Another source claimed that the Tabernacle building was "modified and enlarged" (Ward 1901:28). Both statements are true to some extent. The photograph of the 300 block of Broadway, taken in 1910, was compared to the 1850 drawing of 340-344 Broadway. It is, in fact, the same building, enlarged with the addition of a fifth floor (see Plate 3.4; Plate 3.5).

No drawings or photographs have yet been located that depict the Broadway Tabernacle Church after 1857. Most likely, the church was torn down to allow for the expansion of the five-story commercial building on Broadway concurrent with the raising of its roofline. This episode of demolition, alteration, and construction would most likely have occurred when the firm of Phelps, Bliss & Company established their dry goods import business at 340 Broadway in 1858. John J. Phelps was a Wall Street banker when he had purchased Lot 20 the previous year. He established a partnership with dry goods merchant George Bliss in 1858. Three other dry goods jobbers operated businesses on the 300 block of Broadway (Wilson 1857:82, 658; 1858:147; 1860:84, 680).

John J. Phelps maintained an interest in the dry goods business for several years, but by 1864 was back on Wall Street. George Bliss eventually acquired full control of the firm. At the time of his death in 1896, at the age of 79, George Bliss was worth \$15 million. On the day of his heart attack, he paid a visit to 340 Broadway (New York Times, February 3, 1896, 1:7).

James H. Dunham was brought into the firm in 1862. Interestingly, Dunham became a member of the uptown Broadway Tabernacle church in 1861 (Ward 1901:280; Wilson 1860:680; 1865:254). Dunham leased the property at 340 Broadway, including Lot 20 in 1869, when George Bliss took up the banking profession (Figure 3.4).

James H. Dunham & Company occupied 340 – 344 Broadway and the adjoining Lot 20 until the late 1930s, when the building was torn down (Figure 3.5) (Bromley 1934; New York Telephone Company 1939:327) (see Plate 3.5). By 1940, small brick shops had been built along the Broadway side of the block. Lot 20, still controlled by the George Bliss estate, remained nearly vacant except for a small addition built onto one of the Broadway shops (New York Daily Times, April 14, 1857, 5:4 – 5; Nichols 1940:107 – 109). Lot 20 was used as a parking lot until 2002, when construction began on a residential/commercial structure.

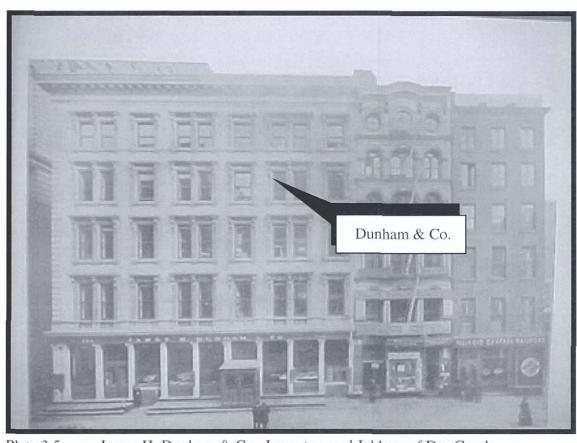


Plate 3.5 James H. Dunham & Co., Importers and Jobbers of Dry Goods (Source: DeLeeuw 1910:179).

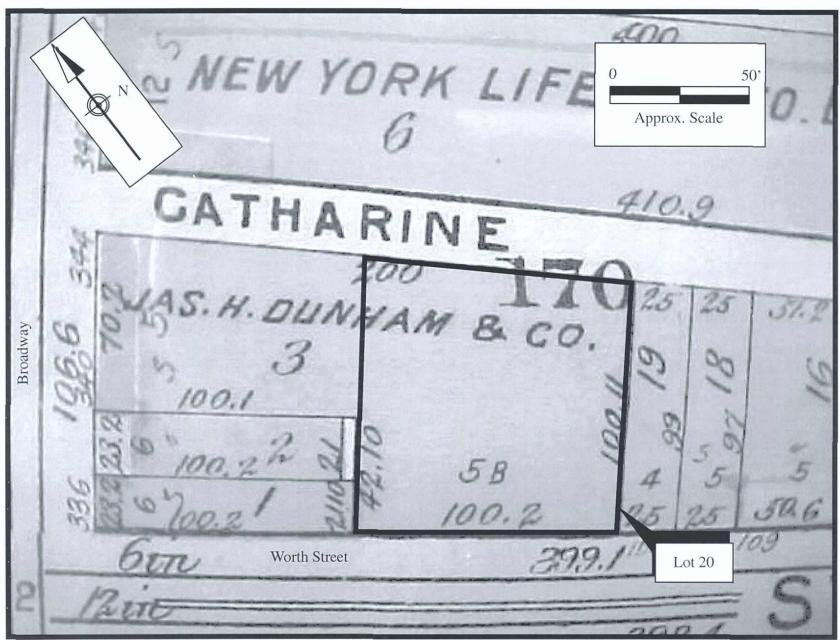


Figure 3.4 Project Area in 1911, Showing Dunham Building on Lot 20 (Source: Bromley 1911).

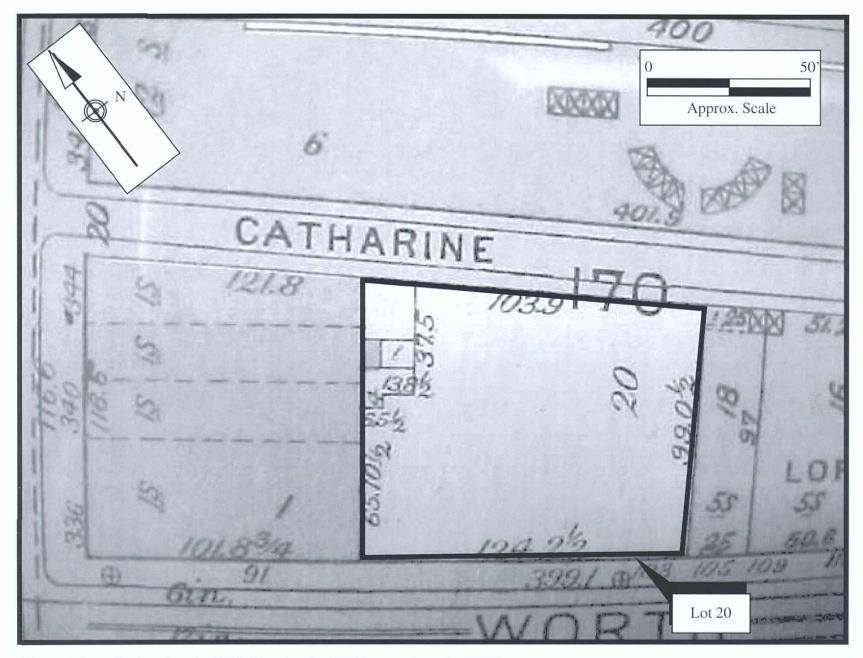


Figure 3.5 Project Area in 1955, Showing Lot 20 (Source: Bromley 1955).

#### IV. RESULTS

URS conducted archaeological field investigations at the Worth Street Site between June 13 and December 31, 2002. Testing entailed the excavations of both hand-excavated units and backhoe trenches, in addition to monitoring the excavation of the foundation and column support footings. Trenches were excavated to a depth of proposed construction impacts, while units were utilized when suspected buried surfaces and features were encountered and extended into sterile subsoil. A total of 10 trenches—six feet wide, of varying lengths—and seven units measuring 2 x 2 feet to 5 x 5 feet were excavated to determine the nature of the soil deposits and assess the presence or absence of cultural resources within the project area (Figure 4.1). Archaeological monitoring was also conducted during the excavation of the footings for the perimeter foundation wall in both the Phase II and Phase III areas, in addition to a number of footings for column supports within the entire site (Figure 4.2). The results from the excavations and monitoring activities are presented below.

#### TEST TRENCHES

The removal of the demolition/rubble fill was stopped at a depth of +10 feet amsl within the Phase I area. Before removing any additional fill, an exploratory trench (E1) was excavated in order to ascertain the extent of its depth. In addition, the trench would also provide information on the nature and extent of subsequent soil deposits within this area of the site. The trench was oriented in a north/south direction and placed adjacent to a brick wall that ran along the northern boundary of the project area (see Figure 4.1). The trench measured 5 x 20 feet and extended to mean sea level. The trench's wall profile indicated that the remaining fill deposit was very compacted and only extended another two to three feet deep (seven to eight feet amsl). The fill layer was underlain by a series of glacial sediment sand deposits (which varied in thickness, textures, and colors) that appeared to be free of cultural material. Based on this information, the remaining fill deposit was left intact at +10 feet amsl in the Phase I area in order to provide a cushion of protection from the tracks and weight of the backhoe impacting any potential intact deposits and/or features. A two-to-three-foot cushion of fill was also left in the remaining two areas.

A series of trenches were then mechanically excavated: an east/west trench was placed across the center of the site; a short east/west trench was placed adjacent to the exploratory trench; and six north/south trenches were spaced at varying intervals from 20 to 45 feet (see Figure 4.1). Trench 2 extended for a length of 125 feet across the center of the project area and provided the most comprehensive stratigraphic view in an east/west direction. Figure 4.3 is a 46-foot sectional profile of Trench 2 that is representative of the deposits encountered throughout the entire length of the trench. The profile shows the only features encountered within Trench 2 and an AB horizon that is solely present within this section. The trench profile reveals 1.2 to two feet of compacted demolition/rubble deposit (Stratum 1), consisting of a reddish brown to brown coarse sand containing brick fragments of various sizes, plaster, mortar, wood, and schist fragments. Selected sampling of diagnostic material dated the deposit to the early to mid nineteenth century. Stratum 2 represents a buried Holocene surface that yielded a radiocarbon date of 8290±50 B. P.

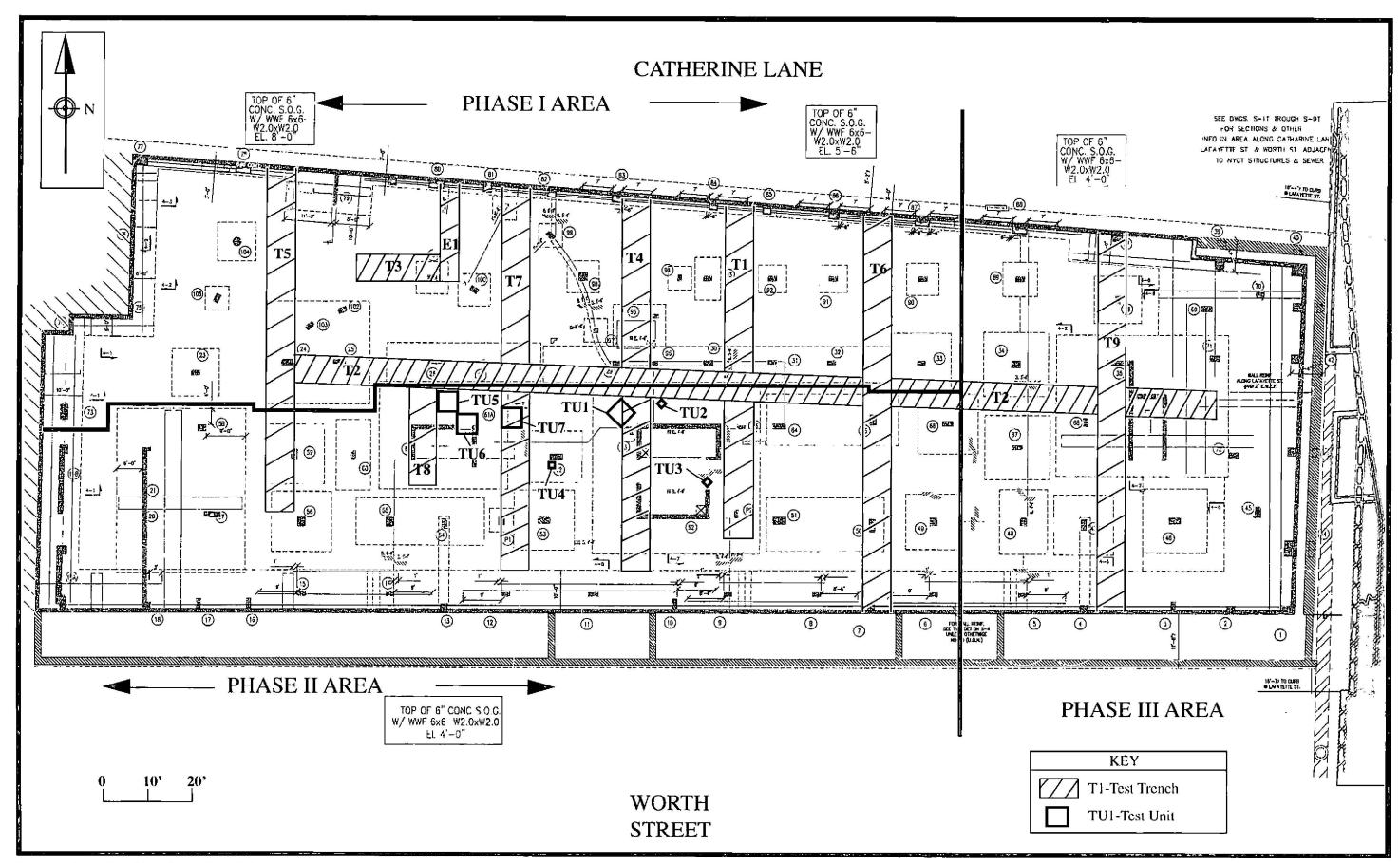


Figure 4.1 Test Trench and Test Unit Locations.

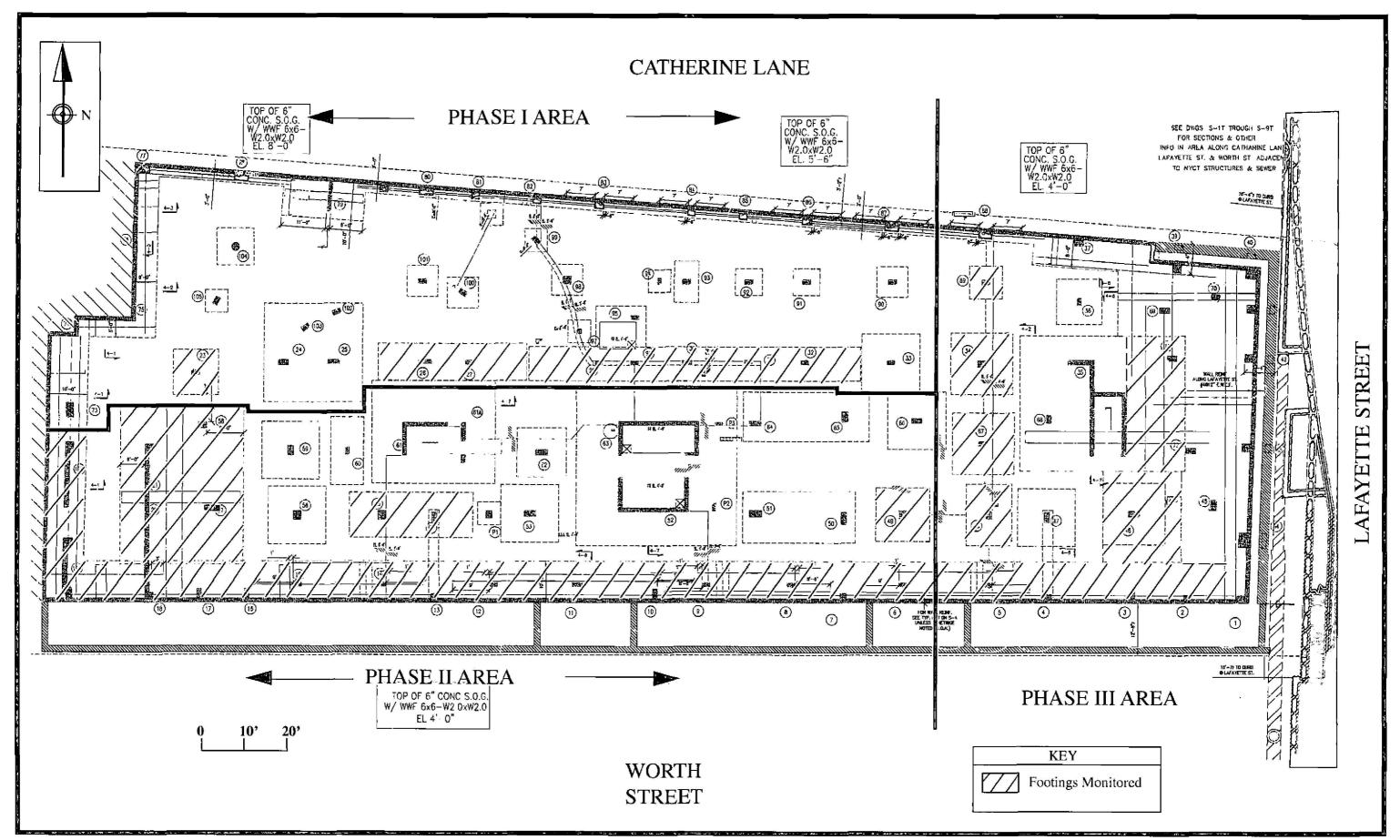
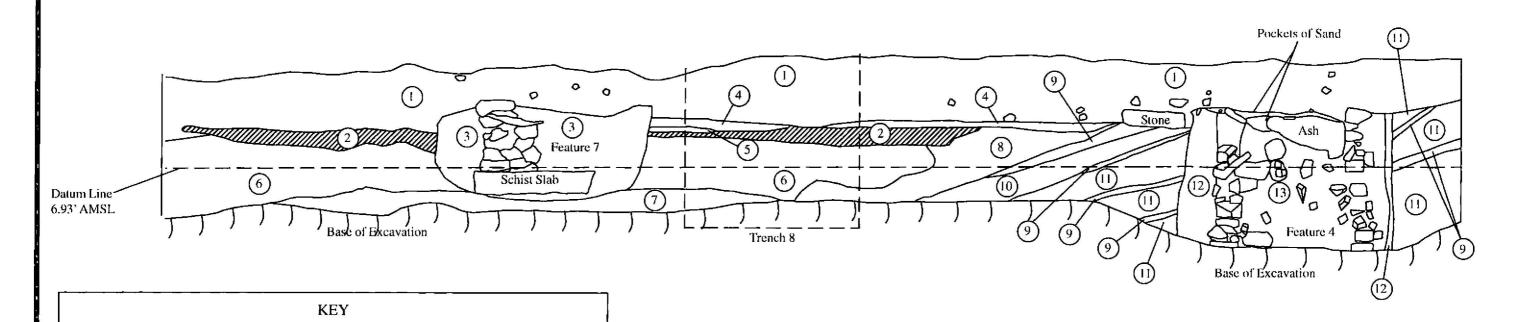


Figure 4.2 Footings Monitored During Construction.



- Demolition /Rubble Fill In 10YR4/3 Brown Coarse Sand
- 2 7.5YR4/4 Strong Brown Medium Fine Sand A/B Horizon
- 3 10YR5/4 Yellowish Brown Coarse Sand Builder's Trench
- (4) 7.5YR4/4 Brown Coarse Sand
- 5 10YR5/3 Brown Coarse Sand
- 6 10YR5/3 Brown Coarse Sand
- (7) 2.5Y4/4 Olive Brown Coarse Sand
- (8) 10YR4/3 Brown Fine Sand
- 9 10YR6/3 Pale Brown Loose Fine Sand
- 7.5YR4/4 Brown Fine Sand
- (1) 10YR6/3 Pale Brown Coarse Sand with Gravel
- (2) 2.5YR3/3 Dark Reddish Brown Coarse Sandy Loam Builder's Trench
- 13 7.5YR3/4 Dark Brown Sandy Loam with Heavy Concentration of Bricks

Feature 4 - Sandstone - Lined Well

Feature 7 - North/South Oriented Stone Wall

Figure 4.3 Test Trench 2, Sectional South Wall Profile.

Beneath this surface were various coarse and fine sand and gravel deposits (Strata 3 through 11) of glacial sediments free of cultural material (see Appendix A for a more detailed discussion of these deposits).

Two features were encountered during the excavation of Trench 2. The first feature consisted of an unmortared sandstone-lined well (Feature 4) and the second, 17 feet to the east, was a mortared schist foundation wall (Feature 7) and associated builder's trench (see Figure 4.3). The trench bisected the upper 4.4 feet of the well, exposing its south wall profile (Plate 4.1). The profile indicated that the interior fill contained a large amount of whole bricks and brick fragments in a compacted sandy loam matrix. Also present were some pieces of sandstone most likely from the upper portion of the well's walls. The well extended to a depth of 13 feet (-3 feet below mean sea level [bmsl]). At the base of the last course of stone, the remains of a badly deteriorated wooden ring were encountered below the water table. The wooden ring was most likely used during the well's construction in order to support the stone lining. The sandstone would be placed on the wooden ring and the soil excavated from beneath it. The weight of the stone would force the ring down to the level where the sand had been removed. This process would continue until the desired depth was achieved. A more detailed discussion of Feature 4 is presented below.

The second feature (Feature 7) consists of the remnants of a north/south oriented, 2.1-foot-wide, mortared schist foundation wall and associated builder's trench truncated by Trench 2 (see Figure 4.3; Plate 4.2). The south wall profile shows a one-to-1.4-foot deposit of demolition/rubble fill on top of the remaining lower section of wall. The fill is a very compact coarse sand with fragments of brick and stone. The wall rests on a schist footing (spread footer), measuring 0.8 feet thick by 3.9 feet wide, that had its top surface dressed to provide a level surface for the wall to rest on. Both the footing and the builder's trench extend into the glacial sands to a depth of +5 feet amsl. Two hand-excavated test units were placed on either side of the wall in order to investigate the builder's trench. The wall appears to extend the entire north/south length of the project site, as additional sections were encountered during fill removal in the Phase II area.

A section within both Trench 5 and 6 was excavated beyond the initial average trench depth of 4.5 feet amsl excavated within the Phase I area to determine that no additional intact buried surfaces were present. Trench 5, located at the western end of the project area, was excavated below the water table (-4 feet bmsl). A profile of the trench could not be drawn due to safety considerations; the sandy soil deposits made it extremely dangerous to enter the 15-foot-deep trench without shoring. However, observations by archaeological personnel and the on-site Geoarchaeologist Dr. Joseph Schuldenrein indicated no buried surfaces were extant. The second trench, Trench 6, was located at the eastern end of the Phase I area. Since more of the demolition/rubble fill was removed from this area of the site, measurements could be taken and a profile drawn in safety. Soil development within the upper portions of the trench was similar to that observed in Trench 5. The lower deposits, however, differed. Here, closer to the Collect Pond, a 1-foot layer of peat underlain by an oxidized sand deposit at -4 feet bmsl indicates hydromorphic effects of ground water oscillations (Plate 4.3) (Appendix A: 14-15;17).



Plate 4.1 Test Trench 2, Feature 4, View Looking South.



Plate 4.2 Test Trench 2, Feature 7 and Associated Builder's Trench, View Looking South.



Plate 4.3 Test Trench 6, East Wall Profile.

Trench 8 was placed south of and adjacent to Trench 2 in order to determine the southern extent and depth of the buried AB horizon previously encountered in Trench 2 (see Figure 4.1). The trench revealed that the buried surface was located at the interface of glacial deposits and sloped significantly to the south and east (Plate 4.4). The deposit consisted of a brown silty medium fine sand with organic infillings and diffuse charcoal dispersed throughout. The deposit continued to slope toward the south for 25 feet, where it gradually tapered to an end. A hand-excavated test unit (TU 5) was then dug to further investigate the buried surface and determine if it contained evidence for prehistoric occupation. The results of this work are presented below.

The remaining trenches within the project site exhibited very similar profiles. Trench 7 provides a representative view of the site in a north/south direction (Figures 4.4 and 4.5). The stratigraphic deposits within the trench consisted of a 0.5-to-5-foot-thick deposit of demolition/rubble fill that contained brick fragments of various sizes, mortar, plaster, and schist fragments in a very compacted brown coarse sand. Directly beneath the fill were two deposits of glacial sands devoid of cultural material. The first consisted of a 1.3-to-4-foot deposit of yellowish brown and light gray-banded coarse sands, which sloped to the south (Plates 4.5 and 4.6). This layer was followed by a yellowish brown soil with brownish yellow banded layers of sand only present within the southern half of the trench (see Figure 4.4 and Plate 4.6). Also evident in the profile was the boring hole and remnants of the PVC pipe of one of the well points used during the excavation of the well. In addition, a builder's trench associated with the brick wall located along the northern boundary of the site was visible. Remains of wood planks were discernable within the builder's trench (see Figure 4.5); these were probably used to keep the sand from collapsing into the trench during the construction of the brick wall.

The only other feature (Feature 9) identified within the project area was encountered within Trenches 1, 4, and 6. This feature consisted of several large schist slabs located within the glacial sand deposits (Plate 4.7). No evidence for any type of structural wall was found in association with the slabs. They were probably used as footings for column supports for two nineteenth-century four- and five-story brick buildings that once stood at this location. Both of the buildings contained a basement and sub-cellar.

#### **TEST UNITS**

A total of seven hand-excavated test units were also utilized to investigate potential intact deposits and features (see Figure 4.1). The excavations were controlled by depths below a datum string line generally set at ground surface. This surface was approximately +10.3 feet amsl.

Test Unit 1 and 2 were placed to investigate Feature 1, thought to be a possible wooden floor. Test Unit 1 was a 5-x-5-foot excavation unit placed on the southern edge of Trench 2. It was placed in this particular position to investigate the presence of a possible wooden floor evidenced by wood planking seen sticking out of the test trench's southern wall. The unit was excavated to a maximum depth of 2.65 feet below datum (+7.65 feet amsl). Two strata were encountered. Stratum 1 was a historic fill layer 7.5YR 4/3 brown course sand with brick fragments and numerous pebbles. A pocket of 7.5YR 4/4 brown coarse sand was observed in the northern wall

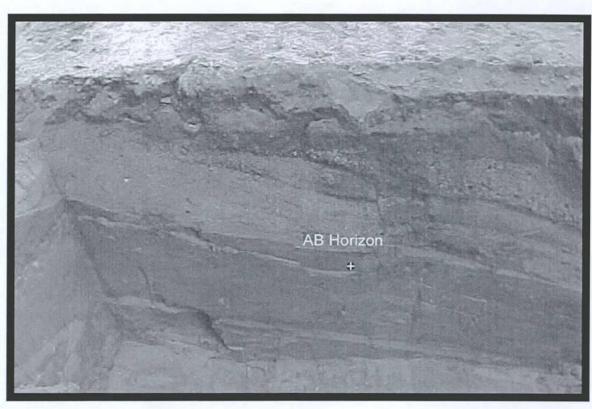


Plate 4.4 Test Trench 8, East Wall Profile.

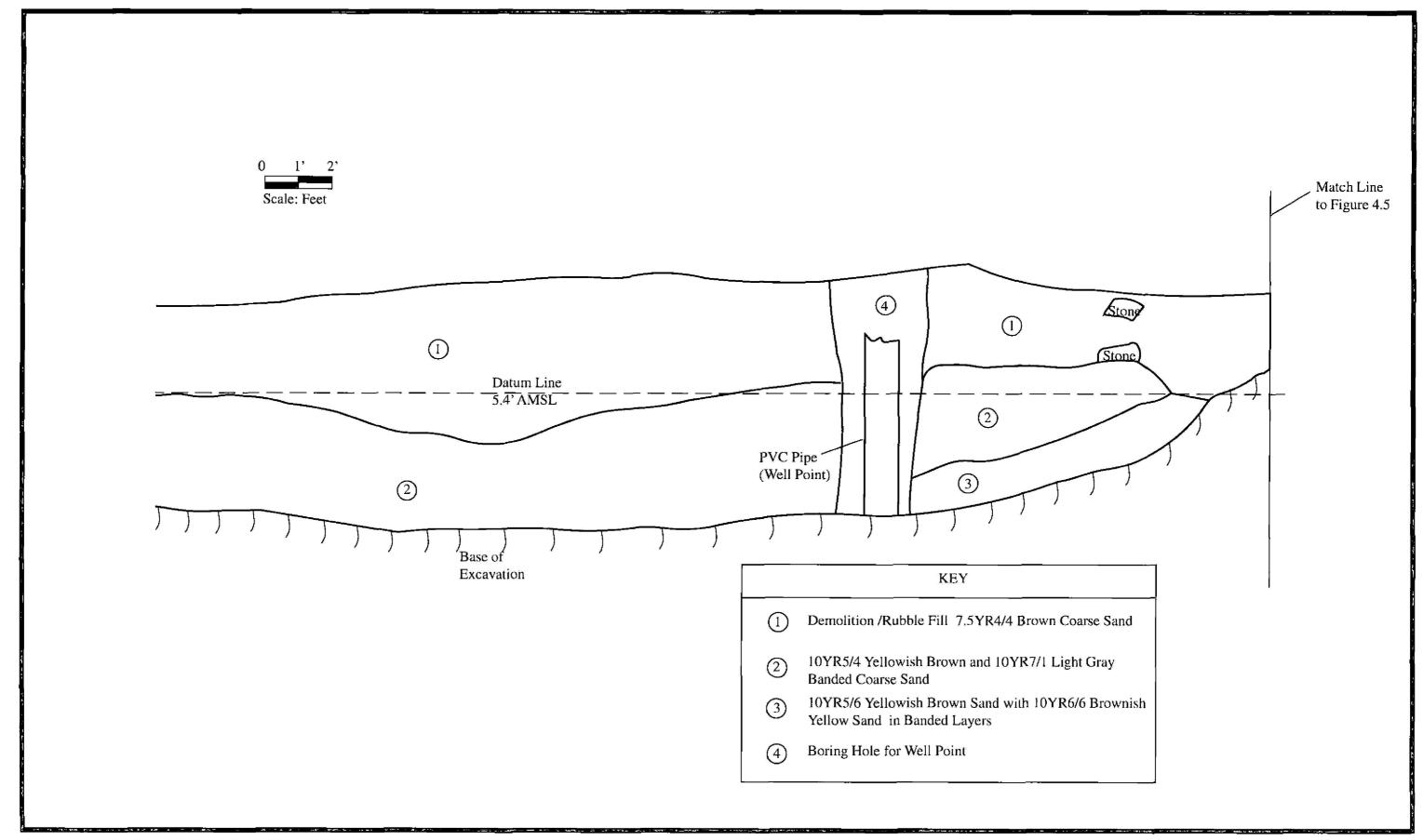


Figure 4.4 Test Trench 7, South Half of West Wall Profile.

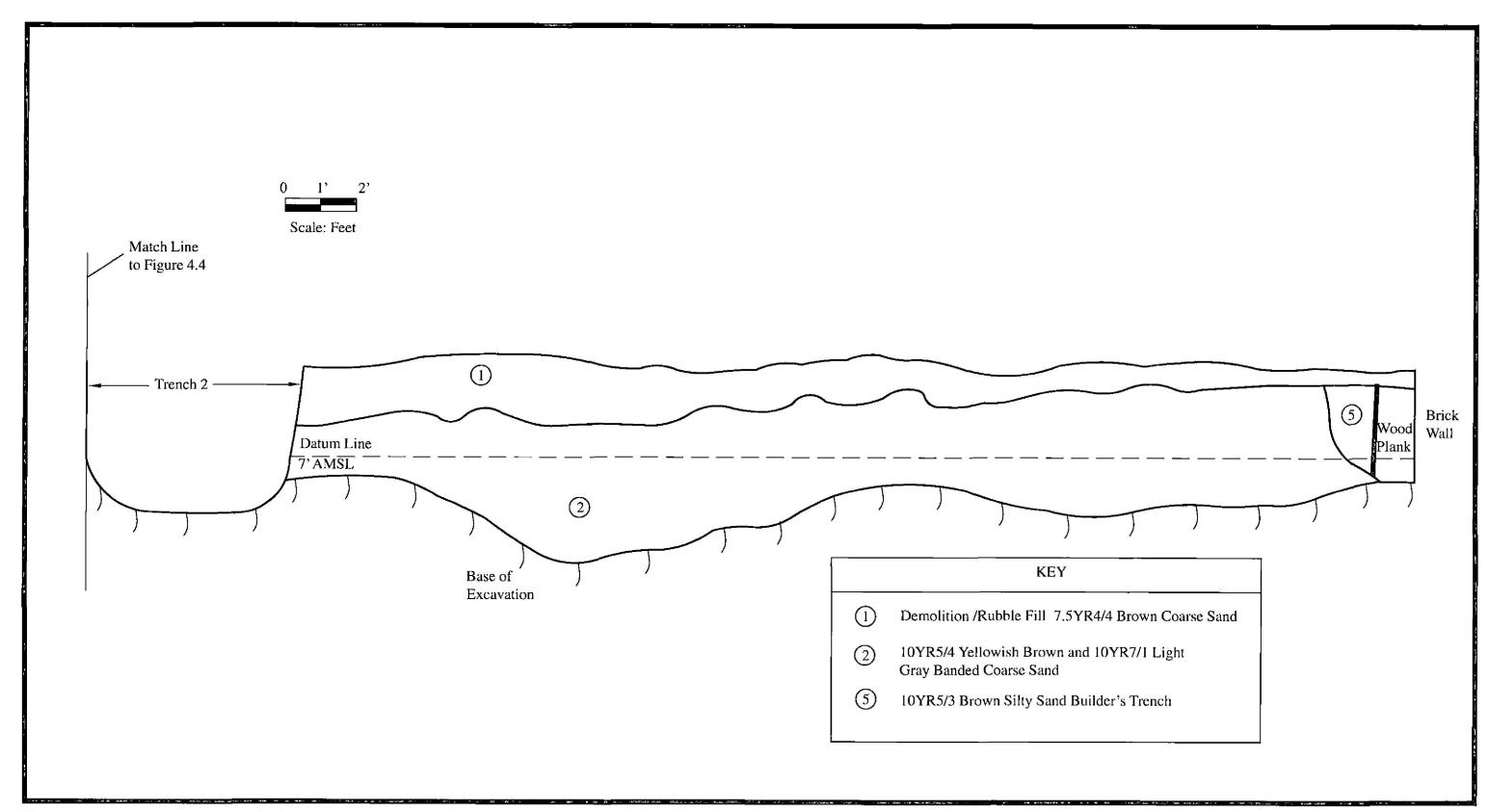


Figure 4.5 Test Trench 7, North Half of West Wall Profile.

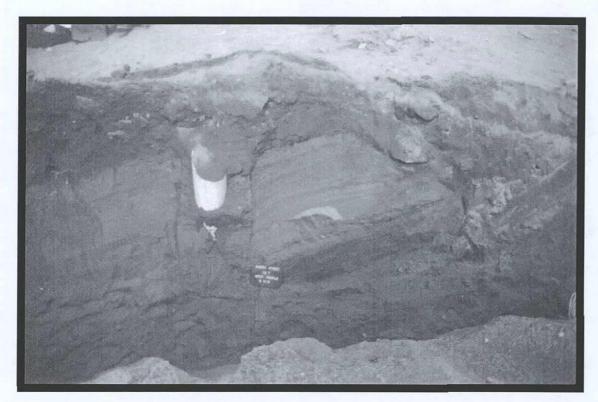


Plate 4.5 Test Trench 7, South Half, West Wall Profile.

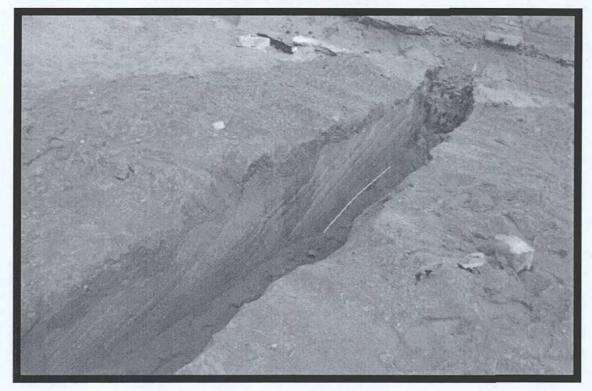


Plate 4.6 Test Trench 7, North Half, West Wall Profile.



Plate 4.7 Feature 9, Schist Footing for Column Supports.

of the unit at the interface of Strata 1 and 2. This pocket is evidence of high levels of disturbance in the upper portion of the profile. Stratum 2 was a 7.5YR 4/4 brown coarse sand with mottles of 10YR 7/2 sand. Feature 1, the wood planking, was encountered in Stratum 2 at a depth of 1.73 feet below datum (+8.57 feet amsl).

Test Unit 2 was a 2-x-2-foot unit placed to find the extent of the wooden planking. It was placed five feet to the east of Test Unit 1. Test Unit 2 was excavated to a maximum depth of 2.9 feet (+7.4 feet amsl), and a total of two strata were encountered. The upper portion of the profile is a 7.5YR 5/3 brown loose coarse sands. This layer extends to a depth of 0.7 feet below datum, and sits on top of a rubble-laden fill 7.5YR 4/3 brown sandy loam. No wood planking resembling that associated with Feature 1 was encountered during the excavation of this unit. Based on the excavation of these two units, Feature 1 was determined to be a free-floating piece of wooden debris suspended in a fill matrix.

Test Units 3 and 4 were placed to investigate the potential for intact deposits/surfaces. Test Unit 3 measured 2 x 2 feet and was excavated to a maximum depth of 3.3 feet below datum (+7 feet amsl). Three strata were encountered during excavation. The uppermost stratum consisted of a 7.5YR4/3 brown sandy loam laden with wood fragments, brick, and concrete rubble. This stratum extended to a depth of one foot below datum. Artifacts recovered from this stratum consisted of glass, wire nails, and fragments of metal. The next stratum extended down to 2.25 feet below datum (+8.05 feet amsl) and consisted of a 10YR 4/4 dark yellowish brown sand. The artifacts recovered included wire nails, glass, bone, oyster shell, and brick fragments. The bottom stratum consisted of 10YR 5/6 yellowish brown to 10YR 7/2 light gray mixed coarse sand. This layer yielded glass, brick fragments, and pieces of plastic. This deposit appears to be a continuation of modern construction fill. Excavation of this test unit was terminated with this stratum.

Test Unit 4 was a 2-x-2-foot test unit excavated to a maximum depth of 1.6 feet below datum (+8.7 feet amsl). Three strata were identified. The uppermost stratum consisted of a 10YR 4/4 dark yellowish brown sandy loam with brick fragments and rounded pebbles. Artifacts recovered from this stratum include a nail, window glass, and a piece of bottle glass. Brick fragments and a piece of plastic were discarded in the field. The deposit terminated 0.65 feet below datum, revealing a redder sediment, Stratum 2. This stratum was a 5YR 4/6 yellowish red coarse sand and extended to a depth of one foot below datum (+9.3 feet amsl). This layer appeared to be consistent with natural sands identified within Trench 2. No artifacts or inclusions were encountered in this context. The bottom stratum was a 10YR 4/4 dark yellowish brown coarse sand mottled with a 5YR 4/1 light gray sand. The color and nature of the sandy sediments indicate that it may be a continuation of natural deposits under the disturbed historic fill sequences. No artifacts were recovered and excavation was terminated within this stratum.

Test Unit 5 measured 5 x 5 feet and was located adjacent the northeast corner of Trench 8 in order to test the buried surface present in both Trench 2 and Trench 8 (see Figure 4.1). Seven stratigraphic deposits were encountered within the unit, excavated to a maximum depth of 3.6 feet below datum (+6.7 feet amsl). A 0.5-to-1.3-foot-thick deposit of demolition/rubble fill (Stratum 1) overlaid a 1.2-foot-thick 7.5 YR5/1 light gray to 7.5YR 7/1 gray coarse sand with pebbles (Stratum 2), and a 1.4-foot-thick 7.5YR 4/4 brown clayey sand (Stratum 3). Directly

below these two deposits was a buried AB horizon (Stratum 4), consisting of a 7.5YR 4/4 brown medium fine sand with organic infillings and diffuse charcoal dispersed throughout. The deposit sloped steeply to the south and east, where it began tapering to an end. No cultural material or any indication of occupation was present within this context. The remaining three strata (7, 8, and 9) were sterile deposits composed of 7.5YR 7/1 light gray to 7.5YR 4/3 brown fine sands.

Test Units 6 and 7 were placed to investigate the builder's trench associated with Feature 7, a stone wall with a north/south orientation. The recovery of artifacts from the builder's trench would aid in generating a relative date for the construction of the wall. Test Unit 6 measured 5 x 5 feet and was placed on the eastern side of the wall. The datum was fixed at 10.3 feet amsl and the unit was excavated to a depth of 3.5 feet below datum (+6.8 feet amsl). The north wall profile of this test unit clearly shows the outline of the builder's trench and Stratum 4. The trench matrix consists of a 10YR 3/3 dark brown coarse sand mottled with 10YR 3/4 dark yellowish brown sand. The uppermost stratum is a cap of demolition debris overlaying three additional strata of coarse sandy soils. These strata are characterized by a 10YR 3/3 dark brown coarse sand with lighter elements of 10YR 3/4 dark yellowish brown sand, which sits on top of a 10YR 5/2 grayish brown to 10YR 5/4 yellowish brown coarse sand. The sands become lighter with depth and forms diagonal bands running from the east and sloping down to the west. This pattern is indicative of natural soil strata in this particular area. The wall was exposed in the western side of the test unit. Large blocks of granitic schist were encountered at the base of the wall and were interpreted as spread footers used to stabilize the wall in the sandy soil.

Test Unit 7 was placed on the western side of the wall (Feature 7) and excavated down to a depth of 3.2 feet below surface (+7.1 feet amsl) (Plate 4.8). Three strata were encountered. The uppermost stratum was a historic cap of soil laden with demolition debris, such as brick and mortar fragments, asphalt, and chunks of concrete. The coarse sandy loam matrix of this layer extended to a depth of one foot below datum and was a 7.5YR 4/2 dark brown. The wall was encountered at 0.4 feet below datum and ran down the eastern side of the unit. The next stratum was a 10YR 5/3 brown coarse sandy loam with rounded pebbles and several large stone flakes. most likely associated with wall construction. The flakes of stone are a granitic schist similar to that used for the spread footers under the wall. This stratum extended to a depth of approximately 2.2 feet below datum (+8.1 feet amsl) and was interpreted as the sandy fill of the builder's trench. The third stratum was the same color as the previous, but its texture was much coarser. Excavation was terminated in Stratum 3 at a depth of 3.2 feet below datum (+7.1 feet amsl). The artifacts collected from the builder's trench include clam and oyster shell fragments, bottle and window glass, and an assortment of ceramic sherds (producing a mean end date of 1833). This date indicates that the wall was associated with the Broadway Tabernacle Church once extant in this portion of the project area.

The only other wall structure (Feature 8) located during the investigation was uncovered while removing the demolition/rubble fill from the Phase I area. An intact section of an east/west oriented stone was located in the northwest corner of the site (Plate 4.9). The wall consisted of mortared, dressed stone, 2.8 feet wide, resting on a 0.25-foot-thick dressed stone footing. Unlike the north/south-oriented wall (Feature 7) encountered in Trench 2 and Test Units 6 and 7, no evidence of a builder's trench was uncovered here. The footings rest directly on glacial sands at an elevation of +11 feet amsl, six feet higher than Feature 7. In addition, the wall was located



Plate 4.8 Test Unit 6, North Wall Profile.



Plate 4.9 Feature 8, View Looking North.

approximately five feet south of the sub-basement wall to the adjacent building on Catherine Lane. Based on the wall's location and comparison to the 1890 Robinson atlas, it is most likely associated with a five-story brick building that once stood in this section of the project area.

#### MONITORING

Revisions to the original testing procedures were necessary due to safety concerns with the installation of the southern perimeter foundation wall beginning in the southwest corner and extending a distance of 168 feet to the east. The erection of wall lagging and tiebacks was required in order to prevent the potential collapse of the sidewalk and portions of Worth Street as fill was removed from the Phase II area to a depth of +7 feet amsl. At this point, a 15-foot-wide trench was excavated to mean sea level in combination with wall lagging and tiebacks for the new foundation footings. This new requirement would prevent four of the north/south cross trenches from being extended to the site's southern boundary. Therefore, the excavation of the footings for the perimeter foundation wall and a number of footings for column supports within the entire site were archaeologically monitored to ensure that intact cultural resources, if present, would not be adversely affected from construction activities (see Figure 4.2). This method also allowed a wider exposure of the project area for investigation than otherwise provided by the excavation of the test units and test trenches. No features, intact deposits, or intact surfaces were encountered during monitoring activities. Whatever resources may have once been present within the project area appear to have been, for the most part, severely impacted or destroyed by subsequent development during the late nineteenth to early twentieth centuries.

# FEATURE 4

Feature 4 is a truncated, stone lined shaft, identified as a well; this feature was first encountered when Trench 2 was extended to the west. The trench clipped the northern edge of the feature, exposing a four-foot-deep profile of well fill with the rest of the ring of stones clearly defined in the trench floor. The interior of the well was approximately four feet in diameter, and the stone well liner averaged 0.8 feet thick (Plate 4.10).

Excavation of the well was conducted within a wooden shoring box engineered by the Forest City Ratner Companies. The well was hand-excavated in 0.6-foot excavation levels. The removal of soil and feature fill occurred in a controlled sequence. First the matrix within the shoring box was removed, then the builder's trench by excavation levels, followed by the stone lining of the well, and finally the interior well fill by excavation levels. Detailed drawings of the well profile were made during the excavation. At the water table, encountered at a depth of -2.77 feet bsml, a well point dewatering system was installed to lower the water table. A pump was also installed within the shoring box to supplement the well point system.

Excavation exposed a profile extending 13 feet into a matrix of stacked fluvial sands. The truncated top of the well was at +8.73 feet amsl and extended to a depth of -4.27 feet bmsl. The



Plate 4.10 Feature 4, Exposed Upper Section of Well Prior to Shoring.

stone lining of the well is made of roughly hewn sandstone blocks averaging between 0.8 and 1.5 feet on their longest dimension. Periodically, a brick was observed imbedded in the lining. The builder's trench was readily visible cutting down into the matrix outside the well ring. It consisted of a coarse sand that starts as a 2.5YR 3/3 dark reddish brown, becoming brighter with depth and grading down to a 10YR 4/4 dark yellowish brown and a 10YR 3/4 dark yellowish brown at the bottom of the well, under the well fill.

The well fill consisted of four stratigraphic fill episodes (Figure 4.6). The uppermost fill layer (Stratum 13) appeared to be demolition debris laden with numerous whole and broken bricks. Some of the bricks show remnants of mortar. Some plaster and ash deposits were also observed in the fill. The matrix was comprised of a 7.5YR 3/4 dark brown sandy loam sediment. Voids (air pockets) were observed within the tumble of brick. This layer extended to a depth of approximately 5.5 feet below datum, or -0.57 feet bsml. The bottom 1.5 feet of this layer (Stratum 13a) was extremely compact. The matrix sediment appeared to have filled in the voids, and the brick seems to have settled and become practically locked into position (Plate 4.11). The brick in this layer tapered toward the middle, possibly due to an internal collapse within the well fill. As organic materials in the fill rotted away, the weight of the bricks may have caused a collapse down the middle of the shaft.

The next layer (Stratum 14) extended to approximately 7.7 feet below datum (-2.77 feet bmsl). A 7.5YR 3/3 dark brown sandy loam with a very dense concentration of bottle glass and some brick characterized this layer. The water table was encountered at the bottom of this layer at approximately -2.77 feet bsml. Below this stratum, a 10YR 3/4 dark yellowish brown sandy loam (Stratum 15) extended to a depth of approximately 8.5 feet below datum (-3.57 feet bsml). Less glass was recovered in this layer, which contained a concentration of corroded iron with broken brick fragments.

The very bottom layer (16) was a 10YR 3/4 dark yellowish brown sandy loam grading into a 10YR 3/2 very dark grayish brown organic soil with isolated pockets of rounded gravels. It extended to a depth of 9.2 feet below datum (-2.27 feet bsml). During the excavation of this layer, Feature 5 was encountered at approximately 8.2 feet below datum (-3.27 feet bmsl). This feature was circular and contained inclusions of black fibrous material. This feature may have been the remnants of a wooden bucket, as it appeared to have a flat bottom in profile. Unfortunately, the feature was irrecoverable.

A wooden builder's ring was observed at the base of the well. The ring surrounded the outside of the well liner and had a bottom board the well liner rested on. Initial well excavation would presumably occur within this ring, which was undercut, dropping it deeper into the builder's trench. The stone of the well liner was placed on the ring and built up as the well was excavated to greater depth. This approach provided some protection from collapse during excavations into the sandy matrix. The wooden builder's ring was constructed similar to a barrel: upright staves were connected to a bottom board that acted like a shelf for the well liner stones. The widths of the staves ranged from 0.62 to 0.86 feet, and they were between two to 2.4 feet long. The bottom board fit into grooves in the stave bottoms, which were secured by nails.

# Figure 4.6 Soil Key

1	Demolition/Rubble Fill 10YR 4/3 Brown Coarse Sand
4	7.5YR 4/4 Brown Coarse Sand
9	10YR 6/3 Pale Brown Loose Fine Sand
10	7.5YR 4/4 Brown Fine Sand
11	10YR 6/3 Pale Brown Coarse Sand with Gravels
12	2.5YR 3/3 Dark Reddish Brown Coarse Sandy Loam
13	7.5YR 3/4 Dark Brown Sandy Loam with a Dense Concentration of Brick, Mortar, and Plaster with Air Pockets
13a	7.5YR 3/4 Dark Brown Sandy Loam Compact with a Dense Concentration of Brick, Mortar, Some Plaster, and Some Flat Stone Slabs; Few Air Pockets
14	7.5YR 3/3 Dark Brown Sandy Loam with a Very Dense Concentration of Bottle Glass and Some Brick
15	10YR 3/4 Very Dark Brown Sandy Loam with Less Glass, a Concentration of Corroded Iron, and Brick
16	10YR 3/4 to 10YR 3/2 Sandy Loam Organic with Small Pockets of Gravel



Plate 4.11 Feature 4, Stratum 13a, South Wall Profile.

# Feature 4 Artifact Analysis

Maps of the city of New York suggest that Lot 20, which comprised the eastern third of the Worth Street Site, remained undeveloped until the 1790s. Tax records from 1808 list houses and taxes for personal property in this area (Historical Perspectives Inc. 2001:15). In 1835, the lot was purchased by a group of men intent on establishing a Free Church within New York City. They cleared the lot and began building in May 1835.

The main feature found on Lot 20 was a well (Feature 4) apparently dug when the Free Church was built in 1835. Excavation of the well produced an assemblage of English refined wares and some Chinese porcelain sherds from the builder's trench and well fill. Table 4.1 lists the vessel distributions for the two contexts. The sherds from the builder's trench and the fill have almost identical mean beginning and end dates, and very similar ware distributions (Table 4.2).

Table 4.1 Ceramic Vessels by Ware Type from Feature 4.

Tubic III Column	C T COOCIO D	7 11440	1)pc Hom 1c	MEMIC I
Ware==				
<b>《《学》的《图图》的《</b> 中	Builder's	Well	Builder's	
<b>一个人的自己的</b>	Trench	15111	Trench	Gill
Chinese Porcelain	0	5	0	10.6
Hard Paste Porcelain	0	1	0	2.2
Creamware	5	10	22.7	21.3
China Glaze	2	4	9.1	8.5
Pearlware	10	18	45.5	38.3
Pearlware/Whiteware	2	0	9.1	0
Whiteware	1	0	4.5	0
Ironstone	0	1	0	2.1
White Granite	0	1	0	2.1
Victorian Majolica	0	3	0	6.4
Basalt	1	0	4.5	0
Refined Redware	1	4	4.5	8.5
Total	22	47	99.9	100

Table 4.2 Feature 4 Ceramic Vessel Mean Dates.

	Builder's Trench	Well Fill
Mean Beginning Date	1795	1796
Mean End Date	1830	1833

A whiteware vessel from the builder's trench fill indicates that the well was dug sometime after 1820. The high ratio of creamware and pearlware relative to other wares suggests that the date could not be much after the 1830s. Clearly, the vessels recovered in the builder's trench accumulated from the beginning of the block's occupation in the 1790s until the clearing of the block in 1835 for the building of the Free Church. This evidence suggests that the well was dug to serve this institution. One of the puzzles about the well ceramics is the close match between the dates and ratios of wares from the builder's trench and the well fill. Table 4.1 shows just

how close the percentages of wares and dates are for the two assemblages. Generating mean beginning and end dates on an assemblage of only 22 vessels from this context is tricky; however, the 47 vessels from the well fill produced almost the same dates. If the two assemblages were combined into a larger sample, the dates would coincide.

Sherds from one white granite vessel and three Victorian majolica vessels from the well fill indicate that the well could not have been filled before 1851. Minton introduced his version of majolica to the market at the Crystal Palace exhibition of 1851 (Wakefield 1962:84); the Victorian majolica vessels provide the *terminus post quem* date that precludes the filling of the well before 1851. Newspaper reports from *the New York Daily Times* stated that John J. Phelps began tearing down the "Tabernacle" in May of 1857 in preparation for building a store on the site. It was probably shortly after this date that the filling of the well occurred.

These assemblages associated with the well, with the exception of the white granite and Victorian majolica vessels, represent what was accumulated on the site before the building of the Free Church. In cleaning up the area, sherds from the earlier occupation became part of the well fill. Thus, the ceramics from the well represent secondary fill. In addition to this secondary fill, a major deposit of broken glass wine bottles and stoneware bottles (primary fill) were uncovered. These bottles differ from the secondary fill in that they were only recovered from the fill of the well and not the builder's trench. They were broken before being discarded into the well, as indicated by the crossmends coming from different levels. As the well was excavated in arbitrary, 0.6-foot levels, mends between adjacent levels were not counted. Table 4.3 lists the vessels made up of crossmends from non-adjacent levels. These mends clearly show that both the stoneware and glass bottles were broken before they were discarded.

Table 4.3 Ceramic and Glass Vessel Crossmends from Non-Adjacent Levels in the Well Fill (Feature 4).

DS#	Context L	evel	Depth	Crossmends	Vesde
3, 4	Interior	1	0.8 - 1.6		
7	Interior	2	1.6 - 2.2		
12	Interior	3	2.2 - 2.8	Mends to Level 5	Vessel # 344 (stoneware)
13	Interior	4	2.8 - 3.4		
18	Interior	5	3.4 - 4.0	Mends to Level 3	Vessel #344 (stoneware)
19	Interior	6	4.0 - 4.6		
22	Interior	7	4.6 - 5.2	Mends to Level 9	Vessel #325 (stoneware)
				Mends to Levels 10 & 12	Vessel #303 (stoneware)
27	Interior	8	5.2 - 5.6	<i>2</i>	
28	Interior	9	5.6 - 6.2	Mends to Level 12	Vessel #119 (glass)
				Mends to Level 7	Vessel #325 (stoneware)
33	Interior	10	6.2 - 6.8	Mends to Level 12	Vessels #176 & #177
				Mends to Level 7 & 12	Vessel #303 (stoneware)
34	Interior	11	6.8 - 7.4		
37	Interior	12	7.4 - 8.2	Mends to Levels 9 & 10	Vessels #119 (glass), #176 (glass) and #177 (glass)
				Mends to Levels 7 & 10	Vessel #303 (stoneware)

#### Stoneware Bottles

Sherds from 14 salt-glazed stoneware bottles with impressed marks were recovered from the well fill. These bottles and their marks are described in Table 4.4 below. Almost all of the bottles are cylindrical and appear to be between pint and quart sizes. Those bottles for which necks have been identified exhibit a globular finish for tying down a cork with a string or wire. The bodies of the vessels are buff to a light gray in color, and many have a brown iron wash, making them brown salt-glazed stoneware (Plate 4.12).

Table 4.4 Stoneware Bottles from Feature 4 Fill

V#	Comments	Color
107	Complete cylindrical bottle with a blob style lip, impressed on shoulder "C. WHITTEMORE / NEW YORK"	Buff-Cream
139	Quart stoneware bottle, impressed "J. WHITTEMORE," similar to bottle 107	Irons Slip
344	Impressed "Whittemo," most likely Whittemore	Brown
343	Impressed on shoulder "ttemor," most likely Whittemore	Brown
334	Impressed "WHITTE," most likely Whittemore	Gray & Brown
341	Part of an impressed "WHIT," most likely Whittemore	Brown
303	Cylindrical bottle, brown slipped interior, some iron slip on exterior, impressed on heel "D. L. ORMSBY" appears to be a 6 ounce bottle	Buff/Tan
120	Complete cylindrical bottle, impressed "JOHN CALLE" on shoulder, the finish is shaped like a blob top bottle	Buff Iron Slip
309	Complete cylindrical bottle, blob top finish, brown interior slip. Shoulder impressed "O. PINKHAM / 1847" which probably when the bottle was made.	Buff
337	Impressed bottler or potter's mark "BORN"	Gray & Brown
338	Brown slipped interior, impressed bottler's mark "A. BRO"	Brown
342	Part of impressed maker or bottler's mark "IZ" or "ZI"	Gray & Brown
340	Part of impressed bottler or potter's mark that reads "PO"	Gray & Brown
339	Impressed " POTTERIES /TTLES," probably Bourne Potteries, Denby, England. They use the word "POTTERIES" as part of a mark.	Buff

One stoneware bottle (Vessel #309) has an impressed bottler or maker's mark that reads "O. PINKHAM" over the date "1847." Presumably, this is the date of the bottle's manufacture. This date fits well with the Victorian majolica, which became popular after its introduction in 1851. O. Pinkham is not listed in the New York City directories for the 1830s through the 1870s. Another bottler not listed in the directories is John Calle, whose impressed mark is on Vessel #120, suggesting that either these bottles were very short lived or that the bottles came from some other city, or possibly from England.

Six of the 14 marked stoneware bottles from the well fill had impressed partial marks near the shoulder reading "Whittemore." Two of the vessels have complete inscriptions: "C. Whittemore" on one, and "J. Whittemore" on the other. Charles Whittemore entered the mineral water business between 1848 and 1850. His place of business was 162 Varick Street, and his home was located at 49 Vandam Street (Doggett 1847:439; Rode 1850:552). By 1853, Whittemore had moved his mineral water business to 86 E. 11<sup>th</sup> Street (Rode 1853:688). Charles

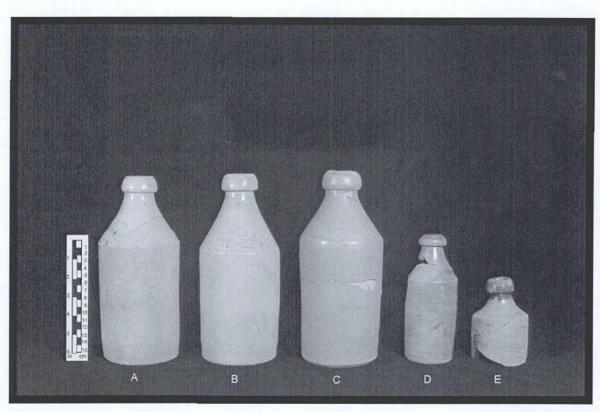


Plate 4.12 Worth Street Stoneware Bottles: A) O. Pinkham Salt Glaze Brown Slip; B) C. Whittemore Salt Glaze Brown Slip; C) John Calle Salt Glaze Brown Slip; D) D.L. Ormsby Salt Glaze Brown Slip; E) Unmarked Salt Glaze Brown Slip.

Whittemore was not listed in any directories for a few years, although he may have been an uncooperative owner of the soda water business at 75 E. 11<sup>th</sup> Street (Wilson 1857:308, 417).

In 1860, Charles Whittemore was in the mirror business with his brother Thomas at 579 Broadway. Charles' lived uptown at 199 W. 38<sup>th</sup> Street (Wilson 1860:916). Interestingly, Charles and his brother Thomas joined the Tabernacle church at its new uptown location in 1860. Charles became an active member of the church, serving on various committees as a deacon. When the sixtieth anniversary of the Broadway Tabernacle Church was celebrated in 1901, Deacon Charles Whittemore delivered a speech on "The Old Tabernacle" (Jefferson 1901; Ward 1901:278-279).

One stoneware bottle has an impressed mark for "D.L. Ormsby." Dorman L. Ormsby was a grocer, working and living on the corner of Bleeker and Perry Streets in 1837 (Longworth 1837:447). In 1838, he listed himself as a brewer at 48 16<sup>th</sup> Street. Ormsby's home was next door at 52 16<sup>th</sup> Street (Longworth 1838:484). In 1840, the location of the Ormsby Brewery was given as 255 16<sup>th</sup> Street, and his home was listed at 251 16<sup>th</sup> Street (Longworth 1840:483). This change may indicate a renumbering of the street addresses rather than a move to a new brewery and household. Around 1842, Dorman Ormsby changed his product from beer to root beer (Doggett 1842:248; Longsworth 1841:539). He continued in the root beer business until around 1846, when he reverted back to brewing beer (Doggett 1846:300; 1847:312). In 1850, Ormsby expanded his business interests to include coach making. The brewery remained in the same location; the coach factory was located at 253 W. 16<sup>th</sup>; and his home remained at 251 W. 16<sup>th</sup> Street (Rode 1850:392).

In the following years, Dorman Ormsby switched back and forth between beer and root beer production. He moved his residence to 20 Lamartin Place and dropped out of the coach business (Wilson 1853:493: 1854:569). In 1855, Ormsby entered into the soda water business at his West 16<sup>th</sup> Street plant and moved his residence to 221 West 29<sup>th</sup> Street (Wilson 1855:639). Soon there after, his son Leonard was in business with him at 432 West 16<sup>th</sup> Street and the rear of 288 West 17<sup>th</sup> Street. Dorman lived at 283 West 18<sup>th</sup> Street, while his son occupied a house at 290 West 17<sup>th</sup> Street (Wilson 1860:660). Sometime in the late 1860s, D. L. Ormsby & Son became beer brewers at 425 West 16<sup>th</sup> Street. Leonard probably managed the business, living only a block away from the plant. Dorman, on the other hand, moved out to the country, up to 124<sup>th</sup> Street (Wilson 1870:931). The early 1870s witnessed another switch back to soda and mineral water production (Wilson 1875:1025).

Leonard Ormsby was the first to leave the beverage business. He was listed in 1877 as an unspecified metal smith, at his father's soda water plant at 424 West 17<sup>th</sup> Street. Dorman moved back to the neighborhood to manage the soda business, but this effort was short-lived. The Ormsbys seem to have left the beverage business for good in 1877. Dorman Ormsby took over the smith business, while Leonard became a hotelkeeper in the Bronx (Wilson 1877:1089; Wilson 1878:1120).

The other marked stoneware bottles exhibit partial inscriptions that apparently fit with descriptions in the city directories. Vessel #337 bears a partial mark that reads "...BORN," which may be for John Dearborn, who was listed as a root beer maker in 1842 at 131 Clinton

Street (Doggett 1842:91). Earlier directories listed John Dearborn as a grocer on Broome Street (Longworth 1841:217). Dearborn moved his root beer business to Riverton Street in the 1840s (Groot & Elston 1845:109). By 1850, he was in the soda water business with Alexander Dearborn, trading as J. & A. Dearborn on 3<sup>rd</sup> Avenue (Rode 1850:133). The Dearborns appear to have left the soda business in 1867(Wilson 1867:253). The dates of the other artifacts and the similarity of form and function make this identification seem probable.

Vessel #338 has a partial inscription that reads "...A. BRO..." This is not much of an inscription to go on; however, an Andrew A. Brown was a cashier on lower Broadway until he entered the beer business around 1869. His operation was located at 1215 3<sup>rd</sup> Avenue, and his home was in New Jersey (Wilson 1870:147). Brown moved his beer business up to 227 West 53<sup>rd</sup> Street, then up to 1<sup>st</sup> Avenue at 117<sup>th</sup> Street in Harlem by 1875. He lived next door to his Harlem brewery. Brown's home was shared by Andrew E. Brown, presumably his son, who was in the in the liquor business (Wilson 1875:156). Andrew A. Brown was still in the brewery business in 1877 (Wilson 1877:163). By 1880, he had left the beer business and pursued real estate sales in Harlem (Wilson 1880:181). The identification of Vessel #388 as being from Andrew A. Brown is very tenuous, due to the brevity of the mark. However, if the bottle was a product of Andrew A. Brown, then the well could not have been filled before 1869, after the Broadway Tabernacle Church was torn down.

In summary, the stoneware bottles were most likely made for root beer, soda water, or mineral water. Some may have been beer containers. The proprietors and the dates for which they were listed in the city directories are summarized below (Table 4.5). One of the common practices for bottlers in the nineteenth century was to use any available bottles. By the 1890s, dealers in secondhand bottles operated in most major American cities (Busch 1991:115). Reuse was common before that, so these bottles could have been filled by anyone. The Whittemore root beer and soda water business was very close to the Broadway Tabernacle Church. Given Deacon Charles Whittemore's long association with the Tabernacle, the bottles are very likely from his establishment.

Table 4.5 Stoneware Bottle Proprietors and Dates from City Directories.

Droputeor	# of bottle	s Root beer	Soda/mineral wa	iter Beer
Whittemore, James	1	1842-1845	=	-
Whittemore, Charles	1	-	1849-1860?	-
Whittemore, J. or C.	4	1842-1845	1849-1860?	-
Ormsby, Dorman L.	1	1842-1846	1855-1860	1838-1842
			1870?-1875	1846-1855
				1860-1870
Dearborn, John	1	1842-1850	1850-1867	

#### Champagne and Wine Bottles

Sherds from wine and champagne bottles are the dominant types of artifact recovered from the well fill. These bottles were badly broken, and only two could be reconstructed, both French champagne bottles. As champagne bottles are the dominant type recovered, the weight of these

two bottles was used to make an estimate of the minimum number of wine bottles represented by the recovered sherds. The 8,088 sherds recovered from the well fill bottles weighed 286 pounds, with the average sherd being only 0.57 of an ounce. By contrast, the builder's trench around the well only contained 17 wine bottle sherds. The two reconstructed wine bottles (Vessels #32 and #119) weighed 35 ounces and 35.55 ounces, respectively (Figure 4.7; Plate 4.13). Dividing the weight of the bottles into that of the bottle sherds results in an estimated range of 127 to 130 bottles. However, 154 bottlenecks were recovered from the contexts, allowing for a better minimum vessel estimate. Using the bottlenecks times the bottle weights, it would appear that our excavations recovered between 84.6 and 86 percent of the sherds to these bottles. Due to the small size of the sherds, the minimal count may be off by a few bottles. Given this quantity of sherds of very similar bottles, reconstruction was not an option.

The color of these bottles ranged from a dark olive green to traditional English black glass. The great majority of these bottles had cracked off lips, some of which were fire polished. All of the bottles had applied string rims for tying off corks. Remains of 23 highly desiccated corks were recovered from Levels 9, 10, and 11 of the well fill. Only one of these corks was complete enough to show compression from tying off; this cork does not show any signs of iron or copper oxide, suggesting that the bottle was tied off with string rather than wire. This cork was found with the bottleneck for Vessel #99. The other corks may well have been in the bottlenecks when they were broken, but became separated due to shrinkage when they dried out in the lab (Plate 4.14).

Only one bottle (Vessel #161) had a lipping tool finish (see Plate 4.14). The lipping tool was introduced in the English glass industry around 1820 to produce a standard finish and save time (Jones et al. 1989:43). By mid-century, lipping tool finishes had become common for English-and American-made bottles. For example, the great majority of the bottles from the 1865 Bertrand shipwreck exhibit lipping tool finishes. The champagne bottles from the wreck, however, appear to have applied string rims and cracked off finishes, and are a close match for most of the bottles from the Worth Street well fill (Switzer 1974:24 – 26).

Limited information is available on the chronology of the French champagne bottle. Earliest documentation for the form appears to be a 1751 advertisement from a Boston newspaper for "full quart long neck'd Champain [sic] Bottles in hampers" (McKeain & Wilson 1978:223). The reference to "long neck'd" suggests the champagne bottle shape, which does not have much of a shoulder. Dumbrell illustrates a French wine bottle that, except for the finish, is very similar to the shape of the bottles from the Worth Street well; Dumbrell dates this wine bottle to circa 1780 (Dumbrell 1983:138). Unfortunately, he does not provide documentation as to how he arrived at this date. Dumbrell illustrates a set of finish drawings for French, Dutch, German, and American wine bottles in which he shows the champagne style finish with a date of 1870 (Dumbrell 1983:134). The Worth Street bottles indicate that this type of finish was in use sometime before the mid-1850s.

Champagne bottles are turn-paste mold blown, which produces a bottle without a mold seam. This method was accomplished by lining the mold with a damp paste and then turning the bottle as it was blown into the mold. Steam created from the moist paste produces a bottle with a smooth glassy finish and no mold lines. These bottles commonly have a rounded projection in

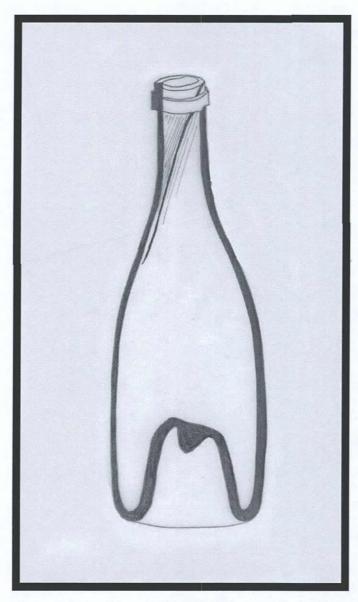


Figure 4.7 Vessel #119 (Drawing by Karen Bieling, URS).

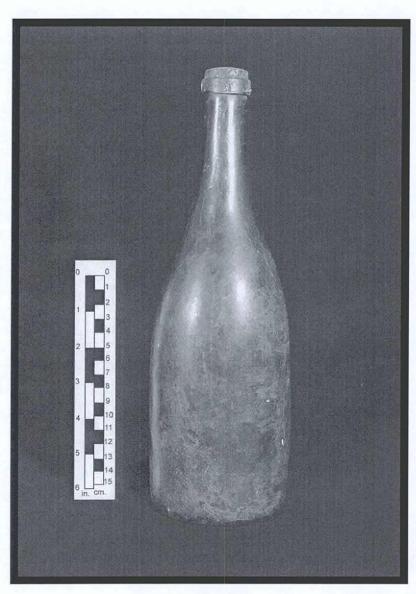


Plate 4.13 French Champagne Bottle (Vessel #119): Turn Paste Molded, Applied String Rim, Cracked Off Finish.

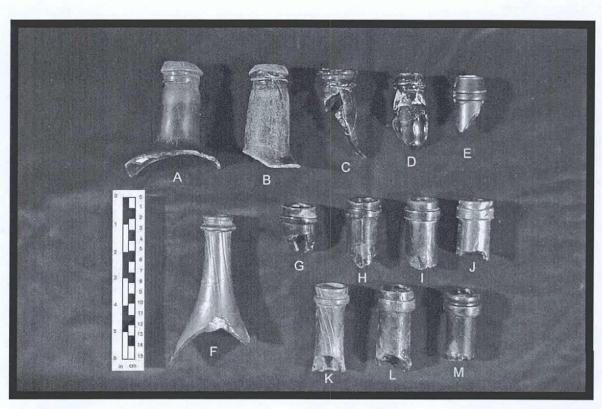


Plate 4.14 Types of Bottle Necks Recovered from the Feature 4: A, B, and D) Down-Tooled and String Rim, Black Glass Wine Bottle; C) V-Toed Finish and String Rim, Black Glass Wine Bottle; E) Lipping Tool Finish with String Rim; F) Applied Rounded String Rim, Typical French Style Finish; G, H, I, J, K, L, and M) Champagne Finish, Applied String Rim Below the Finish.

the kickup that is called a "mamelon." Bases with mamelons were the dominant type in the well fill; however, as they were almost all broken into several pieces, no attempt was made to reconstruct them. The mamelon was created when a concave iron cup like tool was used to produce the kickup in the bottle. This type of a kickup was being used on bottles blown in round-bottomed dip molds in England by 1842 (Olive Jones 1986:96). Just when this technology was adopted to turn-paste molds for seamless bottles is not clear; however, the Worth Street bottles suggest it was not far behind the use of these molds in England. As the mounded part of the mamelon does not come directly into contact with the iron mold, it does not develop a dull surface skin from such contact. Some of the mamelons from the Worth Street bottles have an iron oxide ring around the edges of the recess, while the centers remained brighter than the rest of the glass in the bottle. Turn-paste mold blown bottles are usually dated to the period 1880 to 1910 (Munsey 1970:40).

Seven of the bottles from the well fill appear to have typical English wine bottle finishes with applied string rims and down-tooled finishes. Two of them are from the builder's trench; the other five came from the fill levels above the champagne bottle deposit. The distribution of these bottles is listed on the following table.

Table 4.6 Distribution of Wine Bottle Necks from Feature 4.

I able 110	Distribution of White Bottle Necks from Feature 4.								
Context	FS#				Trench Wine Finish				
Builder's trench	1	1	0.8 – 1.6	1.	-	_			
	29	10	6.2 - 6.8	1	_				
Well fill	2	I	0.8 - 1.6	1,	-	-			
	18	5	3.4 – 4.0	2	-	=			
	19	6	4.0 – 4.6	1					
	27	8	5.2 – 5.6	1	_	3			
	28	9	5.6 – 6.2	=	-	11			
	33	10	6.2 - 6.8	-	-	42			
	34	11	6.8 - 7.4		5	72			
	37	12	7.4 – 8.2	÷	=	11			
Under interior	40		-	-	-	3			
Totals	2			7	5	142			

The distributions by vessels, sherds, and weight all clearly show a major deposit of broken wine bottles existed in the well as part of the site clean up (see Table 4.6 and Table 4.7). The historical documentation and artifact dates all suggest that the clean up took place in 1857, when the Tabernacle was razed in preparation for building a store on the site.

Table 4.7 Distribution of Wine Bottle Sherds by Count and Weight Within Feature 4.

Level	Depth In Feet		d Coun		Weight in Ourices			Rilli W	
		Builder's Trench			Builder's Trench	Wall	Fill	eue n	t.
1	0.8 – 1.6	13	6	26	2.6	0,4	2.6	0.3	0.1
2	1.6 – 2.2		1	15		~	2.7	0.2	0.1
3	2.2 - 2.8	-	1	9		8	5.8	0.1	0.1
4	2.8 - 3.4		=	14	=		1.0	0.2	0.0
5	3.4 - 4.0	=	2	13	#	0.2	6.1	0.2	0.1
6	4.0 – 4.6	_		18	_	-	2.9	0.2	0.1
7	4.6 - 5.2	-	3	25	-	0.9	3.5	0.3	0.1
8	5.2 - 5.6	1	2	52	0.3	0.9	9.9	0.6	0.2
9	5.6 – 6.2		20	850	_	2.8	421.7	10.5	9.2
10	6.2 - 6.8	1	25	3007	4.3	4.6	1140.7	37.2	24.9
11	6.8 - 7.4	-	31	3245		2.9	2376.3	40.1	51.9
12	7.4 - 8.2	2		814	0.2		602.6	10.1	13.2
	Totals	17	91	8088	7.4	12.7	4575.8	100.0	100.0

The one unanswered question is who discarded all of those champagne, wine, and stoneware bottles. Crossmends, small sherd sizes, and the lack of any unbroken bottles all indicate that the bottles were broken before they were deposited in the well. One wonders why someone would go to the trouble of so thoroughly breaking these bottles up despite their economic value. A well-established second-hand bottle trade existed in New York and other large cities throughout the nineteenth century; if unbroken, bottles had an economic value. The purchase of used bottles by such merchants as distillers, saloonkeepers, and druggists has a long tradition dating back into the eighteenth century and probably earlier (Busch 1991:113 – 114). George Bartolf claimed to have begun the first second-hand bottle business in New York City in the late 1840s (Busch 1991:115). Busch's important article on bottle reuse documents that secondhand wine and particularly champagne bottles were in demand throughout the nineteenth century.

Do these broken bottles represent early Temperance movement activity? Or they may be the results of something as simple as a collapsed shelf. The other possibility is that the bottle glass is the accumulated breakage from one of the liquor establishments in the area, put aside in a barrel to be sold as cullet to a glass manufacturer. The only problem with this idea is that the broken stoneware bottles do not have any recycle value. The main value of this collection is that it represents a tightly dated primary deposit from 1857 that pushes the date back for turn-paste molded champagne bottles with mamelons from the traditional date of circa 1880. There is a very strong possibility that the Whittemores used these bottles in their root beer and soda water business. These are strong bottles that would be able to hold the pressure of carbonation, and they had string rims for tying down corks. Given their association with Whittemore's stoneware bottles, the proximity of the Whittemore establishment, and the family association with the Tabernacle, this interpretation makes the best fit with the data. A member of the Whittemore family most likely discarded the glass and stoneware bottles during the filling of the well in 1857.

#### V. CONCLUSIONS AND RECOMMENDATIONS

Subsurface investigations and monitoring of construction activities within the Worth Street Site have determined that the footprints of any earlier structures along with their associated outbuildings, yards, and/or yard features were obliterated by construction during the 1880s. It was during this time that all of the buildings within the block were razed and replaced with substantial brick structures with basements. Additional impacts to any resources that survived this construction episode occurred during the early twentieth century, when sub-basements were constructed within several of these buildings. Nevertheless, a few historic resources survived subsequent development within the project area. These resources consisted of the truncated remains of a sandstone-lined well, the remnants of foundation walls associated with the Broadway Tabernacle Church, a late-nineteenth-century department store, and a number of schist footings used as column supports within the basements of two late-nineteenth-century commercial structures.

Recovered material from the well provided archaeological information on a previously known historical practice, the reuse of bottles. The reuse of any available bottles was a common practice of bottlers in the nineteenth century. There is a very strong possibility that the Whittemore family used the glass and stoneware bottles from the well in their root beer and soda water business, given their association with Whittemore's stoneware bottles, the proximity of the Whittemore establishment, and the family association with the Tabernacle. Most importantly, the collection represents a tightly dated primary deposit from 1857 that pushes the date back for turn-paste molded champagne bottles with mamelons from the traditional date of circa 1880.

Although extensive historic landscaping and development has removed most of the prehistoric deposits, a localized remnant Holocene deposit was identified within the project area. A radiocarbon date of 8290±50 B.P. was obtained from this undisturbed horizon underlying historic fill. Testing of this intact surface did not produce any evidence of occupation. However, the geoarchaeological study produced valuable information on the last 15,000 years of human occupation and landscape history in Lower Manhattan. This study established both the prehistoric age and ancient topographic settings capped by the oldest soil and reconstructed the events in the project area since the earliest known occupation of Manhattan Island.

The Phase IB study of the Worth Street Site has determined that prior historical development has severely compromised the original ground surface and that the site lacks any integrity. Given these parameters, the remnant buried intact prehistoric surface and the investigated historic resources do not have the potential to provide any additional information beyond that already collected during the present investigation. Therefore, no further work is recommended.

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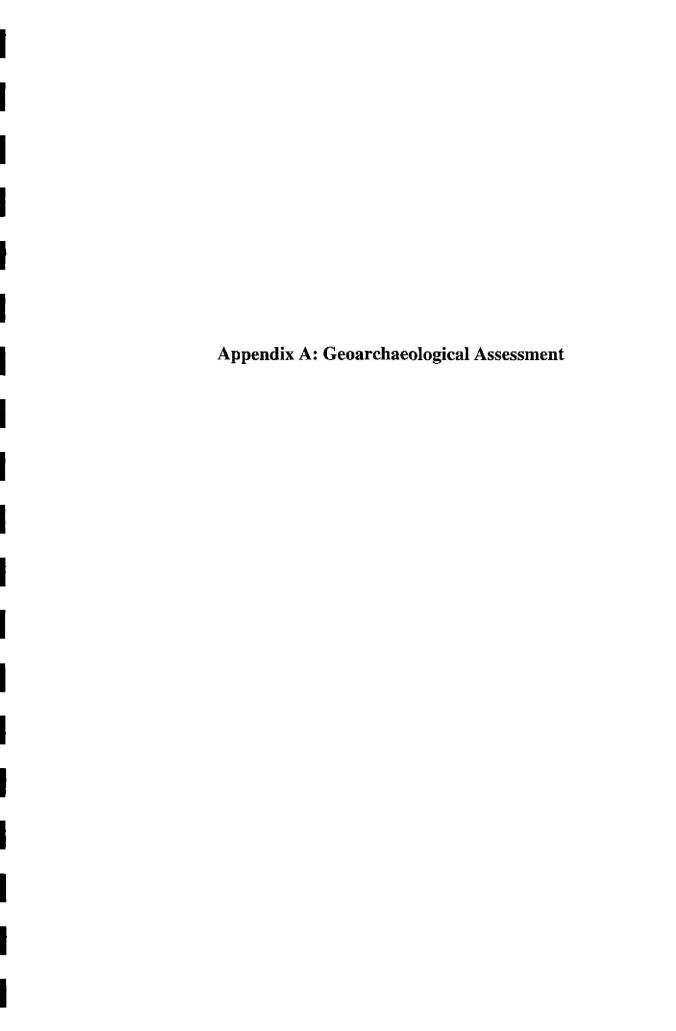
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A Geoarcheological Assessment of the Buried Landscape at the Proposed Site of 101-117 Worth Street, New York, New York

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#### A Geoarcheological Assessment of the Buried Landscape at the Proposed Site of 101-111 Worth Street, New York, New York

#### Joseph Schuldenrein Geoarcheology Research Associates December 14, 2002

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#### A Geoarcheological Assessment of the Buried Landscape at the Proposed Site of 101-117 Worth Street, New York, New York

Joseph Schuldenrein Geoarcheology Research Associates December 14, 2002

#### **Objectives**

The following study has been undertaken to reconstruct the environments and history of the buried landscape in the site of building excavations at Lots 12 through 20 of the eastern end of Block 170 at 101-117 Worth Street. The sensitivity of the area is underscored by its proximity to archeologically significant locations, most prominently the African American Burial Ground, but also the MCC Tunnel at the Five Points locality, and Thomas Paine Park north of Foley Square (Figure A.1). The project design area includes the central and eastern portions of the block circumscribed by Worth Street (south), Lafayette Street (east), Catherine Lane (north), and Broadway (west). The need for geomorphological testing was outlined in the Phase I Scope of Work (SOW) that called for the services of a geomorphologist/pedologist to "...provide an interpretation of soil exposed beneath the basement floors." Responsibilities for such research were to determine "...if original intact prehistoric and/or historic surfaces are present or if the cellars extend into original subsoil, removing the prehistoric and/or historic surfaces" (HPI 2001: 6). Geoarcheological investigations began after archeologists had begun stripping surfaces beneath massive rubble and historic fills, 18.5-23.5 ft. thick (Mueser Rutledge 2001: 5). Ground surface elevations within the project area are 20.5-30.5 ft. amsl (Mueser Rutledge 2001: 2) such that unmodified historic surfaces stood within several feet of sea level before the large scale landscaping of lower Manhattan between the late 18th and 20th centuries.

Previous and ongoing subsurface investigations in the immediate project area have encountered deposits indicative of complex landform changes over the course of late glacial and post-glacial times. Sequences indicate the presence of ice-related features (i.e. pro-glacial lake beds, glacial kames and outwash trains) and post-glacial landscape elements including ancient stream channels, and buried soils. Attendant geological stratigraphies underlie evidence for large scale historic relandscaping. In the project area, the most critical historic features include the infilled sediments of the old Collect or Fresh Water Pond—a well

known historic swamp that was a signature landmark of Dutch and British settlement of Lower Manhattan. In the 18<sup>th</sup> and early 19<sup>th</sup> centuries the Collect was associated with the development of the tanning industry (Geismar 1993; Yamin et al. 1995a, 1995b).

Preliminary indications are that the western margins of the Collect and its sub-basin, "The Little Collect", abutted Lafayette Street and that the sill separating these two former bodies of water immediately underlies Worth Street (Geismar 1993: Figure 8; Yamin et al. 1995a: Figure 12), albeit 1-2 blocks to the east of the project site. Thus the historic geography of the study area suggests the potential presence of historic drainage features in the vicinity of the proposed construction. A 19<sup>th</sup> century well was encountered by archeologists over the course of the present excavations. The original SOW (HPI 2001: 2) also called attention to the presence of the tanneries as well as a pottery, known as "Pottbakers Hill" to the west. Most recent mapping indicates that the major concentrations of the Pearl Street tanneries were to the east (Yamin and Schuldenrein 1995: Figure 12), but the presence of residual processing centers could not be precluded.

A major objective of the geoarcheological study was to refine the mapping of sediments and to develop a chronology of events contemporaneous with and preceding the historic occupation of the site and vicinity. Radiocarbon dates were obtained from undisturbed organic horizons underlying the historic fill. Determinations established both the prehistoric age and the ancient topographic settings capped by the oldest soils.

#### Methods and Procedures

Fieldwork at the Worth Street site was undertaken over the course of four field visits from mid-June to early July, 2001. By the time of the initial field inspections, heavy equipment had excavated much of the block to depths of 18-20 ft., or to the approximate levels of a brown 19<sup>th</sup> century fill and historic deposit. Absolute elevations at this surface were 8-10 ft. amsl. Across much of the project area, two discrete fill types were recognized. The uppermost fill consisted of reddish coarse and gravelly sands (5YR 4/4) with brick fragments and historic building debris. It was excavated en masse to the level of a lower historic (19<sup>th</sup> century) fill that consisted of massive to locally stratified coarse brown sands. These, in turn overlay a complex set of stratified gravels and sands laterally interdigited with more massive sands (7.5YR 5/3 to 6/3). The disconformity

between the lower fill and the stratified sands and gravels marks the separation of the historic and late Quaternary landscapes. The bulk of the Late Quaternary sands were of obvious fluvial origin. On closer inspection several facies changes were evident within the lower (fluvial) sediments.

The general stratigraphic break between the (lower) brown  $19^{th}$  century fill and the (upper) reddish, debris laden  $19^{th}$ - $20^{th}$  century fill was a baseline for the excavation and was identified in the field as "Step 1". Step 1 was at  $\pm$  9 ft. amsl, the surface from which all depths within the archeological trenches were measured.

Geoarcheological observations of select and diagnostic exposures were made at URS Trenches 2, 3, 4, 5, and 6 ("T" designations in Figure A.2) which were open at the time of the investigations. The most comprehensive descriptions were made at T-2 and T-6. T-2 was the longest exposure (east-west) and extended approximately 125 ft. east-west across the broadest expanse of the site. The profiles extended to maximum depths of 4-5 ft. T-6 provided a window to the deepest sequences that reached water table at a depth of 3 ft. amsl. Water table depths reflect the daily tidal movements along the shoreline of Manhattan. A single radiocarbon date was subsequently retrieved from a buried soil in T-8, but that exposure was not open at the time of the field study.

Sediments were described in the field following the criteria of Soil Survey Staff (1994). Observations were made of Munsell color; texture; structure; consistence; and horizon boundary. Stratigraphic terminology and criteria follow recent guidelines set forth in the International Stratigraphic Guide (ISG 1994). Geostratigraphic units as well as soil units were used for defining strata. Geo-strata established how sediments were laid down by natural agency; deposition occurs by water, wind, gravity and, in the present study, by extensive landscape reworking ("fill"). Soils were used to determine the type and extent of weathering in place, (containing variants of "A-B-C" profiles). It is the soils that marked surfaces of stability in which the prehistoric or early historic topographies could be reconstructed. In this study the geo-strata provide the baseline for organizing site sequences because most of the sediment bodies were representative of rapid and/or episodic accumulation. This applies to the historic fill as well as to the late glacial and Holocene stream deposits. Only a single formal soil—an AB horizon--was recognized at Worth Street and it was both sloping and discontinuous signifying a major break in the natural topography. The soil was identified within the central segment of T-2 and later in T-8. It

separated the built and natural landscapes on site. Formal stratigraphic descriptions for the Worth Street succession are presented in Tables 1.

Two (2) bulk organic samples were taken from the AB soil for radiometric dating. The samples were dated by humic acid assays. Each was derived from a separate topographic position. While soils are less than ideal for radiocarbon dating because of potential contamination and taphonomic concerns, the refinement of AMS dating techniques coupled with careful recognition of the source of potentially datable sediment has enhanced the utility of the method (Martin and Johnson 1995; Taylor 1997). Humic acid dates represent the Apparent Mean Residence Time (AMRT) for organic material that has been decomposed (Matthews 1985; Scharpenseel and Schiffman 1977). The material processed provides an order of magnitude age for environmental events and buried surfaces. In this study, both conventional [14C] and calibrated [cal yr B.P.] radiocarbon ages are reported (Stuiver et al. 1998) as appropriate (Appendix 1).

This account begins with a brief background of the Late Quaternary geoarcheology of Lower Manhattan. It proceeds with a description of the stratigraphy of exposures examined at Worth Street. This is followed by the results of radiocarbon dating. A reconstruction of the landscape history is then presented. Results of the Worth Street investigations are then integrated with the emerging subsurface chronologies and reconstructions of Lower Manhattan. Finally, a comprehensive statement on landscape history and archeological potential is proposed based on these investigations.

#### Late Quaternary Landscapes of Lower Manhattan

The prehistoric potential in the vicinity of the Worth Street site is of considerable interest to archeologists, because of its unique estuarine setting and the proven sensitivity of brackish environments for aboriginal and historic sites in the Northeast and Middle Atlantic areas (Schuldenrein 1994; Thorbahn and Cox 1988). Across Lower Manhattan, however, remnants of glacial features, principally steep sided hills called kames, that chronicle the latest (Woodfordian) advance have resulted in the estuarine record's being preserved in select locations. More significantly, Euroamerican landscaping and industrial-age development has irreparably destroyed native natural contours, landforms, and drainage nets. As noted, the surface elevations in the vicinity of Worth Street, currently 20-30 feet (6-9 m) above Mean Sea Level (amsl) (Mueser and Rutledge 2001: 2), seal in the cumulative buildups of historic debris and redeposited

landfill. Fortunately, 18th, 19th and early 20th century geographers' and geologists' accounts provide considerable information on the early colonial terrain and stratigraphy (Cozzens 1843; Gratacap 1909; Reeds 1930; Schuberth 1968). To some degree these accounts facilitate interpretations of pre-Euroamerican landscapes. The most critical pre-industrial age feature in the project area was the Collect Pond, the main interior impoundment of Lower Manhattan (Andrews 1893; Neville 1995). Several reconstructions of the Collect's positions have been attempted (Geismar 1993; Yamin et al. 1995a) and its general location with respect to the project area and 18th century landscape features is shown in Figures A.3 and A.4. No single depiction of the Collect can be considered completely accurate, since the margins of the pond varied with respect to seasonal and yearly discharge from its feeder springs and surface runoff; survey error is also critical in assessing the precision of the feature's placement for the various historic maps.

In the vicinity of the project area, subsurface archeological explorations have largely concentrated on historic sites, such that the relationships between aboriginal occupations, natural surfaces, and the changing shoreline of Lower Manhattan have not been documented in any detail (although see Skinner 1942). While researchers have postulated that the water levels of the New York City vicinity may have risen by as much as 45 feet (14 m) over the last 6000 years (Newman et al. 1969), there is, to date, no direct association between prehistoric remains and the submerged shoreline of Lower Manhattan. A recent compilation of radiocarbon dates spanning a broad range of on-shore and offshore deposits in the vicinity of New York Harbor has shown that sediments on the order of 15-20 feet (5 meters) below sea level are generally less than 5000 years old, although considerably older (i.e. Late Pleistocene) lake beds are preserved at around these depths in the Hackensack Meadowlands to the west (Thieme 2000: Table 1).

#### Regional Geology and Late Quaternary Stratigraphy

The general geology of Lower Manhattan has been summarized in several sources, but one of the more comprehensive is that of Newman et al. (1969) who developed a depositional chronology for the Hudson Estuary. Their model mapped the general sequence as consisting of bedrock (typically gneiss and schist) to depths of 200 ft. BMSL. Bedrock is overlain by what has been referred to as limited "bodies of till" and/or similarly thin distributions of varved lake (lacustrine) sediments between 125-200 ft. bmsl (see also Reeds 1930). Above

depths of 100-125 ft. bmsl are more extensive fluvial sands and gravels that represent erosional deposits of the post-lakes period that were laid down by terminal and post-glacial meltwaters (after 13,000 B.P.). These represent a major fluvial episode that immediately precedes the early Holocene marine transgression along the Hudson Estuary. Transgressive deposits are generally found above 130 ft. BMSL and consist of organic silts and peats. These will extend to within several feet of contemporary sea level. It is emphasized that the fluvial sands and organic silts and peats are often interdigited, since they represent oscillations in the transgression of sea level. Thus, depending on location, the fluvial sands and organics form cyclical depositions, often tens of meters deep. These deposits are of most immediate concern for contemporary geoarcheological research, since they register the interface between the oldest natural surfaces and the initial cultural (prehistoric and historic) occupations. Deposits above sea-level typically consist of urban fills that account for elevation ranges across Lower Manhattan of 10-20 ft. amsl.

The "bedrock-lake bed-fluvial sand-estuarine silt-urban fill" sequences must be considered generalized at best. Considerable variability can be expected even within the substrate of Lower Manhattan. Such factors as iso-eustasy ("post-glacial uplift"), fluvial dynamics, and the glacial topography have modified local landscapes and the composition and distributions of sediments registering them. As discussed further on, estuarine deposits are often not encountered over the course of geoarcheological deep testing below sea-level because the remnants of more massive glacial features (kames, terraces, and outwash trains) extend many meters below sea level, depending on the original configuration of glacial features at the margins of the Harbor Hills moraine, which marked the terminal Woodfordian advance (Sirkin 1967, 1986).

The bedrock geology of Lower Manhattan has been extensively researched and depths to the basement complex were mapped as early as the mid-nineteenth century (Cozzens 1843). In Lower Manhattan micaceous schists of the Manhattan Formation are encountered 80-330 ft. (25-100 m) below surface (Schuberth 1968; Newman et al. 1969). The deepest borings at Worth Street reached 95 feet and did not encounter bedrock, terminating instead in "a granular glacial till" (Mueser Rutledge 2001: 5); this would suggest that evidence for the pro-glacial lake bed sequence was either eroded or that the location marked a sill separating the various lake basins that inundated the lower Hudson region (see Newman et al., 1969).

Early geographers and geologists were aware of the extent and thickness of the local unconsolidated glacial deposits (Cozzens 1843; Hobbs 1905). These were mapped variously as "Diluvium" or "Drift" and were not typically differentiated by outwash (stream derived) or till (glacial front) facies. Surface sediments have been formally mapped on a large scale, most recently in a compilation of the Hudson River Quadrangle (4°x6°) by Fullerton (1992). Quaternary deposits in Lower Manhattan were classified either as "lake, ice-contact, and outwash sands" or "sand to clay till (ground moraine)", thus establishing the complex glacial landform configuration at the ice front. At the close of the Pleistocene (18,000-12,000 B.P.) glacial lakes Hackensack and Flushing merged near lower Manhattan, leaving distinct varve sequences at lower elevations (Newman et al. 1969; Schuberth 1968); local exposures are rarely preserved because of post-glacial erosion, scouring and effects of upwarping. Schuberth (1968: 188) calls attention to surface glacial features, specifically "low and relatively steep-sided hills of sand and gravel called kames" north and west of New York City that are accumulations of rock debris carried in by glacial activity. As discussed below, the kames were the prominent hills that hemmed in the Collect Pond prior to extensive leveling activities in the mid-19th century.

#### Geotechnical Explorations at Worth Street and Vicinity

Boring and subsurface exploration in the Worth Street project area have been undertaken several times over the past 150 years in conjunction with construction programs in Lower Manhattan. Gratacap (1909: 36-40) has summarized some of the earliest historic logs, describing two stratigraphic sections that extended up to 100 ft. (30 m). The first (near Centre Street) consisted of upper levels of "made ground" (land fill) underlain by black muds, blue clays, and gravel and rocks". The second (Broadway and Cedar) featured 2.5 m of land fill atop fine sands and the "running sands." Gratacap (1909: 40) correctly attributes deposition of the finer materials (sands, muds, clays) to the action of running water, while coarser components--gravelly sands and rock--represent resorted glacial drift. In retrospect, it would appear that the uppermost muds and clays underlying the fills are the products of the terminal phase of Glacial Lake Flushing and the onset of Holocene estuary formation at the mouth of the Hudson. As noted, much of the evidence for near shore sedimentation and stabilization of the Manhattan shoreline (around 5000 B.P.) has been destroyed by twentieth century grading activities, although a recently dated boring at Foley Square chronicles sedimentation of the

shoreline—including peat and near shore sedimentation-between 4700-1200 B.P. (Schuldenrein, i.p.). The Gratacap (1909) accounts of upper profiles correspond to intact estuarine sequences assembled for upstream locations (see Newman et al. 1969).

Closer to the project area three (3) sets of core logs are available for scrutiny. Two of these are from Foley Square (200-600 feet east of Worth Street) and one from the geotechnical efforts associated with the present construction project. Results of each are presented in turn.

One set of Foley Square borings was reviewed by Geismar (1993: Table 1 and Figure 9) and summarize results for more than forty (40) bore logs between 1914 and 1937. While the logs suggest considerable variability in substrate composition, much of this is in the upper 16 ft. (5 m) and represents episodic, highly localized land filling. In general, the descriptions suggest that land fill typically extends to in excess of 20 ft. (6 m). Underlying sediments are dominantly "gravels and sands" and various grades of sorted sands, typically gray to red in color.

A second series of forty eight (48) borings was undertaken for the Foley Square Courthouse Annex in 1971 (Gruzen 1971). These spanned the square block bounded by Cardinal Hayes Place, Park Row, Pearl Street and Duane Street (Figure A.1). Descriptions for this series are slightly more detailed than those presented for the Court House and identify several facies changes between 20 and 27 ft. (6-8 m) and specifically within the red-brown sediments generally considered to be of alluvial origin in the older logs. Depth of land fill is extremely variable in this area, ranging between 3 and 13 ft. (1-4 m). It is noted that surface elevations in this area are on the order of 14.5 ft. (4.4 m) such that fills extend just barely to elevations of ±0 ft. (0 m) amsl, effectively to sea level depths.

For the Worth Street project, Mueser Rutledge (2001: Figure B-1) excavated eleven (11) borings generally around the perimeter of the site. These show that typical profiles feature 20 feet of fill overlying 60- 90 feet of sand. Coarser gravelly-sand deposits were only identified at depths >90 feet on the northern edge of the site (along Catherine Street).

In the interpretations of these boring records it is stressed that evidence informing on Quaternary sedimentation, landscape history and chronology is lacking. This is because as geotechnical documents, the bore sections present only a broad measure of vertical resolution that offsets the most rudimentary breaks in sediment type; these corings were undertaken for structural purposes.

The extensive landscaping of Worth Street and east (to the vicinity of Foley Square) has removed most of the Holocene and potential archeological horizons almost everywhere. Fine scale stratigraphic breaks that may preserve sedimentary evidence for land use activities between prehistoric through early Euro-American, agricultural and industrial periods are missing and cannot be identified in boring logs.

Correlations between the boring logs nevertheless disclose the following sedimentary trends:

- Red brown sands intercalated with brick and rubble debris are pervasive in the upper 20 feet of sediment underlying most of Lower Manhattan's streets in the project area;
- These sands (originally reworked alluvium and/or glacial outwash) represent the collective efforts of landscaping and filling activities that began in the 17<sup>th</sup> and 18<sup>th</sup> centuries and became more systematic and intensive in the 19<sup>th</sup> and 20<sup>th</sup> centuries;
- At depths approaching sea-level (0 ft. amsl) sandy-rubble fill sequences are underlain by late Quaternary stream ("alluvial"), lake bed, or glacial ("till") deposits that are brown-tan in color and are often bedded and stratified;
- At select locations the lateral continuity of the glacial deposits is disrupted by finer grained peats and estuarine deposits indicative of Holocene sea-level changes (i.e. still stands and transgressive pulses).

Geoarcheological research undertaken over the past two decades has provided insights into landscape changes and chronologies of events that are represented by the deposits underlying the landfills of New York (see Cantwell and diZerega Wall 2001: Chapter 13). Such research consists of microstratigraphic assessments of the deposits underlying present street level, and include the fill sediments themselves as well as the geogenic (i.e., naturally laid down) sediments and weathered soils encountered at elevations approximating sea level or lower. These results are presented with respect to the Worth Street findings in a subsequent section of this study.

#### Historic Geography

The footprint of the Worth Street project area straddles a pre-industrial age landscape that was significantly different from that of today. An early account describes the immediate landscape as featuring a central pond (the Collect) surrounded by high hills and bordered by a marsh (Lispenard Meadows) (Gratacap 1909: 52). As discussed, most of the 18th and 19th century maps depict the hilly terrain (Figures A.3 and A.4) surrounding the Collect, although dimensions of the landforms vary.

Figure A.5 is a composite landscape reconstruction of the pre-industrial age landscape superimposed on the contemporary street grid of Lower Manhattan. The reconstruction was developed from the earliest historic maps, supplemented by field observations by the author at sites B-1 and the MCC Tunnel. It is instructive for guiding interpretations of the subsurface stratigraphy of the general project area.

As shown, three (3) prominent landforms fashioned the physiography of the area. These include two glacial kames and the 18th century Collect Pond (Figure A.5). Kames are glacial features, typically low and relatively steep-sided hills of stratified sands and gravels that were laid down along the lower Hudson Valley during the terminal glacial (Woodfordian) advance, ca. 14,000 B.P. Both kames appear as extensive hills in the Viele (1874) map of the late 19th century. Figure A.5 shows that the northernmost kame once extended eastward to the Worth Street site (also Figures A.3 and A.4). This landscape feature was named Kalkhoek Promontory by the Dutch (Neville 1995). The southern kame—historically known as Catimuts Hill (Gratacap 1909)—may have delimited the southern limits of the Collect.

Kalkhoek Promontory was a massive feature extending at least 1200 feet north-northeast and spanning 1000 feet east-west. The 18th century maps depict the landform as an extensive interfluve, perhaps consisting of two north-facing lobes (Figure A.4). Gratacap (1909: 30) describes it as "...a hill whose substratum forms the down grade to Broadway toward Canal Street, rose at Franklin Street and declined towards the still obvious hollow of Centre Street, commanding the Collect Pond and the inconspicuous city to the south." The landform was so prominent that as late as 1772, Broadway terminated at Duane Street and the kame itself was identified as "... a noble hill covered with fine fruit trees known as Rutger's Orchard. The ground was much higher then than now." (Brown 1913: 283). By the mid-19th century the kame may have been partially razed, since an

1843 account notes that it was only 25-30 feet above street level. That account suggests that the "built landscapes" of this part of Lower Manhattan had not yet been elevated to present levels—15-20 ft. amsl—at this time (Cantwell and diZerega Wall 2001: Chapter 13).

Figure A.5 shows that the foot of the southern kame extended westward to Broadway. The landform is described as "... a high hill known as Catimuts Hill (probably an Indian name) to the Fresh Water brook that ran from Collect Pond to the East River [probably the Eastern Outlet in Figure A.5], and this hillslope was so steep that in order to avoid the abrupt declivity another road of easier grade was formed.....about on the present line of Duane and Rose Streets to the junction of Pearl Street" (Gratacap 1909: 60-61). The prominence of Catimuts Hill cannot be overestimated. The Viele (1874) map shows that the landscape was the site of considerable activity as it was traversed by Park Row, lower Chatham Street and descended steeply to City Hall Park (Figure A.5). The Commons were situated on the southeast segment of the landscape. Peck's Hill referred to the easternmost portion of the kame (overlooking Park Row in Figure A.5) and was probably the highest portion of the landform (Brown 1913). Catimuts Hill may once have been part of a continuous glacial feature that merged with the northern outcrop; as shown in Figure A.5, only Reade and Duane streets were part of the lower lying terrain separating Kalkhoek Promontory and Catimuts Hill. It is certainly possible that Dutch-era landscaping resulted in the leveling of discontinuous segments of the elevated terrain.

The third prominent and defunct feature of the early historic landscape was the Collect Pond. The Collect emerged from a residual glacial drainage line and was probably a former tributary of the Holocene Hudson trench. Early colonial accounts alluded to the Collect as the largest of a series of bog-like ponds, surrounded by hills (read kames), that spanned the lower portions of the island (Brown 1913; Cozzens 1843; Gratacap 1909). It was approximately 10 acres in extent and waters extended to depths in excess of fifteen meters (fifty feet) (Andrews 1893). The pond was fed by numerous natural springs. In the early 1700's the pond was heavily stocked with fish and served as a skating pond during the winter. Shortly thereafter, the Collect Pond became the central processing station for a burgeoning tanning industry that had continued to migrate progressively northward from the tip of Manhattan. The Pearl Street tanneries were the most prominent and utilized the Collect Pond and its ancillary effluents (i.e., Eastern Outlet) for hide processing, possibly draining the springs and

influents that supplied fresh water to the local basin (Rothschild 1990; Neville 1995; Geismar 1993; Yamin et al. 1995a). Early in the 19th century (1801), New Yorkers began to fill in the Collect Pond with earth from the construction of City Hall's foundation (Cozzens 1843). By 1805, the pond was entirely covered over after a debate was raised as to whether a canal should be left running through it. By this time, the pond had become a foul smelling, stagnant pool in which rubbish and especially animal carcasses and hides were discarded. Once filled in, the former pond became the site of the prison referred to as the Tombs.

The historic utilization of the Collect has critical implications for the availability of fresh water in historic lower Manhattan. Sources of fresh water in lower Manhattan were rare, as documented in the earliest historic accounts. Gratacap (1909: 53), citing early accounts, noted that in 1690 there were about a dozen public wells and that the water was of poor quality. The Maerschalck map (1754) illustrates the emergence of the Eastern Outlet as a funnel draining the eastern divide of Manhattan Island. Its evolution was apparently linked to the general lowering of the water tables by the drainage of Lispenard's Meadow (1733) north of Kalkhoek Promontory and the localized rechanneling of the Outlet in conjunction with late 18th century tanning activities. The lowered water table was partially due to the increased dependence on the spring waters by the burgeoning tanning industry, but also related to reclamation of the surrounding terrain involving construction of drains by Anthony Rutgers (see Neville 1995: 68 ff). As a result of water table lowering, wells began to proliferate in Lower Manhattan. Cozzens (1843) makes reference to at least two of these in the vicinity of the project area: one at White and Elm (currently Lafayette) Street and a second at Grand Street. Both were related to municipal works and were originally constructed to supply the area's water needs in the late 18th century.

Lower Manhattan was a major center for water distribution during the late eighteenth and nineteenth centuries. Catimuts Hill served as the site of a gravity-fed water distribution center following its construction by the Manhattan Company in the early nineteenth century. Examination of the Valentine Map (1863) shows that the well dated to the time of the construction of the Free Church on the Worth Street site property (1835) is emplaced at the approximate eastern footslope of Kalkhoek Promontory. The Kalkhoek Promontory was the location of an earlier water distribution reservoir for the never completed New York Water Works built just prior to the Revolution (Neville 1995: 17). Thus it would have

been the ideal location for another series of wells built because of progressive water table lowering as the municipal well system expanded in the 19<sup>th</sup> century.

#### Field and Laboratory Investigations

The application of the principles of stratigraphic separation to the Worth Street sequence resulted in the establishment of three (3) master Depositional Units (1-3) and seven (7) subordinate layers within them (2a-2b; 3a-3e) (Figure A.6). Assignment of Depositional Units was based on chronology and structural and textural changes in unit lithology. The Depositional Units were separable by diverse sedimentary processes and origins. Subordinate units represented contemporaneous or near contemporaneous facies changes within a single master Depositional Unit or time frame. These also included sediments modified by soil formation (weathering) and diagenetic processes (i.e., waterlogging and oxidation-reduction) subsequent to deposition. As detailed below, while in excess of 10,000 years are represented in the 8 ft. deep composite stratigraphic column, 2.5 ft. (Units 1-2) accumulated within the past 200 years. Based on the radiocarbon dates, there is no net sedimentation between ca. 6500 B.P. and the 19th century. The base of the column (Unit 3) records late glacial to early post-glacial events along the margins of the Hudson channel in the lowermost 5.5 ft. of the sequence.

#### General Site Stratigraphy

As shown in Figure A.6, the two uppermost units are historic fills. Unit 1 (Upper Historic Fill/Overburden) is a distinct fill that accumulated as a result of the surface stripping at the level of Step 1. It is nevertheless representative of the deepest upper fills. The sediment is offset by its deep red sandy parent material, originally either a reworked glacial till or outwash, that was transported and laid down in conjunction with particular historic landscaping activities. Unit 2 (Lower Historic Fill/Relandscaping Debris) contained 19<sup>th</sup> and 20<sup>th</sup> century artifacts and decomposed organics in a heterogeneous series of rubbly brown sands and silts. Unit 3 (Ice Contact and Fluviatile Sands and Gravels) consisted of a complex set of stratified sands and gravels, well to massively bedded and containing lateral discontinuities. The uppermost sands in this Unit were capped by an Early to Middle Holocene soil and the base of the sequence encountered the water table which accounted for the lowermost redoximorphic sands and gleyed horizons. This unit probably dates to ca. 14,000 B.P. at the depths exposed (8 ft. below grade;

 $\pm$  1-3 ft. amsl). It is dominated by stratified drift, and stream or outwash sands and gravels.

In sum, the upper 2.5 ft. of the studied sequence consists of two discrete historic fill types (Units 1 and 2), generally post-dating 1850. The lower 5.5 ft. (Unit 3) is the record of Late Quaternary sedimentation that is antecedent to the capping soil dated to ca. 8000-6000 B.P. The lowermost exposed sediments were laid down during the late Woodfordian (kame construction) and in the subsequent post-glacial (early Holocene alluviation) along the post-glacial trench of the Hudson channel.

The composite stratigraphy spanning the Worth Street sequence was assembled from observations in Trench 2, although the basal sediments (Units 3d, 3e) were described from Trench 6 (see Figure A.2 for spatial relationships between trenches). The following sedimentary sequence was recognized (youngest to oldest):

#### Upper Historic Fill, Overburden

19th and 20th century landfill, rubble, and residua of urban habitation (i.e., foundation, utility and construction debris);

#### Lower Historic Fill, Relandscaping Debris

Dominantly 19<sup>th</sup> century rubbly matrices of brown sands and silts with truncated features (burnt floors, house debris, discard and refuse loci). These include:

- Sandy gravel fills with dense anthropogenic materials including burnt brick, concrete, burnt floor and preserved wood (eastern exposure);
- Pebbly sands, silts and clays (oxidized and reduced) containing organic mats and silt drapes indicative of standing water (western exposure).

### Glacial to Post-glacial Ice Contact and Fluviatile Sands and Gravels Mainly massive coarse-medium sands with gravel beds and lenticular sands. Sub-units include:

- Cambic paleosol developed on silty medium sand with subangular blocky structures (central exposure);
- Cross-bedded coarse-medium sands capping column of high energy discharge (western exposure);
- Imbricated and sub-horizontal sands in sandy matrix underlying high discharge sands (western exposure);

- Iron and manganese depleted (reduced), gleyed organics above medium-coarse sands (eastern exposure);
- Iron and manganese enriched (oxidized), well-sorted sands (eastern exposure).

The Unit chronology is indexed by the abundant historic artifacts in the upper 2.5 ft. and the two (2) Early to Middle Holocene radiocarbon dates obtained from the unit 3a (Figure A.6). As illustrated, the well was identified on western edge of Trench 2 and extends through cross bedded deposits (3b and 3c) that were incised through the more massive sands of the primary Late Quaternary deposition (3) (Plate A.1). The foresets of the primary beds (3b) suggest channel flow that was primarily to the west, although steep opposing crossbeds may indicate meandering stream flow or deglaciation at the front of the kame (Plate A.1). The redoximorphic features at the base of the exposure can be presumed to extend across the buried local landscape, as they mark the depths of sea level (Plate A.2) and the present groundwater level. These oscillate within a vertical range of at least 6 ft. in response to tidal effects.

Table 1 summarizes the principal sedimentologic properties of the subunits. Each sub-unit is described with respect to depth; color (Munsell value, chroma, and hue); texture; structure; relative degrees of mottling, stoniness, roots, and oxidation/reduction (Fe/Mn); and distinctness of boundary. A final column details the overall composition of the sediment matrix.

A synoptic classification of the Depositional Units is presented below. Stratification, chronology and sedimentology are indexed to Figure A.6 and Table A.1.

#### Unit 1

These uppermost sediments were exposed on the eastern and western edges of Trench 2 (Plate A.3). Sediment composition and consistence is relatively uniform along both exposures to a depth of 1.1 ft. The principal matrix is an admixture of medium-fine sands and rubble. Source material is a poorly sorted, red-sandy glacial outwash derived from the East River beach that may have some alluvial contributions. This fill was locally available and was variously transported onto the site from various local

sources; it is intergraded with sandy interbeds. Structures are massive to granular. Artifact concentrations are dense and include abundant broken construction debris, cinder, refuse and fragmented and rusted iron. The sandy interbeds are slope derived and poorly sorted, possibly laid down during an episode of erosion, perhaps from a spoil pile flanking the locality. Unit 1 is sharply offset from sub-unit 2 since the underlying parent sediment is brown and derived from a different glacial source material. This uppermost fill appears to be associated with building construction from the late (20th century) to earlier (mid-19th century) industrial age, because of abundant and varied concentrations of cinder and brick debris as well as broad distributions of nails, plaster and wood refuse. Within Unit 1, sediments are not separable by time frame because, where exposed, they have been mixed by heavy machinery.

#### Unit 2

The unit consists of laterally separable facies of historically reworked fills that are resorted, in part, by winnowing action of sheetflow. The eastern facies (2/2a) is dominantly a sandy gravel fill with slightly imbricated beds, extending to depths of 1.1-2.5 feet. The western facies (2b) is finer and consists of laminar to lenticular interbeds of pebbly sands, silts, and clays, capping and underlying thicker, more massive fills with dense rubble, cinder, and brick debris (1.1-2.3 feet) (Plate A.3).

More detailed microstratigraphic examination disclosed that 2a has clast-supported wedges of poorly sorted sands and gravels incorporating burnt brick, plaster, and concrete. Sloping to laminar interbeds suggest redeposition of fines from a former discard locus, perhaps due to localized flooding. In the center of the section dense organic mats, fibrous wood segments, and decayed wooden boards implicate a burnt floor, perhaps covered by planks from an outbuilding. Burnt lenses are 5-10 mm thick, clearly stratified.

2b also features sheetflow lenses incorporating finer rhythmite-like sets of silts, sands and thin gravel stringers (5-10 mm thick), weakly sloping (to 5°). Weak subangular blocky structures are visible in silt beds, some of which are olivine (reduced) while others are black and organic with intact vegetation mats and preserved organic filaments and root structures.

Iron/manganese streaks, stains and heterogeneous mottles as well as field moist consistence are suggestive of water-logging due to a perched water table; this signifies moist conditions during and subsequent to accumulation. Coarser fill elements (brick fragments, loose wood, plaster, and cinders) are identifiable within fine gravelly interbeds.

Lateral separation of facies 2/2a and 2b is suggestive of deliberate landscaping and preparation of the initial occupation surfaces above the (weathered) glacial sediments. This activity probably occurred during the middle 19<sup>th</sup> century and perhaps in association with the construction for the Free Church in 1835.

#### Unit 3

An ice-contact (3/3a) (Plate A.4) and two fluviatile facies (3b, 3c) (Plate A.1) are recognized above water table (2.3-6.1 feet). Hydromorphic sediments associated with the massive to weakly stratified ice contact deposition (3d, 3e) (Plate A.2) extend to the base of the section (6.1-> 8 feet). Matrices are dominated by coarser sands and gravels, variably sorted and bedded. These are complex depositions laid down and modified in Glacial lake Hudson and include fluvial discharges (outwash, alluvium) as well as remnant landforms, most notably kame terraces; the latter were truncated, but the stratified beds are typical of ice margin drift.

Facies 3 is massive, interbedded with well sorted lenses of coarse to medium sands. Sands included abundant heavy minerals and 5-10% mica (occasionally large flakes [to 8 mm]) (Plate A.4). Organics cap several lenticular depositions. Diffuse and thin gravel stringers slope weakly to east (5-7°). This sediment body may represent the truncated kame landform.

Sub-unit 3a caps the central portion of the section for a length of 35 feet. This is a moderately well developed soil with weak medium subangular blocky structures and compound peds (break into laminar structures) developed in a silty medium sand. This is a possible AB horizon. Abundant Fe/Mn streaking is characteristic at ped interfaces; organic infillings and diffuse charcoal are dispersed throughout soil. At exposure the horizon is near level, but it it slopes steeply to south. Radiocarbon determinations date the formation of this soil within the range 8300-6700 B.P. (Early-Middle Holocene).

Facies 3b and 3c are steeply sloping fluviatile or possibly deltaic foreset beds (to 24° southeast) (Plate A.1). They truncate the kame sediments on the western exposure. The upper beds (3b) are well stratified, and fining upward from medium to fine sands and silts. Upper sets of the deposition are organic. Lower beds (3c) are a matrix of sands, cobbles and ellipsoid/ovate with beds of imbricated gravels, sub-angular to sub-rounded with abraded faces (slopes of 5-15° to east). Both facies are suggestive of high discharge.

Units 3d and 3e were identified at the water table (± 1 ft. amsl) (Plate A.2). They are an extension of the primary sediment body (Facies 3). Unit 3d consists of Mn/Fe depleted sands and settling silts. Gleys up to 1 ft. thick consist of clay-silts overlying oxidized (Mn/Fe enriched) well sorted sands. These horizons identify the redoximorphic zone of the oscillating water table.

Unit 3 is of glacial origin and represents the complex landform and stratigraphic signature at the melting ice front in the vicinity of the retreating terminal Wisconsinan glacier and pro-glacial Lake Hudson.

#### Radiocarbon Chronology

The entire succession of events at 107-117 Worth Street was indexed by the historic artifact chronology (for Units 1 and 2) and by two radiocarbon dates submitted from the soil horizon of Unit 3a. The historic artifacts terminated abruptly at the interfaces of Units 2a or 2b with 3 or 3a. Since the composition of the Unit 3 sediment complex established its glaciogenic origins, the only possible evidence for preserving an intact Holocene surface was unit 3a, an apparent paleosol recognized in the field as an AB horizon.

Buried soils are less than ideal contexts for establishing firm dates for prehistoric events. This is because the organic matter within soil horizons is subject to churning and decomposition during and after the long period of surface stabilization. As a result the humic materials dated represent the average age of the horizon formed during soil formation, also known as the Apparent Mean Residence Time (AMRT) (Matthews 1985; Scharpenseel and Schiffman 1977; Taylor 1987). The determinations on soil organic matter provide an order of magnitude date for environmental events and buried surfaces preserved in sediments underlying the cultural horizon. Samples typically suffer a mean residence error older than time of burial and are best considered a maximum age for the unit that buries the soil (Frederick 2001).

Nevertheless at Worth Street, the lateral extent and the thickness of the sloping paleosol capping the glacial deposits was consistent with the preservation of a surface and cultural materials of prehistoric age.

Soil humates were collected from two separate locations, but near identical depths within the paleosol: in Trench 2, segment D (Plate A.4); and in Trench 8, at the apex of the south sloping soil horizon (Plate A.5). Trench 2 provided a conventional radiocarbon date of  $6720\pm50$  B.P. (Beta-158799; organic sediment;  $\delta^{13}$ C=-22.7%) and the specimen from Trench 8 was dated to 8290±50 B.P. (Beta-158800; organic sediment;  $\delta^{13}$ C=-21.5%) Appendix 1 summarizes the radiocarbon data and includes the calibration curves. The calibration curves place the dates between 9500 and 7500 B.P.

The radiocarbon dates are consistent with a prehistoric occupation as early as the Middle Archaic period. It is stressed, however, the radiocarbon ages must be considered approximate. In this case in particular there is a possibility that the soil is older than the determinations suggest because of the near certainty of downward percolation of younger organics from Unit 2 that would tend to retard the Mean Residence Time. In this connection it is noted that the paleosol at the MCC tunnel site, in analogous stratigraphic context, provided a determination of 470±50 B.P. (Beta-77026) (Yamin et al. 1995a). Field observations indicate that the paleosol at Worth Street is both thicker and more extensive. Here two separate contexts, spaced over twenty feet apart, provided determinations of Middle Holocene age. This would be consistent with a long period of pedogenesis. Further, the presence of subangular blocky soil structures within the sandy parent material typically requires thousands of years to develop.

The argument for protracted weathering is further bolstered by the depositional hiatus between Units 3 and 2 that may extend as much as 10,000 years. Unit 3a represents a marker horizon, beneath which soils and sediments are linked to the Holocene and late Pleistocene glacio-fluvial history of the local landscape. It is the only horizon that offers the potential for preserving prehistoric materials and that preservation potential extends from at least Middle Archaic times to the Contact period.

#### Depositional History and Site Formation Processes

The Worth Street site offers a limited window on landscape changes over the last 200 years of Euro-American activity in Lower Manhattan.

Evidence for earlier American and colonial occupation is, strictly speaking, missing, but historic accounts underscore the significance of the immediate cultural and natural landscape in New York's emergence as a major commercial center in the 17<sup>th</sup> and 18<sup>th</sup> century.

Worth Street contains evidence for complex geomorphic changes for the terminal Pleistocene pleniglacial period. At elevations of 6 ft. amsl to slightly below, there is a series of stratified deposits that record the terminal Wisconsinan glacial advance on the margins of pro-glacial lakes Hudson and Albany. The sediments revealed by the excavations are most likely ice contact and outwash deposits associated with remnants of kames that once dammed these ancient lakes.

The lowermost sediments (Unit 3) minimally date to the period of the Late Wisconsinan retreat, 12,000-13,000 B.P. (Newman et al., 1969; Stanford 1997); they may be several thousand years older. The steeply sloping beds of sands and gravels (facies 3b and 3c) are typical of delta kame bedding at the margins of ice collapse (Allen 1977). In Trench 2 the most extensive body of sediment is facies 3, a massive accumulation of stratified drift expected at the location of a collapsed kame. It is possible that the fluviatile facies of strata 3b and 3c represents the stream flow along the margins of the kame. A third, and less likely, possibility is that the bedded sands and gravels represent an early Holocene (i.e., post-glacial) braided stream associated with the emerging greater Hudson drainage net. More laterally extensive exposures would provide confirming evidence for the precise source of sedimentation. In any case, these deposits are clearly related to events at the close of the Pleistocene, either to the retreat of the glaciers at the margins of the ice front and reconfigured lake basins or to the initiation of post-glacial stream flow.

A moderately well developed Cambic paleosol ("AB" horizon) is the only weathering surface encountered in the project area. As noted the sandy soil—formed in coarse glacial deposits—was radiocarbon dated to the Middle Holocene and appears to have endured well into Late Holocene times. This soil may have been forming for >5000 years, based on the age of such soils in sandy parent materials elsewhere in the northeast (Bilzi and Ciolkoscz 1977). The sandy texture of the solum as well as its weathering profile suggests that the dominant vegetation at the time was coniferous forest.

More problematic is the origin of the surface on which the soil formed. This is because while the soil is of apparent Holocene age it appears to have

weathered on kame deposits. The kame itself was clearly intact and rose over 100 feet above street surface in 18th century New York. It is not possible that the soil formed within the middle of the kame during the glacial period since the landform formed at least 14,000 years ago and could not have preserved a weathering horizon other than in its uppermost elevations. Two possible explanations could account for the Holocene age. First, the deposits of horizon 3 are not part of the intact kame, but simply represent a reworked ice-contact facies that formed the Early to Middle Holocene surface in the vicinity of the project area. A possible alternative, however, is suggested by examining the location of 101-117 Worth Street with respect to the historic landscape features depicted in Figures A.3 and A.4. The Hutchings Map (Figure A.4) shows that in the immediate site vicinity the kame is south sloping landform. It is possible that the weathered soil evolved on the level surface that graded off of the steep slopes of the kame proper and into the surrounding plain (at approximate street level and also underlain by glacial drift). The fact that the slope extends steeply south (in Trench 8; Plate A.5) indicates that the street level at Worth Street once formed an extensive prehistoric surface in the post-glacial period. To the south the surface graded into an ancient drainage feature. Figure A.4 shows that this slope grades into historic marshland, which probably formed in an earlier natural depression. In either case, the Cambic soil mimics the contours of an ancient surface that probably records the variable prehistoric surface grades of Lower Manhattan.

The first episode of landscaping associated with the parcel appears to be related to the construction of the Free Church in 1835. The unconformity between Units 3 and 2 (Figure A.6) was produced by leveling the kame known as Kalkhoek Promontory (Figures A.3, A.4, and A.5). Grading of the surface established the footprint for the church edifice and its various outbuildings, structures and lots. The planks and burnt floor of the feature in segment C marks the grade (Plate A.4). Prior to this time, the underlying sandy glacial deposits would have rendered the lands unsuitable for most forms of agriculture. This may account for minimal use of the parcel by the Dutch and English colonists. On the other hand these same sedimentary properties— high porosity of the sands and high recharge of groundwater (i.e., from the nearby freshwater springs associated with the Collect Pond)—would have made the location an ideal well site, specifically in the vicinity of

the coarsest deposits, on the western edge of Trench 2 (Figure A.6 and Plate A.1). The thickness of horizon 2, the coarseness of its sediment matrices (chiefly sands and gravels), and the brown-tan hues of the deposits (dominantly 10YR and 7.5YR) indicate that the source of the landscaping materials for the church building project was the immediate substrate. The only exception is horizon 2b which contained pockets of finer sediment and evidence of waterlogging indicative of localized flooding and redeposition because due to sheetflow.

A second period of relandscaping is evidenced by the fills of Unit 1 that effectively extend for approximately 20 feet from street level to the base of Step 1. The sediments have a distinctly redder (5YR) hue and were apparently transported from a different source area. Much higher concentrations of coarser clasts and more varied debris types—bricks of various styles, rubble including cinder and asphalt, wood and metal construction debris—are suggestive of large scale dumping, filling, and limited recontouring of the greater terrain, beginning at the turn of the 20th century. Similar fill has been described at other historic sites, most specifically at Hanover Square, where the source facies was considered to be a beach sand (Rothschild and Pickman 1990; see also Cantwell and deZerega Wall 2001: 239). Here the beach sands were an apparent near-shore facies and immediately underlay the initial (17th century Dutch) Euroamerican occupation. These sands were interpreted to represent a continuously reworked and older Pleistocene outwash. Analogous sediments are reported both capping and underlying historic deposits from excavations along the East River in Lower Manhattan. Such highly porous (well draining) sands were apparently both abundant and accessible, constituting a favored fill material for the extensive relandscaping associated with the reconfigurations of the commercial center of Lower Manhattan at the end of the 19th and beginning of the 20th century.

#### Synthesis: A Model of Landscape Archeology in Lower Manhattan

While the site formation model presented above applies directly to the archeological record at the Worth Street site, its detailed record of landscape change and occupation has more regional ramifications for understanding the evolving human and physical landscapes of Lower Manhattan. As late as the early 19th century, the local terrain still preserved the contours of the

immediate post-glacial period. Moreover, the economic foundations of colonial and early post-colonial New York were, in large measure, fashioned by activities dictated by the intensive utilization of local physical and natural resources. In particular, the Collect Pond stood out as the original boundary between town and country, eventually becoming the hub for New York's thriving tanning industry in the 18<sup>th</sup> century and ultimately the center of the notorious Five Points neighborhood by the mid-19<sup>th</sup> century (Yamin 2000).

The native geography of the area has been totally obliterated by development over the past 150 years; at least two periods of large scale land-filling resulted in the near complete leveling of the hills and rises that broke up the flat terrain of Lower Manhattan (Yamin et al. 1995a). However, the geomorphic record of pre-settlement New York City is sealed within the subsurface sediments that typically begin nearly 15-20 ft. below street grade. It is possible to reconstruct the local events leading up to the initial settlement of a good portion of Lower Manhattan by examining the stratigraphic records of several well researched locales in the vicinity of the Worth Street site.

Figure A.7 is a west-northwest to east-southeast subsurface transect spanning three (3) historic sites whose stratigraphies have been recently investigated. They include the Worth Street site (this report), Thomas Paine Park north of Foley Square (Schuldenrein, i.p.) and the MCC Tunnel at the site of the old Five Points neighborhood (Yamin et al. 1995a). This transect extends for a distance of 1600 feet. It crosses the undulating terrain that historically extended from the southeast margins of the glacial kame at Kalkhoek Promontory (101-117 Worth Street), through the southern end of the Collect Pond ("Little Collect"; Thomas Paine Park, boring B-1), and across to the southeastern margins of the Collect at the site of the former tanyards at Five Points (MCC Tunnel). The original landforms that once formed the local topography are depicted in Figure A.5. Even today, subsequent to systematic leveling and grading, surface elevations range from 17 feet to 28 feet.

The present topographic gradients still reflect landform relations that existed in the past. Accordingly, the highest elevations flank the ancient Collect Pond setting (B-1), from the edge of the former Kalkhoek Promontory on the west to the open area that marked the eastern extent of the tannery complex near the location of the Eastern Outlet (Figure A.5). The

latter funneled the waters of the Collect to the East River. The stratigraphies of these formerly higher landforms (at Worth Street and MCC Tunnel) preserve the massive terminal glacial (Woodfordian) deposits on which the Holocene Cambic soil formed. This sedimentary suite is not contained in the lower lying B-1 locality whose basal sequence consists of cyclic, time transgressive accumulations of estuarine silts and reworked near-shore deposits. Ironically, evidence for the Collect Pond's signature organic silts, sands, and slackwater clays is present only at MCC Tunnel, which formed the outer margins of the pond basin, and not in the B-1 section where it would be expected. The absence of historic marsh and/or stream sediments at B-1 can only be explained by the depth of filling at this location. As illustrated in Figure A.7, fills here extended beneath sea level, thus securing an unconformable interface between the estuarine silts and the lowermost historic fills.

Taken together, five (5) discrete sedimentary deposits (stratiforms) form the stratigraphic columns recognized in this critical section (Figure A.7). These may be summarized as follows (youngest to oldest):

# ◆ Upper Historic Fill (19<sup>th</sup> to 20<sup>th</sup> century); 15-20 ft. This is a dense, massive and heterogeneous fill containing poorly sorted, clast supported rubble. The upper 10 feet were churned by heavy equipment to level surfaces while lower accumulations (<5 feet) are often more variable in composition, containing silts and clays that appear to have been laid down on a lot by lot basis. Source material is often reddish sands, derived from reworked older outwash, dispersed the length of Manhattan's original shoreline. This fill forms a near uniform cap across much of lower Manhattan.</p>

## ◆ Lower Historic fill (19<sup>th</sup> century); 4-10 ft. Deposits are thickest and most poorly differentiated in B-1. In general matrices are separable from Upper Historic Fill, because there

separable from Upper Historic Fill, because there are visible stratified pockets. Stratification is due to localized erosion and deposition across "natural features" (i.e., ponding in yard depressions). Sediment packages contain admixtures of perishable and inorganic cultural materials

extending to the unconformity with underlying geogenic units.

## ◆ Collect Pond sediments (17<sup>th</sup>-19<sup>th</sup> century); <4 ft. Confined to MCC Tunnel. Deposit consists of organic, low energy stream sands as well as slackwater clays and silts. Laminar to lenticular bedding is characteristic of seasonally discharged alluvium. Perishable cultural materials (wood from tanning vats, waste products, and faunal remains) are abundant throughout. Sediment not identified in B-1 because of burial by substantially later, massive fill.</p>

#### ♦ Estuarine silts, sands and peats (Middle-Late Holocene); 6-10 ft.

Recognized only at B-1, these are cyclic sets of near-shore, reworked outwash and till sands and organic silts. Nearshore sands grade thinner up the sequence, while silts become thicker and progressively more organic (peats to top). Deposits record progressive shoreline stabilization between ca. 4600-1200 B.P.

#### ◆ <u>Ice contact to fluviatile sands and gravels (Late</u> Pleistocene) capped by Cambic soil (Holocene)

At MCC and Worth Street only. Very complex and diverse sequence of steep to sub-horizontally bedded sands and gravels, sometimes interdigited with more massive, unstratified sands. These are ice-front depositions of high energy fluviatile and/or delatic origin that formed at the margins of pro-glacial Lake Hudson. Truncated kame terraces recognized (Worth Street) per morphology and historic geographic accounts. Cambic soil recognized at both Worth Street and MCC Tunnel. Soil is of probable Middle to Late Holocene age.

The highest portion of the unmodified, early historic landscape was at Worth Street, which formed the edge of the glacial kame known by the Dutch as Kalkhoek Promontory. It was to the west of the Collect Pond. As discussed, however, this landform was only one in a series of such steep

sided hills of sand and gravel that defined the prominent topography of colonial New York well into the 19th century. Catimuts Hill was a more extensive feature that flanked the Collect Pond to the south. The kame terraces originally flanked former pro-glacial Lake Hudson. With the retreat of the glaciers the contours of the emerging Hudson Valley system followed those of the existing glacial topography. This topography is reflected in the early colonial period (Dutch and English) maps depicting the historic landform configurations. Subsurface excavations confirmed the dominance of kame features across the Woodfordian glacial margins of Lower Manhattan. This is expressed by the fact that only B-1 records a well stratified record of estuarine sedimentation along the later Holocene shoreline of Manhattan Island. Accordingly, the kames extended to such depths that they effectively blocked the encroachment of the transgressing shoreline. The stratigraphy illustrated in Figure A.7 also suggests that the early Holocene Hudson drainage trench cut through the kames, only partially eroding them.

The various sources of geologic, cartographic, informant, and historic data abstracted for this study can be merged with field observations to develop a more comprehensive model of landscape archeology for Lower Manhattan in the general vicinity of the Five Points area. A diachronic construct demonstrating the sequential interaction of landscape evolution, land use, occupation, and site preservation is presented in Figures 8a and 8b. The model presents a sequence of cross sections spanning the last 15,000 years. It is based on the composite stratigraphy generated at the three study locations. As discussed below, field relations and stratigraphy afford a three dimensional perspective on the landscape history. Taken together, the historic maps and the subsurface records help to establish the depositional contexts of the sediments (both pre-occupation and occupation) and to explain the stratigraphy in the absence of intact landscape relations.

For the late glacial through prehistoric periods (Stages I and II) the ancient geography shows the long term evolution of the alluvial valley that eventually gave rise to the Collect Pond, flanked on both banks by the prehistoric aged Holocene paleosol (at Worth Street and the MCC Tunnel site). For the colonial periods (Stages III and IV), the transect begins at Catimuts Hill, crosses the lower sub-basin of the Collect Pond at B-1 and the MCC Tunnel, and terminates at the Kalkhoek Promontory overlooking

Worth Street. This is the optimal projection of landscape features and human settlement prior to large scale relandscaping during the Industrial and Recent Ages (Stages V and VI). Each developmental stage in human and landscape history is considered separately below.

Stage I (Terminal Pleistocene/Holocene: 15,000-10,000 B.P.) underscores the geomorphic dynamism of the Pleistocene to Holocene transition. At this time the ancestral Hudson may have featured a distributary net that migrated southeastward and created the trough that evolved historically into Lispenard's Meadow, the poorly drained fields north of the kames fronting glacial lake Hudson. Both the MCC Tunnel and Worth Street excavations encountered remnants of the deeply stratified and steeply bedded gravels and sands that could only have been derived from extensive meltwater drainage. While Early to Middle Archaic period sites could have been located in the vicinity of both locations, the stratigraphy demonstrates that the local fluvial environments were too dynamic to have preserved archeological remains.

Stage II (Middle-Late Holocene: 8000-2000 B.P.) is the earliest period for which geological contexts bearing on archeological site potential is recorded, albeit indirectly. The Cambic paleosol (Worth Street and MCC Tunnel) probably first stabilized over 6000 years ago and was progressively enriched by soil forming processes. Since the paleosol caps a regionally extensive surface, it would have spanned most of the level terrain fronting the channel at the area hemmed in by the kame landforms. The historic breadth of this terrain, the relative narrowness of the channel, the coarseness of the channel fill, and the subdued relief along the floodplain, indicates that a braided stream would have migrated across the valley. The later Holocene channel would have been sub-tidal in its downstream end, in response to the stabilization of near shore environments. In the immediate site vicinity stream migration was confined by the depth of the kame sands, which would have blocked Holocene stream flow at depth. The stream was fed by active springs that discharged through the local aquifer. It is possible that considerable prehistoric activity (Middle Archaic-Woodland) would have occurred along the channel banks, especially since the evidence points to enrichment and incremental buildup of the soil and surface for at least 5000 years. No evidence for prehistoric occupation has been reported within the paleosol because of the limited window afforded by the testing efforts at both MCC Tunnel and Worth Street. However, site expectation should be considered high for the soil, where encountered.

By stage III times (A.D. 1650-Dutch settlement), historic maps depict extensive agricultural lands. The Lispenard Meadows functioned as farm, pasture and swamp lands depending on the permeability and composition of the soils (see Castello Plan of 1660; Lyne Plan of 1728). The Worth Street site was part of the Hook Farm at this time. The Collect Pond began to develop, perhaps as a result of delicate hydrological balances related to land use (i.e., overgrazing, destructive farming practices, accelerated erosion) and general aggradation of the alluvial surface. Drainage features were being built at this time in Lispenards Meadow. Indications are that at least two water bodies emerged at that time, both nourished by springs and run-off from the surrounding kames. These would have been the forerunners of the "Collect" and "Little Collect". By the time of Dutch settlement, the southeastern kame had been named Catimuts Hill and the lookout above Worth Street was called Kalkhoek Promontory. The topographic gradients across the transect began to diminish as a result of limited landscaping and the aforementioned sedimentation of the floodplain.

In stage IV (A.D. 1750), the Collect Pond became the central fixture of the economic landscape. The entire expanse between Catimuts Hill and Kalkhoek Promontory was part of the tannery infra-structure centered on the Collect. As discussed elsewhere (Yamin et al. 1995a), the Collect Pond was a swamp that probably was utilized for long-term hide soaking while running waters from the Eastern Outlet (Figures A.5 and A.8) were exploited by the tanners to remove chemicals and rinse the hides. In the vicinity of Worth Street, Scots Tanyard (Figure A.4) would have had access to the waters on the northwest end of the Collect, which were probably more stagnant (and favored soaking). Extensive debris, animal carcasses and tanyard waste were discarded everywhere along the swamp margins. Processing sheds would also have been built along the sill and the higher ground flanking the Collect and Eastern Outlet.

Stage V (A.D. 1850) registers the abandonment of the tanneries and burial of the Collect and the sub-basins associated with the tannery infrastructure. Extensive grading was the dominant regional activity over the course of this period. This is when the Free Church became the dominant landmark on Worth Street (constructed in 1835). The well encountered in the

excavations was also emplaced at this time or shortly before then. The area became an increasingly commercial center as the leather trade (and the tanneries) disappeared. The kames were leveled and differential grading soon created the even surfaces over which streets and sidewalks were built.

The stratigraphy documents a second major phase of land filling after A.D. 1900 (Stage VI: Contemporary), again attendant to the area's transition to its contemporary role as an administrative and legislative center. The excavated fill preserves more diverse artifact assemblages of the latter twentieth century including utility debris and large scale construction rubble. The transformation of the prehistoric environment was completed.

#### Conclusions

Geoarcheological investigations at the Worth Street site produced a wealth of information bearing on the last 15,000 years of human and landscape history of Lower Manhattan. Field observations coupled with historic accounts and geological records facilitated a reconstruction of events in the project area since the earliest known occupation of Manhattan Island. The following are the key findings of this study:

- 1. The stratigraphic column at the Worth Street site consists of three primary depositional units to a depth of about 30 feet below surface; these include 20 feet of fill (Units 1 and 2) and >10 feet of glacial sediment (Unit 3) beginning at elevations of ± 3 feet ft. amsl.
- 2. Unit 1 accounts for at least half of the column (by depth) and is the Upper Historic Fill that documents massive surface buildups and the large scale relandscaping of Lower Manhattan as it became a major administrative center in the late 19<sup>th</sup> to early 20<sup>th</sup> century; the reddish sandy fill is derived from near shore glacial deposits transported some distance from the site;
- 3. Unit 2 is the Lower Historic Fill, a localized, mid-19<sup>th</sup> century sandy deposit (3-6 ft. thick) that was used to grade the block in preparation for the construction of the Free Church (1835) and associated buildings and lots; sediments preserve features indicative of human activity and localized reworking (burnt floors, sheetflow events);
- 4. Unit 3 consists of ice contact and fluviatile sands and gravels that extend tens of ft. bmsl; these represent complex depositions at the margin of the terminal Woodfordian advance (Harbor Hills moraine)

- with proglacial Lakes Hudson and Albany. The glacial deposits are probably 15,000 years or older.
- 5. A single buried soil was recognized at the interface of the glacial deposits (Unit 3a) and the lowermost historic sediments (Unit 2). This soil was dated to 8300-6800 B.P. and has the potential for preserving archeological materials of Middle Archaic age and younger, even though no evidence for prehistoric occupation was found.
- 6. At the dawn of the Euroamerican (Dutch) occupation, 101-117 Worth Street was on the margins of an extensive glacial hill known as a kame and subsequently named Kalkhoek Promontory. The promontory overlooked the marshy lands (Lisepenard Meadows) to the north and south. That hill was probably leveled in the mid-19<sup>th</sup> century to make way for 19<sup>th</sup> century construction projects.
- 7. To the east, the property was flanked by an 18th century tannery that utilized the waters of the Collect Pond for processing hides. The site may have been on the western edge of the thriving tannery complex centered on Pearl Street. No evidence of the Collect Pond or its attendant processing basins is preserved in the subsurface stratigraphy.
- 8. The African Burial Ground lay one block south of the Worth Street site, also at the margins of Kalkhoek Promontory. No evidence of that site was recorded in the sequence.
- 9. The stratigraphy and historic geography of the site is consistent with sequences at neighboring archeological sites, near Foley Square and in the vicinity of the old Five Points neighborhood. Such sequences record deep glacial records capped by historic archeological successions that typically begin with the 18<sup>th</sup> and 19<sup>th</sup> century occupations. Evidence for prehistoric activity is lacking even though an extensive Holocene paleosol is unequivocally present across Lower Manhattan.
- 10. Analogous sequences can be expected elsewhere, such that an approach utilizing historic maps and limited subsurface excavation is optimal for recontructing post-glacial human and landscape histories with unusual clarity and resolution.

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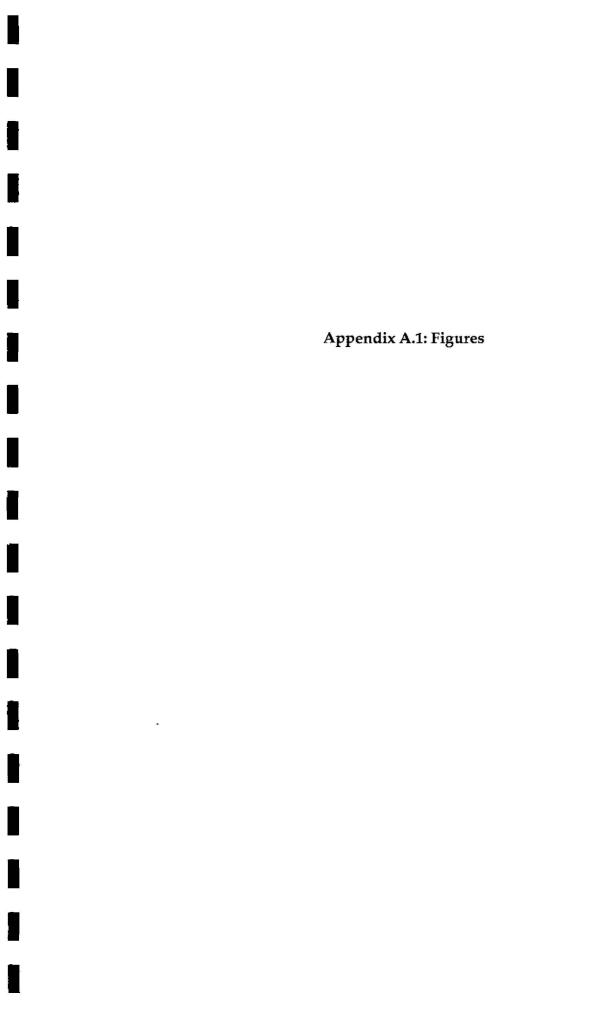
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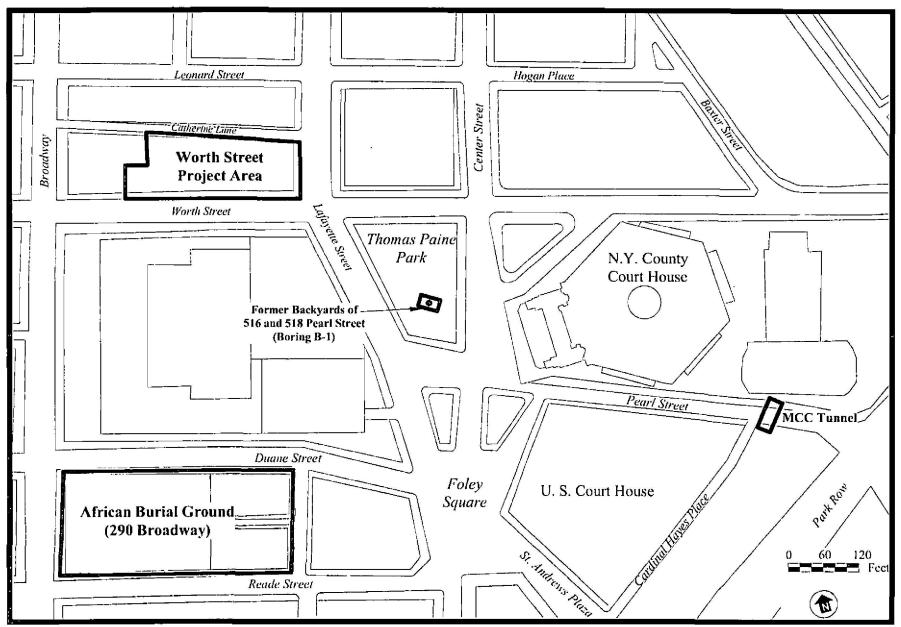


Figure A.1 Map of Project Area Showing the Worth Street Site and Other Prominent Archeological Sites Discussed in the Text.

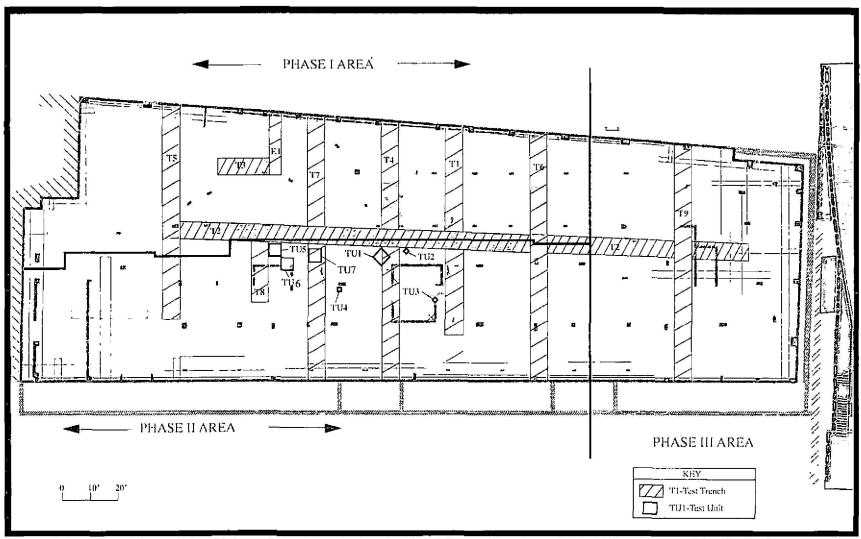


Figure A.2 Plan View of Test Units and Test Trenched at the Worth Street Site. Areas in Red Were Inspected by the Project Geoarcheologist.

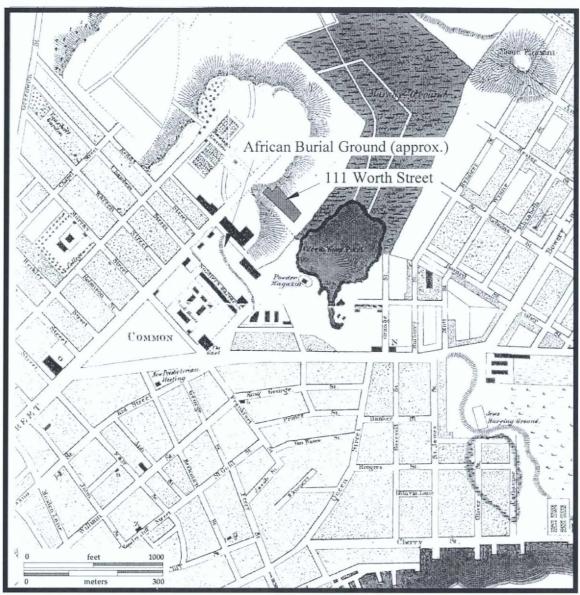


Figure A.3 Depiction of Collect Pond and Vicinity in the Mid-18th Century. Worth Street Site and African Burial Ground are Superimposed. (Source: Valentine 1863). Note Location of the Worth Street Site on Downslope of Elevated Rise (Kalkhoek Promontory) and the Extent of Poorly Drained Marshland to the North (Lispernard Meadows).

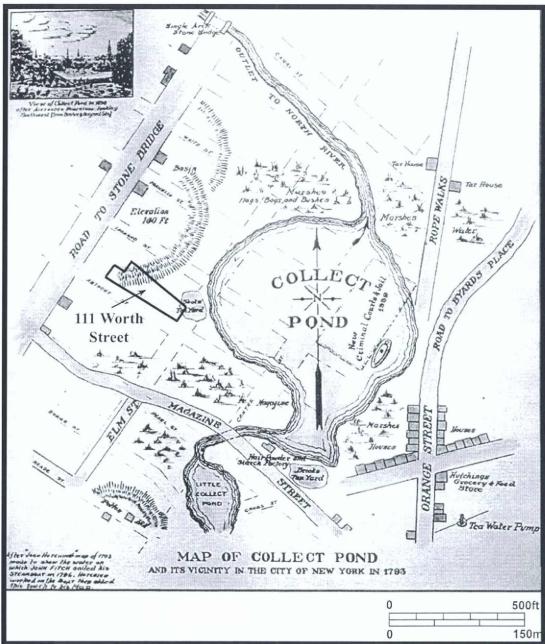


Figure A.4 Depiction of Collect Pond and Vicinity in 1793 with Worth Street Site Superimposed. Note Division of Collect into Primary and Secondary ("Little Collect") Basisns. There is a Tanyard that Abusts the Worth Street Property to the East. Marshland is Shown Extending to the Sputh and East of the Worth Street Property (Source: Hutchings 1793).

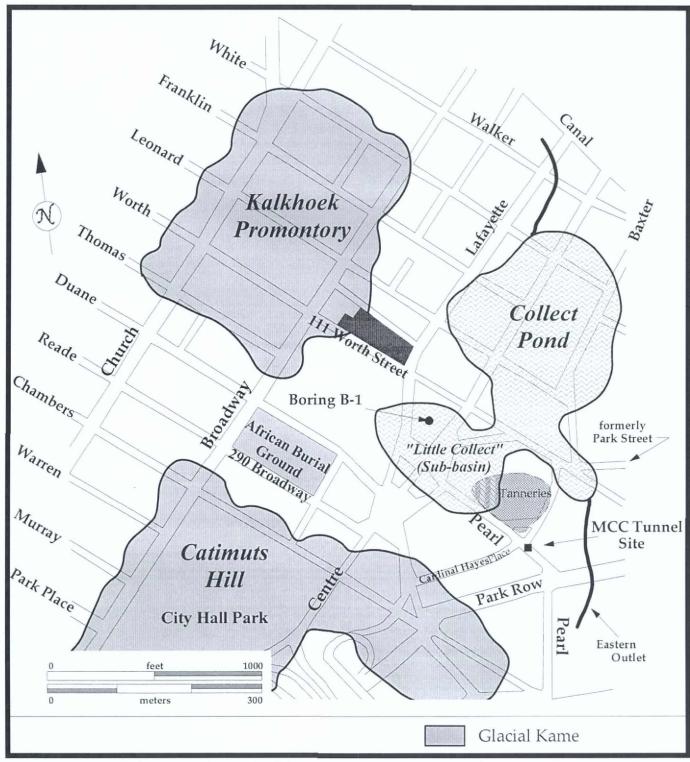


Figure A.5 Reconstruction of Post-Glacial Landform Distributions Superimposed on Contemporary Street Grid of Lower Manhattan. Landform Dimensions are Approximate and Depict Maximum Projected Extents Prior to Industrial Age Removal (ca. Pre 1850). Early Colonial Names of Landscape Features are Used (Source: Viele 1874 and Others).

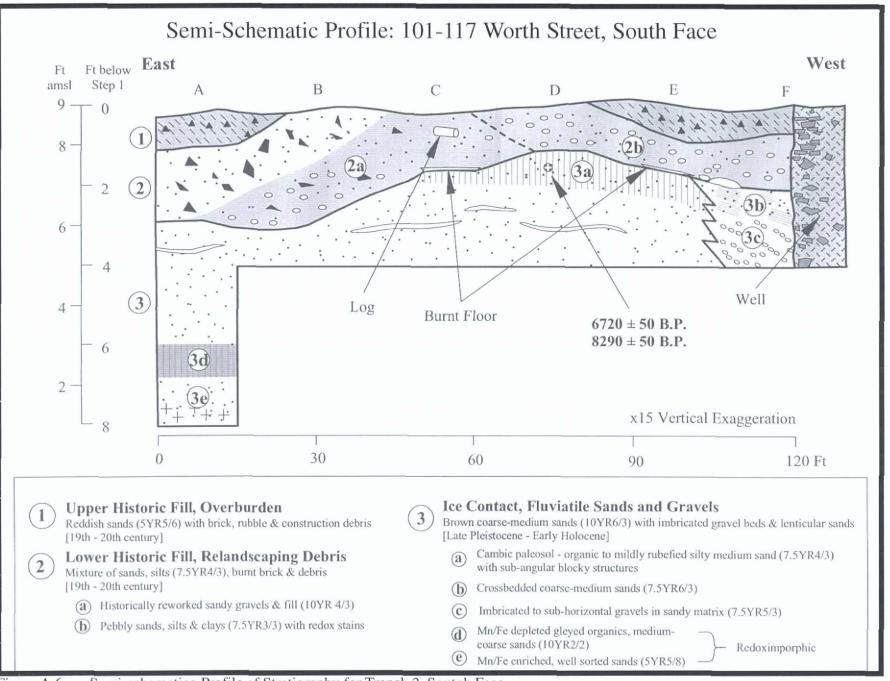


Figure A.6 Semi-schematico Profile of Stratigraphy for Trench 2, Southh Face.

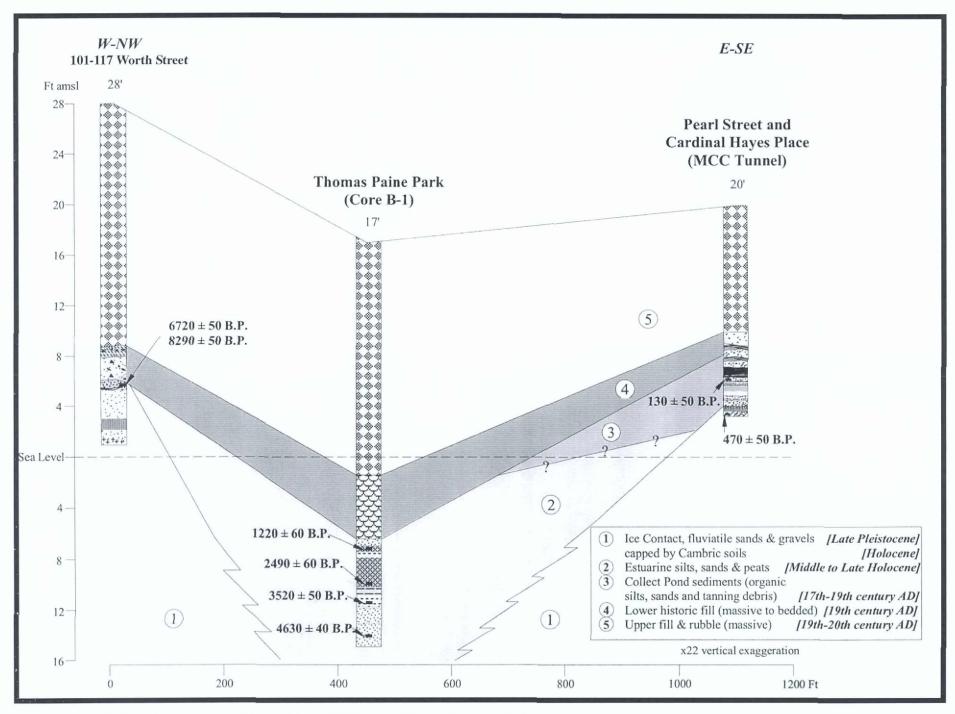


Figure A.7 Subsurface Stratigraphies at Three (3) Historic Sites in Lower Manhattan

I. Terminal Pleistocene/Early Holocene (15,000-10,000 B.P.) SSE NNW Kame Terrace Meltwater Trough Kame Outwash Valley II. Middle-Late Holocene (8000-2000 B.P.) SSE NNW Kame Terrace Alluvial Valley Kame spring braided stream concavo-complex surfaces capped by paleosol III. A.D. 1650 - Dutch settlement, agricultural landscape SSE NNW Catimuts Hill "Kolck" Pond Kalkhoek Promontory springs spring bed, Pond/swamp complex, with fresh water outlets

Figure A.8a Diachronic Model of Land Use and Occupation, Five Points Area 15,000 B.P. to A.D. 1650.

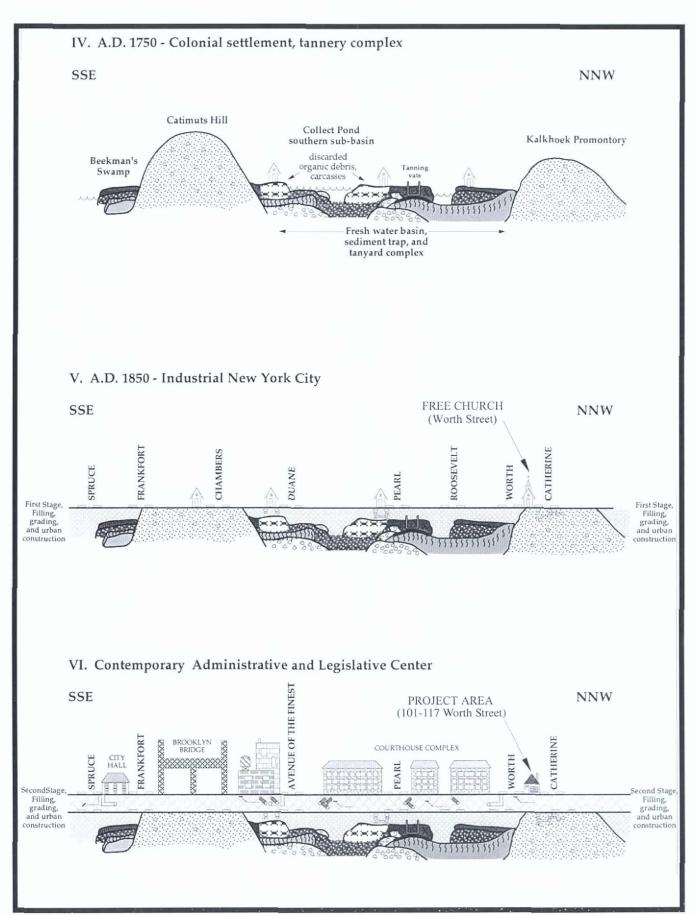


Figure A.8b. Diachronic Model of Land Use and Occupation, Five Points Area, A.D. 1650 to Present .

Appendix A.2: Plates

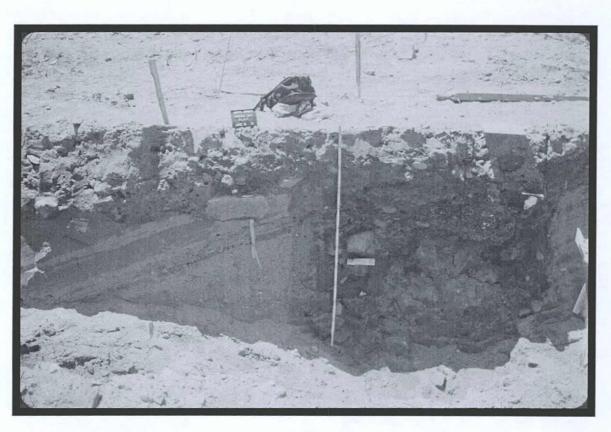


Plate A.1 Trench 2, Segment F, Units 3b and 3c. Steep Forest Beds of Sands and Gravels Indicate Either Meandering Late Glacial Stream or Deglaciation at Front of Kame Delta. Note 19<sup>th</sup> Century Well Excavated into the Western Edge of the Profile.

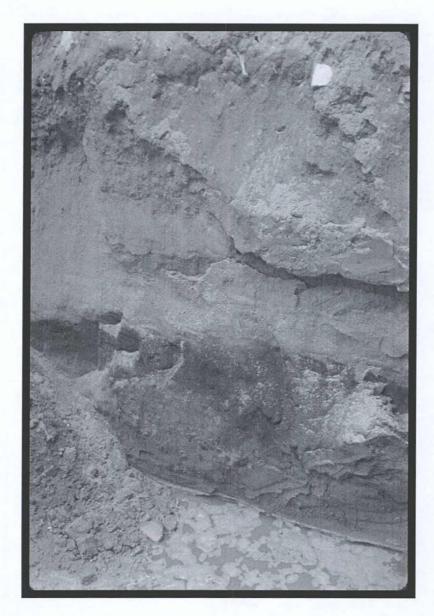


Plate A.2 Trench 6, Units 3d and 3e. Redoximorphic and Gleyed Sediments Indicate Hydromorphic Effects of Ground Water Oscillations at Sea Level.

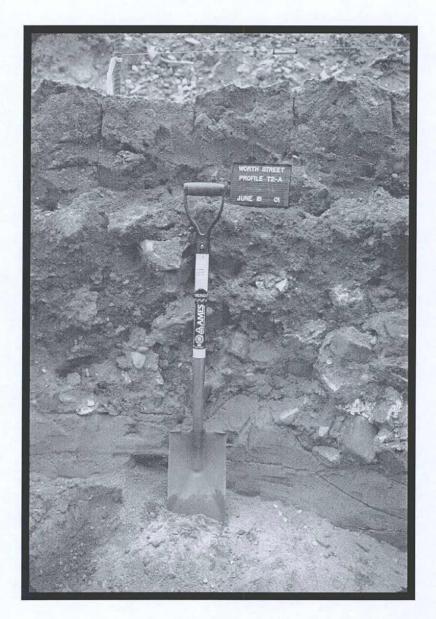


Plate A.3 Trench 2, Segment A, Units 1, 1a, and 3. Unit ½a Interface is at Sea Level of Sign. Unit 2a is Rubbly Facies. Interface of Lower Historic Fill (2a) with Ice Contact Sands (3) is at Level of Shovel.



Plate A.4 Trench 3, Segment C, Unit 3 and 3a. Ice Contact Sediments (3) are Massive Sands Interbedded with Organic Lenses. Cambric Paleosol (3a) (Right Side of Photo) Produced a Radiocarbon Date of 6720±50 B.P. A Thin Lens Marking Historic Burnt Wood Planks is Visible on Either Side of the Shovel Handle.

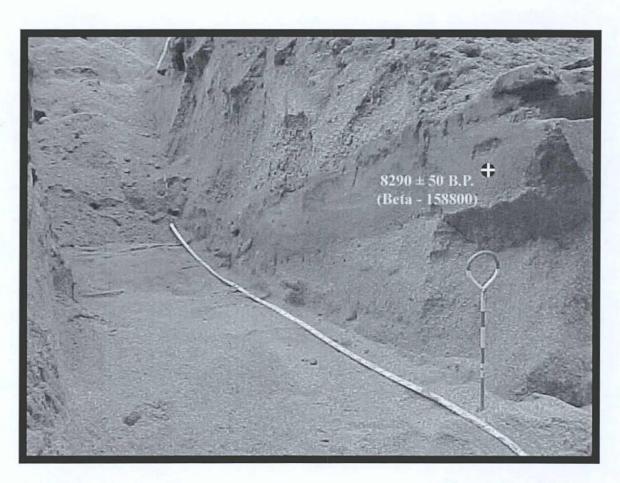


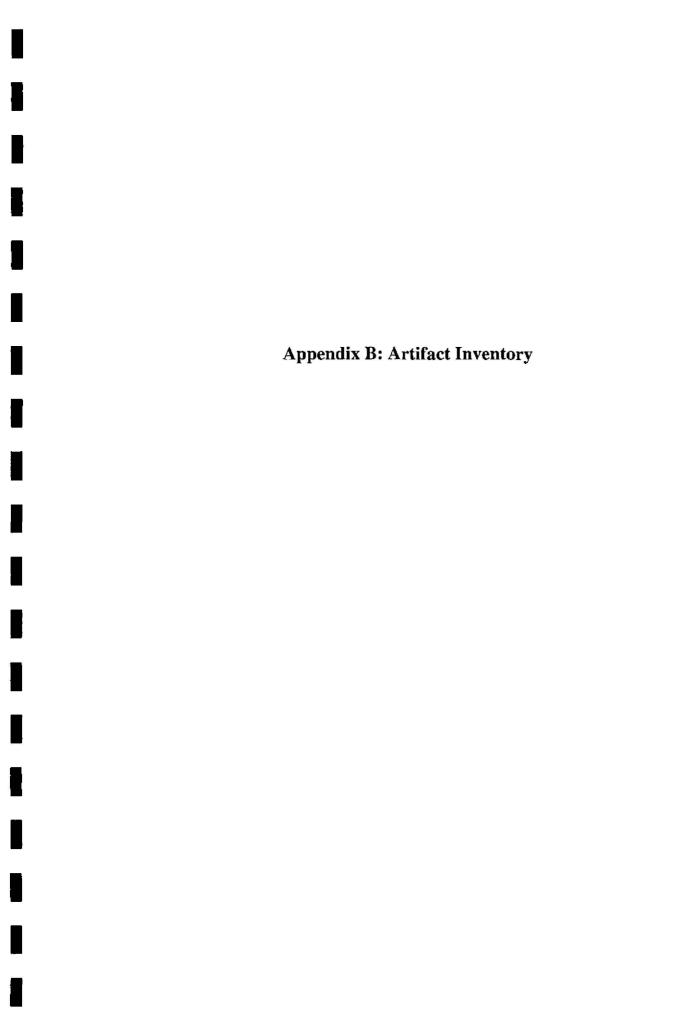
Plate A.5 Trench 8, Unit 3a. Cambic Paleosol is Formed on Massive Glacial Drift Sands and Slopes to the South, Identifying a Buried Holocene Surface. Soil Yielded a Radiocarbon date of 8290±50 B.P.



# Table A.1: Sediment Characteristics, 101-117 Worth Street Trench 2, South Profile

Unit	Depth (ft.)	Color	Texture	Structure	Mottling	Stonines	Roots	Fe/Mn	Boundary	Comments
1	0-1.1	5YR4/6	Medium- fine sands with brick and rubble	Massive to granular	L-M	н	М	NA	A,S	Upper Historic Fill. Sandy matrix with abundant 19th and 20th century construction debris, brick fragments, cinder fill and debris; isolated slopewash interbeds; distribution on east, west edges of exposure
2a	1.1-2.5 (east half)	10YR4/3	Sands, fine gravels, pebbles and debris	Massive to granular with sub- horizontal sandy interbeds	M-H	Н	М	М	A,S	Lower Historic Fill. Parent matrix, used for relandscaping, apparently transported en mass from external source location; abundant small pebbles capping thin, lenticular sands (from localized discharge event); preserved burnt features, wood logs, and organic mats at base
2b	1.1-2.3 (west half)	7.5YR3/3	Pebbly sands, silts, and clays	Granular to weak sub- angular blocky	н	Н	Н	Н	C,S	Lower Historic Fill. Preserved structures in thin (10 mm) lenticular silt beds accreted in small depressions of historic surface; extensive organic mats and diffuse charcoal, brick debris
3	2.3 (2.5)- 6.1 (east end)	10YR6/3	Coarse- Medium sands	Granular with lenticular interbeds	NA	L	L	NA .	Ċ,S	Ice contact and fluviatile glacial/post-glacial sediments. Massive sands, moderately well sorted with abundant/large mica flakes (to 4 mm). Main deposit is stratified with medium, sandy lenses and interbeds; some weak organic drapes formed over lenticular sands
За	2.1-2.4 (center section)	7.5YR 4/3	Silty medium sand	Subangular blocky	NA	L	L	L		Cambic paleosol (AB/Bw horizon) formed over ice contact sands. Organic infillings and diffuse charcoal. Historic features (burnt floor) mark upper boundary. Dates obtained on soil (6720±50 B.P.; 8290±50 B.P.). Probable long term.surface (Middle Holocene or later).
3b	2.3-3.0 (west end)	7.5YR5/3	Coarse- Medium sands	Laminar to thin sets of crossbeds	Ļ	L	L	L	A,S	Fluviatile facies. Slight upward fining medium sands with thin to thick organic upper set; thicker (>2 mm) foresets inclined 20-24° to southeast indicate this was dominant flow direction; some opposing crossbeds suggestive of meandains.
3c	3.0->4.0 (west end)	7.5YR6/3	Clast (gravel) supported sands	Granular	ÑĀ	Н	NA	M-H		Lower fluviatile facies. Matrix of sands, cobbles and ellipsoid/ovate gravels; clasts are subangular to subrounded with abraded faces.Gravels (10-20% by volume) dominantly imbricated (5-15°) to east. Texture and bedding indicative of high energy channel flow
3d	6.1-6.8 (east end)	10YR2/2	Medium- coarse sands with organic silts	Massive with laminar interbeds	Н	М	L	Н	A,S	Hydromorphic sediments. Mn/Fe depleted sands and silts. Gleyed horizon caps sediment complex indicative of Holocene through contemporary water table oscillations
3e	6.8->8.0 (east end)	5YR5/8	Medium- coarse sands	Massive to weak subangular blocky	Н	М	L	Н		Oxidized sediments. Mn/Fe enriched, well sorted sands. Basal contact not reached

| blocky | L = Low M= Medium H= High | G = Gradual A = Abrupt C = Clear S = Smooth



Cat	Provenience	Artifact	Class	Subclass	Object	Ware/Tech	Primary	Color	Comments/Mark	Begin	End	Status
#		Count				3	Decoration			Date	Date	
1	Feature 4, Level 1, Builders Trench	l L	Ceramic		Tapered Arch Brick	e e		Brick Red	tapered well brick, length 7.75" width 3.5" thickest side 2.5", thin side 1.75"			
1	Feature 4, Level 1, Builders Trench	1	Ceramic	Coarse Earthenware	Hollowware	Redware	Black Glazed	Black	double glazed			
1	Feature 4, Level 1, Builders Trench	2	Ceramic	Refined Earthenware	Bowl	Creamware	Undecorated	White		1770	1840	
1	Feature 4, Level 1, Builders Trench	2	Ceramic	Refined Earthenware	Сир	Pearlware	Painted	Polychrome	painted cup sherd, brown and green extant	1795	1830	
1	Feature 4, Level 1, Builders Trench	1	Ceramic	Refined Earthenware	Pipe Bowl		Embossed	White				
Ĺ	Feature 4, Level 1, Builders Trench	4	Ceramic	Refined Earthenware	Plate	Creamware	Undecorated	White		1784	1835	
ſ	Feature 4, Level 1, Builders Trench	2	Ceramic	Refined Earthenware	Saucer	Pearlware	Painted	Polychrome	sherds to a pearlware saucer painted in the early colors (blue, tan and brown), boarder motif	1795	1830	
1	Feature 4, Level 1, Builders Trench	1	Ceramic	Refined Earthenware	Saucer	Pearlware	Painted	Polychrome	sherds to a pearlware saucer painted in the early colors (brown, blue, yellow and pale green)	1795	1830	
1	Feature 4, Level 1, Builders Trench	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Brown		1795	1830	
1	Feature 4, Level 1, Builders Trench	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1795	1830	
1	Feature 4, Level 1, Builders Trench	4	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	_
1	Feature 4, Level 1, Builders Trench	15	Ceramic	Refined Earthenware	Sherd	Peartware	Unknown	Unknown		1780	1830	
1	Feature 4, Level 1, Builders Trench	2	Ceramic	Refined Earthenware	Sherd	Unidentified	Dipt	Brown	burned sherds			
1	Feature 4, Level 1, Builders Trench	ı	Ceramic	Stoneware	Hollowware	Salt Glazed		Buff				
1	Feature 4, Level 1, Builders Trench	l	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	large body sherd to a bellied crock, probably to a bottle or jar. Salt glazed exterior, brown slipped interior			
ď	Feature 4, Level 1, Builders Trench	τ	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown				0
1	Feature 4, Level 1, Builders Trench	14	Fauna	Bone	Bone Fragment							
1	Feature 4, Level 1, Builders Trench	I	Glass		Bottle			Aqua				
1	Feature 4, Level 1, Builders Trench	1	Glass		Bottle			Green	sherd to a small bottle			
1	Feature 4, Level 1, Builders Trench	1	Glass		Bottle			Light Green	bottle sherd with a heavy patina, appears to be much earlier that the other artifacts.			

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Worth Street Inventory

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
1	Feature 4, Level 1, Builders Trench	6	Glass		Bottle Glass			Olive Green	sherds to a small olive green glass bottle			
1	Feature 4, Level 1, Builders Trench	1	Glass		Lamp Glass			Pale	chimney glass sherd		•	
1	Feature 4, Level 1, Builders Trench	2	Glass		Vial	Dip Mold		Aqua	small vial with a constricted neck and a flaring lip			
1	Feature 4, Level 1, Builders Trench	16	Glass		Window Glass			Pale Green	small window glass sherds, discarded		,	Discarde
1	Feature 4, Level 1, Builders Trench	2	Glass	,	Wine Bottle			Olive Green	body sherds		2.2	
1	Feature 4, Level 1, Builders Trench	5	Glass		Wine Bottle			Olive Green	Appears to be an English black glass wine bottle finish to a cylindrical bottle with a down tooled lip and string rim.			
1	Feature 4, Level 1, Builders Trench	3	Glass	Lead	Stemware		Engraved	Colorless	sherds to a stemware, folded foot, copper wheel engraved flower motif near rim		0	
1	Feature 4, Level 1, Builders Trench	L	Glass	Lead	Wine Bottle			Colorless	lamp chimney sherd			
1	Feature 4, Level 1, Builders Trench	3	Glass	Non Lead	Lamp Glass			Colorless	small lamp chimney shords			
1	Feature 4, Level 1, Builders Trench	3	Glass	Non Lead	Sherd			Colorless				
1	Feature 4, Level 1, Builders Trench	l	Glass	Non Lead	Tumbler			Colorless	empontilled tumbler, non-lead, probably Bohemian			
1	Feature 4, Level 1, Builders Trench	5	Glass	Non Lead	Tumbler	*		Colorless	empontilled tumbler, non-lead, probably Bohemian			,
1	Feature 4, Level 1, Builders Trench	I	Glass	Non Lead	Tumbler		li sko	Colorless	empontilled tumbler, non-lead, probably Bohemian			
2	Feature 4, Level 1, Wall	ī	Ceramic	Coarse Earthenware	Jug	Redware	Undecorated	Lead Glaze Red	base to a double glazed bulbous redware jug			
2	Feature 4, Level 1, Wall	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Blue	7.5	1795	1830	
2	Feature 4, Level 1, Wall	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown				
2	Feature 4, Level 1, Wall	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray				
2	Feature 4, Level 1, Wall	2	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown				-
2	Feature 4, Level 1, Wall	6	Fauna	Bone	Bone Fragment						-	<del> </del>
2	Feature 4, Level 1, Wall	4	Glass		Bottle			Olive Green	thin bottle glass sherds			-
2	Feature 4, Level 1, Wall	4	Glass		Sherd			Colorless	small glass bottle sherds			
2	Feature 4, Level 1, Wall	4	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarded
2	Feature 4, Level 1, Wall	1	Glass		Wine Bottle			Olive Green	appears to be an English wine bottle			
2	Feature 4, Level 1, Wall	I	Glass		Wine Bottle			Olive Green	body sherd			

Cat	Provenience	Artifact	Class	Subclass	Object	Ware/Tech	Primary	Color	Comments/Mark	Begin	End	Status
#		Count					Decoration		- Commonwarian	Date	Date	Dillos
2	Feature 4, Level 1, Wall	20	Metal	Iron	Nail			Rust	badly rusted nail fragments, discarded			Discarded
3	Feature 4, Level 1, Interior	Ī	Ceramic	Coarse Earthenware	Dish	Redware	Undecorated	Red-Brown	drape molded dish with a coggled rim		22	
3	Feature 4, Level 1, Interior	1	Ceramic	Coarse Earthenware	Hollowware	Redware	Undecorated	Unglazed	sherd to a large thrown ware, residue on the exterior suggests a flowerpot			
3	Feature 4, Level 1, Interior	Ī	Ceramic	Coarse Earthenware	Pitcher	Redware	Undecorated	Brown	appears to be to a bulbous pitcher			
3	Feature 4, Level 1, Interior	1	Ceramic	Porcelain	Insulator Fragment	Pressed	0.20	White	dust pressed glazed porcelain electrical insulator			
_	Feature 4, Level 1, Interior	1	Ceramic	Porcelain	Saucer	Chinese Porcelain	Painted, Overglaze	Red &?	enamel painted, red extant, there were probably other colors		5 <del>-2</del> 14	
	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Bowl	Creamware	Undecorated	White		1770	1840	
3	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Сир	Pearlware	Painted	Green & Brown	sherds to a fluted pearlware cup painted in the early colors.	1795	1825	
3	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Сир	Pearlware	Painted	Polychrome	floral painted cup sherd (brown, tan, and olive green) boarder	1795	1830	
3	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Cup	Pearlware	Printed	Blue	same pattern as the saucer that is vessel 222	1815	1830	
	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Pipe Stem			White				3.00
	Feature 4, Level 1, Interior		Ceramic	Refined Earthenware	Plate	Creamware	Undecorated	White	sherds from 3 and 47, appear to be the same plate, but do not mend	1780	1820	
3	Feature 4, Level 1, Interior	<u>'</u>	Ceramic	Refined Earthenware	Plate	Ironstone	Printed	Blue	landscape, thick plate sherd	1840	1860	
3	Feature 4, Level 1, Interior	l l	Ceramic	Refined Earthenware	Saucer	Pearlware	Painted	Blue		1815	1835	
3	Feature 4, Level 1, Interior	9	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780	1830	
3	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Dipt	Brown & Tan		1795	1830	
3	Feature 4, Level 1, Interior	4	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1795	1830	
3	Feature 4, Level 1, Interior	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
25.0	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
3	Feature 4, Level 1, Interior	1	Ceramic	Stoneware	Bottle	Salt Glazed		Tan & Brown	salt glazed exterior over an iron slip, brown slipped interior			
3	Feature 4, Level 1, Interior	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown				
3	Feature 4, Level 1, Interior	ļ .	Ceramie	Stoneware	Bottle	Slip Glazed		Brown	finish to a stoneware bottle, shaped like a blob top			
3	Feature 4, Level 1, Interior	2	Ceramie	Stoneware	Hollowware	Salt Glazed		Buff & Brown	brown slipped interior		2000	
3	Feature 4, Level 1, Interior	1	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown				
3	Feature 4, Level 1, Interior	7	Ceramic	Stoneware	Sherd	Salt Glazed	<u> </u>	Gray & Brown	brown slipped interior			-

#### ₩ 4.

Worth Street Inventory A06101.012569

	th Street inventory		12 200,000	6101.01256	4.7	,				_		
Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
3	Feature 4, Level 1, Interior	15	Ceramic	Stoneware	Sherd	Slip Glazed		Brown	double slip glazed			
3	Feature 4, Level 1, Interior	2	Composite		Mortar			Off White	mortar fragments, discarded			Discarded
3	Feature 4, Level 1, Interior	2	Fauna	Bone	Bone Fragment							
3	Feature 4, Level 1, Interior	2	Glass		Bottle			Colorless	very small sherds			
3	Feature 4, Level 1, Interior	4	Glass		Buttle		e .	Olive Green	thin sherds to a small bottle		_	
3	Feature 4, Level 1, Interior	1	Glass		Bottle		5 <del>8</del> 8	Olive Green	small bottle body sherd			
3	Feature 4, Level 1, Interior	1	Glass		Lamp Glass		ic .	Colorless	lamp chimney			
3	Feature 4, Level 1, Interior	I	Glass		Lamp Glass			Pale Green	thin lamp chimney glass			7 10 100
3	Feature 4, Level 1, Interior	8	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarded
3	Feature 4, Level 1, Interior	I	Glass		Window Glass		-	Pale Green	small window glass sherd, discarded			Discarded
3	Feature 4, Level 1, Interior	135	Glass		Window Glass			Pale Green	fragments of window glass, discarded			Discarded
3	Feature 4, Level 1, Interior	2	Glass		Wine Bottle	-		Olive Green	body sherds		-	
3	Feature 4, Level 1, Interior	1	Glass	Lead	Bottle	Mold Blown	io se	Colorless	body sherd to a small lead glass bottle			
3	Feature 4, Level 1, Interior	ı.	Glass	Lead	Tumbler			Colorless	tumbler rim sherd		2000	
3	Feature 4, Level 1, Interior	i	Glass	Lead	Tumbler	Pressed		Colorless	thick base to a tumbler, appears to be pressed, heavy use wear on standing ring		•	
3	Feature 4, Level 1, Interior	I	Glass	Non Lead	Tableware		Etched	Colorless	sherd to a hollowware, perhaps a tumbler, the vessel has an frosted band into which some flowers motive have been cut. Perhaps Bohemian glass.			
3	Feature 4, Level 1, Interior	1	Glass	Non Lead	Tableware	Pressed		Colorless	possibly to a tumbler			
3	Feature 4, Level 1, Interior	1	Glass	Non Lead	Tableware	Pressed	Molded Pattern	Colorless	possibly to a tumbler, flat perpendicular panels			
3	Feature 4, Level 1, Interior	1	Metal	Copper Alloy	Copper Wire			Copper Oxide	twisted copper wire, probably electrical			
3	Feature 4, Level 1, Interior	10	Metal	Iron	Iron Fragments			Rust	nondescript rusted iron fragments, discarded			Discarded
3	Feature 4, Level 1, Interior	59	Metal	Iron	Nail			Rust	badly rusted nail fragments, discarded			Discarded
3	Feature 4, Level 1, Interior	25	Metal	Iron	Nail			Rust	badly rusted nail fragment, discarded			Discarded
3	Feature 4, Level 1, Interior	8	Metal	Iron	Sheet Iron			Rust	badly rusted sheet iron fragments, discarded			Discarded
4	Feature 4, Level 1, Interior	t	Ceramic	Coarse Earthenware	Canning Jar	Unidentified	Unknown	Brown-Pink	rims sherd that probably is to a canning jar, it has a string rim.			
4	Feature 4, Level 1, Interior	Ĺ	Ceramie	Coarse Earthenware	Dish	Pennsylvania Style Slipware	Slip Decorated	Yellow Slip	drape molded dish with white slip decoration that is yellow under the lead glaze, the rim is coggled.			

Cat	Provenience	Artifact	Class	Subclass	Object	Ware/Tech	Primary	Color	Comments/Mark	Begin	End	Status
#		Count					Decoration			Date	Date	
4	Feature 4, Level 1, Interior	ı	Ceramic	Coarse Earthenware	Flower Pot	Redware		Unglazed Red	unglazed redware thrown flower pot			
4	Feature 4, Level 1, Interior	1	Ceramic	Coarse Earthenware	Jar	Redware	Rouletted	Lead Glaze	rim to a bellied canning jar, glazed on interior, rouletted raised band just below rim			
4	Feature 4, Level 1, Interior	1	Ceramic	Porcelain	Saucer	Chinese Porcelain	Enamel Painted	Iron Red	base sherd to a Chinese porcelain vessel, most likely a saucer, enamel painted flower spray in center,			
4	Feature 4, Level 1, Interior	3	Ceramic	Refined Earthenware	Bowl	Creamware	Dipt	Tan, Brown	Simple banded creamware bowl, Chinese tea bowl shape, broad tan slip band and annular lines in dark brown and a pale olive color	1810	1830	16
4	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Bowl	Creamware	Undecorated	White		1770	1840	
4	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Cup	China Glaze	Printed	Blue	blue printed cup in an oriental pattern	1790	1820	
4	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Cup	Pearlware	Painted	Polychrome	painted cup sherd, brown and tan extant	1795	1830	
4	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Cup	Pearlware	Printed	Blue	same pattern as the saucer that is vessel 222	1815	1830	
4	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Hollowware	Red Bodied	Unknown	Brown	probably to a redware teapot, double glazed			
4	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Muffin Plate	Creamware	Undecorated	White	sherds from 4, 33 and 37, appear to be the same plate, but do not mend	1780	1820	
4	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Muffin Plate	Pearlware	Printed	Blue	small muffin plate	1810	1830	
4	Feature 4, Level 1, Interior	l.	Ceramic	Refined Earthenware	Pipe Bowl		Embossed	White	small pipe bowl sherd with a cross hatched pattern			
4	Feature 4, Level 1, Interior	2	Ceramic	Refined Earthenware	Platter	Creamware	Undecorated	White	all mended	1784	1830	
4	Feature 4, Level 1, Interior	2	Ceramic	Refined Earthenware	Saucer	China Glaze	Painted	Blue		1775	1815	
4	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Saucer	Pearlware	Painted	Blue		1795	1830	
4	Feature 4, Level 1, Interior	6	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780	1830	
4	Feature 4, Level 1, Interior	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Brown		1795	1830	
4	Feature 4, Level 1, Interior	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1795	1830	300
4	Feature 4, Level 1, Interior	4	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
4	Feature 4, Level 1, Interior	3	Ceramie	Refined Earthenware	Unidentified	Victorian Majolica	Molded Pattern	Polychrome	yellow, green and purple extant, molded leaf and basket motif	1851	1880	
4	Feature 4, Level 1, Interior	2	Ceramie	Refined Earthenware	Unidentified	Victorian Majolica	Molded Pattern	Yellow	yellow extant, probably had other colors	1851	1880	

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
4	Feature 4, Level 1, Interior	I	Ceramic	Stoneware	Bottle	Salt Glazed		Buff	Salt-glazed stoneware bottle, the finish is like a blob top, brown slipped interior			
-	Feature 4, Level 1, Interior		Ceramic	Stoneware	Bottle	Sali Glazed		Buff	impressed POTTERIES / TTLES probably Bourne Potteries, Denby, England. They made stoneware bottles and used the word POTTERIES as part of a maker's mark.			ā.
	Feature 4, Level 1, Interior	1	Ceramic	Stoneware	Bottle	Salt Glazed		Gray & Brown	brown slipped interior			
4	Feature 4, Level 1, Interior	1	Ceramic	Stoneware	Bottle	Salt Glazed		Gray & Brown	salt glazed exterior, brown slipped interior			
	Feature 4, Level 1, Interior	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	stoneware bottle, the finish is shaped like a blob top			<del>-</del>
4	Feature 4, Level 1, Interior	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	finish to a stoneware bottle, shaped like a blob top			
4	Feature 4, Level 1, Interior	7	Ceramic	Stoneware	Hollowware	Salt Glazed		Buff & Brown	brown slipped interior		144	i
4	Feature 4, Level 1, Interior	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior			
4	Feature 4, Level 1, Interior	4	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior		-	
4	Feature 4, Level 1, Interior	58	Ceramic	Stoneware	Hollowware	Slip Glazed	1	Brown	brown slipped interior			*
4	Feature 4, Level 1, Interior	ı	Ceramic	Stoneware	Teapot	Basalt	Engine Turned	Black	Engine turned basalt sherds, most likely to a teapot. Sherds from FS# 4, 9, and 22(2)			
4	Feature 4, Level 1, Interior	11	Fauna	Bone	Bone Fragment	9.5-90ec						
4	Feature 4, Level 1, Interior	9	Fauna	Bone	Bone Fragment							
4	Feature 4, Level 1, Interior	3	Glass		Lamp Glass			Colorless	lamp chimney glass			
4	Feature 4, Level 1, Interior	2	Glass		Plate Glass			Pale Green				
4	Feature 4, Level 1, Interior	21	Glass		Window Glass			Pale Green	small window glass sherds			
4	Feature 4, Level 1, Interior	62	Glass		Window Glass			Pale Green	small window glass sherds, discarded	ļ		Discarded
4	Feature 4, Level 1, Interior	19	Glass		Wine Bottle			Olive Green	body sherds			
4	Feature 4, Level 1, Interior	1	Glass	Lead	Tableware	Unidentified	Unknown	Colorless	flat piece of lead glass that tapers, possibly to a decanter or some form of hollowware			
4	Feature 4, Level 1, Interior	3	Glass	Non Lead	Bottle			Colorless	small bottle sherds			
4	Feature 4, Level 1, Interior	1	Metal	Copper Alloy	Button	Stamped		Copper Oxide	small four hole copper alloy button			
4	Feature 4, Level 1, Interior	I	Metal	Iron	Handle			Rust	corroded iron handle to something			
4	Feature 4, Level 1, Interior	3	Metal	Iron	Iron Fragments			Rust	nondescript rusted iron fragments, discarded			Discarded
4	Feature 4, Level 1, Interior	1	Metal	Iron	Lid			Rust	small metal lid fragment		-	

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
4	Feature 4, Level 1, Interior	80	Metal	iron	Nail		1	Rust	badly rusted nail fragments, discarded			Discarded
4	Feature 4, Level 1, Interior	37	Metal	Iron	Nail			Ruste	badly rusted nail fragment, discarded			Discarded
5	Feature 4, Level 2, Builders Trench	1	Ceramic	Refined Earthenware	Cup	Creamware	Bat Printed	Black Print	rim sherd to a black bat printed cup, appears to be to a Chinese tea bowl shaped cup.	1770	1815	
	Feature 4, Level 2, Builders Trench	1	Ceramic	Refined Earthenware	Cup	Pearlware	Painted	Green & Brown	sherds to a fluted pearlware cup painted in the early colors.	1795	1825	
5	Feature 4, Level 2, Builders Trench	1	Ceramic	Refined Earthenware	Saucer	Pearlware	Painted	Polychrome	sherds to a pearlware saucer painted in the early colors (blue, tan and brown), boarder motif	1795	1830	
5	Feature 4, Level 2, Builders Trench	1	Ceramic	Refined Earthenware	Saucer	Pearlware	Printed	Blue	deep saucer with a motive of sea shells and seaweed, pearlware	1815	1830	
5	Feature 4, Level 2, Builders Trench	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Green & Brown		1795	1830	
5	Feature 4, Level 2, Builders Trench	5	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1835	
5	Feature 4, Level 2, Builders Trench	1	Ceramic	Stoneware	Hollowware	Salt Glazed	Painted	Blue On Gray	salt-glazed stoneware sherd probably to a jar, painted with cobalt blue	)		
5	Feature 4, Level 2, Builders Trench	1	Fauna	Bone	Bone Fragment	6						
5	Feature 4, Level 2, Builders Trench	2	Fauna	Bone	Teeth				animal teeth			<u> </u>
5	Feature 4, Level 2, Builders Trench	10	Glass		Flacon	Mold Blown		Blue Green	sherds to a French flacon, other sherds from FS# 30 and 5			1
5	Feature 4, Level 2, Builders Trench	2	Glass		Lamp Glass			Colorless				
5	Feature 4, Level 2, Builders Trench	2	Glass		Lamp Glass			Pale Green	very thin lamp chimney sherds			
5	Feature 4, Level 2, Builders Trench	13	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarde
5	Feature 4, Level 2, Builders Trench	I	Glass	Lead	Tableware	Free Blown	Unknown	Colorless	footed vessel blown in three parts, very short stem to a bowl or hollowware, The foot is pedestalled	-		
5	Feature 4, Level 2, Builders Trench	1	Glass	Non Lead	Tableware			Colorless	glass hollowware, probably mold blown			
5	Feature 4, Level 2, Builders Trench	4	Metal	Iron	Nail			Rust	badly rusted nail fragments, discarded		=	Discarde
6	Feature 4, Level 2, Wall	1	Ceramic	Refined Earthenware	Platter	Creamware	Undecorated	White		1784	1835	
6	Feature 4, Level 2, Wall	2	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White	7.	1780	1830	
6	Feature 4, Level 2, Wall	3	Ceramic	Stoneware	Bottle	Slip Glazed	Undecorated	Brown				<u> </u>
6	Feature 4, Level 2, Wall	2	Fauna	Bone	Bone Fragment			T				
6	Feature 4, Level 2, Wall	1	Glass		Bottle	Dip Mold		Olive Green	square bottle, probably a snuff or gin		-	

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Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
6	Feature 4, Level 2, Wall	1	Glass		Lamp Glass			Colorless	lamp chimney glass			
6	Feature 4, Level 2, Wall	1	Glass		Window Glass			Pale Green	small window glass sherd, discarded	-		Discarded
6	Feature 4, Level 2, Wall	2	Metal	Iron	Nail		-	Rust	badly rusted nail fragment, discarded	-		Discarded
7	Feature 4, Level 2, Interior	2	Ceramic	Coarse Earthenware	Sherd	Redware	Undecorated	Black Glaze				
7	Feature 4, Level 2, Interior	2	Ceramic	Coarse Earthenware	Sherd	Redware	Unknown	Lead Glazed				
7 -	Feature 4, Level 2, Interior	1	Ceramic	Refined Earthenware	Bowl	Creamware	Dipt	Tan, Brown	Simple banded creamware bowl, Chinese tea bowl shape, broad tan slip band and annular lines in dark brown and a pale olive color	1810	1830	
7	Feature 4, Level 2, Interior	I	Ceramic	Refined Earthenware	Bowl	Creamware	Undecorated	White		1770	1840	
7	Feature 4, Level 2, Interior	ſ	Ceramic	Refined Earthenware	Bowl	Creamware	Undecorated	White	not a mend, but appear to be to the same bowl	1770	1840	
7	Feature 4, Level 2, Interior	I	Ceramic	Refined Earthenware	Chamber Pot	Creamware	Undecorated	White	flat rimmed creamware chamber pot	1770	1840	
7	Feature 4, Level 2, Interior	2	Ceramic	Refined Earthenware	Cup	China Glaze	Printed	Blue	blue printed cup in an oriental pattern	1790	1820	
7	Feature 4, Level 2, Interior	f	Ceramic	Refined Earthenware	Muffin Plate	Pearlware	Shell Edge	Green Edge	rim sherd to green shell edged pearlware muffin plate with a scalloped rim and impressed straight lines.	1810	1835	
7	Feature 4, Level 2, Interior	1	Ceramic	Refined Earthenware	Pipe Bowl		Molded Pattern	White	fluted pipe bowl			
7	Feature 4, Level 2, Interior	- (	Ceramic	Refined Earthenware	Pipe Stem			White		-		
7	Feature 4, Level 2, Interior	I	Ceramic	Refined Earthenware	Pipe Stem			White				
7	Feature 4, Level 2, Interior	2	Ceramic	Refined Earthenware	Platter	Creamware	Undecorated	White	all mended	1784	1830	
7	Feature 4, Level 2, Interior	1	Ceramic	Refined Earthenware	Saucer	China Glaze	Printed	Blue	blue printed saucer in an oriental pattern	1790	1820	
7	Feature 4, Level 2, Interior	2	Ceramic	Refined Earthenware	Sherd	Creamware		White		1780	1830	
7	Feature 4, Level 2, Interior	1	Ceramic	Refined Earthenware	Sherd	Creamware	Dipt	Brown		1795	1835	
7	Feature 4, Level 2, Interior	10	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780	1830	
7	Feature 4, Level 2, Interior	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Blue		1795	1830	
7	Feature 4, Level 2, Interior	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Polychrome		1795	1830	
7	Feature 4, Level 2, Interior	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
	Feature 4, Level 2, Interior	1	Ceramic	Refined Earthenware	Sherd	Unidentified	Painted	Burnt	highly burned sherd, painted, can not tell ware type	LAUC .	Date	
7	Feature 4, Level 2, Interior	2	Ceramic	Stoneware	Bottle	Salt Glazed		Gray & Brown	brown slipped interior	15.5		
7	Feature 4, Level 2, Interior	ī	Ceramic	Stoneware	Bottle	Salt Glazed	Painted	Blue On Grey	Salt-glazed stoneware bottle, the finish is like a blob top and has been painted blue. Brown slipped interior	į		e e
7	Feature 4, Level 2, Interior	1	Ceramic	Stoneware	Bottle	Salt Glazed	Undecorated	Gray & Brown	Shoulder sherd to a salt-glazed stoneware bottles with a brown slipped interior, impressed mark that reads WHITTE Probably the bottler or a grocer's name.	"		8
7	Feature 4, Level 2, Interior	J	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	finish to a stoneware bottle, shaped like a blob top			
7	Feature 4, Level 2, Interior	1	Ceramic	Stoneware	Hollowware	Brown Body Salt Glazed	Slip Decorated					
7	Feature 4, Level 2, Interior	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior			
7	Feature 4, Level 2, Interior	11	Ceramic	Stoneware	Sherd	Salt Glazed		Brown	brown slipped interior			- 10
7	Feature 4, Level 2, Interior	ı	Ceramic	Stoneware	Sherd	Salt Glazed		Brown				
7	Feature 4, Level 2, Interior	3	Ceramic	Stoneware	Sherd	Salt Glazed		Gray & Black	Albany slipped interior			<u> </u>
7	Feature 4, Level 2, Interior	9	Ceramic	Stoneware	Sherd	Salt Glazed		Gray & Brown	brown slipped interior			
7	Feature 4, Level 2, Interior	T	Ceramic	Stoneware	Sherd	Salt Glazed		Tan & Brown	brown slipped interior	7.5		
7	Feature 4, Level 2, Interior	72	Ceramic	Stoneware	Sherd	Slip Glazed		Brown				
7	Feature 4, Level 2, Interior	11	Fauna	Bone	Bone Fragment					-		
7	Feature 4, Level 2, Interior	1	Fauna	Bone	Bone Fragment							
7	Feature 4, Level 2, Interior	1	Glass		Bottle			Light Green	small bottle sherd			
7	Feature 4, Level 2, Interior	6	Glass		Bottle			Olive Green	thin olive green glass bottle sherds, to a small bottle			
7	Feature 4, Level 2, Interior	1	Glass		Bottle	Mold Blown	·	Pale Green	sherd to a square or tapered bottle			
7	Feature 4, Level 2, Interior	i	Glass		Bottle	Mold Blown	Embossed	Green	body sherd with embossed unreadable letter, part of an inscription, probably a beer or pop bottle			
7	Feature 4, Level 2, Interior	2	Glass		Lamp Glass			Colorless	one leaded and one not lead lamp chimney sherd			
7	Feature 4, Level 2, Interior	1	Glass		Lamp Glass			Colorless	lamp chimney			-
7	Feature 4, Level 2, Interior	1	Glass	l,	Unidentified	Unidentified		Milk Glass	small milk glass sherd, could be to a lamp glob or tableware			,
7	Feature 4, Level 2, Interior	1	Glass		Window Glass			Light Green	appears to be 18th century window glass, heavy patina and scratches on one surface		_	
7	Feature 4, Level 2, Interior	3	Glass		Window Glass			Pale Green	small window glass sherd, discarded			Discarded

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Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
7	Feature 4, Level 2, Interior	5	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarded
7	Feature 4, Level 2, Interior	3	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarded
7	Feature 4, Level 2, Interior	9	Glass		Wine Bottle			Olive Green	body sherds		7 <u>11</u>	<del>                                     </del>
7	Feature 4, Level 2, Interior	1	Glass	Lead	Wine Stem	Free Blown	Unknown	Colorless	base to a wine stem with an iron pontil			
7	Feature 4, Level 2, Interior	1	Glass	Non Lead	Bottle			Colorless		r i		
7	Feature 4, Level 2, Interior	1	Glass	Non Lead	Bottle	Mold Blown		Colorless				
7	Feature 4, Level 2, Interior	Î.	Glass	Non Lead	Bottle	Multi Part Mold	Molded Pattern	Pale Green	appears to be a sherd to a London Mustard shape bottle			
7	Feature 4, Level 2, Interior	1	Metal	Coarse Earthenware	Unidentified			Copper Oxide	small copper alloy loop with a stem, possibly from jewelry			
7	Feature 4, Level 2, Interior	24	Metal	Iron	Nail	2		Rust	rusted nail fragments, discarded			Discarded
7	Feature 4, Level 2, Interior	35	Metal	Iron	Nail			Rust	badly rusted nail fragments, discarded			Discarded
7	Feature 4, Level 2, Interior	2	Metal	Iron	Unidentified			Rust	badly rusted iron rod			
8	Feature 4, Level 3, Builders Trench	1	Ceramic	Refined Earthenware	Cup	Pearlware	Painted	Polychrome	painted cup sherd, brown and yellow extant	1795	1830	
8	Feature 4, Level 3, Builders Trench	3	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780		
8	Feature 4, Level 3, Builders Trench	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Blue		1795	1830	
9	Feature 4, Level 4, Builders Trench	1	Ceramic	Coarse Earthenware	Sherd	Redware	Unknown	Lead Glazed				
9	Feature 4, Level 4, Builders Trench	1	Ceramic	Refined Earthenware	Bowl	Creamware	Undecorated	White	base sherd to a bowl, use wear marks on the interior	1780	1830	
9	Feature 4, Level 4, Builders Trench	1	Ceramic	Refined Earthenware	Bowl	Creamware	Undecorated	White	not a mend, but appear to be to the same bowl	1770	1840	
9	Feature 4, Level 4, Builders Trench	2	Ceramic	Refined Earthenware	Hollowware	Creamware	Painted	Polychrome	bowl or cup sherds, floral painted, olive-green, brown and mustard yellow, early colors.	1795	1830	
9	Feature 4, Level 4, Builders Trench	1	Ceramic	Refined Earthenware	Saucer	Pearlware	Painted	Polychrome	sherds to a pearlware saucer painted in the early colors (brown and pale green)	1795	1830	
9	Feature 4, Level 4, Builders Trench	4	Ceramie	Refined Earthenware	Sherd	Creamware		White		1780	1830	
9	Feature 4, Level 4, Builders Trench		Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Blue		1795	1830	
9	Feature 4, Level 4, Builders Trench	L	Ceramic	Stoneware	Teapot	Basalt	Unknown	Black	Engine turned basalt sherds, most likely to a teapot. Sherds from FS# 4, 9, and 22(2)			
9	Feature 4, Level 4, Builders Trench	2	Fauna	Bone	Bone Fragment							
9	Feature 4, Level 4, Builders Trench	1	Fauna	Bone	Teeth							

Cat	Provenience	Artifact	Class	Subclass	Object	Ware/Tech	Primary	Color	Comments/Mark	Begin	End	Status
#	10 <u>10 10 10 10 10 10 10 10 10 10 10 10 10 1</u>	Count					Decoration			Date	Date	
9	Feature 4, Level 4, Builders	1	Glass		Flacon	Mold Blown		Blue Green	sherd to a French flacon, vessel 147,			
	Trench			4					stored with the vessel, two sherds to			
									this vessel are from bag 30			
9	Feature 4, Level 4, Builders Trench	l.	Glass		Lamp Glass			Pale Green	lamp chimney glass			
9	Feature 4, Level 4, Builders Trench	1	Glass		Window Glass			Pale Green	small window glass sherd, discarded			Discarde
9	Feature 4, Level 4, Builders Trench	2	Glass	Non Lead	Lamp Glass			Colorless	lamp chimney glass			
9	Feature 4, Level 4, Builders Trench	44	Metal	Iron	Nail			Rust	badly rusted nail fragments, discarded			Discarded
10	Feature 4, Level 3, Wall	2	Ceramic	Coarse Earthenware	Sherd	Redware	Undecorated	Black Glaze				
10	Feature 4, Level 3, Wall	3	Ceramic	Refined Earthenware	Sherd	Creaniware	3	White		1780	1830	
10	Feature 4, Level 3, Wall	1	Glass		Bottle			Olive Green	body sherd			
10	Feature 4, Level 3, Wall	1	Glass		Lamp Glass			Colorless	lamp chimney			
10	Feature 4, Level 3, Wall	1	Glass		Window Glass			Pale Green	small window glass sherd, discarded			Discarde
10	Feature 4, Level 3, Wall	1.1	Metal	Iron	Nail			Rust	badly rusted nail fragments, discarded			Discarde
11	Feature 4, Level 4, Wall	1	Ceramic	Refined Earthenware	Sherd	Creamware	Unknown	Unknown	small creamware sherd	1780	1830	
11	Feature 4, Level 4, Wall	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown	pearlware foot ring	1780	1830	
11	Feature 4, Level 4, Wall	7	Composite		Mortar			Off White	small lumps of mortar			Discarded
11	Feature 4, Level 4, Wali	1	Fauna	Bone	Bone Fragment				sawn bone fragment			
11	Feature 4, Level 4, Wall	3	Glass		Window Glass			Pale Green				Discarde
11	Feature 4, Level 4, Wall	29	Metal	Iron	Nail			Rust	badly rusted nail fragments, probably cut			Discarde
12	Feature 4, Level 3, Interior	2	Ceramic		Brick			Brick Red	brick with mortar adhering, 7.75" by 3.5" by 2.25", second brick no mortar, 7.5" by 3.5" by 2.375			Discarded
12	Feature 4, Level 3, Interior	1	Ceramic	Coarse Earthenware	Hollowware	Redware	Unknown	Lead Glaze Red	redware sherd, either to a jar or jug, mica present in the body, unglazed exterior			
12	Feature 4, Level 3, Interior	1	Ceramic	Coarse Earthenware	Pitcher	Redware	Undecorated	Brown	appears to be to a bulbous pitcher			
12	Feature 4, Level 3, Interior	3	Ceramic	Coarse Earthenware	Sherd	Redware		Lead Glazed				
12	Feature 4, Level 3, Interior	1	Ceramic	Coarse Earthenware	Sherd	Redware	Black Glazed	Black				
12	Feature 4, Level 3, Interior	I	Ceramic	Porcelain	Plate	Chinese Porcelain	Painted	Blue		1750	1830	
12	Feature 4, Level 3, Interior	1	Ceramic	Porcelain	Plate	Chinese Porcelain	Painted	Blue	<del>-</del>	1750	1830	

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
12	Feature 4, Level 3, Interior	2	Ceramic	Refined Earthenware	Bowl	Creamware	Dipt	Tan, Brown	Simple banded creamware bowl, Chinese tea bowl shape, broad tan slip band and annular lines in dark brown and a pale olive color	1810	1830	
12	Feature 4, Level 3, Interior	I	Ceramic	Refined Earthenware	Bowl	Unidentified	Dipt	Tan & ?	burned sherd to a London shape bowl with dipt decoration, part of tan band and lines present, probably pearl or white ware.		-	
12	Feature 4, Level 3, Interior	1	Ceramic	Refined Earthenware	Cup	Pearlware	Painted, Overglaze	Red & Brown	small pearlware sherd to a fluted cup, enamel painted in floral patterns, most of which have worn off	1790	1820	i i
12	Feature 4, Level 3, Interior	1	Ceramic	Refined Earthenware	Hollowware	Pearlware	Unknown	Unknown		1780	1835	
12	Feature 4, Level 3, Interior	1	Ceramic	Refined Earthenware	Hollowware	Red Bodied	Black Glazed	Black	probably a teapot sherd			
12	Feature 4, Level 3, Interior	2	Ceramic	Refined Earthenware	Platter	Creamware	Undecorated	White	all mended	1784	1830	
12	Feature 4, Level 3, Interior	3	Ceramic	Refined Earthenware	Sherd	Creamware		White		1780	1830	-
12	Feature 4, Level 3, Interior	ı	Ceramic	Stoneware	Bottle	Salt Glazed	(8) 8	Gray & Brown	brown slipped interior			
12	Feature 4, Level 3, Interior	1	Ceramic	Stoneware	Bottle	Salt Glazed		Iron Slip				
12	Feature 4, Level 3, Interior	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	part of an impressed maker's mark		•	
12	Feature 4, Level 3, Interior	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	stoneware bottle, the finish is shaped like a blob top			32
12	Feature 4, Level 3, Interior	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	stoneware bottle, the finish is shaped like a blob top		_	
12	Feature 4, Level 3, Interior	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	impressed maker of bottler's mark, "Wettemo"			
12	Feature 4, Level 3, Interior	5	Ceramic	Stoneware	Hollowware	Salt Glazed		Buff & Brown	brown slipped interior			
12	Feature 4, Level 3, Interior	9	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior	-		
12	Feature 4, Level 3, Interior	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior		_	
12	Feature 4, Level 3, Interior	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	irons slipped exterior, brown slipped interior			
12	Feature 4, Level 3, Interior	1	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown	_	0.00		
12	Feature 4, Level 3, Interior	ı	Ceramic	Stoneware	Hollowware	Slip Glazed	-	Brown				
12	Feature 4, Level 3, Interior	30	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown	_		-	<u> </u>
12	Feature 4, Level 3, Interior	15	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown On Gray				
12	Feature 4, Level 3, Interior	14	Composite		Mortar			Off White	small fragments of mortar			Discarded
12	Feature 4, Level 3, Interior	6	Glass		Window Glass			Pale Green	_			Discarded
12	Feature 4, Level 3, Interior	9	Glass		Wine Bottle			Olive Green	body sherds			l

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
12	Feature 4, Level 3, Interior	4	Glass	Non Lead	Bottle			Colorless				
12	Feature 4, Level 3, Interior	4	Glass	Non Lead	Lamp Glass			Colorless				†
12	Feature 4, Level 3, Interior	i.	Metal	Copper Alloy	Unidentified			Copper Oxide	manufactured copper alloy part to something. Unknown function	-		
12	Feature 4, Level 3, Interior	37	Metal	Iron	Nail			Rust	badly rusted nail fragments	-		Discarded
12	Feature 4, Level 3, Interior	1	Metal	Iron	Unidentified			Rust	wrought iron fragment			<del>                                     </del>
13	Feature 4, Level 4, Interior	2	Ceramiç		Brick			Brick Red	brick with some mortar attached, 7.25" by 3.5" by 2.25" and one 7.5" by 3.5" by 2.25"			Discarded
13	Feature 4, Level 4, Interior	1	Ceramic	Coarse Earthenware	Bottle	Redware	Undecorated	Red-Brown	small cylindrical redware bottle, double glazed			
13	Feature 4, Level 4, Interior	2	Ceramic	Coarse Earthenware	Sherd	Redware	Black Glazed	Black				
13	Feature 4, Level 4, Interior	l	Ceramic	Refined Earthenware	Hollowware	Pearlware	Painted	Green Brown		1795	1830	
13	Feature 4, Level 4, Interior	1	Ceramic	Refined Earthenware	Pipe Bowl			Off White	clay pipe bowl with stem			
13	Feature 4, Level 4, Interior	5	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780		
13	Feature 4, Level 4, Interior	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1795	1830	
13	Feature 4, Level 4, Interior	2	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	cylindrical stoneware bottle, the finish is shaped like a blob top			
13	Feature 4, Level 4, Interior	4	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior	T		1
13	Feature 4, Level 4, Interior	3	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior			<del>                                     </del>
13	Feature 4, Level 4, Interior	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior			
13	Feature 4, Level 4, Interior	1	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown		-		
13	Feature 4, Level 4, Interior	22	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown		<u> </u>		<del> </del>
13	Feature 4, Level 4, Interior	2	Composite	-	Mortar			Off White	fragments of mortar	1		Discarded
13	Feature 4, Level 4, Interior	2	Fauna	Bone	Teeth				animal teeth			
13	Feature 4, Level 4, Interior	L	Glass	<u> </u>	Bottle		† <del></del>	Pale Green	thin bottle glass sherd, probably for medicine			
13	Feature 4, Level 4, Interior	1	Glass		Bottle Glass	Mold Blown		Light Green	possibly a London mustard bottle sherd			
13	Feature 4, Level 4, Interior	7	Glass		Window Glass			Pale Green			2 /	Discarded
13	Feature 4, Level 4, Interior	14	Glass		Wine Bottle	1		Olive Green	body sherds			
13	Feature 4, Level 4, Interior	1	Glass	Lead	Tumbler			Colorless	base sherd to a lead glass tumbler with a pontil scar			3
13	Feature 4, Level 4, Interior	1	Glass	Non Lead	Tableware	Unidentified	Unknown	Milk Glass	small milk glass sherd, to tableware of lighting device			

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
13	Feature 4, Level 4, Interior	40	Metal	Iron	Nail			Rust	badly rusted nail fragments	******		Discarded
14	Feature 4, Level 5, Builders Trench	Ī	Ceramic	Refined Earthenware	Hollowware	Creamware	Unknown	White		1780	1830	
14	Feature 4, Level 5, Builders Trench	I	Ceramic	Refined Earthenware	Pipe Stem			White				
14	Feature 4, Level 5, Builders Trench	1	Ceramic	Refined Earthenware	Plate	Pearlware/Whitewa re	Shell Edge	Blue Edge	rim sherd to blue shell edged pearlware or whiteware plate with an even scalloped rim and impressed straight lines.	1820	1840	
14	Feature 4, Level 5, Builders Trench	1	Ceramic	Refined Earthenware	Platter	Pearlware	Shell Edge	Blue Edge	large sherd to an oval blue shell edged pearlware pattern, no foot ring, unscalloped with an impressed curved line rim pattern.	1820	1835	
14	Feature 4, Level 5, Builders Trench	1	Ceramic	Refined Earthenware	Saucer	China Glaze	Printed	Blue	blue printed saucer in an oriental pattern	1790	1820	
14	Feature 4, Level 5, Builders Trench	2	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780	1830	
14	Feature 4, Level 5, Builders Trench	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1795	1830	
14	Feature 4, Level 5, Builders Trench	2	Ceramic	Stoneware	Bottle	Slip Glazed	Undecorated	Brown		1		
14	Feature 4, Level 5, Builders Trench	1	Glass		Window Glass			Pale Green	small window glass sherd, discarded			Discarded
14	Feature 4, Level 5, Builders Trench	1	Glass	Non Lead	Tumbler			Colorless	tumbler sherd, probably pressed	679		
[4	Feature 4, Level 5, Builders Trench	1	Metal	Iron	Nail			Rust	badly rusted nail fragment, discarded		_	Discarded
16	Feature 4, Level 5, Wall	1	Ceramic	Refined Earthenware	Saucer	Pearlware	Painted, Overglaze	Red & Unknow	small pearlware rim sherd with traces of enamel overglaze painting in red, other colors unknown	1790	1820	
16	Feature 4, Level 5, Wall	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Polychrome	painted in early colors, green, brown and blue	1795	1830	
16	Feature 4, Level 5, Wall	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1795	1830	
16	Feature 4, Level 5, Wall	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
16	Feature 4, Level 5, Wall	4	Composite		Mortar			Off White	small mortar fragments, disearded			Discarded
16	Feature 4, Level 5, Wall	2	Glass		Wine Bottle	- Marie		Olive Green	body sherds			
16	Feature 4, Level 5, Wall	1	Glass	Non Lead	Bottle			Coloriess				-
16	Feature 4, Level 5, Wall	-5	Metal	lron	Nail			Rust	hadly rusted nail fragments, discarded		-	Discarded
16	Feature 4, Level 5, Wall	2	Metal	Iron	Unidentified			Rust	nondescript iron fragments, discarded	_		Discarded
17	Feature 4, Level 6, Wall	1	Ceramic	Coarse Earthenware	Sherd	Redware	Mottled Glaze	Brown & Tan				
17	Feature 4, Level 6, Wall	1	Ceramic	Stoneware	Sherd	Salt Glazed	**	Buff				

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Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
18	Feature 4, Level 5, Interior	1	Ceramic	<u> </u>	Brick			Brick Red	brick with some mortar adhering 8" by 3.5" 2.375", discarded			Discarde
18	Feature 4, Level 5, Interior	1	Ceramic		Fire Brick			Off White	small fire brick fragment			
18	Feature 4, Level 5, Interior	1	Ceramic	Coarse Earthenware	Pitcher	Redware	Undecorated	Brown	appears to be to a bulbous pitcher			
18	Feature 4, Level 5, Interior	1	Ceramic	Coarse Earthenware	Sherd	Redware	Black Glazed	Black				-
18	Feature 4, Level 5, Interior	2	Ceramic	Porcelain	Bowl	Chinese Porcelain	Painted, Overglaze	Red	_			
18	Feature 4, Level 5, Interior	2	Ceramic	Refined Earthenware	Pipe Stem			White				
18	Feature 4, Level 5, Interior	1	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780	1830	
18	Feature 4, Level 5, Interior	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Brown		1795	1830	
18	Feature 4, Level 5, Interior	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Polychrome		1795	1830	_
18	Feature 4, Level 5, Interior	ı	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1795	1830	
18	Feature 4, Level 5, Interior	1	Ceramic	Refined Earthenware	Teapot	Red Bodied	Unknown	Lead Glaze Red	sherd to the pouring spout, probably an English redware teapot			P-
18	Feature 4, Level 5, Interior	1	Ceramic	Refined Earthenware	Teapot	Redware		Black				
18	Feature 4, Level 5, Interior	1	Ceramic	Refined Earthenware	Teapot	Redware	Engine Turned	Brown				_
18	Feature 4, Level 5, Interior	t	Ceramic	Stoneware	Bottle	Salt Glazed		Buff	Salt-glazed stoneware bottle, the finish is in the shape of a blob top, brown slipped interior			
18	Feature 4, Level 5, Interior	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	impressed maker of bottler's mark, "Wettemo"			
18	Feature 4, Level 5, Interior	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	cylindrical stoneware bottle, the finish is shaped like a blob top			
18	Feature 4, Level 5, Interior	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	-			
18	Feature 4, Level 5, Interior	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Buff & Brown	brown slipped interior			
18	Feature 4, Level 5, Interior	15	Ceramic	Stoneware	Hollowware	Salt Glazed		Buff & Brown	brown slipped interior			_
18	Feature 4, Level 5, Interior	1	Ceramic	Stoneware	Hollowware	Salt Glazed	<del>                                     </del>	Gray & Brown	brown slipped interior	-		
18	Feature 4, Level 5, Interior	2	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown stipped interior	-		<del></del>
18	Feature 4, Level 5, Interior	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	large body sherds to a bellied crock, probably to a bottle or jar. Salt glazed exterior, brown slipped interior			,
18	Feature 4, Level 5, Interior	l l	Ceramic	Stoneware	Hollowware	Salt Glazed		Iron Slip	interior not extant			
18	Feature 4, Level 5, Interior	1	Ceramic	Stoneware	Hollowware	Salt Glazed	Painted	Blue	small blue painted sherd, possibly to the mouth of a stoneware bottle			

Cat	Provenience	Artifact		Subclass		11/ CT - 1		· -·				T = """
#	1	Count	Class		Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
18	Feature 4, Level 5, Interior	11	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown				
18	Feature 4, Level 5, Interior	3	Composite		Mortar			Off White	small mortar fragments, discarded	-		Discarded
18	Feature 4, Level 5, Interior	10	Composite		Mortar			Off White	mortar fragments, discarded			Discarded
18	Feature 4, Level 5, Interior	1	Composite		Mortar			Off White	small piece of mortar, discarded		-	Discarded
18	Feature 4, Level 5, Interior	2	Fauna	Bone	Bone Fragment							
18	Feature 4, Level 5, Interior	2	Glass		Lamp Glass			Colorless	lamp chimney sherds			
18	Feature 4, Level 5, Interior	6	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarded
18	Feature 4, Level 5, Interior	11	Glass		Wine Bottle			Olive Green	small body sherds	-		•
81	Feature 4, Level 5, Interior	1	Glass		Wine Bottle			Olive Green	Neck to an English black glass wine bottle with a down tooled lip and a string rim. The neck has heavy use- wear marks and scratches. Probably to a dip mold-blown cylindrical bottle.			
18	Feature 4, Level 5, Interior	1	Glass		Wine Bottle			Olive Green	appears to be an English wine bottle finish			1000
18	Feature 4, Level 5, Interior	2	Glass		Wine Bottle	Dip Mold	Undecorated	Black Glass	base to a British dip mold-blown cylindrical black glass wine bottle		-	
18	Feature 4, Level 5, Interior	1	Glass	· <u>-</u>	Wine Bottle	Dip Mold	Undecorated	Black Glass	base to a British dip mold-blown			
18	Feature 4, Level 5, Interior	1	Metal	Copper Alloy	Button	Stamped		Copper Oxide	cylindrical black glass wine bottle brass button that had an iron shank, there appears to have had a cloth covering which can be seen in the oxidized surface			
18	Feature 4. Level 5. Interior	21	Metal	Iron	Nail			Rust	badly rusted nail fragment, discarded	<u> </u>		Discarded
19	Feature 4, Level 6, Interior	I	Ceramic	-	Brick			Brick Red	brick 7.875" by 3.5" by 2.375", discarded			Discarded
19	Feature 4, Level 6, Interior	3	Ceramic		Brick			Brick Red	small brick fragments, discarded			Discarded
19	Feature 4, Level 6, Interior	1	Ceramic		Fire Brick Fragment			Off White	half of a fire brick with impressed lettering that reads RRYS / 1190 / 4.5" wide, 2.5" thick	_		
19	Feature 4, Level 6, Interior		Ceramic	Refined Earthenware	Bowl	Creamware	Dipt	Tan, Brown	Simple banded creamware bowl, Chinese tea bowl shape, broad tan slip band and annular lines in dark brown and a pale olive color	1810	1830	
19	Feature 4, Level 6, Interior	1	Ceramic	Refined Earthenware	Plate	Creamware	Undecorated	White		1780	1820	V -
19	Feature 4, Level 6, Interior	1	Ceramic	Refined Earthenware	Plate	Pearlware	Printed	Blue	thick center sherd to a plate or platter	1815	1830	
19	Feature 4, Level 6, Interior	ļ	Ceramic	Refined Earthenware	Saucer	Pearlware	Painted	Polychrome	sherds to a pearlware saucer painted in the early colors (brown, blue, tan)	1795	1830	
19	Feature 4, Level 6, Interior	5	Ceramic	Refined Earthenware	Sherd	Creamware		White	(arran) eras, tan)	1780	1830	

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Cat:	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
19	Feature 4, Level 6, Interior	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1795	1830	
19	Feature 4, Level 6, Interior	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
19	Feature 4, Level 6, Interior	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown				
19	Feature 4, Level 6, Interior	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Buff & Brown	brown slipped interior			
19	Feature 4, Level 6, Interior	4	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown				
19	Feature 4, Level 6, Interior	4	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown				
19	Feature 4, Level 6, Interior	1	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown				
19	Feature 4, Level 6, Interior	7	Composite		Mortar			Off White	mortar fragments, discarded			Discarded
19	Feature 4, Level 6, Interior	2	Fauna	Bone	Bone Fragment		-	***				
19	Feature 4, Level 6, Interior	1	Glass		Bottle			Light Green	body sherd, probably to a beer or pop bottle	-		
19	Feature 4, Level 6, Interior	3	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarded
19	Feature 4, Level 6, Interior	1	Glass		Wine Bottle		756	Black Glass	neck to an English wine bottle, down tooled finish and a string rim			
19	Feature 4, Level 6, Interior	14	Glass		Wine Bottle			Olive Green	body sherds			-
19	Feature 4, Level 6, Interior	4	Glass		Wine Bottle			Olive Green	body sherds			
19	Feature 4, Level 6, Interior	1	Glass	Lead	Tableware			Colorless	small rim sherd, possibly to a tumbler			
19	Feature 4. Level 6, Interior	k	Glass	Non Lead	Tumbler		Engraved	Colorless	rim, possibly to a tumbler, with copper wheel engraving, probably Bohemian glass			
19	Feature 4, Level 6, Interior	11	Metal	lron	Nail			Rust	badly rusted nail fragments, one may be an iron nail, discarded	,		Discarded
19	Feature 4, Level 6, Interior	12	Metal	Iron	Sheet Iron Fragments			Rust	small fragments of sheet iron, discarded			Discarded
20	Feature 4, Level 7, Builders Trench	2	Ceramic		Brick			Brick Red	small brick crumbs, discarded			Discarded
20	Feature 4, Level 7, Builders Trench	3	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780	1830	
20	Feature 4. Level 7, Builders Trench	1	Ceramic	Refined Earthenware	Teapot	Redware	Engine Turned	Brown				
20	Feature 4, Level 7, Builders Trench	7	Fauna	Bone	Bone Fragment				burnt bone fragments			
20	Feature 4, Level 7, Builders Trench	1	Glass		Bottle	Unidentified		Aqua	small vile with a flaring lip			
20	Feature 4, Level 7, Builders Trench	9	Glass		Window Glass			Palc Green				Discarded
20	Feature 4, Level 7, Builders Trench	2	Glass	Lead	Tableware	Unidentified		Colorless	two small lead glass sherds, possibly to a tumbler			
20	Feature 4, Level 7, Builders Trench	2	Glass	Non Lead	Bottle			Colorless	two small body sherds			

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
21	Feature 4, Level 7, Wall	1	Ceramic	Coarse Earthenware	Jug	Redware	Undecorated	Lead Glaze Red	base to a double glazed bulbous redware jug			
21	Feature 4, Level 7, Wall	1	Ceramic	Refined Earthenware	Saucer	Whiteware	Printed	Red	probably a saucer, red printed white ware with a small amount of bluing to the glaze. Despite the bluing in the footring, the vessel appears very white.	1830	1845	
21	Feature 4, Level 7, Wall	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior			
21	Feature 4, Level 7, Wall	6	Fauna	Bone	Tableware		·		probably sheep teeth		-	
21	Feature 4, Level 7, Wall	3	Glass		Window Glass				small window glass sherds, discarded			Discarded
21	Feature 4, Level 7, Wall	3	Glass	1	Wine Bottle			Olive Green	body sherds		-	
21	Feature 4, Level 7, Wall	2	Glass	Lead	Bottle	Multi Part Mold	Molded Pattern	Light Green	probably a London mustard bottle	_		
21	Feature 4, Level 7, Wall	1	Glass	Lead	Tumbler	Mold Blown	Engraved	Colorless	tumbler sherd, mold blown and copper wheel engraved			
21	Feature 4, Level 7, Wall	2	Metal	Iron	Nail			Rust	badly rusted nail fragments			Discarded
22	Feature 4, Level 7, Interior	1	Ceramic		Brick			Brick Red	7.25" by 3.25" by 2.25			Discarded
22	Feature 4, Level 7, Interior	1	Ceramic		Fire Clay Liner			Off White	fire clay liner brick with a molded surface for a cast iron stove or furnace. 1.5" thick 6.5" wide.			
22	Feature 4, Level 7, Interior	1	Ceramic	Coarse Earthenware	Sherd	Redware	Black Glazed	Black			, , , , , ,	
22	Feature 4, Level 7, Interior	1	Ceramic	Refined Earthenware	Egg Cup	Creamware	Undecorated	White		1770	1830	
22	Feature 4, Level 7, Interior	1	Ceramic	Refined Earthenware	Plate	Creamware	Undecorated	White	4 sherds that appear to be to the same plate, but do not mend	1780	1820	
22	Feature 4, Level 7, Interior	8	Ceramic	Refined Earthenware	Sherd	Creamware	<u></u>	White		1780	1830	
22	Feature 4, Level 7, Interior	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Brown & Green		1795	1830	
22	Feature 4, Level 7, Interior	2	Ceramic	Refined Earthenware	Sherd	Peartware	Unknown	Unknown		1780	1835	
22	Feature 4, Level 7, Interior	1	Ceramic	Stoneware	Bottle	Salt Glazed		Gray & Brown	salt glazed exterior, brown slipped interior			
22	Feature 4, Level 7, Interior	1	Ceramic	Stoneware	Bottle	Salt Glazed	Undecorated	Buff/Tan	Salt-glazed cylindrical stoneware bottle, brown slipped interior, some iron slip present on exterior, impressed letters at the heel "D. L. ORMSBY" appears to be about 6 ounces in capacity	- ,		
22	Feature 4, Level 7, Interior	3	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	large body sherds to a bellied crock, probably to a bottle or jar. Salt glazed exterior, brown slipped interior			
22	Feature 4, Level 7, Interior	1	Ceramie	Stoneware	Sherd	Salt Glazed		Buff				

Cat # «	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
22	Feature 4, Level 7, Interior	.5	Ceramic	Stoneware	Sherd	Salt Glazed		Gray & Brown	brown slipped interior			
22	Feature 4, Level 7, Interior	1	Ceramic	Stoneware	Sherd	Salt Glazed		Gray & Brown	brown slipped interior			
22	Feature 4, Level 7, Interior	13	Ceramic	Stoneware	Sherd	Slip Glazed		Brown	-			<del></del>
22	Feature 4, Level 7, Interior	2	Ceramic	Stoneware	Teapot	Basalt	Engine Turned	Black	Engine turned basalt sherds, most likely to a teapot. Sherds from FS# 4, 9, and 22(2)			v
22	Feature 4. Level 7, Interior	27	Composite	_	Mortar			Off White	mortar fragments, discarded			Discarde
22	Feature 4, Level 7, Interior	1	Composite		Unidentified			Off White	lump of plaster?	8		-
22	Feature 4, Level 7, Interior	2	Fauna	Bone	Bone Fragment	<b>1</b>		<del>                                     </del>	burned bone fragments			<del>-</del>
22	Feature 4, Level 7, Interior	2	Glass		Bottle			Olive Green	sherds to a small dark offive green bottle with a flaring lip.			
22	Feature 4, Level 7, Interior	1	Glass		Bottle	Mold Blown		Green				į.
22	Feature 4, Level 7, Interior	1	Glass		Window Glass			Light Green	looks like a sherd of 18th century window glass			
22	Feature 4, Level 7, Interior	9	Glass		Window Glass			Pale Green	small window glass sherds			Discarde
22	Feature 4, Level 7, Interior	3	Glass		Wine Bottle			Black	body sherds to an English black glass bottle			
22	Feature 4, Level 7, Interior	23	Glass	_	Wine Bottle			Olive Green	body sherds			
22	Feature 4, Level 7, Interior	J	Glass	Lead	Bottle	Multi Part Mold	Molded Pattern	Pale Green	appears to be a sherd to a London Mustard bottle, probably to vessel 143			0 20 2
22	Feature 4, Level 7, Interior	7	Glass	Lead	Lamp Glass			Pale Green				
22	Feature 4, Level 7, Interior	62	Metal	Iron	Nail	<u> </u>	-	Rust	badly rusted nail fragments			Discarde
22	Feature 4, Level 7, Interior	3	Metal	Iron	Sheet Metal			Rust	small fragments of sheet iron.			Discarde
23	Feature 4, Level 8, Builders Trench	1	Ceramic	Coarse Earthenware	Jug	Redware	Undecorated	Lead Glaze Red	base to a double glazed bulbous redware jug	-		
23	Feature 4, Level 8, Builders Trench	1	Ceramie	Coarse Earthenware	Sherd	Redware	Lead Glazed	Brown			•	
23	Feature 4, Level 8, Builders Trench	1	Ceramic	Refined Earthenware	Clay Pipe		Molded Pattern	Off White				
23	Feature 4, Level 8, Builders Trench	1	Ceramic	Refined Earthenware	Saucer	Pearlware/Whitewa re	Painted	Blue		1820	1835	
23	Feature 4, Level 8, Builders Trench	5	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780	1830	
23	Feature 4, Level 8, Builders Trench	1	Ceramie	Refined Earthenware	Sherd	Pearlware	Painted	Blue		1795	1830	
23	Feature 4, Level 8, Builders Trench	10	Fauna	Bone	Bone Fragment				some burnt			
23	Feature 4, Level 8, Builders Trench	[1]	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarded

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
23	Feature 4, Level 8, Builders Trench	1	Glass		Wine Bottle			Olive Green	body sherd			
23	Feature 4, Level 8, Builders Trench	1	Glass	Lead	Tumbler	Mold Blown	Fluted	Colorless	body sherd to a tumbler of small pitcher			-
23	Feature 4, Level 8, Builders Trench	.5	Metal	Iron	Nail			Rust	badly rusted nail fragments			Discarde
23	Feature 4, Level 8, Builders Trench	2	Metal	Iron	Nail			Rust	badly rusted nail fragments, discarded			Discarde
24	Feature 4, Level 9, Builders Trench	1	Ceramic	Refined Earthenware	Pipe Bowl		Embossed	White	embossed part of a mark " E" and a pattern on the other side			
24	Feature 4, Level 9, Builders Trench	4	Ceramic	Refined Earthenware	Sherd	Creamware	Unknown	White		1780	1830	
24	Feature 4, Level 9, Builders Trench	6	Fauna	Bone	Bone Fragment							
24	Feature 4, Level 9, Builders Trench	2	Glass	w	Window Glass			Pale Green	small window glass sherds, discarded			
24	Feature 4, Level 9, Builders Trench	4	Metal	Iron	Nail			Rust	badly rusted nail fragments, discarded			Discarded
25	Feature 4, Level 8, Wall	1	Glass		Window Glass			Pale Green	small window glass sherd, disearded			Discarded
25	Feature 4, Level 8, Wall	2	Glass		Wine Bottle			Olive Green	body sherds			
	Feature 4, Level 8, Wall	1	Glass	Non Lead	Tumbler		Etched	Colorless	copper wheel engraved tumbler, non- lead, probably Bohemian glass			
26	Feature 4, Level 9, Wall	1	Ceramic	Coarse Earthenware	Sherd	Redware	Black Glazed	Black				
	Feature 4, Level 9, Wall	1	Ceramic	Coarse Earthenware	Sherd	Redware	Lead Glazed	Brown				
26	Feature 4, Level 9, Wall	1	Ceramic	Refined Earthenware	Sherd	Creamware	Unknown	White		1780	1830	
26	Feature 4, Level 9, Wall	I.	Ceramic	Stoneware	Bottle	Salt Glazed	Undecorated	Buff/Tan	Salt-glazed cylindrical stoneware bottle, brown slipped interior, some iron slip present on exterior, impressed letters at the heel "D. L. ORMSBY" appears to be about 6 ounces in capacity			
26	Feature 4, Level 9, Wall	I	Ceramic	Stoneware	Bottle	Salt Glazed	Undecorated	Gray & Brown	brown slipped interior			
26	Feature 4, Level 9, Wall	1	Fauna	Bone	Bone Fragment				burnt bone fragment		-	
26	Feature 4, Level 9, Wall	3	Glass		Lamp Glass			Colorless	very thin lamp glass, possibly to a light bulb			
26	Feature 4, Level 9, Wall	6	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarded
26	Feature 4, Level 9, Wall	20	Glass		Wine Bottle			Olive Green	body sherds			
26	Feature 4, Level 9, Walf	1	Metal	Iron	Nail				badly rusted nail fragment, discarded			Discarded
27	Feature 4, Level 8, Interior	l.	Ceramic		Fire Brick			Off White	fragment from a fire brick, discarded			Discarded

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
27	Feature 4, Level 8, Interior		Ceramic	Coarse Earthenware	Hollowware	Redware	Lead Glazed	Brown				
27	Feature 4, Level 8, Interior	1	Ceramic	Porcelain	Saucer	Chinese Porcelain	Painted, Overglaze	Red & Black				
27	Feature 4, Level 8, Interior	1	Ceramic	Refined Earthenware	Cup	Pcarlware	Painted	Polychrome	painted cup sherd, brown and tan	1795	1830	
27	Feature 4, Level 8, Interior	1	Ceramic	Refined Earthenware	Muffin Plate	Pearlware	Shell Edge	Green Edge	rim sherd to green shell edged pearlware muffin plate with a scalloped rim and impressed straight lines.	1810	1835	
27	Feature 4, Level 8, Interior	1	Ceramic	Refined Earthenware	Pipe Stem			White				
27	Feature 4, Level 8, Interior	I	Ceramic	Refined Earthenware	Plate	Pearlware	Shell Edge	Blue Edge	rim sherd to blue shell edged pearlware plate with an even scalloped rim and impressed straight lines.	1810	1830	
27	Feature 4, Level 8, Interior	3	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White	,	1780	1830	
27	Feature 4, Level 8, Interior	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
27	Feature 4, Level 8, Interior	1	Ceramic	Stoneware	Bottle	Salt Glazed	Undecorated	Buff/Tan	Salt-glazed cylindrical stoneware bottle, brown slipped interior, some iron slip present on exterior, impressed letters at the heel "D. L. ORMSBY" appears to be about 6 ounces in capacity			
27	Feature 4, Level 8, Interior	2	Ceramic	Stoneware	Hollowware	Salt Glazed		Buff & Brown	brown slipped interior			
27	Feature 4, Level 8, Interior	16	Ceramic	Stoneware	Hollowware	Salt Glazed		Buff & Brown	brown slipped interior			
27	Feature 4, Level 8, Interior	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Buff Body			-	
27	Feature 4, Level 8, Interior	2	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior			
27	Feature 4, Level 8, Interior	2	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior			
27	Feature 4, Level 8, Interior	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior			
27	Feature 4, Level 8, Interior	2	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior			
27	Feature 4, Level 8, Interior	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	part of an impressed maker or bottler's mark " IZ" or " Z1"			
27	Feature 4, Level 8, Interior	6	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown			- 70	
27	Feature 4, Level 8, Interior	2	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown	exterior not extant			
27	Feature 4, Level 8, Interior	1	Composite		Mortar		_	Off White	lump of mortar, discarded			Discarded
27	Feature 4, Level 8, Interior	2	Composite		Mortar			Off White	lumps of mortar, discarded			Discarded
27	Feature 4, Level 8, Interior	3	Fauna	Bone	Bone Fragment	<del> </del>	<del>                                       </del>				N	

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Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
27	Feature 4, Level 8, Interior	1	Fauna	Bone	Bone Fragment							
27	Feature 4, Level 8, Interior	9	Fauna	Bone	Bone Fragment							
27	Feature 4, Level 8, Interior	1	Fauna	Shell	Oyster Shell				-		-	Discarded
27	Feature 4, Level 8, Interior	1	Glass		Bottle		Embossed	Green	body sherd to a beer or pop bottle, embossed " W W"			
27	Feature 4, Level 8, Interior	I	Glass		Bottle	Mold Blown		Amber				
27	Feature 4, Level 8, Interior	1	Glass		Bottle	Mold Blown		Colorless				8
27	Feature 4, Level 8, Interior	1	Glass		Bottle	Mold Blown		Green				
27	Feature 4, Level 8, Interior	2	Glass		Bottle	Multi Part Mold	Molded Pattern	Light Green	appears to be part of a London Mustard Bottle			
27	Feature 4, Level 8, Interior	ı	Glass		Glass Shelf Sherd	Pressed	Molded Pattern	Colorless	sherd to a glass shelf, one surface has a series of embossed parallel lines			
27	Feature 4, Level 8, Interior	3	Glass	*	Lamp Glass			Colorless	lamp chimney glass			
27	Feature 4, Level 8, Interior	I	Glass		Unidentified	Pressed		White	thick, pressed milk glass object, possibly a bowl		2700	
27	Feature 4, Level 8, Interior	15	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarded
27	Feature 4, Level 8, Interior	3	Glass		Window Glass			Pale Green	small window glass sherds, discarded	_		Discarded
27	Feature 4, Level 8, Interior	5	Glass		Wine Bottle			Olive Green	body sherds to a wine bottle			
27	Feature 4, Level 8, Interior	2	Glass		Wine Bottle			Olive Green	neck to an English wine bottle, two sherds mended, lipping tool finish			
27	Feature 4, Level 8, Interior	4	Glass		Wine Bottle			Olive Green	body sherds to a wine bottle			-20
27	Feature 4, Level 8, Interior	5	Glass		Wine Bottle			Olive Green	wine bottle body sherds			
27	Feature 4, Level 8, Interior	I	Glass		Wine Bottle			Olive Green				
27	Feature 4, Level 8, Interior	32	Glass		Wine Bottle			Olive Green	body sherds	,		
27	Feature 4, Level 8, Interior	1	Glass	<del>                                     </del>	Wine Bottle	Paste Mold	İ	Olive Green				
27	Feature 4, Level 8, Interior	2	Glass		Wine Bottle	Paste Mold		Olive Green				
27	Feature 4, Level 8, Interior	ı	Glass	Lead	Bottle	Unidentified	Unknown	Pale Green	base to a small bottle, empontilled			
27	Feature 4, Level 8, Interior	1	Glass	Lead	Lamp Glass			Light Green	small lamp chimney sherd	_	26.0	-
27	Feature 4, Level 8, Interior	3	Glass	Lead	Tableware	Unidentified	Unknown	Colorless	3 small lead glass sherds			<del>                                     </del>
27	Feature 4, Level 8, Interior	3	Glass	Non Lead	Lamp Glass	-		Colorless	lamp chimney sherds			
27	Feature 4, Level 8, Interior	1	Glass	Non Lead	Tableware	Mold Blown	Molded Pattern	Colorless	body sherd to a hollowware, appears to have molded panels			_
27	Feature 4, Level 8, Interior	3	Glass	Non Lead	Tumbler	Pressed	Unknown	Colorless	base and body sherds to a tumbler			-320
27	Feature 4, Level 8, Interior	Į.	Metal	Copper Alloy	Button Part	Stamped		Copper Oxide	die stamped button backing, two holes, probably had a cloth front.			
27	Feature 4, Level 8, Interior	l l	Metal	Copper Alloy	Unidentified	Unidentified		Copper Oxide	cast copper implement fragment	*		

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
27	Feature 4, Level 8, Interior	1	Metal	Iron	Nail	_		Rust	badly rusted nail, discarded			Discarded
27	Feature 4, Level 8, Interior	54	Metal	lron	Nail			Rust	badly rusted nail fragments, discard			Discarded
27	Feature 4, Level 8, Interior	30	Metal	iron	Nail			Rust	badly rusted nail fragments, probably cut	a)		Discarded
27	Feature 4, Level 8, Interior	16	Metal	lron	Nail			Rust	badly rusted nail fragment, discarded			Discarded
27	Feature 4, Level 8, Interior	3	Metal	Iron	Sheet Iron			Rust	small rusted fragments of sheet iron, nondescript, discarded			
27	Feature 4, Level 8, Interior	7	Metal	Iron	Sheet Metal				badly rusted fragments of sheet metal, discarded			Discarded
27	Feature 4, Level 8, Interior	I	Metal	Iron	Unidentified	Cast		Rust	large sheet of what appears to be cast iron, burned and incrusted			
27	Feature 4, Level 8, Interior	1	Metal	Lead	Lead Fragments			Lead Color				
28	Feature 4, Level 9, Interior	1	Ceramic		Brick	,		Brick Red	brick 7.75" by 3.5" by 2.25" recommended for discard			Discarded
28	Feature 4, Level 9, Interior	2	Ceramic		Fire Clay Stove Liners			Off-White	two fragments of fire brick lining slabs for a cast iron stove or furnace. One has molding to fit next to the iron.			
28	Feature 4, Level 9, Interior	1	Ceramic	Coarse Earthenware	Hollowware	Redware	Black Glazed	Black				
28	Feature 4, Level 9, Interior	1	Ceramic	Refined Earthenware	Chamber Pot	Creamware	Undecorated	White	flat rimmed creamware chamber pot	1770	1840	
28	Feature 4, Level 9, Interior	1	Ceramic	Refined Earthenware	Pipe Bowl			White	white clay pipe bowl sherd			
28	Feature 4, Level 9, Interior	3	Ceramic	Refined Earthenware	Sherd	Creamware		White		1780	1830	
28	Feature 4, Level 9, Interior	1	Ceramic	Refined Earthenware	Sherd	Creamware	Unknown	White		1780	1830	
28	Feature 4, Level 9, Interior	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1795	1830	
28	Feature 4, Level 9, Interior	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
28	Feature 4, Level 9, Interior	1	Ceramic	Refined Earthenware	Teapot	Pearlware	Printed	Blue	probably a teapot or sugar bowl	1815	1840	
28	Feature 4, Level 9, Interior	1	Ceramic	Stoneware	Bottle	Salt Glazed		Gray & Brown	salt glazed exterior, brown slipped interior			
28	Feature 4, Level 9, Interior	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray	,			
28	Feature 4, Level 9, Interior	2	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior			
28	Feature 4, Level 9, Interior	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	part of an impressed bottler or potter's mark that reads "PO	-		
28	Feature 4, Level 9, Interior	J	Composite		Cement Tile			Off-White	cement tile, 8" by 8" by 2" recommended for discard		,	Discarded
28	Feature 4, Level 9, Interior	3	Composite		Mortar			Off White	3 mortar fragments, discarded			Discarded

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Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
28	Feature 4, Level 9, Interior	1	Composite		Mortar			Off-White	small mortar fragment, discarded			Discarded
28	Feature 4, Level 9, Interior	5	Fauna	Bone	Bone Fragment				looks like pig and possibly one rodent bone		**	-
28	Feature 4, Level 9, Interior	1	Flora	Wood	Corks				bottle cork		c c	
28	Feature 4, Level 9, Interior	13	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarded
28	Feature 4, Level 9, Interior	100	Glass		Wine Bottle		<u> </u>	Olive Green	wine bottle body sherds			
28	Feature 4, Level 9, Interior	1	Glass		Wine Bottle			Olive Green				
28	Feature 4, Level 9, Interior	1	Glass		Wine Bottle			Olive Green				
28	Feature 4, Level 9, Interior	1	Glass		Wine Bottle			Olive Green				<u> </u>
28	Feature 4, Level 9, Interior	2	Glass		Wine Bottle			Olive Green				
28	Feature 4, Level 9, Interior	2	Glass		Wine Bottle			Olive Green		_	8	
28	Feature 4, Level 9, Interior	25	Glass	3	Wine Bottle			Olive Green	wine bottle body sherds			
28	Feature 4, Level 9, Interior	1	Glass		Wine Bottle		1	Olive Green				
28	Feature 4, Level 9, Interior	100	Glass		Wine Bottle	185		Olive Green	wine bottle body sherds			
28	Feature 4, Level 9, Interior	1	Glass		Wine Bottle			Olive Green				
28	Feature 4, Level 9, Interior	50	Glass		Wine Bottle			Olive Green	wine bottle body sherds		-	<del></del>
28	Feature 4, Level 9, Interior	2	Glass		Wine Bottle			Olive Green				
28	Feature 4, Level 9, Interior	18	Glass		Wine Bottle		-	Olive Green	bottle neck sherds, below finish	- 3	3	-
28	Feature 4, Level 9, Interior	100	Glass		Wine Bottle			Olive Green	wine bottle body sherds	_		
28	Feature 4, Level 9, Interior	15	Glass		Wine Bottle		_	Olive Green	base wine bottle fragments, too small to classify			
28	Feature 4, Level 9, Interior	1	Glass		Wine Bottle	-	1	Olive Green				$\overline{}$
28	Feature 4, Level 9, Interior	100	Glass		Wine Bottle			Olive Green	wine bottle body sherds			*
28	Feature 4, Level 9, Interior	100	Glass		Wine Bottle			Olive Green	wine bottle body sherds	_		3
28	Feature 4, Level 9, Interior	100	Glass		Wine Bottle			Olive Green	wine bottle body sherds	-		
28	Feature 4, Level 9, Interior	75	Glass	<u> </u>	Wine Bottle	3		Olive Green	wine bottle body sherds			
28	Feature 4, Level 9, Interior	34	Glass	-	Wine Bottle			Olive Green	base wine bottle fragments, too small to classify		,	
28	Feature 4, Level 9, Interior	2	Glass		Winc Bottle			Olive Green				
28	Feature 4, Level 9, Interior	1	Glass		Wine Bottle			Olive Green	kick up to a wine bottle with an iron pontil			

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Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
28	Feature 4. Level 9, Interior	1	Glass		Wine Bottle	Dip Mold	Undecorated	Olive Green	Compete French Champaign bottle, mend from FS# 28 to FS# 37. Well interior 5.6 to 6.2 feet mended to a sherd from 7.4 to 8.2 feet. Good proof that the bottles were broken before being discarded.		I	
28	Feature 4, Level 9, Interior	I	Glass		Wine Bottle	Paste Mold		Olive Green			<u> </u>	
28	Feature 4, Level 9, Interior	15	Glass	8.00	Wine Bottle	Paste Mold		Olive Green	15 bases to paste turned bottles		<del></del>	
28	Feature 4, Level 9, Interior	ŀ	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				
28	Feature 4, Level 9, Interior	2	Glass	Lead	Lamp Glass			Colorless	lamp chimney sherds		551 L	
28	Feature 4, Level 9, Interior	1	Lithic		Slate Pencil			Gray	slate pencil fragment			
28	Feature 4, Level 9, Interior	1	Lithic		Soap Stone Slab		Undecorated	Gray	I.25 inch thick piece of soap stone that was over 5 inches long an over 4.25 inches wide. Possibly for a stove or a heating device, appears to have been subject to heat. It appears burned on one surface.			
28	Feature 4, Level 9, Interior	50	Metal	Iron	Nail			Rust	badly rusted nail fragments, most likely cut		_	Discarded
29	Feature 4, Level 10, Builders Trench	1	Ceramic	Refined Earthenware	Cup	China Glaze	Printed	Blue	blue oriental lands scape on a cup	1790	1820	
29	Feature 4, Level 10, Builders Trench	1	Ceramic	Refined Earthenware	Cup	Pearlware	Painted	Brown	sherd to a Chinese shape cup, brown floral painted pattern, other colors not extant	1795	1830	
29	Feature 4, Level 10, Builders Trench	I	Ceramic	Refined Earthenware	Сир	Pearlware	Painted	Green & Brown	sherds to a fluted pearlware cup painted in the early colors.	1795	1825	
29	Feature 4, Level 10, Builders Trench	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
29	Feature 4, Level 10, Builders Trench	1	Fauna	Bone	Bone Fragment							
29	Feature 4, Level 10, Builders Trench	1	Glass	5-0	Lamp Glass			Pale Green	lamp chimney sherd			
29	Feature 4, Level 10, Builders Trench	3	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarded
29	Feature 4, Level 10, Builders Trench	1	Glass		Wine Bottle			Olive Green	This appears to be an English finish for a cylindrical dip mold blown bottle			
30	Feature 4, Level 11, Builders Trench	1	Ceramic		Brick		_	Brick Red	brick fragment, discarded	74 - 5,00		Discarded
30	Feature 4, Level 11, Builders Trench	2	Glass		Flacon	Mold Blown	Undecorated	Blue-Green	French blue-green glass flacon moth rim sherds. Shed to this vessel is from bag 9.		-	
30	Feature 4, Level 11, Builders Trench	3	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarded

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
30	Feature 4, Level 11, Builders Trench	ŀ	Glass	Lead	Tableware	Mold Blown		Colorless	burned fragment of a mold-blow lead glass tableware, appears to be ribbed		D-MIC.	
31	Feature 4, Level 10, Wall	i	Ceramic	Porcelain	Plate	Chinese Porcelain	Painted	Blue		1785	1840	
	Feature 4, Level 10, Wall	1	Ceramic	Refined Earthenware	Teapot	Pearlware	Printed	Blue	probably a teapot or sugar bowl	1815	1840	
	Feature 4, Level 10, Wall	I	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	cylindrical stoneware bottle, the finish is shaped like a blob top			
	Feature 4, Level 10, Wall	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	cylindrical stoneware bottle, the finish is shaped like a blob top	konga		**
31	Feature 4, Level 10, Wall	1	Glass		Window Glass			Pale Green	small window glass sherd, discarded			Discarded
31	Feature 4, Level 10, Wall	24	Glass		Wine Bottle			Olive Green	body sherds		-	
31	Feature 4, Level 10, Wall	1	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				
32	Feature 4, Level 11, Wall	1	Ceramic		Brick			Brick Red	small brick fragment			Discarded
32	Feature 4, Level 11, Wall	2	Fauna	Bone	Bone Fragment							
32	Feature 4, Level 11, Wall	2	Glass		Window Glass			Pale Green				Discarded
	Feature 4, Level 11, Wall	3	Glass		Wine Bottle			Olive Green	bottle neck, cracked off finish with a string rim, three sherds mended from contexts 23, 33, and 34. This is the best evidence that the bottles were broken before they were thrown into the well.			
32	Feature 4, Level 11, Wall	28	Glass		Wine Bottle			Olive Green	body sherds, unidentifiable			
33	Feature 4, Level 10, Interior	1	Ceramic		Brick		Undecorated	Buff Red	complete brick, 8" by 3.5" by 2.25" no signs of mortar, recommended for diseard			Discarded
33	Feature 4, Level 10, Interior	1	Ceramic	Coarse Earthenware	Hollowware	Redware	Black Glazed	Black			, ,	
33	Feature 4, Level 10, Interior	1	Ceramic	Refined Earthenware	Chamber Pot	Creamware	Undecorated	White	flat rimmed creamware chamber pot	[770	1840	N
33	Feature 4, Level 10, Interior	1	Ceramic	Refined Earthenware	Cup	Pearlware	Painted	Brown	painted cup sherd, brown extant, probably polychrome	1795	1830	
33	Feature 4, Level 10, Interior	1	Ceramic	Refined Earthenware	Сир	Pearlware	Painted	Polychrome	painted cup sherd, brown and olive green extant	1795	1830	
	Feature 4, Level 10, Interior	'	Ceramic	Refined Earthenware	Egg Cup	Creamware	Undecorated	White		1770	1830	
	Feature 4, Level 10, Interior	I	Ceramic	Refined Earthenware	Muffin Plate	Creamware	Undecorated	White	sherds from 4, 33 and 37, appear to be the same plate, but do not mend	1780	1820	
	Feature 4, Level 10, Interior	2	Ceramic	Refined Earthenware	Pitcher Handle	Creamware	Unknown	Unknown	the mended sherd from 34 is stored with bag 33	1780	1830	
33	Feature 4, Level 10, Interior	1	Ceramic	Refined Earthenware	Plate	Ironstone	Printed	Light Blue	thick light blue printed ironstone plate rims sherd with a zigzag pattern on the marley, typical of the 1840s and 1850s	1840	1860	

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
33	Feature 4, Level 10, Interior	2	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780	1830	
33	Feature 4, Level 10, Interior	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1810	1835	
33	Feature 4, Level 10, Interior	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1835	
33	Feature 4, Level 10, Interior	2	Ceramic	Refined Earthenware	Teapot	Redware	Engine Turned	Brown		1790	1830	
33	Feature 4, Level 10, Interior	1	Ceramic	Stoneware	Bottle	Salt Glazed		Gray & Brown	salt glazed exterior, brown slipped interior			
33	Feature 4, Level 10, Interior	2	Ceramic	Stoneware	Bottle	Salt Glazed	Undecorated	Buff/Tan	Salt-glazed cylindrical stoneware bottle, brown slipped interior, some iron slip present on exterior, impressed letters at the heel "D. L. ORMSBY" appears to be about 6 ounces in capacity			
33	Feature 4, Level 10, Interior	5	Ceramic	Stoneware	Bottle	Salt Glazed	Undecorated	Gray & Brown	base to a cylindrical salt-glazed stoneware bottle, brown slip in side see entry 1011			
33	Feature 4, Level 10, Interior	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	finish to a stoneware bottle, shaped like a blob top			
33	Feature 4, Level 10, Interior	6	Ceramic	Stoneware	Sherd	Salt Glazed		Brown				
33	Feature 4, Level 10, Interior	1	Ceramic	Stoneware	Sherd	Salt Glazed		Gray				5
33	Feature 4, Level 10, Interior	2	Ceramic	Stoneware	Sherd	Salt Glazed		Gray				
33	Feature 4, Level 10, Interior	3	Ceramic	Stoneware	Shord	Slip Glazed		Brown				
33	Feature 4, Level 10, Interior	1	Ceramic	Stoneware	Sherd	Unidentified		Buff & Brown	unglazed exterior, Albany slipped	1		
33	Feature 4, Level 10, Interior	12	Fauna	Bone	Food Bone				Small badly deteriorated food bone fragments, some have been sawn			
33	Feature 4, Level 10, Interior	I	Fauna	Bone	Food Bone			33.7	animal tooth fragment, possibly sheep or deer			
33	Feature 4, Level 10, Interior	8	Flora	Wood	Corks			Black Stained	8 desiccated corks that seem to small to have gone with the bottles from this context			
33	Feature 4, Level 10, Interior	2	Glass		Bottle	Multi Part Mold		Light Green	sherds to a small square bottle with chamfered corners, possibly a London Mustard Bottle			
33	Feature 4, Level 10, Interior	5	Glass		Bottle	Unidentified	Undecorated	Olive Green	body sherds to smaller bottles	-		
33	Feature 4, Level 10, Interior	1	Glass		Ink	Multi Part Mold	Molded Pattern	Light Green	three part mold blown umbrella lnk bottle sherds	1830	1917	
33	Feature 4, Level 10, Interior	15	Glass		Window Glass		Undecorated	Pale Green	15 small window glass sherds, recommended for diseard			Discarded
33	Feature 4, Level 10, Interior	3	Glass		Window Glass	Unidentified	Undecorated	Olive Green	base sherds		-	
33	Feature 4, Level 10, Interior	100	Glass	****	Wine Bottle		Undecorated	Olive Green	body sherds to wine bottles			

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
33	Feature 4. Level 10, Interior	100	Glass		Wine Bottle	-	Undecorated	Olive Green	body sherds to wine bottles			
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle		Undecorated	Olive Green	body sherds to wine bottles			-
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle		Undecorated	Olive Green	body sherds to wine bottles	_		
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle		Undecorated	Olive Green	body sherds to wine bottles			
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle		Undecorated	Olive Green	body sherds to wine bottles			
33	Feature 4, Level 10, Interior	ŧ	Glass		Wine Bottle	Dip Mold	Undecorated	Black Glass	appears to be a dip mold blown cylindrical English black glass wine bottle with a high kick up, cannot tell if it was empontilled	1780	1860	
33	Feature 4, Level 10, Interior	[	Glass		Wine Bottle	Dip Mold	Undecorated	Black Glass	dip mold blown cylindrical English black glass wine bottle that appears to have a sand pontil	1780	1860	
	Feature 4, Level 10, Interior	l L	Glass		Wine Bottle	Dip Mold	Undecorated	Black Glass	appears to be a dip mold blown cylindrical English black glass wine bottle with a high kick up, cannot tell if it was empontilled	**		
33	Feature 4, Level 10, Interior	t	Glass		Wine Bottle	Dip Mold	Undecorated	Olive Green	dip mold blown cylindrical English black glass wine bottle that appears to have a sand pontil			
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	body sherds to wine bottles			
33	Feature 4, Level 10, Interior	2	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior		Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	Bottle that is only missing its neck. This bottle plus a neck sherd that make a good estimate of what one of these bottles way come to 35 ounces.		5	
33	Feature 4, Level 10, Interior	18	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	base sherds to wine bottles with high kickups and mamelons		1	
33	Feature 4, Level 10, Interior	4	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	base sherds to wine bottles with high kickups and mamelons			
33	Feature 4, Level 10, Interior	50	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	bottle neck sherds			
33	Feature 4, Level 10, Interior	60	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	bottle neck sherds			
33	Feature 4. Level 10, Interior	108	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	body sherds to wine bottles	-		
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	body sherds to wine bottles		<u> </u>	
33	Feature 4, Level 10, Interior	100	Glass	_	Wine Bottle	Paste Mold	Undecorated	Olive Green	body sherds to wine bottles		-	
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	body sherds to wine bottles		10	
33	Feature 4, Level 10, Interior	1 -	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	body sherds to wine bottles			

	rth Street Inventory	r		5101.01256	2 (2)			013,30				
Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	body sherds to wine bottles			
33	Feature 4, Level 10, Interior	25	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	base sherds to wine bottles with high kickups,			
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off fip			_
33	Feature 4, Level 10, Interior	I	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip	-		
33	Feature 4, Level 10, Interior	I	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	ľ	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	I	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off down tooled lip		-	
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	2	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	body sherds to wine bottles			
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	I	Glass	_	Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	1	Glass	-	Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip		_	
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	8	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	base sherds to wine bottles with high kickups and mamelons		-	_
33	Feature 4, Level 10, Interior	I	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10. Interior	25	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	base sherds to wine bottles with high kickups,			
33	Feature 4, Level 10, Interior	2	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	ı	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip		1	
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	ı	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip		- 1	
33	Feature 4, Level 10, Interior	2.5	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	base sherds to wine bottles with high kickups,			

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
33	Feature 4, Level 10, Interior	25	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	base sherds to wine bottles with high kickups,			
33	Feature 4, Level 10, Interior	25	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	base sherds to wine bottles with high kickups.		7-3-3-	
33	Feature 4, Level 10, Interior	25	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	base sherds to wine bottles with high kickups,			
33	Feature 4, Level 10, Interior	25	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	base sherds to wine bottles with high kickups,			
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip			
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	applied string rim, cracked off lip		_	_
33	Feature 4, Level 10, Interior	1	Glass		Wine Bottle	Unidentified	Undecorated	Olive Green	appears to be a dip mold blown cylindrical English black glass wine bottle with a sand pontil			
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle	Unidentified	Undecorated	Olive Green	wine bottle body sherds	1 4- 0		
33	Feature 4, Level 10, Interior	100	Glass	4.5	Wine Bottle	Unidentified	Undecorated	Olive Green	wine bottle body sherds			
33	Feature 4, Level 10, Interior	100	Glass	140	Wine Bottle	Unidentified	Undecorated	Olive Green	wine bottle body sherds			
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle	Unidentified	Undecorated	Olive Green	wine bottle body sherds			
33	Feature 4, Level 10, Interior	17	Glass		Wine Bottle	Unidentified	Undecorated	Olive Green	body sherds			_
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle	Unidentified	Undecorated	Olive Green	wine bottle body sherds			
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle	Unidentified	Undecorated	Olive Green	wine bottle body sherds			
33	Feature 4, Level 10, Interior	100	Glass	_	Wine Bottle	Unidentified	Undecorated	Olive Green	wine bottle body sherds			
33	Feature 4, Level 10, Interior	100	Glass	,	Wine Bottle	Unidentified	Undecorated	Olive Green	wine bottle body sherds			
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle	Unidentified	Undecorated	Olive Green	wine bottle body sherds			
33	Feature 4. Level 10, Interior	100	Glass		Wine Bottle	Unidentified	Undecorated	Olive Green	wine bottle body sherds			-
33	Feature 4, Level 10, Interior	001	Glass		Wine Bottle	Unidentified	Undecorated	Olive Green	wine bottle body sherds			
33	Feature 4, Level 10, Interior	100	Glass		Wine Bottle	Unidentified	Undecorated	Olive Green	wine bottle body sherds			
33	Feature 4, Level 10, Interior	2	Glass		Wine Bottle Sherds		-	Olive Green	2 small bottle neck sherds			
33	Feature 4, Level 10, Interior	2	Glass		Wine Bottle Sherds	Paste Mold		Olive Green				
33	Feature 4, Level 10, Interior	2	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				
33	Feature 4, Level 10, Interior	2	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				-
33	Feature 4, Level 10, Interior	ı	Glass		Wine Bottile Sherds	Paste Mold		Olive Green				
33	Feature 4, Level 10, Interior	1	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				
33	Feature 4, Level 10, Interior	2	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				

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Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
33	Feature 4, Level 10, Interior	I	Glass		Wine Botttle Sherds	Paste Mold	-792	Olive Green				
33	Feature 4, Level 10, Interior	1	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				,
33	Feature 4, Level 10, Interior	1	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				_
33	Feature 4, Level 10, Interior	2	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				
33	Feature 4, Level 10, Interior	3	Glass		Wine Botttle Sherds	Paste Mold	*	Olive Green			,	
33	Feature 4, Level 10, Interior	1	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				•
33	Feature 4, Level 10, Interior	2	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				
33	Feature 4, Level 10, Interior	6	Glass	Lead	Sherd	Unidentified	Unknown	Colorless	body sherds, could be to table glass or lighting objects			-
33	Feature 4, Level 10, Interior	ı	Glass	Lead	Tableware	Cut	Cut Pattern	Colorless	cut lead glass sherd to a hollowware.			
33	Feature 4, Level 10, Interior	4	Glass	Lead	Tumbler	Mouth Blown	Undecorated	Colorless	sherds to a lead glass tumbler			_
33	Feature 4, Level 10, Interior	l	Glass	Lead	Unidentified		Unknown	Colorless	sherd of lead glass with a frosted exterior surface, probably to a lamp globe of some type			
33	Feature 4, Level 10, Interior	3	Glass	Non Lead	Lamp Glass			Colorless	three thin sherds to a lamp chimney			
33	Feature 4, Level 10, Interior	1	Metal	Copper Alloy	Unidentified	Unidentified	Reeded	Copper Oxide	fragment of cast copper alloy, possibly from a brass stop cock. The reeding suggests the end that would go into the barrel bung hole. This is a wild guess.			
33	Feature 4, Level 10, Interior	49	Metal	lron	Nail	Unidentified		Rusted fron	badly rusted nail fragments, some appear to be cut, most unidentifiable. Discarded			Discarded
33	Feature 4, Level 10, Interior	1	Metal	Iron	Pin		Undecorated	Rust Color	fragment from an iron straight pin			
34	Feature 4, Level 11, Interior	1	Ceramic		Brick	-		Brick Red	brick, 7.375" by 3.25" by 2.125, discarded	-		Discarded
34	Feature 4, Level 11, Interior	I	Ceramic	Coarse Earthenware	Hollowware	Redware	Undecorated	Lead Glaze Red	redware sherd, either to a jar or jug, mica present in the body, unglazed exterior			-
34	Feature 4, Level 11, Interior	1	Ceramic	Coarse Earthenware	Unidentified	Unidentified		Brick Red	conical shaped plug on a round base, unglazed, function unknown.  Appears to be for use as a stopper, probably with some sort of sealing wax. 2.25" in diameter, 1.5" high. Wheel thrown from the hump.  Matches vessel 332	-		-

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Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
34	Fcature 4, Level 11, Interior	i	Ceramic	Coarse Earthenware	Unidentified	Unidentified	Undecorated	Brick Red	conical shaped plug on a round base, unglazed, function unknown.  Appears to be for use as a stopper, probably with some sort of scaling wax. 2" in diameter, 1.375" high.  Wheel thrown from the hump.  Matches vessel 333			
34	Feature 4, Level 11, Interior	1	Ceramic	Porcelain	Hollowware	Hard Paste Porcelain	Unknown	White	hard white paste vessel, possibly French porcelain			
34	Feature 4, Level 11, Interior	2	Ceramic	Refined Earthenware	Chamber Pot	Creamware	Undecorated	White	flat rimmed creamware chamber pot	1770	1840	
34	Feature 4, Level 11, Interior	6	Ceramic	Refined Earthenware	Cup	Pearlware	Painted	Polychrome	sherds to at least two pearlware cups, painted in early colors	1795	1830	
34	Feature 4, Level 11, Interior	1	Ceramic	Refined Earthenware	Hollowware	Unidentified	Green Glaze	Green				
34	Feature 4, Level 11, Interior	1	Ceramic	Refined Earthenware	Muffin Plate	Pearlware	Printed	Blue	small muffin plate, no foot ring	1810	1830	
34	Feature 4, Level 11, Interior	1	Ceramic	Refined Earthenware	Mulfin Plate	White Granite	Undecorated	White		1845	1930	
34	Feature 4, Level 11, Interior	I	Ceramic	Refined Earthenware	Pitcher Handle	Creamware	Unknown	White	the mended sherd from 34 is stored with bag 33	1780	1830	
34	Feature 4, Level 11, Interior	1	Ceramic	Refined Earthenware	Plate	Creamware	Undecorated	White		1780	1820	
34	Feature 4, Level 11, Interior	1	Ceramic	Refined Earthenware	Saucer	Pearlware	Printed	Blue	small rim sherd to a saucer	1790	1830	, <del></del>
34	Feature 4, Level 11, Interior	3	Ceramic	Refined Earthenware	Sherd	Creamware		White		1780	1830	ì
34	Feature 4, Level 11, Interior	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1795	1830	
34	Feature 4, Level 11, Interior	1	Ceramic	Refined Earthenware	Teapot	Pearlware	Printed	Blue	probably a teapot or sugar bowl	1815	1840	
34	Feature 4, Level 11, Interior	2	Ceramic	Refined Earthenware	Teapot	Redware	Engine Turned	Brown				
34	Feature 4, Level 11, Interior	2	Ceramic	Stoneware	Bottle	Salt Glazed		Buff	Salt-glazed cylindrical stoneware bottle, the finish is in the shape of a blob top, brown slipped interior. Impressed mark on shoulder "O, PINKHAM / 1847" Probably a bottler's mark. The 1947 is apparently the date of production for the bottle. Complete bottle	1847	1847	
34	Feature 4, Level 11, Interior	l l	Ceramic	Stoneware	Bottle	Salt Glazed		Buff	Salt-glazed stoneware bottle, the finish is in the shape of a wine bottle finish, brown slipped interior	-		
	Feature 4, Level 11, Interior	1	Ceramic	Stoneware	Bottle	Salt Glazed		Gray & Brown	salt glazed exterior, brown slipped interior			
34	Feature 4, Level 11, Interior	1	Ceramic	Stoneware	Botile	Salt Glazed		Gray & Brown	salt glazed exterior, brown slipped interior			

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Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
34	Feature 4, Level 11, Interior	4	Ceramic	Stoneware	Bottle	Salt Glazed	Painted	Blue On Grey	Salt-glazed cylindrical stoneware bottle, the finish is like a blob top and has been painted blue. Appears to be about 6 ounces in capacity, brown slipped interior.	Surv		
200	Feature 4, Level 11, Interior	t	Ceramic	Stoneware	Bottle	Salt Glazed	Undecorated	Buff/Tan	Salt-glazed cylindrical stoneware bottle, brown slipped interior, some iron slip present on exterior, impressed letters at the heel "D. L. ORMSBY" appears to be about 6 ounces in capacity			
34	Feature 4, Level 11, Interior	1	Ceramic	Stoneware	Bottle	Salt Glazed	Undecorated	Buff-Cream	complete cylindrical stoneware bottle with a blob style lip, salt glazed, impressed on shoulder "C. WHITTEMORE / NEW YORK" There was a Charles Whittemore listed at 162 Varick Street in 1850 who bottled mineral water. From John Doggett's 1851 "Doggett's New York City Street Directory, for 1851. The bottle probably held a liquid quart. Matches vessel 139, however that vessel has the impressed mark J. WHITTEMORE.			
34	Feature 4, Level 11, Interior	2	Ceramic	Stoneware	Bottle	Salt Glazed	Undecorated	Gray & Brown	base to a cylindrical salt-glazed stoneware bottle, brown slip in side see entry 1010			
34	Feature 4, Level 11, Interior	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	finish to a stoneware bottle, shaped like a blob top			
34	Feature 4, Level 11, Interior	2	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray				
34	Feature 4, Level 11, Interior	2	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior			
34	Feature 4, Level 11, Interior	2	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior	•		
34	Feature 4, Level 11, Interior	2	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown		-	1	-
34	Feature 4, Level 11, Interior	2	Ceramic	Stoneware	Sherd	Salt Glazed		Buff & Brown			1	
34	Feature 4, Level 11, Interior	l	Ceramic	Stoneware	Unidentified	Unidentified	Undecorated	Gray	conical shaped plug on a round base, unglazed, function unknown.  Appears to be for use as a stopper, probably with some sort of sealing wax. 1.5" in diameter, 1.375" high. Probably thrown.			
34	Feature 4, Level 11, Interior	3	Composite		Mortar			Off White	small mortar sample, discarded			Discarded
S	Feature 4, Level 11, Interior	2	Composite		Unidentified			Rusted	iron loop attached to a leather strip that has been sewn and riveted to it, probably some type of harness			
34	Feature 4, Level 11, Interior	17	Fauna	Bone	Bone Fragment				cow bone, sawn			

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Cat #		Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
34	Feature 4, Level 11, Interior	24	Fauna	Bone	Bone Fragment				food bone		***	
34	Feature 4, Level 11, Interior	6	Fauna	Bone	Bone Fragment	1				<del>-</del>		
34	Feature 4, Level 11, Interior	13	Flora	Wood	Corks	†	<u> </u>	<del>-</del>	bottle corks that are a bit desiccated	<u> </u>		-
34	Feature 4, Level 11, Interior	ı	Flora	Wood	Corks	_	-	Dark Cork	cork from one of the wine bottles, desiccated			
34	Feature 4, Level 11, Interior	18	Glass		Bottle			Olive Green	body sherds to small olive green glass bottles, thin glass			
34	Feature 4, Level 11, Interior	1	Glass		Bottle	Dip Mold		Light Green	small bottle with a blow pipe pontil			
34	Feature 4, Level 11, Interior	1	Glass		Bottle	Dip Mold		Pale Green	small round bottle with a blow pipe			
34	Feature 4, Level 11, Interior	1	Glass		Bottle	Multi Part Mold		Light Green				72
34	Feature 4, Level 11, Interior	1	Glass		Lamp Glass		1	Colorless		<del>                                     </del>	-	<del>                                     </del>
34	Feature 4, Level 11, Interior	2	Glass		Mineral Water Bottle	Multi Part Mold	Embossed	Blue	embossed on side of bottle,			
34	Feature 4, Level 11, Interior	1	Glass		Sherd	Mold Blown	Molded Pattern	Milk Glass	small sherd, form unknown			
34	Feature 4, Level 11, Interior	7	Glass		Window Glass			Pale Green	small window glass sherds, discarded	<u> </u>	_	Discarde
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle	-	900	Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	50	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	75	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	27	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn moided or dip moided			
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded		-	
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded		9	
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle		-	Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle	1		Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	50	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	50	Glass	,	Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle			Olive Green	kick-up to an English black glass wine bottle that appears to have a sand pontil, probably cylindrical shape			
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle		_	Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	31	Glass		Wine Bottle			Olive Green	base sherds to turn paste or dip mold blown wine bottles			
	Feature 4, Level 11, Interior	5	Glass		Wine Bottle			Olive Green	base fragments to wine bottles, either turn paste mold or dip mold blown, too small to tell which	8		
34	Feature 4, Level 11, Interior	5	Glass		Wine Bottle			Olive Green	base fragments to wine bottles, either turn paste mold or dip mold blown, too small to tell which			
34	Feature 4, Level 11, Interior	25	Glass		Wine Bottle			Olive Green	base fragments to wine bottles, either turn paste mold or dip mold blown, too small to tell which			
	Feature 4, Level 11, Interior	25	Glass		Wine Bottle			Olive Green	base fragments to wine bottles, either turn paste mold or dip mold blown, too small to tell which			is n
	Feature 4, Level 11, Interior	25	Glass		Wine Bottle			Olive Green	base fragments to wine bottles, either turn paste mold or dip mold blown, too small to tell which			
34	Feature 4, Level 11, Interior	25	Glass		Wine Bottle			Olive Green	base fragments to wine bottles, either turn paste mold or dip mold blown, too small to tell which			
34	Feature 4, Level 11, Interior	25	Glass		Wine Bottle			Olive Green	base fragments to wine bottles, either turn paste mold or dip mold blown. too small to tell which			
34	Feature 4, Level 11, Interior	50	Glass		Wine Bottle		_	Olive Green	base fragments to wine bottles, either turn paste mold or dip mold blown, too small to tell which			
34	Feature 4, Level 11, Interior	50	Glass		Wine Bottle			Olive Green	base fragments to wine bottles, either turn paste mold or dip mold blown, too small to tell which			
34	Feature 4, Level 11, Interior	25	Głass		Wine Bottle			Olive Green	base fragments to wine bottles, either turn paste mold or dip mold blown, too small to tell which			-

Worth Street Inventory

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
34	Feature 4, Level 11, Interior	I	Glass	,	Wine Bottle			Olive Green	kick-up to an English black glass wine bottle that appears to have a sand pontil, probably cylindrical shape			
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded	,		
34	Feature 4, Level 11, Interior	I	Glass		Wine Bottle			Olive Green	kick-up to an English black glass wine bottle that appears to have a sand pontil, probably cylindrical shape			
34	Feature 4, Level 11, Interior	Ī	Glass		Wine Bottle			Olive Green	kick-up to an English black glass wine bottle that appears to have a sand pontil, probably cylindrical shape			-
34	Feature 4, Level 11, Interior	50	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Fcature 4, Level 11, Interior	73	Glass		Wine Bottle			Olive Green	body and body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	50	Glass		Wine Bottle			Olive Green	body and body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	75	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	50	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	75	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			8 88 C
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded		_	
34	Feature 4, Level 11, Interior	100	Glass		Wine Bottle		5	Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle			Olive Green	kick-up to an English black glass wine bottle that appears to have a sand pontil, probably cylindrical shape			
34	Feature 4, Level 11, Interior	50	Glass		Wine Bottle			Olive Green	body sherds to wine bottles, probably past turn molded or dip molded	-		

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Worth Street Inventory

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Dip Mold	Undecorated	Olive Green	base to a cylindrical English black glass wine bottle with a high kick-up that appears to have a sand pontil			
	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Dip Mold	Undecorated	Olive Green	base to a cylindrical English black glass wine bottle with a high kick-up that appears to have a sand pontil			
	Feature 4, Level 11, Interior	3	Glass		Wine Bottle	Paste Mold		Olive Green	base fragments to wine bottles, turn paste mold blow each one with a mamelon			
34	Feature 4, Level 11, Interior	4	Glass		Wine Bottle	Paste Mold		Olive Green	base fragments to wine bottles, turn paste mold blow each one with a mamelon			
34	Feature 4, Level 11, Interior	5	Glass		Wine Bottle	Paste Mold		Olive Green	base fragments to wine bottles, turn paste mold blow each one with a mamelon			
	Feature 4, Level 11, Interior	6	Glass		Wine Bottle	Paste Mold		Olive Green	base fragments to wine bottles, turn paste mold blow each one with a mameton			
	Feature 4, Level 11, Interior	5	Glass		Wine Bottle	Paste Mold		Olive Green	base fragments to wine bottles, turn paste mold blow each one with a mamelon			
34	Feature 4, Level 11, Interior	4	Glass		Wine Bottle	Paste Mold		Olive Green	base fragments to wine bottles, turn paste mold blow each one with a mamelon			
34	Feature 4, Level 11, Interior	3	Glass	208 2	Wine Bottle	Paste Mold		Olive Green	base fragments to wine bottles, turn paste mold blow each one with a mamelon	9		
34	Feature 4, Level 11, Interior	4	Glass		Wine Bottle	Paste Mold		Olive Green	base fragments to wine bottles, turn paste mold blow each one with a mamelon			
34	Feature 4, Level 11, Interior	3	Glass		Wine Bottle	Paste Mold		Olive Green	base fragments to wine bottles, turn paste mold blow each one with a mamelon. These three have been separated as examples. One shows an iron oxide ring around the mamelon much clearer that most of the others. A second one has an air bubble which makes the mamelon look like added glass.			
34	Feature 4, Level 11, Interior	20	Glass		Wine Bottle	Paste Mold		Olive Green	base fragments to wine bottles, turn paste mold blow each one with a manuelon			
34	Feature 4, Level 11, Interior	3	Glass		Wine Bottle	Paste Mold		Olive Green	base fragments to wine bottles, turn paste mold blow each one with a mamelon			
34	Feature 4, Level 11, Interior	2	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Statu
	Feature 4, Level 11, Interior	I	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip		Date	
34	Feature 4, Level 11, Interior	1	Glass	ļ -	Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip		-	
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip	-		-
34	Feature 4, Level 11, Interior	I	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	2	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip	-		
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			-
34	Feature 4, Level 11, Interior	I	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip	-		
34	Feature 4, Level 11, Interior	ı	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip		J	_
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			<u> </u>
34	Feature 4, Level 11, Interior	2	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip	54 17		
34	Feature 4, Level 11, Interior	i	Glass		Wine Boule	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass	D 5255	Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	I	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	l	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip	3		
34	Feature 4, Level 11. Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	L	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	2	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	t	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			

	th Street Inventory		AU	0101.01206	9							
Cat #	Provenience	Artifact Count	Class	Subclass	Object	. Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
34	Feature 4, Level 11, Interior	t	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			-
34	Feature 4, Level 11, Interior	l l	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	į –	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip	4		-
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip	-		
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	I	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip	-27		
34	Feature 4, Level 11, Interior	1 _	Glass	,	Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	L	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	ľ	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	Ĺ	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	l	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			***
34	Feature 4, Level 11, Interior	[	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	ï	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
34	Feature 4, Level 11, Interior	2	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	linish with an applied string rim and a cracked off lip, and a cork found in the neck of the bottle, the top of the cork shows compression where it was tied off, but no sign of rust, so it was not tied with wire. The top section of the cork is wider than that part that was in the bottle and this fits with descriptions of corks that were tied down.			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	Î	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	I I	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip, the neck appears to have traces of a lead foil cover			
34	Feature 4, Level 11, Interior	I	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	body sherds to wine bottles, probably past turn molded or dip molded			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass	_	Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip		ь	
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			ė.
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip	Ì		
34	Feature 4, Level 11, Interior	l	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	l	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	finish with an applied string rim and a cracked off lip			

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
34	Feature 4, Level 11, Interior	4	Glass		Wine Bottle Sherds			Olive Green	4 bottle neck sherds			
34	Feature 4, Level 11, Interior	2	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				
34	Feature 4, Level 11, Interior	1	Glass		Wine Botttle Sherds	Paste Mold	*	Olive Green				
34	Feature 4, Level 11, Interior	Ī	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				
34	Feature 4, Level 11, Interior	1	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				
34	Feature 4, Level 11, Interior	2	Glass		Wine Botttle Sherds	Paste Mold		Olive Green	,		-22-	
34	Feature 4, Level 11, Interior	1	Glass		Wine Bottile Sherds	Paste Mold		Olive Green				
34	Feature 4, Level 11, Interior	2	Glass		Wine Bottle Sherds	Paste Mold		Olive Green			-	
34	Feature 4, Level 11, Interior	2	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				
34	Feature 4, Level 11, Interior	1	Glass	-	Wine Botttle Sherds	Paste Mold		Olive Green				<del></del>
34	Feature 4, Level 11, Interior	1	Glass		Winc Botttle Sherds	Paste Mold		Olive Green	-			
34	Feature 4, Level 11, Interior	1	Glass		Wine Botttle Sherds	Paste Mold		Olive Green	3			
34	Feature 4, Level 11, Interior	1	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				
34	Feature 4, Level 11, Interior	1	Glass		Wine Boutle Sherds	Paste Mold	-	Olive Green				
34	Feature 4, Level 11, Interior	2	Glass	_	Wine Botttle Sherds	Paste Mold		Olive Green	appears to be a French wine bottle neck with a rounded string rim			
34	Feature 4, Level 11, Interior	2	Glass	Lead	Sherd			Colorless	probably table glass		-	
34	Feature 4, Level 11, Interior	1	Glass	Lead	Tumbler	Pressed	Unknown	Colorless	pressed tumblers with a heavy base that may have been polished			
34	Feature 4, Level 11, Interior	1	Glass	Lead	Unidentified			Colorless	The state of the s			
34	Feature 4, Level 11, Interior	1	Glass	Non Lead	Bottle			Colorless		-		
34	Feature 4, Level 11, Interior	5	Glass	Non Lead	Bottle			Colorless	body sherds	-		
34	Feature 4, Level 11, Interior	1	Glass	Non Lead	Tumbler	Pressed	Fluted	Colorless	pressed fluted non-lead tumbler	_		
34	Feature 4, Level 11, Interior	23	Metal	Iron	Nail	ĺ		Rust	badly rusted nail fragments, discarded		-	Discarde
34	Feature 4, Level 11, Interior	28	Metal	Iron	Nail			Rust	badly rusted nail fragments	,	50 sel	Discarde
34	Feature 4, Level 11, Interior	I	Metal	Iron	Unidentified		1	Rust	fragment of badly rusted iron, possibly a spike	-		
34	Feature 4, Level 11, Interior	38	Metal	Iron	Unidentified			Rust	badly rusted small iron fragments, discarded			Discarde

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin	End	Status
34	Feature 4, Level 11, Interior	3	Metal	Iron	Unidentified		Decoration	Rust	fragments of badly rusted iron	Date	Date	Discarde
34	Feature 4, Level 11, Interior	1	Metal	lron	Unidentified	Hand Wrought		Rust	metal bar, flat on one surface, half round on the other, wrought			
35	Feature 4, Level 12, Builders Trench	1	Glass		Window Glass			Pale Green	Towns on the vines, wrongin			Discarded
35	Feature 4, Level 12, Builders Trench	2	Glass		Wine Bottle			Olive Green	body sherds, unidentifiable			
36	Feature 4, Level 12, Wall	1	Ceramic	Refined Earthenware	Cup	Pearlware	Printed	Blue		1795	1830	
37	Feature 4. Level 12, Interior	1	Ceramic		Fire Clay Brick			Off White	fragment of a fire clay brick, possibly for lining a cast iron stove	,	-	Discarded
37	Feature 4, Level 12, Interior	1	Ceramic		Pipe Stem		Undecorated	White	To thing would not be to to	_		
37	Feature 4, Level 12, Interior	8	Ceramic		Sherd	Salt Glazed		Brown				<del>                                     </del>
37	Feature 4, Level 12, Interior	4	Ceramic	Coarse Earthenware	Hollowware	Redware		Black Glaze	possibly to a jug, double glazed			
37	Feature 4. Level 12, Interior	1	Ceramic	Coarse Earthenware	Hollowware	Redware	Undecorated	Lead Glaze Red	redware sherd, either to a jar or jug, the interior glaze is mottled, unglazed exterior		-	
37	Feature 4, Level 12, Interior	1	Ceramic	Coarse Earthenware	Sherd	Redware	Unglazed	Brick Red	probably to a flower pot			
37	Feature 4, Level 12, Interior	1	Ceramic	Porcelain	Hollowware	Hard Paste Porcelain	Unknown	White	hard white paste vessel, possibly French porcelain			
37	Feature 4, Level 12, Interior	1	Ceramic	Refined Earthenware	Hollowware	Pearlware	Painted	Brown & Tan	probably a cup sherd, painted in the early colors	1795	1830	
37	Feature 4, Level 12, Interior	1	Ceramic	Refined Earthenware	Hollowware	Unidentified	Green Glaze	Green	<u> </u>			
37	Feature 4, Level 12, Interior	l _	Ceramic	Refined Earthenware	Muffin Plate	Creamware	Undecorated	White	sherds from 4, 33 and 37, appear to be the same plate, but do not mend	1780	1820	
37	Feature 4, Level 12, Interior	1	Ceramic	Refined Earthenware	Muffin Plate	Pearlware	Printed	Blue	small muffin plate, no foot ring	1810	1830	
37	Feature 4, Level 12, Interior	3	Ceramic	Refined Earthenware	Plate	Pearlware	Shell Edge	Green	rim sherd to green shell edged pearlware plate with a rococo scalloped rim	1780	1810	
37	Feature 4, Level 12, Interior	2	Ceramic	Refined Earthenware	Saucer	China Glaze	Painted	Blue	deep saucer painted in a Chinese style	1775	1815	
37	Feature 4, Level 12, Interior	7	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780	1830	_
37	Feature 4, Level 12, Interior	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Blue		1795	1830	
37	Feature 4, Level 12, Interior	5	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1835	
37	Feature 4, Level 12, Interior	9	Ceramie	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
37	Feature 4, Level 12, Interior	1	Ceramic	Refined Earthenware	Sherd	Red Bodied	Lead Glazed	Brown	probably to a teapot		74	

Cat	Provenience	Artifact	Class	Subclass	Object	Ware/Tech	Primary	Color	Comments/Mark	Begin	End	Status
#		Count				mara room	Decoration	Color	Comments was k	Date	Date	Status
37	Feature 4, Level 12, Interior	1	Ceramic	Refined Earthenware	Teapot	Pearlware	Printed	Blue	probably a teapot or sugar bowl	1815	1840	-
37	Feature 4, Lcvel 12, Interior	2	Ceramic	Stoneware	Bottle	Salt Glazed		Buff	Salt-glazed cylindrical stoneware bottle, the finish is in the shape of a blob top, brown slipped interior. Impressed mark on shoulder "O. PINKHAM / 1847" Probably a bottler's mark. The 1947 is apparently the date of production for the bottle. Complete bottle	1847	[847	
	Feature 4, Level 12, Interior	3	Ceramic	Stoneware	Bottle	Salt Glazed	Undecorated	Buff Iron Slip	complete stoneware bottle cylindrical with tapered shoulder, impressed "IOHN CALLE" on shoulder, the finish is shaped like a blob top bottle, possibly for tying off a cork.			
37	Feature 4, Level 12, Interior	1	Ceramic	Stoneware	Sherd	Salt Glazed		Gray & Brown	brown slipped interior, impressed bottler or grocery's mark RBORN			
37	Feature 4, Level 12, Interior	2	Ceramic	Stoneware	Sherd	Salt Glazed		Gray & Brown				
37	Feature 4, Level 12, Interior	1	Ceramic	Stoneware	Sherd	Slip Glazed		Brown	brown slipped interior, impressed bottler's mark A. BRO			=
37	Feature 4, Level 12, Interior	22	Fauna	Bone	Bone Fragment			*	bones from ungulates			
37	Feature 4, Level 12, Interior	7	Fauna	Bone	Bone Fragment				bones			<del></del>
37	Feature 4, Level 12, Interior	2	Glass		Lamp Glass		_	Pale Green	two small lamp glass sherds		18	
37	Feature 4, Level 12, Interior	11	Glass		Window Glass			Pale Green	small window glass sherds, recommended for discard	_		Discarded
37	Feature 4, Level 12, Interior	1	Glass		Window Glass			Pale Green	small window glass sherd			Discarded
37	Feature 4, Level 12, Interior	100	Glass		Wine Bottle			Olive Green	body sherds			
37	Feature 4, Level 12, Interior	2	Glass		Wine Bottle			Olive Green	bottle neck, cracked off finish with a string rim			_
37	Feature 4, Level 12, Interior	1	Glass		Wine Bottle			Olive Green	bottle neck, cracked off finish with a string rim			
10 (00)	Feature 4, Level 12, Interior	i ———	Glass		Wine Bottle			Olive Green	bottle neck, cracked off finish with a string rim			e e
	Feature 4, Level 12, Interior	1	Glass		Wine Bottle			Olive Green	bottle neck, cracked off finish with a string rim			
37	Feature 4, Level 12, Interior	1	Glass		Wine Bottle			Olive Green	large body sherd		-	
37	Feature 4, Level 12, Interior	100	Glass		Wine Bottle		1	Olive Green	body sherds			
37	Feature 4, Level 12, Interior	1	Glass		Wine Bottle		1	Olive Green	bottle neck, cracked off finish with a string rim			D 250 0 0 00
	Feature 4, Level 12, Interior	50	Glass		Wine Bottle			Olive Green	body sherds			
	Feature 4, Level 12, Interior	1	Glass		Wine Bottle			Olive Green	bottle neck, cracked off finish with a string rim			
37	Feature 4, Level 12, Interior	100	Glass		Wine Bottle			Olive Green	body sherds			

Worth Street Inventory

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
37	Feature 4, Level 12, Interior	100	Glass		Wine Bottle			Olive Green	body sherds			
37	Feature 4, Level 12, Interior	50	Glass	1	Wine Bottle			Olive Green	base sherds, to small to identify	*********		
37	Feature 4, Level 12, Interior	23	Glass		Wine Bottle			Olive Green	base sherds, to small to identify			
37	Feature 4, Level 12, Interior	38	Glass	<u> </u>	Wine Bottle			Olive Green	neck sherds, not to rim			
37	Feature 4, Level 12, Interior	100	Glass		Wine Bottle			Olive Green	body sherds			
37	Feature 4, Level 12, Interior	115	Glass	<u> </u>	Wine Bottle		-	Olive Green	body sherds, unidentifiable			
37	Feature 4, Level 12, Interior	1	Glass		Wine Bottle			Olive Green	bottle neck, cracked off finish with a string rim			
1000-0-1	Feature 4, Level 12, Interior	1	Glass		Wine Bottle	Dip Mold		Olive Green	cylindrical English glass wine bottle, sand pontil,			
37	Feature 4, Level 12, Interior	1	Glass		Wine Bottle	Dip Mold		Olive Green	cylindrical English glass wine bottle, sand pontil,			
37	Feature 4, Level 12, Interior	1	Glass		Wine Bottle	Dip Mold		Olive Green	cylindrical English glass wine bottle, glass pontil,	0 0 10 130		
	Feature 4, Level 12, Interior	5	Glass		Wine Bottle	Paste Mold		Olive Green	bases to paste turn mold blown bottles			
37	Feature 4, Level 12, Interior	10	Glass		Wine Bottle	Paste Mold		Olive Green	bases to paste turn mold blown bottles			-
37	Feature 4, Level 12, Interior	4	Glass		Wine Bottle	Paste Mold		Olive Green	bases to paste turn mold blown bottles			
37	Feature 4, Level 12, Interior	1	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	large body sherd			
	Feature 4, Level 12, Interior	i	Glass		Wine Bottle	Paste Mold	Undecorated	Olive Green	Complete French Champaign bottle, mend from FS# 28 and FS# 37. Well interior 5.6 to 6.2 feet and one from 7.4 to 8.2 feet. Good proof that the bottle was broken before it was discarded.			
37	Feature 4, Level 12, Interior	1	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				
37	Feature 4, Level 12, Interior	2	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				
37	Feature 4, Level 12, Interior	i	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				
37	Feature 4, Level 12, Interior	I	Glass		Wine Botttle Sherds	Paste Mold		Olive Green				
100.00	Feature 4, Level 12, Interior	2	Glass	Lead	Lignting			Colorless	two small sherds of thin lead glass, probably lighting			-
37	Feature 4, Level 12, Interior	6	Glass	Non Lead	Tumbler	Pressed	Fluted	Colorless	sherds to a pressed colorless non-lead tumbler			
37	Feature 4, Level 12, Interior	42	Metal	Iron	Nail			Rust	badly rusted nail fragments, most likely cut.			Discardo
37	Feature 4, Level 12, Interior	42	Metal	Iron	Sheet Metal			Rust	small badly rusted sheet iron or tin can fragments			Discarde

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
37	Feature 4, Level 12, Interior	1	Metal	Iron	Spike			Rust	iron spike, badly rusted, probably cut			
	Feature 4, Level 12, Interior	3	Metal	Lend	Sheet Metal			Lead	sheet lead fragment, broken into 3 pieces, many holds punched through around edge, looks like a repair of a hole in something.			
39	Feature 4, Under Wall	l	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1795	1830	
39	Feature 4, Under Wall	2	Glass		Wine Bottle			Olive Green	body sherds			
39	Feature 4, Under Wall	l l	Metal	Iron	Unidentified			Rusted	two small iron fragments, unidentified			Discarded
40	Feature 4, Under Interior	I	Ceramic	Coarse Earthenware	Hollowware	Redware	Black Glazed	Black				
40	Feature 4, Under Interior	l	Ceramic	Refined Earthenware	Plate	Creamware	Undecorated	White	4 sherds that appear to be to the same plate, but do not mend	1780	1820	
40	Feature 4, Under Interior	3	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780	1830	
40	Feature 4, Under Interior	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
40	Feature 4, Under Interior	4	Ceramic	Stoneware	Bottle	Salt Glazed		Buff	Salt-glazed cylindrical stoneware bottle, the finish is in the shape of a blob top, brown slipped interior. Impressed mark on shoulder "O. PINKHAM / 1847" Probably a bottler's mark. The 1947 is apparently the date of production for the bottle. Complete bottle	1847	1847	
	Feature 4, Under Interior	I	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	cylindrical stoneware bottle, the finish is shaped like a blob top			
40	Feature 4, Under Interior	2	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior		5	
40	Feature 4, Under Interior	3	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior			1
40	Feature 4, Under Interior	5	Ceramic	Stoneware	Hollowware	Slip Glazed		Вгомл				1
40	Feature 4, Under Interior	3	Fauna	Bone	Bone Fragment				jaw bone, possibly sheep			
40	Feature 4, Under Interior	3	Fauna	Bone	Food Bone				small food bone fragments			
40	Feature 4, Under Interior	4	Glass		Window Glass			Pale Green	window glass	_		Discarde
40	Feature 4, Under Interior	1	Glass		Wine Bottle			Olive Green				
40	Feature 4, Under Interior	1	Glass	-	Wine Bottle		_	Olive Green	<del> </del>			
40	Feature 4, Under Interior	10	Glass		Wine Bottle		-	Olive Green	body sherds to a wine bottle			<del> </del>
40	Feature 4, Under Interior	21	Glass	· ·	Wine Bottle			Olive Green	small body sherds			<del>                                     </del>
40	Feature 4, Under Interior	I	Glass		Wine Bottle		-	Olive Green				

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
40	Feature 4, Under Interior	2	Glass	Lead	Small Bottle			Colorless	neck and finish to a small bottle with a flaring lip, probably for medicine, probably English			
	Feature 4, Under Interior	4	Metal	Iron	Nail	Cut		Rusted	badly rusted nail fragments, square in cross section, probably cut			Discarded
40	Feature 4, Under Interior	22	Metal	Iron	Unidentified	0429 (042)		Rusted	fragments of sheet iron			Discarded
40	Feature 4, Under Interior	I	Synthetic		Mortar		<u> </u>		cement fragment from building rubble			Discarded
41	Feature 4, Under Interior	1	Ceramic	Refined Earthenware	Сир	Pearlware	Painted	Brown	painted cup sherd, brown extant, probably polychrome	1795	1830	
41	Feature 4, Under Interior	2	Ceramic	Refined Earthenware	Platter	Creamware	Unknown	White		1780	1830	
41	Feature 4, Under Interior	1	Ceramic	Refined Earthenware	Saucer	Pearlware	Printed	Blue	same pattern as the cup that is vessel 223	1815	1830	
41	Feature 4, Under Interior	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	impressed mark on shoulder, that reads " Ttemor." gray paste	25		
41	Feature 4, Under Interior	2	Ceramic	Stoneware	Hollowware	Salt Glazed		Iron Slip	interior not extant			
41	Feature 4, Under Interior	5	Ceramic	Stoneware	Hollowware	Slip Glazed		Brown				-
41	Feature 4, Under Interior	ī	Fauna	Bone	Bone Fragment				long bone from a small ungulate	-		_
41	Feature 4, Under Interior	1	Glass		Bottle			Colorless	small colorless glass sherd, non-lead			
41	Feature 4, Under Interior	2	Glass		Window Glass			Pale Green	two small window glass sherds			Discarded
41	Feature 4, Under Interior	5	Glass	\$ - B	Wine Bottle			Olive Green	body sherds to wine bottles		_	
42	Feature 4, Below Floor	1	Ceramic	Porcelain	Sherd	Chinese Porcelain	Unknown	Unknown				
42	Feature 4. Below Floor	1	Ceramic	Stoneware	Bottle	Salt Glazed	Undecorated	Irons Slip	one quart stoneware bottle with an impressed mark J. WHITTEMORE, similar to a stoneware bottle vessel #107, however the other bottle has the impressed mark C. WHITTEMORE / NEW YORK, There was a Charles Whittemore listed at 162 Variek Street in 1850 who bottled mineral water. From John Doggett's 1851 Street Directory. The bottle probably holds a liquid quart.			
42	Feature 4, Below Floor	2	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior			
42	Feature 4, Below Floor	1	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray & Brown	brown slipped interior			
42	Feature 4, Below Floor	5	Ceramic	Stoneware	Hollowware	Slip Glazed	<u> </u>	Brown				
42	Feature 4, Below Floor	2	Fauna	Bird	Bone Fragment			, , ,	two very small bird bone fragments			
42	Feature 4, Below Floor	1	Glass		Bottle	1		Pale Green	small body sherd to a bottle			
42	Feature 4, Below Floor	ľ	Glass		Glass Fragment			Olive Glass	small glass sherd to a wine bottle neck			

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End- Date	Status
42	Feature 4, Below Floor	2	Glass		Window Glass			Colorless	small window glass sherds discarded		AP 5414	Discarde
42	Feature 4, Below Floor	l	Metal	Iron	Nail	_		Rusted	badly rusted nail fragment	l -		Discarde
43	Feature 5	i	Metal	Copper Alloy	Соіл	Stamped			copper coin in crusted in iron, probably and American large cent or a token			
47	Feature 4, ?	1	Ceramic	Coarse Earthenware	Sherd	Unidentified	Unglazed	Brick Red				
47	Feature 4, ?	3	Ceramic	Refined Earthenware	Сир	Pearlware	Painted	Brown	cup sherd, brown floral painted pattern, other colors not extant	1795	1830	
47	Feature 4, ?	4	Ceramic	Refined Earthenware	Hollowware	Creamware	Undecorated	White	, and a second	1780	1830	
47	Feature 4, ?	1	Ceramic	Refined Earthenware	Plate	Creamware	Undecorated	White		1784	1830	
47	Feature 4, ?	Ï	Ceramic	Refined Earthenware	Plate	Creamware	Undecorated	White	sherds from 3 and 47, appear to be the same plate, but do not mend	1780	1820	
47	Feature 4, ?	2	Ceramic	Refined Earthenware	Plate	Creamware	Undecorated	White	4 sherds that appear to be to the same plate, but do not mend	1780	1820	
47	Feature 4, ?	1	Ceramic	Refined Earthenware	Saucer	Whiteware	Printed	Light Blue	light blue printed saucer in a floral	1825	1850	
47	Feature 4, ?	Ī.	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White	burned	1780		
47	Feature 4, ?	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Blue		1795	1830	ļ
47	Feature 4, ?	5	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
47	Feature 4, ?	1	Ceramic	Stoneware	Bottle	Salt Glazed		Buff	Salt-glazed cylindrical stoneware bottle, the finish is in the shape of a blob top, brown slipped interior. Impressed mark on shoulder "O. PINKHAM / 1847" Probably a bottler's mark. The 1947 is apparently the date of production for the bottle. Complete bottle	1847	1847	
47	Feature 4, ?	l	Ceramic	Stoneware	Bottle	Salt Glazed		Gray & Brown	salt glazed exterior, brown slipped interior			
47	Feature 4, ?	8	Ceramic	Stoneware	Bottle	Salt Glazed	Undecorated	Buff Iron Slip	complete stoneware bottle cylindrical with tapered shoulder, impressed "JOHN CALLE" on shoulder, the finish is shaped like a blob top bottle, possibly for tying off a cork.			
47	Feature 4, ?	1	Ceramic	Stoneware	Bottle	Slip Glazed		Brown	stoneware bottle, the finish is shaped like a blob top		<u>-</u>	
47	Feature 4, ?	4	Ceramie	Stoneware	Hollowware	Salt Glazed	1	Buff & Brown	brown slipped interior	<del></del>		
47	Feature 4, ?	4	Ceramic	Stoneware	Hollowware	Salt Glazed	1	Gray & Brown	brown slipped interior			5
47	Feature 4, ?	12	Ceramic	Stoneware	Hollowware	Slip Glazed	1	Brown				-

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
47	Feature 4, ?	1	Composite		Mortar			Off White	small mortar fragment made with sand			Discarded
47	Feature 4, ?	10	Fauna	Bone	Bone Fragment				small bone fragments and two teeth			
47	Feature 4, ?	4	Glass		Window Glass			Pale Green	small fragments of window glass, discarded			Discarded
47	Feature 4, ?	34	Glass		Wine Bottle	*		Olive Green	small body sherds to wine bottles			
47	Feature 4, ?	1	Glass	Lead	Wine Bottle			Colorless	small sherd to a lamp chimney, lead glass	_		
	Feature 4, ?	14	Metal	lron	Sheet Iron			Rusted	small fragments of sheet iron of tin can fragments, discarded			Discarded
47	Feature 4, ?	1	Metal	Lead	Unidentified			Off-Gray	strip of lead			
48	Test Unit 1, Context 2, Feature 1	1	Ceramic		Building Tile		Undecorated	White	fragment from a wall tile with a white glaze	8 0		
48	Test Unit 1, Context 2, Feature 1	2	Ceramic		Tile			Gray	unglazed large ceramic tile sherd, highly fired. Possibly for drainage of rain water	,		
48	Test Unit 1, Context 2, Feature 1	2	Ceramic	Coarse Earthenware	Hollowware	Redware	Mottled Glaze	Brown & Tan			·	
48	Test Unit 1, Context 2, Feature (	2	Ceramic	Porcelain	Cup	Hard Paste Porcelain	Unknown	White	hard white porcelain, possibly French			
48	Test Unit 1, Context 2, Feature 1	1	Ceramic	Porcelain	Hollowware	Chinese Porcelain	Unknown	Unknown	body sherd that has a grayish tint to it, unknown decoration	,		
48	Test Unit 1, Context 2, Feature 1	1	Ceramic	Refined Earthenware	Hollowware	Red Bodied	Silver Lustre	Silver & White	redware sherd with a silver luster glaze on the outside, and a white clay slip on the inside, possibly a teapot or bowl	1830	1940	
48	Test Unit 1, Context 2, Feature 1	i	Ceramic	Refined Earthenware	Muffin	Pearlware	Printed	Dark Blue	foot ring sherd, probably to a muffin plate	1815	1830	
48	Test Unit 1, Context 2, Feature 1	T	Ceramic	Refined Earthenware	Muffin Plate	Whiteware	Printed	Blue		1825	1850	
48	Test Unit 1, Context 2, Feature f	4	Ceramic	Refined Earthenware	Sherd	Creamware	<u> </u>	White	,	1780	1830	
48	Test Unit 1, Context 2, Feature 1	1	Ceramic	Stoneware	Hollowware	Salt Glazed	Painted	Blue & Brown	salt-glazed stoneware sherd to a jar or jug, incised pattern filled with cobalt blue.	<u>.</u>		
48	Test Unit 1, Context 2, Feature 1	i	Composite		Formica		Undecorated	White	20th century			
48	Test Unit 1, Context 2, Feature 1	1	Fauna	Bone	Bone Fragment							
48	Test Unit 1, Context 2, Feature 1	I	Glass		Bottle	Dip Mold		Green Glass	appears to be to either a snuff or a square Dutch gin bottle			
48	Test Unit 1, Context 2, Feature 1	3	Glass		Mirror Glass			Mirror	plate glass mirror fragments		3	
48	Test Unit 1, Context 2, Feature 1	2	Glass		Security Glass			Colorless	security glass with imbedded chicken wire	1892	2000	

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
48	Test Unit 1, Context 2, Feature 1	1	Glass		Sherd	Milk Glass	Unknown	White	small rim sherd, possibly a bowl			
48	Test Unit 1, Context 2, Feature 1	1	Glass		Unidentified Milk Glass	Pressed		White	thick milk glass sherd, flat on one surface, ridged on the other, possibly a shelf			
48	Test Unit 1, Context 2, Feature 1	7	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarde
48	Test Unit 1, Context 2, Feature 1	3	Glass		Wine Bottle			Olive Green	body sherds			
48	Test Unit 1, Context 2, Feature 1	3	Metal	Iron	Nail			Rust	badly rusted nail fragments, discarded			Discarde
48	Test Unit 1, Context 2, Feature I	1	Metal	Iron	Unidentified	-		Rust	small fragment of sheet iron, possibly to a tin can, discarded			Discarde
48	Test Unit 1, Context 2, Feature 1	1	Synthetic	Plastic	Plumbing Valve	Molded		White	Nylon valve with a black rubber gasket and a red release button for a brass piston, probably for water or some other liquid		2000	
48	Test Unit 1, Context 2, Feature 1	1	Synthetic	Plastic	Reflector			Colorless	appears to be part of a lens for a reflector with a molded cross-hatched surface		9	
49	Test Unit 1, Context 5	1	Ceramic		Brick			Brick Red	•			Discarde
49	Test Unit 1, Context 5	1	Ceramic	Stoneware	Bottle	Salt Glazed		Gray & Brown	salt glazed exterior, brown slipped interior			
49	Test Unit 1, Context 5	1	Ceramic	Stoneware	Bottle	Salt Glazed	Undecorated	Gray & Brown	brown slipped interior			
49	Test Unit 1, Context 5	1	Glass		Bottle			Green	body sherd			_
49	Test Unit 1, Context 5	1	Glass		Wine Bottle			Olive Green	body sherd	•		<u> </u>
49	Test Unit 1, Context 5	1	Metal	Iron	Nail		f	Rust	badly rusted nail fragment, discarded			Discarde
50	Test Unit 1, Context 6, Feature 3	ı	Ceramic	Refined Earthenware	Saucer	Pearlware/Whitewa	Painted	Blue		1820	1835	
50	Test Unit 1, Context 6, Feature 3	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
50	Test Unit 1, Context 6, Feature 3	1	Glass		Bottle	-		Colorless	body sherd			
50	Test Unit 1, Context 6, Feature 3	2	Glass		Bottle	Mold Blown		Colorless	2 body sherds			
50	Test Unit 1, Context 6, Feature 3	1	Glass		Window Glass			Pale Green	window glass sherd, discarded			Discarde
50	Test Unit 1, Context 6, Feature 3	2	Glass		Wine Bottle		-	Olive Green	body sherds to a wine bottle			3 112
51	Test Unit 1, Context 8, Feature 3	1	Ceramic		Brick		,	Brick Red	brick fragment with mortar, discarded			Discarded
51	Test Unit 1. Context 8, Feature 3	1	Ceramic	Refined Earthenware	Unidentified	Yellowware	Unknown	Pale Yellow				
51	Test Unit 1, Context 8, Feature 3	1	Glass		Window Glass			Pale Green	-			Discarded

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
51	Test Unit 1, Context 8, Feature 3	2	Metal	Iron	Nail			Rust	badly rusted nail fragments, discarded			Discarded
52	Test Unit 2, Strat 2	1	Ceramic	Refined Earthenware	Hollowware	Unidentified	Dipt	Burnt	burnt sherd of mocha, could be pearlware	1795	1835	
52	Test Unit 2, Strat 2	1	Ceramic	Refined Earthenware	Sherd	Creamware	Sponged	Green		1780	1810	
52	Test Unit 2, Strat 2	3	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780	1830	
52	Test Unit 2, Strat 2	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1790	1840	
52	Test Unit 2, Strat 2	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
52	Test Unit 2, Strat 2	1	Ceramic	Stoneware	Sherd	Stone China	Unknown	White	very vitrified sherd, possibly early stone china or Mason's fronstone	1805	1840	
52	Test Unit 2, Strat 2	1	Composite		Masonite			Brown	Masonite fragment, discarded	r bi		Discarded
52	Test Unit 2. Strat 2	I	Fauna	Shell	Oyster Shell Fragment				oyster shell, discarded			Discarded
52	Test Unit 2, Strat 2	ï	Glass		Bottle	Mold Blown		Light Green	sherd to a small bottle			
52	Test Unit 2, Strat 2	2	Glass	_	Plate Glass Mirror		1	Colorless				<del>                                     </del>
52	Test Unit 2, Strat 2	5	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarded
52	Test Unit 2, Strat 2	1	Glass		Wine Bottle			Olive Green	cracked off neck and a string rim			
52	Test Unit 2, Strat 2	2	Metal	Aluminum	Pull Top Coke Can			Red & Black	pull top coke type can that has been hit by a lawn mower blade. Discarded	1962	2000	Discarded
52	Test Unit 2, Strat 2	9	Metal	Iron	Nail	-		Rust	badly rusted nail fragments, discarded			Discarded
52	Test Unit 2, Strat 2	1	Metal	Unknown	Machine Part	Cast	12 22	Gray	cast white metal fragment, from a machine or a toy			
52	Test Unit 2, Strat 2	1	Metal	Unknown	Unidentified			Silver	metal strip with a whole in one end, bright, but not aluminum or iron, unknown function			
52	Test Unit 2, Strat 2		Synthetic		Unidentified			Gray	fragment of plastic	1930	2000	
53	Test Unit 2, Strat 3	3	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780	1830	
53	Test Unit 2, Strat 3	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Brown & Green	painted in early colors, probably to a cup	1795	1830	
53	Test Unit 2. Strat 3	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1790	1840	
53	Test Unit 2, Strat 3	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown	impressed mark in a circle, "IRE " most likely STAFFORDSHIRE, Clews, Adams, or Wood and other potters used marks like this	1815	1830	
53	Test Unit 2. Strat 3	1	Composite		Cement Fragment			Off White	cement fragment that was attached to a building tile, discarded		5	Discarded
53	Test Unit 2, Strat 3	4	Composite		Plaster			White	small fragments of wall plaster, discarded			Discarded

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
53	Test Unit 2, Strat 3	2	Fauna	Bone	Bone Fragment							
53	Test Unit 2, Strat 3	4	Fauna	Shell	Oyster Shell Fragment				small oyster shell fragments, discarded			Discarded
53	Test Unit 2, Strat 3	1	Glass		Bottle			Olive Green	body sherds to a small olive green glass bottle			
53	Test Unit 2, Strat 3	2	Glass		Bottle	Mold Blown	Embossed	Pale Green	sherds to a small mold blown bottle with embossed letters, "NC" and "UE"	2		
53	Test Unit 2, Strat 3	3	Glass		Window Glass			Colorless	small window glass sherds, discarded			Discarded
53	Test Unit 2, Strat 3	4	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarded
53	Test Unit 2, Strat 3	1	Glass		Wine Bottle		<del> </del>	Olive Green	body sherd to a wine bottle		<del>                                     </del>	<del>                                     </del>
53	Test Unit 2, Strat 3	2	Lithic	Slate	Slate		;	Gray			<u> </u>	<del>                                     </del>
53	Test Unit 2, Strat 3	8	Metal	Iron	Nail Fragment		1	Rusted	badly rusted nail fragments, discarded	-		Discarded
53	Test Unit 2, Strat 3	3	Metal	Iron	Sheet Iron Fragments			Rust	badly rusted sheet iron fragments,			Discarded
54	Test Unit 2	2	Ceramic	Refined Earthenware	Pipe Stem			White				
54	Test Unit 2	1	Ceramic	Refined Earthenware	Plate	Pearlware	Printed	Dark Blue	dark blue printed plate or muffin plate	1815	1830	
54	Test Unit 2	2	Ceramic	Refined Earthenware	Plate	Pearlware	Unknown	Unknown		1780	1835	
54	Test Unit 2	1	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780	1830	
54	Test Unit 2	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue	small sherd of blue printed pearlware with part of an impressed mark "ADAMS" in a circle. A common mark for the early 19th century sites. Probably Godden's mark 19(page 21), Unfortunately, the sherd is too small to attribute to any of the vessels.	1815	1830	
54	Test Unit 2	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1790	1830	1
54	Test Unit 2	1	Ceramic	Refined Earthenware	Sherd	Whiteware	Unknown	Unknown		1825	1900	
54	Test Unit 2	I	Composite		Concrete Fragment			Off White	fragment of cement from between two bricks, discarded			Discarded
54	Test Unit 2	Ī	Fauna	Bone	Bone Fragment	T .	1		sawn vertebra			<del>                                     </del>
54	Test Unit 2	1	Fauna	Bone	Calm Shell		1 -		clam shell, discarded	-		Discarded
54	Test Unit 2	3	Fauna	Bone	Oyster Shell				oyster shell fragments, discarded			Discarded
54	Test Unit 2	1	Glass	-	Window Glass			Pale Green	window glass sherd, discarded			Discarded
54	Test Unit 2	6	Metal	lron	Nail		<u> </u>	Rust	badly rusted nail fragments, discarded			Discarded

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
54	Test Unit 2	3	Metal	Iron	Sheet Iron			Rusted	badly rusted sheet iron fragments, discarded			Discarded
55	Test Unit 3, Context 12	l	Ceramic	Refined Earthenware	Cup	Creamware		White		1770	1810	
55	Test Unit 3, Context 12	1	Composite		Formica			White	Formica			
55	Test Unit 3, Context 12	l	Glass		Bottle			Olive Green	small body sherd			
55	Test Unit 3, Context 12	ı	Glass		Glass Shelf Sherd	Pressed		Colorless	small sherd with parallel raised lines on one surface, possibly from a refrigerator shelf			
55	Test Unit 3, Context 12	3	Glass		Window Glass			Colorless	small window glass sherds, discarded			Discarded
55	Test Unit 3, Context 12	9	Glass		Window Glass		ı	Pale Green	small window glass sherds, discarded			Discarded
55	Test Unit 3, Context 12	4	Metal	Iron	Nail			Rust	badly deteriorated nail fragments, discarded			Discarded
56	Test Unit 3, Context 13	1	Ceramic		Building Tile			Brick Red	part of a hollow redware building tile, discarded			Discarded
56	Test Unit 3, Context 13	2	Fauna	Bone	Bone Fragment				r			
56	Test Unit 3, Context 13	1	Fauna	Shell	Oyster Shell				oyster shell, discarded			Discarde
56	Test Unit 3, Context 13	1	Glass		Bottle			Amber	body sherd			
56	Test Unit 3, Context 13	2	Glass		Bottle			Olive Green	body sherds to a thin bottle			
56	Test Unit 3, Context 13	!	Glass		Bottle	Machine Made		Colorless	base to a thick colorless bottle, probably for milk, embossed " 34	1905	1960	
0. 1000	Test Unit 3, Context 13	2	Glass		Plate Glass			Colorless	plate glass sherds with a fair amount of ware, possibly from a glass counter			
56	Test Unit 3, Context 13	1	Glass		Security Glass			Colorless	sherd of security window glass with imbedded chicken wire.	1892	2000	
56	Test Unit 3, Context 13	3	Glass		Window Glass			Colorless	small window glass sherds, discarded			Discarded
56	Test Unit 3, Context 13	4	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarded
56	Test Unit 3, Context 13	l	Metal	Iron	Nail		20	Rust	badly rusted nail fragment, discarded			Discarded
57	Test Unit 3, Context 14	4	Composite	Linoleum	Tile			Mottled Brown	floor linoleum tile fragments			
57	Test Unit 3, Context 14	1	Glass		Plate Glass Mirror			Colorless	sherd to a plate glass mirror that has some cement for attaching to a wall			
57	Test Unit 3, Context 14	1	Glass		Window Glass			Pale Green	small sherds of window glass, discarded			Discarde
58	Test Unit 4, Context 10	3	Glass		Window Glass			Pale Green	small sherds of window glass, discarded			Discarded
58	Test Unit 4, Context 10	l l	Metal	Iron	Nail	-		Rust	badly rusted nail fragment, discarded		-	Discarded
59	Test Unit 7, Context 2	l l	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	White	fragment from an impressed mark, unreadable, circle or oval impressed dot lines, center not extant	1810	1835	

Çat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
59	Test Unit 7, Context 2	1	Fauna	Shell	Oyster Shell				oyster shell			-
59	Test Unit 7, Context 2	1	Glass		Bottle Glass			Light Green	small body sherd			
59	Test Unit 7, Context 2	1	Glass	· · -	Window Glass			Pale Green	small window glass sherd, discarded	_		Discarded
59	Test Unit 7, Context 2	2	Glass	<u> </u>	Wine Bottle		,,	Olive Green	body sherds	-		-
59	Test Unit 7, Context 2	l	Glass	Lead	Security Window Glass			Colorless	security glass, introduced in 1892 (Miller 2001:9)	1892	2000	
59	Test Unit 7, Context 2	4	Lithic		Mica				small pieces of mica, possibly for a cast iron stove			
59	Test Unit 7, Context 2	3	Metal	Iron	Nail			Rust	badly rusted nail fragments, discarded			Discarded
60	Test Unit 7, Context 3	2	Fauna	Shell	Shell				very small, discarded		-	Discarded
60	Test Unit 7, Context 3	1	Glass	100	Window Glass			Pale Green	small window glass sherd, discarded			Discarded
60	Test Unit 7, Context 3	1	Lithic		Mica Fragment				small fragment of mica, possibly from a cast iron stoves, discarded		-	Discarded
60	Test Unit 7, Context 3	1	Metal	Iron	Nail		,	Rust	badly rusted nail fragment, square, discarded			Discarded
61	Test Unit 7, Context 4	1	Glass	Lead	Tableware			Colorless	small sherd			
62	Test Unit 7, Context 5	1	Ceramic	Coarse Earthenware	Hollowware	Redware	Black Glazed	Black				
62	Test Unit 7, Context 5	1	Ceramic	Coarse Earthenware	Hollowware	Redware	Mottled Glaze	Brown & Tan				
000000	Test Unit 7, Context 5	3	Fauna	Shell	Oyster Shell Fragment				oyster shell fragments, discarded			Discarded
63	Test Unit 7. Context 6	1	Ceramic	Refined Earthenware	Bowl	Creamware	Undecorated	White		1770	1840	
63	Test Unit 7, Context 6	3	Ceramic	Refined Earthenware	Chamber Pot	Creamware	Undecorated	White	3 mended sherds, appears to be the base of a chamberpot	1770	1860	
64	Test Unit 7, Context 7	1	Ceramic	Refined Earthenware	Сир	Pearlware	Painted	Blue	blue floral painted cup, appears to be London shape	1810	1830	
	Test Unit 7, Context 7	1	Ceramic	Refined Earthenware	Sherd	Peariware	Unknown	Unknown		1780	1830	
10.00	Test Unit 7, Context 7	1	Fauna	Shell	Clam Shell Fragment				small clam shell fragment, discarded			Discarded
114145	Trench 2, Backhoe Collection	l l	Ceramic	Refined Earthenware	Pipe Stem			White				
	Trench 2, Backhoe Collection	L	Ceramic	Refined Earthenware	Saucer	Pearlware/Whitewa re	Painted	Blue	Large blue painted floral patters like this were recovered from an importer's dump in Detroit that dates to around 1829	1820	1835	
65	Trench 2, Backhoe Collection	2	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	Undecorated		1780	1830	
65	Trench 2, Backhoe Collection	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Blue		1795	1830	

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Cat	Provenience	Artifact	Class	Subclass	Object	Ware/Tech	Primary	Color	Comments/Mark	Begin	End	Status
#		Count			1		Decoration	400		Date .	Date	
65	Trench 2, Backhoe Collection	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
65	Trench 2, Backhoe Collection	2	Glass		Wine Bottle			Olive Green	wine bottle body sherds			
66	Trench 2, Feature 1	1	Ceramic	Refined Earthenware	Saucer	Pearlware	Painted	Polychrome	sherds to a pearlware saucer painted in the early colors (blue, tan and olive green	1795	1830	
66	Trench 2, Feature 1	2	Metal	Iron	Nail			Rust	badly rusted nail fragment, discarded			Discarded
66	Trench 2, Feature 1	1	Other		Tarpaper Fragment			Black	fragment of tarpaper, discarded			Discarded
67	Trench 2, Feature 5	1	Ceramic		Brick			Brick Red	small brick crumb, discarded			Discarded
67	Trench 2, Feature 5	1	Glass		Lamp Glass			Colorless	small lamp chimney sherd			
67	Trench 2, Feature 5	2	Glass	There is a second of the secon	Window Glass			Pale Green	small window glass sherds, discarded			Discarded
68	Trench 2, Feature 6	6	Ceramic		Brick			Brick Red	small brick crumbs, discarded			Discarded
68	Trench 2, Feature 6	1	Ceramic	Refined Earthenware	Cup	Pearlware	Painted	Blue	painted cup sherd, blue extant, possibly polychrome	1795	1830	
68	Trench 2, Feature 6	2	Ceramic	Refined Earthenware	Cup	Pearlware	Painted	Blue	painted cup sherd, blue extant, possibly polychrome	1795	1830	
68	Trench 2, Feature 6	1	Ceramic	Refined Earthenware	Muffin Plate	Pearlware	Printed	Dark Blue	dark blue printed muffin plate with a hollow markey	1815	1830	
68	Trench 2, Feature 6	] '	Composite		Mortar			Off White	small hunk of mortar, discarded			Discarded
68	Trench 2, Feature 6	I	Lithic	Other	Mica				small flake of mica, possibly from a cast iron stove.			
68	Trench 2, Feature 6	1	Metal	Iron	Nail			Rust	badly rusted nail fragment, discarded			Discarded
70	Test Unit 4, Context 14, 15, 20	1	Glass		Bottle	Dip Mold		Dark Purple	base to a dark purple dip pattern mold blown bottle or piece of table glass			
71	Surface Above Feature 4	i	Ceramic	Coarse Earthenware	Sherd	Redware	Unglazed	Brick Red	probably a flower pot			
71	Surface Above Feature 4	1	Ceramic	Porcelain	Saucer	Chinese Porcelain	Painted, Overglaze	Red & Unknown	enamel painted, most of the decoration is not extant			
	Surface Above Feature 4	1	Ceramic	Refined Earthenware	Čup	Pearlware	Painted	Brown	cup sherd, brown floral painted pattern, other colors not extant	1795	1830	
34 1860	Surface Above Feature 4	I	Ceramic	Refined Earthenware	Mug	Creamware	Dipt	Dark Brown	Sherd to a cylindrical shaped creamware vessel, probably from a mug. The surface was engine turned in a series of curved lines which was then covered by a brown slip that was turned to reveal the pattern in a dark brown on cream.	1785	1820	
71	Surface Above Feature 4	1	Ceramic	Refined Earthenware	Plate	Pearlware	Shell Edge	Blue Edge	sherd to an octagonal blue shell edged pearlware plate, impressed straight lines at rim	1800	1825	

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
71	Surface Above Feature 4	1	Ceramic	Refined Earthenware	Plate	Pearlware	Shell Edge	Green Edge	rim sherd to green shell edged pearlware plate with an even scalloped rim and impressed straight lines.	1810	1835	
	Surface Above Feature 4	1	Ceramic	Refined Earthenware	Saucer	China Glaze	Printed	Blue	blue printed saucer in an oriental pattern	1790	1820	
71	Surface Above Feature 4	2	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780	1830	1.0
71	Surface Above Feature 4	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Printed	Blue		1795	1830	
71	Surface Above Feature 4	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
71	Surface Above Feature 4	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
71	Surface Above Feature 4	2	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray Body	interior unglazed			
71	Surface Above Feature 4	1	Glass		Bottle			Green	simple neck sherd, the rim appears to have been fire polished		_	
71	Surface Above Feature 4	1	Glass		Flacon Bottle	Dip Mold		Blue Green	shoulder sherd to a square French blue-green glass flacon bottle			
71	Surface Above Feature 4	2	Glass	1	Lamp Glass			Colorless	lamp chimney	*		
71	Surface Above Feature 4	6	Glass		Lamp Shade	Pressed	Fluted	White	sherds to a large pressed milk glass lamp shade		_	
71	Surface Above Feature 4	19	Glass		Window Glass			Pale Green	small window glass sherds, discarded		-	Discarde
71	Surface Above Feature 4	57	Glass		Window Glass			Pale Green	small window glass sherds, discarded			Discarde
71	Surface Above Feature 4	3	Glass	77.90	Wine Bottle	-		Olive Green	wine bottle body sherds	1	-	
71	Surface Above Feature 4	1	Glass		Wine Bottle Neck			Olive Green			3_	
71	Surface Above Feature 4	i	Glass	Lead	Tableware			Colorless	small sherd			
71	Surface Above Feature 4	1	Glass	Lead	Window Glass Stem Fragment			Colorless	made in two parts			
71	Surface Above Feature 4	1	Glass	Non Lead	Bottle			Colorless				
71	Surface Above Feature 4	l	Glass	Non Lead	Lamp Glass			Colorless	lamp chimney			
71	Surface Above Feature 4	1	Glass	Non Lead	Patterned Window Glass	Pressed		Coloriess	pressed pattern window glass, such as used for bathroom windows			
71	Surface Above Feature 4	24	Metal	lron	Nail			Rust	badly rusted nail fragment, discarded		-	Discarde
72	Feature 4 Cleanup	l l	Ceramic	Porcelain	Saucer	Chinese Porcelain	Painted, Overglaze	Red & Unknown	enamel painted, most of the decoration is not extant			
72	Feature 4 Cleanup	t	Ceramic	Refined Earthenware	Saucer	China Glaze	Printed	Blue	blue printed saucer in an oriental pattern	1790	1820	
72	Feature 4 Cleanup	1	Ceramic	Refined Earthenware	Sherd	Pearlware	Painted	Tan & Green		1795	1830	
72	Feature 4 Cleanup	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	

Cat #	Provenience	Artifact Count	Class	Subclass	Object	Ware/Tech	Primary Decoration	Color	Comments/Mark	Begin Date	End Date	Status
72	Feature 4 Cleanup	i	Ceramic	Stoneware	Hollowware	Salt Glazed		Gray				
72	Feature 4 Cleanup	t	Glass		Bottle			Amber	,			· ·
72	Feature 4 Cleanup	1	Glass	1	Lamp Glass	<del> </del>		Colorless	lamp chimney			
72	Feature 4 Cleanup	2	Glass		Lamp Glass		-	Pale Green	lamp chimney sherds			<del> </del>
72	Feature 4 Cleanup	5	Glass	<u> </u>	Plate Glass	<u> </u>		Colorless				
72	Feature 4 Cleanup	2	Class		Plate Glass	Cast	<u> </u>	Pale Green	plate glass sherds			
72	Feature 4 Cleanup	16	Glass		Window Glass		-	Pale Green	small window glass sherds, discarded			Discarded
	Feature 4 Cleanup		Glass	Non Lead	Tableware	Mold Blown	Molded Pattern	Colorless	sherd to a mold blown glass vessel, possibly a tumbler, flute like pattern, body sherd			
72	Feature 4 Cleanup	2	Metal	Iron	Iron Strips			Rust	narrow strips of iron			
72	Feature 4 Cleanup	20	Metal	Iron	Nail		-	Ruste	badly rusted nail fragment, discarded			Discarded
73	Trench I	1	Ceramic		Brick			Brick Red	brick fragment, no mortar, width 3.625" by 2.125, discarded			Discarded
73	Trench 1	2	Ceramic		Decorated Wall Tile		Embossed	Brown On White	decorated wall tile with an embossed pattern, scalloped edges, and highlighted in brown. Probably for a kitchen or bathroom. One fragment has cement adhering to the back, vitrified			
73	Trench i		Ceramic	Refined Earthenware	Plate	Pearlware	Shell Edge	Green Edge	rim sherd to green shell edged pearlware plate with an even scalloped rim and impressed straight lines,	1810	1835	
73	Trench I	I.	Ceramic	Refined Earthenware	Saucer	China Glaze	Printed	Blue	blue printed saucer in an oriental pattern	1790	1820	
73	Trench i	5	Ceramic	Refined Earthenware	Sherd	Creamware	Undecorated	White		1780	1830	
73	Trench 1	1	Fauna	Shell	Clam Shell Fragment							Discarded
73	Trench 1	1	Metal	Iron	Nail			Rust	badly rusted nail fragment, discarded			Discarded
74	General Collection	1	Ceramic	Porcelain	Sherd	Bone China	Unknown	White				<del>                                     </del>
74	General Collection	2	Ceramic	Porcelain	Sherd	Chinese Porcelain	Painted	Blue				
74	General Collection	ı	Ceramic	Refined Earthenware	Sherd	Creamware		White		1780	1830	
74	General Collection	2	Ceramic	Refined Earthenware	Sherd	Pearlware	Dipt	Brown & Tan		1795	1830	
74	General Collection	I	Ceramic	Refined Earthenware	Sherd	Pearlware	Unknown	Unknown		1780	1830	
74	General Collection	14	Ceramic	Stoneware	Sherd	Salt Glazed		Buff & Brown	small sherds that have spalled off the inside of stoneware containers, all have a brown slip			

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Provenience	Artifact	Class	Subclass	Object	Ware/Tech	Primary	Color	Comments/Mark	Begin	End	Status
	Count					Decoration			Date	Date	1
General Collection	16	Ceramic	Stoneware	Sherd	Salt Glazed		Gray & Brown	small stoneware container sherds,	T T		
							2007	brown slipped interiors			
General Collection	13	Ceramic	Stoneware	Sherd	Slip Glazed	•	Brown	small stoneware container sherds			
	General Collection	General Collection 16	General Collection 16 Ceramic	Count   General Collection   16   Ceramic   Stoneware	General Collection Count Stoneware Sherd	General Collection Count Stoneware Sherd Salt Glazed	Count   Decoration   Decoration   Count   Ceramic   Stoneware   Sherd   Salt Glazed   Ceramic   Ceramic	Count Decoration  General Collection 16 Ceramic Stoneware Sherd Salt Glazed Gray & Brown	Count Decoration  General Collection 16 Ceramic Stoneware Sherd Salt Glazed Gray & Brown small stoneware container sherds, brown slipped interiors	Count Date  General Collection 16 Ceramic Stoneware Sherd Salt Glazed Gray & Brown small stoneware container sherds, brown slipped interiors  Count Collection 16 Ceramic Stoneware Sherd Salt Glazed Gray & Brown sipped interiors	Count Decoration Decoration Date Date  General Collection 16 Ceramic Stoneware Sherd Salt Glazed Gray & Brown small stoneware container sherds, brown slipped interiors

Appendix C: Vessel Lists

Table C.1	Feature 4	4, FS#s t	y Level
Level	Builders	Interior	Wall
	Trench	FS#'s	FS#'s

Level	Builders Trench	Interior FS#'s	Wall FS#'s
Surface/Clean up	ES#'s	47, 71 & 72	
1	1	3 & 4	2
2	5	7	6
3	8	12	10
4	9	13	11
- 5	14	18	16
6	15	19	17
7	20	22	21
8	23	27	25
9	24	28	26
10	29	33	31
11	30	34	32
12	35	37	36
Under	38	40, 41, & 42	39, 45 & 46

On the following tables, a gray-shaded vessel # cell indicates a non-Feature 4 provenience.

Table C.2 FS#s for Non-Feature 4 Proveniences

Provemen	CES
Provenience	FS#'s
Feature 5	43
General Collection	74
Test Unit 1, Context 2, Feature 1	48
Test Unit 1, Context 5	49
Test Unit 1, Context 6, Feature 3	50
Test Unit 1, Context 8, Feature 3	51
Test Unit 2	54
Test Unit 2, Strat 2	52
Test Unit 2, Strat 3	53
Test Unit 3, Context 12	55
Test Unit 3, Context 13	56
Test Unit 3, Context 14	57
Test Unit 4, Context 10	58
Test Unit 4, Context 14, 15, 20	70
Test Unit 7, Context 2	59
Test Unit 7, Context 3	60
Test Unit 7, Context 4	61
Test Unit 7, Context 5	62
Test Unit 7, Context 6	63
Test Unit 7, Context 7	64
Trench 1	73
Trench 2, Backhoe Collection	65
Trench 2, Feature 1	66
Trench 2, Feature 5	67
Trench 2, Feature 6	68
Trench 2, Feature 7	69

Table C.3 Wine Bottle Vessel List for Feature 4

V #	FS#	Mends	Tech	Color	Finish	Base	Comments	Origins	Sherd
1	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		1
2	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		1
3	33		Paste Mold	Olive Green	Champagne	1	applied string rim, cracked off lip		2
4	33		Paste Mold	Olive Green	Champagne	<u> </u>	applied string rim, cracked off lip		1
5	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off down tooled	<del>                                     </del>	1
6	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		1
7	33	-	Paste	Olive	Champagne		applied string rim, cracked off lip		1
8	33		Mold Paste	Green Olive	Champagne	<del> </del>	applied string rim, cracked off lip		1
9	33		Mold_ Paste	Green Olive	Champagne	<del>                                     </del>	applied string rim, cracked off lip		1
10	33		Mold Paste	Green Olive	Champagne	-	applied string rim, cracked off lip		1
11.	33		Mold Paste	Green Olive	Champagne		applied string rim, cracked off lip	-	1
12	33	2 5	Mold Paste	Green Olive	Champagne	<del>                                     </del>	applied string rim, cracked off lip		2
13	33		Mold Paste	Green Olive	Champagne		applied string rim, cracked off lip	<del>                                     </del>	1
14	33		Mold Paste	Green Olive	Champagne	<del> </del>	applied string rim, cracked off lip		1
15	33		Mold Paste	Green Olive	Champagne		applied string rim, cracked off lip		1
16	33		Mold Paste	Green Olive	Champagne		applied string rim, cracked off lip		' 1
	i		Mold	Green Olive					
17	33		Paste Mold	Green	Champagne		applied string rim, cracked off lip		1
18	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		1
19	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		1
20	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		1
21	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		i
22	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		1
23	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip	3	1
24	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		1
25	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		1
26	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		2
27	33		Paste Mold	Olive Green	Champagne		applied string rim. cracked off lip		1
28	33		Paste	Olive Green	Champagne		applied string rim, cracked off lip		1
29	33		Mold Paste	Olive Green	Champagne		applied string rim. cracked off lip		1
30	33		Mold Paste	Olive	Champagne		applied string rim, cracked off lip		1
31	33		Mold Dip Mold	Green Black		Sand pontil	dip mold-blown, appears to have a sand pontil	English	1
32	33		Paste Mold	Glass Olive Green	Champagne	Mamelon	Bottle missing its finish. This plus a finish sherd suggest that these bottles weigh about 35 ounces.		1

Table C.3 Wine Bottle Vessel List for Feature 4

V #	FS#	Mends	Tech	Color	Finish	Base	Comments	Origins	Sherds
33	33		Dip Mold	Olive Green		Sand pontil	dip mold-blown that appears to have a sand pontil	English	i
34	33		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		I
35	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
36	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
37	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		2
38	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
39	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		2
40	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
41	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		П
42	34		Paste Mold	Olive Green	Champagne	457	cracked off finish with an applied string rim		1
43	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
44	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		T
45	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
46	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
47	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim	2003	1
48	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
49	34	200 00 200	Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
50	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
51	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		l
52	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		I.
53	34		Paste Mold	Olive Green	Wine Bottle Finish		cracked off finish with an applied string rim		1
54	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
55	34		Paste Mold	Olive Green	Champagne	_	cracked off finish with an applied string rim		1
56	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
57	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
58	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
59	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		2
60	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		2
61	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		T
62	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
63	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
64	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		!
65	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1

Table C.3 Wine Bottle Vessel List for Feature 4

V #	FS#	Mends	Tech	Color	Finish	Base	Comments	Origins	Sherd
66	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
67	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim	1	1
68	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
69	34		Paste	Olive	Champagne		cracked off finish with an applied string rim		1
70	34		Mold Paste	Olive	Champagne	<u> </u>	cracked off finish with an applied string rim	i	1
71	34		Mold Paste	Green Olive	Champagne		applied string rim, cracked off lip, the neck	<del> </del>	1
72	34		Mold Paste	Green Olive	Champagne		appears to have traces of a lead foil cover cracked off finish with an applied string rim		1
73	34	-	Mold Paste	Green Olive	Champagne	<u> </u>	cracked off finish with an applied string rim	<u> </u>	1
74	34		Mold Paste	Green Olive	Champagne	+	cracked off finish with an applied string rim		1
75	34		Mold Paste	Green Olive	Champagne		cracked off finish with an applied string rim		1
76	34		Mold Paste	Green Olive	Wine Bottle	-	cracked off finish with an applied string rim		<del>                                     </del>
77	34		Mold Paste	Green Ölive	Finish Champagne		cracked off finish with an applied string rim		1
78	34		Mold Paste	Green	Champagne	<del> </del>	cracked off finish with an applied string rim		1
79	34	_	Mold Paste	Green	Champagne	<u> </u>	cracked off finish with an applied string rim	_	
			Mold	Green		ļ			1
80	34	<u>.</u>	Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim	_	1
81	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
82	34		Paste Mold	Olive Green	Champagne	2.0	cracked off finish with an applied string rim		1
83	34	5	Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
84	34		Paste Mold	Olive Green	Wine Bottle Finish	S SUG.	cracked off finish with an applied string rim		
85	34		Paste Mold	Olive Green	Wine Bottle Finish		cracked off finish with an applied string rim		1
86	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
87	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
88	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
89	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		I
90	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		I
91	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim	1	1
92	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
93	34		Paste	Olive	Champagne		cracked off finish with an applied string rim		1
94	34		Mold Paste	Olive	Champagne		cracked off finish with an applied string rim		1
95	34		Mold Paste	Olive	Champagne		cracked off finish with an applied string rim		i.
96	34	-	Mold Paste	Green Olive	Champagne	-	cracked off finish with an applied string rim		1
97	34		Mold Paste	Green Olive	Champagne		cracked off finish with an applied string rim		1
98	34		Mold Paste	Green Olive	Champagne		cracked off finish with an applied string rim		1
_			Mold	Green		L		L	<u> </u>

Table C.3 Wine Bottle Vessel List for Feature 4

V#	FS#	Mends	Tech	Color	Finish	Base	Comments	Origins	Sherds
99	34		Paste Mold	Olive Green	Champagne		cracked off finish, applied string rim, and a tapered cork in place, the cork has compression from being tied off, but no iron or copper oxide so it was not tied with wire.		2
100	34	1	Dip Mold	Olive Green		Sand pontil	cylindrical English wine bottle with a high kick-up that appears to have a sand pontil	English	1
101	34		Dip Mold	Olive Green		Sand pontil	cylindrical English wine bottle with a high kick-up that appears to have a sand pontil	English	1
102	34			Olive Green	-	Sand pontil	kick-up to an English wine bottle, appears to have a sand pontil, probably cylindrical	English	1
103	34			Olive Green		Sand pontil	kick-up to an English wine bottle, appears to have a sand pontil, probably cylindrical	English	ī
104	34			Olive Green		Sand pontil	kick-up to an English wine bottle, appears to have a sand pontil, probably cylindrical	English	1
105	34			Olive Green		Sand pontil	kick-up to an English wine bottle, appears to have a sand pontil, probably cylindrical	English	1
106	34			Olive Green		Sand pontil	kick-up to an English wine bottle that appears to have a sand pontil, probably cylindrical	English	1
108	37			Olive Green			cracked off finish with an applied string rim		1
109	37			Olive Green			cracked off finish with an applied string rim		1
110	37			Olive Green			cracked off finish with an applied string rim		2
111	37		, š	Olive Green			cracked off finish with an applied string rim		1
112	37			Olive Green			cracked off finish with an applied string rim		1
113	37			Olive Green			cracked off finish with an applied string rim		1
114	37			Olive Green			cracked off finish with an applied string rim		1
115	32	32, 33, & 34		Olive Green	Champagne		cracked off finish and string rim, 3 sherds mend, the best evidence the bottles were broken before being discarded in the well.		3
116	37		Dip Mold	Olive Green		glass pontil	cylindrical English wine bottle, glass pontil,	English	1
117	37		Dip Mold	Olive Green		Sand pontil	cylindrical English wine bottle, sand pontil,	English	1
118	37		Dip Mold	Olive Green	-	sand pontil	cylindrical English wine bottle, sand pontil,	English	ī
119	37	28 & 37	Paste Mold	Olive Green	Champagne	Mamelon	Complete bottle, mend from 5.6 to 6.2 feet and 7.4 to 8.2 feet, proof the bottle was broken before discard.		2
121	28			Olive Green	Champagne		applied string rim, cracked off lip		1
122	1			Olive Green	Down Tooled & String Rim		Appears to be an English wine bottle with a down tooled lip and string rim.	English	5
123	28			Olive Green	Champagne		applied string rim, cracked off lip		1
124	28			Olive Green	Champagne		applied string rim, cracked off lip		1
125	28			Olive Green	Champagne		applied string rim, cracked off lip		2
126	28			Olive Green	Champagne		applied string rim, cracked off lip		2
127	28			Olive Green	Champagne		applied string rim, cracked off lip	_	I
128	28		-	Olive Green	Champagne		applied string rim, cracked off lip	*	1
129	28			Olive Green	Champagne		applied string rim, cracked off lip		2
130	28			Olive Green	Champagne		applied string rim, cracked off lip	·	2
131	28			Olive Green	Champagne		applied string rim, cracked off lip		1

Table C.3 Wine Bottle Vessel List for Feature 4

V#	FS#	Mends	Tech	Color	Finish	Base	Comments	Origins	Sherds
132	27			Olive Green	Champagne		applied string rim, cracked off lip		ı
133	40			Olive Green	Champagne	81			1
134	40			Olive Green	Champagne				1
135	29			Olive Green	Down Tooled & String Rim		appears to be an English finish for a dip mold bottle	English	1
136	18			Olive Green	Down Tooled & String Rim		Neck to an English bottle, the neck has heavy use-wear marks Probably to a dip mold- blown	English	1
137	18		Dip Mold	Black Glass		Sand pontil	English dip mold-blown cylindrical wine bottle	English	2
138	18		Dip Mold	Glass	<u> </u>	Sand pontil	English dip mold-blown cylindrical wine bottle	English	1
140	28		Dip Mold	Olive Green		Iron pontil	kick up to a wine bottle with an iron pontil	English	1
160	19			Black Glass	Down Tooled		neck with a down-tooled finish and a string rim	English	1
161	27			Olive Green	Lipping Tool		English bottle, two sherds mended, lipping tool finish	English	2
165	71			Olive Green			cracked off finish with an applied string rim		1
167	33	33 & 34	Mold	Olive Green	Champagne		applied string rim, cracked off lip		2
168	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip	166	1
169	33	) 55000	Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		2
170	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		2
171	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		2
172	33	33 & 34	Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		3
173	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		2
174	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		1
175	33		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		1
176	37	33& 37	Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim	eo.	2
177	37	33& 37	Paste Mold	Olive Green	Champagne	-	cracked off finish with an applied string rim		4
178	33	28 & 33	Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		4
179	34	33& 34	Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		2
180	34		Paste Mold	Olive Green	Wine Bottle Finish		cracked off finish with an applied string rim		2
181	34		Paste Mold	Olive Green	Champagne	-	cracked off finish with an applied string rim		1
182	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		2
183	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		1
184	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		2
185	34		Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		2
186	34		Paste Mold	Olive Green	Champagne	<del></del>	cracked off finish with an applied string rim		1
187	34		Paste	Olive	Champagne		cracked off finish with an applied string rim		1
			Mold	Green			l	L	<u> </u>

Table C.3 Wine Bottle Vessel List for Feature 4

V#	FS#	Mends	Tech	Color	Finish.	Base	Comments	Origins	Sherds
188	33		Dip Mold	Black Glass		high kickup no mamelon	appears to be a dip mold blown with a high kick up, cannot tell if it was empontilled	English	I
189	37	34 & 37	Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		2
190	34	34 & 37	Paste Mold	Olive Green	Champagne		cracked off finish with an applied string rim		2
191	31	31 & 34	Paste Mold	Olive Green	Champagne				3
192	2			Olive Green	Tooled Lip & String Rim		appears to be an English wine bottle finish	English	1
193	18			Olive Green	Tooled Lip & String Rim		appears to be an English wine bottle finish	English	1
194	27		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		2
195	27		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		1.
196	28		Paste Mold	Olive Green	Champagne		applied string rim, cracked off lip		1
197	40			Olive Green	Champagne		cracked off finish with an applied string rim		1
345	33		Dip Mold	Black Glass		high kickup no mamelon	appears to be a dip mold blown with a high kick up, cannot tell if it was empontilled	English	1

Table C.4 Table Glass Vessel List for Feature 4 and Unit 4.

V #	FS#	Object	Туре	Tech	Color	Base	Comments	Sherds
141	20	Bottle			Aqua		small vile, hand finished flaring lip	1
142	21	Tumbler	Lead	Mold Blown	Colorless		tumbler sherd, mold blown and copper wheel engraved	ì
143	21	Bottle	Lead	Multi Part Mold	Light Green	Snap Case	probably a London mustard bottle, chamfered corners, mold blown	2
144	22	Bottle			Olive Green		sherds to a small dark olive green bottle with a hand finished flairing lip.	2
145	25	Tumbler	Non Lead		Colorless		copper wheel engraved, probably Bohemian glass	1
146	27	Bottle	Lead		Pale Green	Empontilled	base to a small bottle, empontilled	1
147	5, 9 & 30	Flacon		Mold Blown	Blue- Green		French blue-green glass flacon moth rim sherds	13
148	7	Stemware	Lead	Free Blown	Colorless	Iron Pontil	base to a wine stem with an iron pontil	j
150	5	Table Ware	Lead	Hand Blown	Colorless		footed bowl or hollowware made in 3 parts, short stem	1
151	3	Table Ware	Non Lead		Colorless		hollowware, perhaps a tumbler, frosted band into which a flower motive has been cut. Perhaps Bohemian glass.	1
152	1	Vial		Dip Mold	Aqua		small vial, constricted neck, flairing lip	2
153	1	Stemware	Lead		Colorless		stemware, folded foot, copper wheel engraved flower motif near rim	3
154	1	Tumbler	Non Lead		Colorless	Empontilled	non-lead, probably Bohemian	5
155	I	Tumbler	Non Lead		Colorless	Empontilled	non-lead, probably Bohemian	1
156	1	Tumbler	Non Lead		Colorless	Empontilled	non-lead, probably Bohemian	1
157	34	Mineral Water Bottle		Multi Part Mold	Blue		embossedWEDDLE'S / BRATED / ERAL probably celebrated mineral water	2
158	34	Tumbler	Lead	Pressed	Colorless		pressed tumblers with a heavy base that may have been polished	I
159	34	Tumbler	Non Lead	Pressed	Colorless		pressed fluted non-lead tumbler	l
162	19	Tumbler	Non Lead		Colorless		rim, possibly to a tumbler, copper wheel engraving, probably Bohemian glass	1
163	70	Bottle		Dip Mold	Dark Purple		base to a dip pattern mold blown bottle or table glass	1
166	71	Stemware	Lead		Colorless	Empontilled	made in two parts	1
191	31& 34	Stemware		Paste Mold	Olive Green			2

Table C.5 Stoneware Bottle Vessel List for Feature 4 and Unit 1

V #	FS#	Mends	Object	Ware	Impressed Marks	Comments	sherds
107	34		Bottle	Body	C, WHITTMORE / NEW YORK	complete cylindrical bottle with a blob style finish, mark on shoulder. A Charles Whittemore is listed at 162 Varick St. in 1850 who bottled mineral water. From John Doggett's 1851 "Doggett's Directory"	1
120	47	37 & 47	Bottle	Salt Glaze On Iron Slip, Buff Body	JOHN CALLE	complete cylindrical bottle, impressed "JOHN CALLE" on shoulder, the finish is shaped like a blob top bottle	11
139	42		Bottle	Salt Glazed On Iron Slip	J. WHITTEMORE	quart stoneware bottle, similar to bottle 107 which, is impressed C. WHITTEMORE / NEW YORK, There is a Charles Whittemore listed at 162 Varick Street in 1850 who bottled mineral water	1
303	27	22, 26, 27, 33, & 34	Bottle	Salt Glazed, Buff Body	D. L. ORMSBY	cylindrical bottle, brown slipped interior, some iron slip on exterior, impressed on heel "D. L. ORMSBY" appears to be a 6 ounce bottle	6
304	34		Bottle	Gray Salt Glazed		Cylindrical bottle, blob top shaped finish that is painted blue. Appears to be 6 ounces in capacity, brown slipped interior.	4
305	7		Bottle	Gray Salt Glazed		Salt-glazed stoneware bottle, the finish is like a blob top and has been painted blue. Brown slipped interior	1
306	4		Bottle	Salt Glazed, Buff Body		Salt-glazed stoneware bottle, the finish is like a blob top, brown slipped interior	I
307	34		Bottle	Salt Glazed, Buff Body		Stoneware bottle, the finish is in the shape of a wine bottle finish, brown slipped interior	1
308	18		Bottle	Salt Glazed, Buff Body		Salt-glazed stoneware bottle, the finish is in the shape of a blob top, brown slipped interior	1
309	34	34, 37, 40 & 47	Bottle	Salt Glazed, Buff Body	O. PINKHAM / 1847	cylindrical bottle, blob top finish, brown slipped interior. Impressed on shoulder "O. PINKHAM / 1847" The 1847 is apparently the date of production. Complete	9
310	3		Bottle	Brown Slip Glazed		finish to a stoneware bottle, shaped like a blob top	1
311	4		Bottle	Brown Slip Glazed		finish to a stoneware bottle, shaped like a blob top	1
312	34	-	Bottle	Brown Slip Glazed		finish to a stoneware bottle, shaped like a blob top	1
313	33		Bottle	Brown Slip Glazed		finish to a stoneware bottle, shaped like a blob top	ı
314	7		Bottle	Brown Slip Glazed	_	finish to a stoneware bottle, shaped like a blob top	1
315	40	13, 18, 31, & 40	Bottle	Brown Slip Glazed	9 70 00	cylindrical stoneware bottle, blob top shaped finish	5
316	4		Bottle	Brown Slip Glazed		stoneware bottle, the finish is shaped like a blob top	1
317	12		Bottle	Brown Slip Glazed		stoneware bottle, the finish is shaped like a blob top	1
318	12		Bottle	Brown Slip Glazed		stoneware bottle, the finish is shaped like a blob top	1
319	31		Bottle	Brown Slip Glazed		cylindrical stoneware bottle, blob top shaped finish	1
320	47	1	Bottle	Brown Slip Glazed		stoneware bottle, the finish is shaped like a blob top	1
321	33		Bottle	Salt Glazed, Brown Interior Slip		salt glazed ,brown slipped interior	1
322	49		Bottle	Salt Glazed, Brown Interior Slip		salt glazed, brown slipped interior	1
323	3		Bottle	Salt Glazed, Brown Interior Slip		salt glazed exterior over an iron slip, brown slipped interior	1
324	4		Bottle	Salt Glazed, Brown Interior Slip		brown slipped interior	1

Table C.5 Stoneware Bottle Vessel List for Feature 4 and Unit 1

V #	FS#	Mends	Object	Ware	Impressed Marks	Comments	sherds
325	22	22 & 28	Bottle	Salt Glazed, Brown Interior Slip		brown slipped interior	2
326	34		Bottle	Salt Glazed, Brown Interior Slip		brown slipped interior	1
327	34	ġ.	Bottle	Salt Glazed, Brown Interior Slip		brown slipped interior	1
328	47		Bottle	Salt Glazed, Brown Interior Slip		brown slipped interior	i
329	1		Hollow Ware	Salt Glazed, Brown Interior Slip		large body sherds to a bellied bottle or jar. Salt glazed, brown slipped interior	1
330	22	18 & 22	Hollow Ware	Salt Glazed, Brown Interior Slip		large body sherds to a bellied bottle or jar. Salt glazed, brown slipped interior	4
334	7		Bottle	Salt Glazed, Brown Interior Slip	WHITTE	impressed mark WHITTE Probably the bottler or a grocer's name.	1
337	37		Sherd	Salt Glazed, Buff Body	RBORN	brown slipped interior, impressed bottler or grocery's mark.	I
338	37		Sherd	Brown Slip Glazed	A. BRO	brown slipped interior, impressed bottler's mark	l
339	4		Bottle	Salt Glazed, Buff Body	POTTERIES / TTLES	probably Bourne Potteries, Denby, England. Their stoneware bottles used "POTTERIES" as part of a mark.	l
340	28	0.0	Hollow Ware	Salt Glazed, Buff Body	PO	part of impressed mark that reads " PO	1
341	12		Bottle	Brown Slip Glazed	WHIT	part of an impressed maker's mark "WHIT "	1
342	27		Hollow Ware	Salt Glazed, Brown Interior Slip	lZ or ZI	part of impressed maker or bottler's mark	1
343	41		Bottle	Brown Slip Glazed	TTEMORE	impressed mark on shoulder, that reads, gray paste	1
344	18	12 & 18	Bottle	Brown Slip Glazed	WHITTEMO	impressed maker of bottler's mark	2

Table C.6 Table Ceramics Vessel List for Feature 4; Units 1, 2, & 7 and Trench 1 & 2.

V#	FSs#	Mends	Object	Ware	Decoration	Color	Comments	Sherds	Begin	End
149	9	4, 9, & 22 (non mends)	Teapot	Basalt		Black	Engine turned basalt sherds, most likely to a teapot.	4		
198	71		Mug	Creamware	Dipt	Dark Brown	a cylindrical vessel, probably a mug. Engine turned in a series of curved lines which was covered by a brown slip that was turned to reveal the pattern in a dark brown on cream.		1785	1820
199	19	4, 7, 12, 19	Bowl	Creamware	Dipt	Tan, Brown	Simple banded bowl, Chinese tea bowl shape, broad tan slip band with dark brown annular lines and a pale olive color	7	1810	1830
200	14		Platter	Pearlware	Shell Edge	Blue Edge	large sherd to an oval platter, no foot ring, unscalloped with an impressed curved line rim pattern.	1	1820	1835
201	71		Plate	Pearlware	Shell Edge	Blue Edge	sherd to an octagonal blue shell edged Pearlware plate, impressed straight lines at rim	ī	1800	1825
202	14		Plate	Pearlware/ Whiteware	Shell Edge	Blue Edge	blue shell edged plate with an even scalloped rim and impressed straight lines.	1	1820	1840
203	27		Plate	Pearlware	Shell Edge	Blue Edge	blue shell edged Pearlware plate with an even scalloped rim and impressed straight lines.	1	1810	1830
204	71		Plate	Pearlware	Shell Edge	Green Edge	green shell edged Pearlware plate with an even scalloped rim and impressed straight lines.	1	1810	1835
205	73		Plate	Pearlware	Shell Edge	Green Edge	green shell edged Pearlware plate with an even scalloped rim and impressed straight lines.	1	1810	1835
206	7		Muffin	Pearlware	Shell Edge	Green Edge	muffin plate with a scalloped rim and impressed straight lines.	1	1810	1835
207	27		Muffin	Pearlware	Shell Edge	Green Edge	green shell edged Pearlware muffin plate with a scalloped rim and impressed straight lines.	1	1810	1835
208	37		Plate	Pearlware	Shell Edge	Green	green shell edged Pearlware plate with a rococo scalloped rim	3	1780	1810
209	5		Cup	Creamware	Bat Printed	Black Print	black bat printed cup, appears to be Chinese tea bowl shaped cup.	1	1770	1815
210	21		Saucer	Whiteware	Printed	Red	probably a saucer, red printed with a small amount of bluing to the glaze. Despite the bluing, the vessel appears very white	1. :	1830	1845
211	5		Saucer	Pearlware	Printed, Sea Shells	Blue	deep saucer with a motive of sea shells and seaweed, Pearlware	1	1815	1830
212	37	34 & 37	Muffin	Pearlware	Willow	Blue	small muffin plate, no foot ring	2.	1810	1830
213	4		Muffin	Pearlware	Willow	Blue	small muffin plate	1	1810	1830
214	7	4&7	Cup	China Glaze	Printed	Blue	blue printed cup in an oriental pattern	3	1790	1820
215	72		Saucer	China Glaze	Printed	Blue	blue printed saucer in an oriental pattern	2	1790	1820
216	73	}	Saucer	China Glaze	Printed	Blue	blue printed saucer in an oriental pattern	1	1790	1820
217	14	, ,,_,	Saucer	China Glaze	Printed	Blue	blue printed saucer in an oriental pattern	1	1790	1820
218	7	_	Saucer	China Glaze	Printed	Blue	blue printed saucer in an oriental pattern	1	1790	1820
219	47		Saucer	Whiteware	Printed	Light Blue	light blue printed saucer in a floral pattern	ŀ	1825	1850
220	68		Muffin	Pearlware	Printed	Dark Blue	dark blue printed with a hollow marley	I	1815	1830

Table C.6 Table Ceramics Vessel List for Feature 4; Units 1, 2, & 7 and Trench 1 & 2.

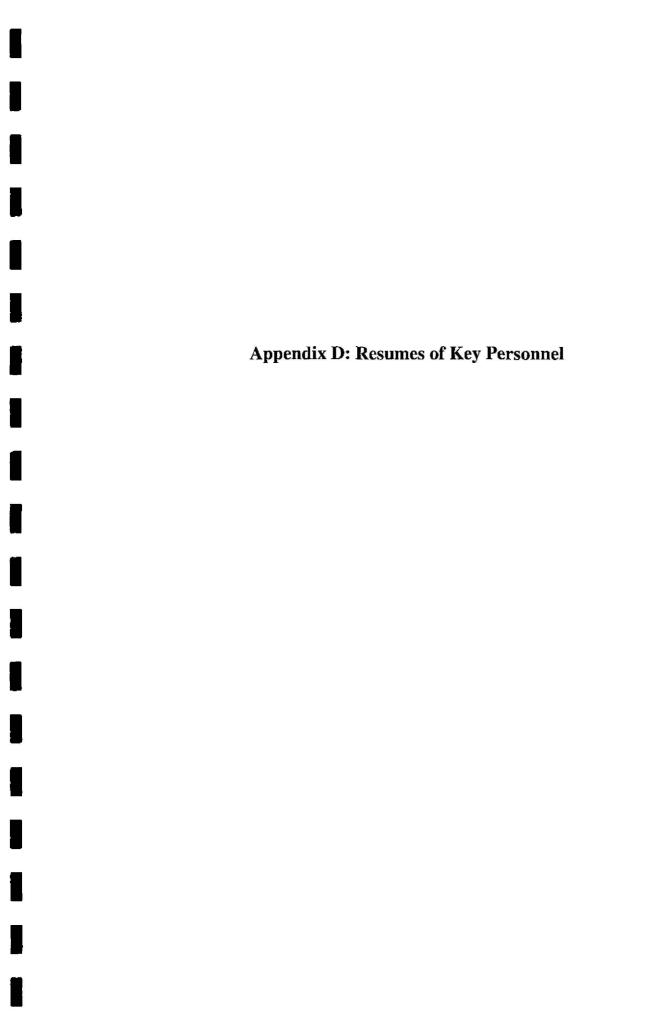
٧#	FSs#	Mends	Object	Ware	Decoration	Color	Comments	Sherds	Begin	End
221	34		Saucer	Pearlware	Printed	Blue	small rim sherd to a saucer	I	1790	1830
222	41		Saucer	Pearlware	Printed	Blue	same pattern as the cup that is vessel 223	Ī	1815	1830
223	4		Cup	Pearlware	Printed	Blue	same pattern as the saucer that is vessel 222	2	1815	1830
224	29		Cup	China Glaze	Printed	Blue	blue oriental landscape on a cup	1	1790	1820
225	37	28, 31, 34 & 37	Teapot?	Pearlware	Printed, Landscape	Blue	probably a teapot or sugar bowl	4	1815	1840
226	33		Plate	Ironstone	Printed	Light Blue	thick light blue printed ironstone plate rim with a zigzag marley pattern	l	1840	1860
227	54		Plate	Pearlware	Printed	Dark Blue	dark blue printed plate or muffin plate	I	1815	1830
228	19	7 <u>1.44</u> 100	Plate	Pearlware	Printed	Blue	thick center sherd to a plate or platter	1	1815	1830
229	37		Saucer	China Glaze	Painted	Blue	deep saucer painted in a Chinese style	2	1775	1815
230	16		Saucer	Pearlware	Painted, Overglaze	Red & Unknown	small Pearlware rim sherd with traces of enamel overglaze painting in red, other colors unknown	i	1790	1820
231	12		Сир	Pearlware	Painted, Overglaze	Red & Brown	small sherd to a fluted cup, enamel painted in floral patterns, most of which have worn off	1	1790	1820
232	4		Saucer	China Glaze	Printed	Blue	Chinese style pattern	2	1775	1815
233	65		Saucer	Pearlware/ Whiteware	Floral Painted	Blue	Large blue painted floral patterns like this were found at an importer's dump in Detroit that dates to around 1829	i.	1820	1835
234	3		Saucer	Pearlware	Floral Painted	Blue		1	1815	1835
235	23		Saucer	Pearlware/ Whiteware	Floral Painted	Blue		I	1820	1835
236	<b>5</b> 0		Saucer	Pearlware/ Whiteware	Floral Painted	Blue		Ĺ	1820	1835
237	29	3, 5, 29	Cup	Pearlware	Floral Painted	Green & Brown	a fluted cup painted in the early colors.	3	1795	1825
238	5	1 & 5	Saucer	Pearlware	Floral Painted	Polychrome	sherds to a saucer painted in the early colors (blue, tan and brown), boarder motif	3	1795	1830
239	66		Saucer	Pearlware	Floral Painted	Polychrome	sherds to a Pearlware saucer painted in the early colors (blue, tan and olive green	1	1795	1830
240	9		Saucer	Pearlware	Floral Painted	Polychrome	painted in the early colors (brown and pale green)	1	1795	1830
241	1		Saucer	Pearlware	Floral Painted	Polychrome	sherds to a saucer painted in the early colors (brown, blue, yellow and pale green)	1	1795	1830
242	19		Saucer	Pearlware	Floral Painted	Polychrome	sherds to a Pearlware saucer painted in the early colors (brown, blue, tan)	1	1795	1830
243	71		Cup	Pearlware	Floral Painted	Brown	cup sherd, brown floral painted pattern, other colors not extant	l l	1795	1830
244	29		Сир	Pearlware	Floral Painted	Brown	Chinese shape cup, brown floral painted pattern, other colors not extant	1	1795	1830
245	47		Cup	Pearlware	Floral Painted	Brown	cup sherd, brown floral painted pattern, other colors not extant	3	1795	1830
246	3		Cup	Pearlware	Painted	Polychrome	floral painted, classical boarder, cup sherd (brown, tan, and olive green) boarder	I	1795	1830
247	27		Сир	Pearlware	Painted	Polychrome	painted cup sherd, brown and tan extant	1	1795	1830

Table C.6 Table Ceramics Vessel List for Feature 4; Units 1, 2, & 7 and Trench 1 & 2.

V #	FSs#	Mends	Object	Ware	Decoration	Color	Comments	Sherds	Begin	End
248	4		Cup	Pearlware	Painted	Polychrome	painted cup sherd, brown and tan	1	1795	1830
249	33		Cup	Pearlware	Floral Painted	Polychrome	painted cup sherd, brown & olive green extant	1	1795	1830
250	8		Cup	Pearlware	Painted	Polychrome	painted cup sherd, brown and yellow extant	1	1795	1830
251	1		Cup	Pearlware	Painted	Polychrome	painted cup sherd, brown and green extant	2	1795	1830
252	41		Сир	Pearlware	Painted	Вгомл	painted cup sherd, brown extant	1	1795	1830
253	33		Сир	Pearlware	Painted	Brown	painted cup sherd, brown extant, probably polychrome	1	1795	1830
254	68		Сир	Pearlware	Floral Painted	Blue	painted cup sherd, blue extant, possibly polychrome	1	1795	1830
255	68		Cup	Pearlware	Painted	Blue	painted cup sherd, blue extant, possibly polychrome	2	1795	1830
256	64		Сир	Pearlware	Floral Painted	Blue	blue floral painted, appears to be London shape	1	1810	1830
257	7		Chamber Pot	Creamware	Undecorated	White	flat rimmed Creamware chamber pot	1.	1770	1840
258	28	28, 33, & 34	Chamber Pot	Creamware	Undecorated	White	flat rimmed Creamware chamber pot	4	1770	1840
259	40	22, 40, & 47	Plate	Creamware	Royal Pattern	White	4 sherds that do not mend	4	1780	1820
260	19		Plate	Creamware	Royal Pattern	White		.1	1780	1820
261	34		Plate	Creamware	Royal Pattern	White		1	1780	1820
262	47	3 & 47	Plate	Creamware	Royal Pattern	White	sherds from 3 and 47, appear to be the same plate, but do not mend	2	1780	1820
263	33	4, 33 & 37	Muffin Plate	Creamware	Royal Pattern	White	sherds from 4, 33 and 37, appear to be the same plate, but do not mend	3	1780	1820
264	4	4, 7, & 12	Platter	Creamware	Bath Pattern	White	all mended	6	1784	1830
265	47		Plate	Creamware	Bath Pattern	White		1	1784	1830
266	6		Platter	Creamware	Paris Or Plain	White		1	1784	1835
267	1		Plate	Creamware	Paris Or Plain	White		4	1784	1835
268	33	22 & 33	Egg Cup	Creamware	Undecorated	White		2	1770	1830
269	7	7&9	Bowl	Creamware	Undecorated	White	not a mend, but appear to be to the same bowl	2	1770	1840
270	1		Bowl	Creamware	Undecorated	White		2	1770	1840
271	63	22-10-0	Bowl	Creamware	Undecorated	White		I	1770	1840
272	3	3, 4 & 7	Bowl	Creamware	Undecorated	White		3	1770	1840
273	31		Plate	Chinese Porcelain	Painted, Canton Ware	Blue		1	1785	1840
274	12		Plate	Chinese Porcelain		Blue		i	1750	1830
275	12		Plate	Chinese Porcelain	Painted	Blue		1	1750	1830
276	72	71 & 72	Saucer	Chinese Porcelain	Painted, Overglaze	Red & Unknown	enamel painted, most of the decoration is not extant	2		
277	27		Saucer	Chinese Porcelain	Painted, Overglaze	Red & Black	-	i	-	
278	3		Saucer	Chinese Porcelain	Painted, Overglaze	Red &?	enamel painted, red extant, there were probably other colors	i		
279	18		Bowl	Chinese Porcelain		Red		2		

Table C.6 Table Ceramics Vessel List for Feature 4; Units 1, 2, & 7 and Trench 1 & 2.

V#	FSs#	'Mends	Object	Ware	Decoration	Color	Comments	Sherds	Begin	End
280	37	34 & 37	Hollow Ware	Hard Paste Porcelain	Unknown	White	possibly French porcelain	2		
281	48		Сир	Hard Paste Porcelain	Unknown	White	hard white porcelain, possibly French	2		
282	33		Teapot	Redware	Engine Turned	Brown		4	1790	1830
283	18		Teapot	Redware	Engine Turned	Brown		1		
284	20		Teapot	Redware	Engine Turned	Brown		1	_	
285	18		Teapot	Redware		Black		1		
286	51		Unidentified	Yellowware	Unknown	Pale Yellow		I		
287	34		Muffin	White Granite	Undecorated	White		1	1845	1930
288	37	34 & 37	Hollow Ware	Unidentified	Green Glaze	Green		2		
289	4		Unidentified	Victorian Majolica	Molded Pattern	Yellow	yellow extant, probably had other colors	2	1850	0881
290	4		Unidentified	Victorian Majolica	Molded Pattern	Polychrome	yellow, green and purple extant, molded leaf and basket motif	3	1850	1880
298	18		Teapot	Red Bodied	Unknown	Lead Glaze Red	pouring spout, probably to an English Redware teapot	1	_	
335	48		Hollow Ware	Red Bodied	Silver Luster	Silver & White	Redware sherd with a silver luster exterior glaze and a white slipped inside, a teapot or bowl	1		



## **Education:**

M.S./1980/Rensselaer Polytechnic Institute, Troy, New York Archaeology

M.A./1978/St. Louis University, St. Louis, Missouri American Studies

B.A./1975/Westfield State College, Westfield, Massachusetts History

### Professional:

Register of Professional Archaeologists (RPA Certification)
Society for Historical Archaeology
Society for Industrial Archaeology
Council for Northeast Historical Archaeology, Executive Board Member
Professional Archaeologists of New York City

### Experience:

Mr. Morin has over 24 years of experience in conducting and supervising archaeological investigations. He has directed archaeological and historical assessments, National Register evaluations, and archaeological data recovery efforts. Mr. Morin's particular expertise is in the area of urban archaeology and nineteenth century farmsteads, domestic deposits and structural remains.

1999 to Present \* Senior Archaeologist, URS Corporation

Archaeological Data Recovery, New Jersey Route 18, Section 2A, Middlesex County, New Jersey. Principal Investigator for Phase III archaeological investigations of a late 17<sup>th</sup> to late 19<sup>th</sup> century village along the Raritan River. Responsible for the excavation of three of the thirteen house lots. Conducted for the New Jersey Department of Transportation.

Open-End Contract for Cultural Resources, Archaeology Sites, Statewide, Delaware. Principal Investigator responsible for investigating historic resources on a three year Open-End Contract for Cultural Resources, Archeology Sites, Statewide, Delaware. Conducted for the Delaware Department of Transportation.

Woodrow Wilson Bridge Improvement Project Virginia/Maryland/Washington, DC. Principal Investigator responsible for all aspects of investigating historic archaeological resources associated with this \$2-billion bridge replacement, which carries I-95 over the Potomac River. The project involved URS managing all cultural resource efforts implemented under the Memorandum of Agreement. Work also included Design Review Working Group created to implement the MOA, and Section 106 and 4(f) coordination with the Virginia, Maryland and Washington, D.C. SHPOs, National Park Service, and Federal Highway Administration on cultural resource issues. Conducted for the Federal Highway Administration.

Phase II Archaeological Testing and Determination of Eligibility Documentation for Submittal to The Keeper of the National Register of Historic Places, Virginia Shipbuilding Corporation Site (44AX78), Alexandria, Virginia. Principal Investigator for Phase II archaeological investigations of the remains of the Virginia Shipbuilding Corporation that was constructed in 1918 in an effort to support and enlarge the United States merchant fleet during World War I. Conducted for the Federal Highway Administration, Virginia Department of Transportation and the National Park Service.

Lancaster Pike and Brackenville Road Improvements, New Castle County, Delaware. Principal Investigator for a Phase I cultural resources study of the area of potential effect associated with proposed intersection and roadway improvements. Conducted for the Delaware Department of Transportation..

State Route 9 Road Improvements, New Castle County, Delaware. Principal Investigator for a Phase I cultural resources survey of the area of the area of potential effect associated with proposed intersection and roadway improvements. Conducted for the Delaware Department of Transportation.

Archaeological Monitoring for the Dry-Laid Stonewall Stabilization/Restoration Project, Chesapeake and Ohio Canal National Historical Park, Georgetown, District of Columbia. Principal Investigator, for the recordation and evaluation of structural remains and deposits associated with the restoration of the towpath stone retaining wall between 33<sup>rd</sup> and 34<sup>th</sup> Streets. Conducted for the National Capital Region of the National Park Service.

Phase I Archaeological Investigations, Route 71, Monmouth University, Monmouth County, New Jersey. Principal Investigator for Phase I archaeological investigations of a pedestrian walkway across Route 71 at Monmouth University. Conducted for the New Jersey Department of Transportation.

Route 27 Environmental Screening, Somerset and Middlesex Counties, New Brunswick, New Jersey. Principal Investigator for environmental screening along Route 27 in Somerset and Middlesex Counties, New Jersey. Conducted for the New Jersey Department of Transportation.

Cultural Resource Reconnaissance Survey of the Proposed Hillsborough Motor Vehicle Inspection Station, Somerset County, New Jersey. Principal Investigator for an historical and archaeological field reconnaissance survey to identify and evaluate the potential for any significant cultural resources within the construction area of a proposed inspection station. Conducted for the New Jersey Department of Transportation.

Reconstruction of the Stone Street Historic District, New York, New York. Principal Investigator for archaeological monitoring of Stone Street reconstruction. Provided the oversight and inspection of an archaeological contractor providing monitoring services associated with the installation of a water main and catch basins. Provided review of resulting archaeological report. Conducted for the New York City Landmarks Preservation Commission.

Cultural Resource Survey of the Proposed Freehold Motor Vehicle Inspection Station, Monmouth County, New Jersey. Principal Investigator for an archaeological survey as part of a Categorical Exclusion Document for a proposed motor vehicle inspection station. Conducted for the New Jersey Department of Transportation.

Archaeological Overview and Assessment of the Chesapeake Ohio Canal National Historical Park. Principal Investigator for providing archival, literature and collections research for developing an overview and assessment of the prehistoric and historic archaeological resources located within the C&O Canal park. This information will be summarized and evaluated, addressing topics regarding the nature, distribution, and significance of the prehistoric and historic resources. Recommendations will also be generated for future research involving site prediction, sampling bias in the existing record and National Register evaluations. Conducted for the National Capital Region, National Park Service

1991 to 1998 \* Staff Archaeologist, National Park Service, Denver Service Center, Applied Archaeology Center.

Various Archaeological Assessment and Testing Programs at Gettysburg National Military, Gettysburg, Pennsylvania. Principal Investigator, for the determination of construction impacts to archaeological resources associated with nineteenth century farmsteads battle field related activities.

Archaeological Investigations of Outer Line Drive and PA Route 252 Intersection, Valley Forge National Historical Park, Chester County, Pennsylvania. Principal Investigator for the determination of construction impacts to archaeological resources associated with a nineteenth century farmstead.

Archaeological Testing at the Delaware Aqueduct, Upper Delaware Scenic and Recreational River, Minisink Ford, New York and Lackawaxen, Pennsylvania. Principal Investigator for the determination of construction impacts to potential archaeological resources associated with the aqueduct and Delaware and Hudson Canal.

Archaeological Assessment for Phase 1 Development at Windber/Scalp Level Coal Heritage Project, Borough of Scalp Level, Cambria County, Pennsylvania. Principal Investigator for testing the foundation of a circa 1910 house foundation and yard that was occupied by a former coal mine supervisor.

#### **Publications:**

- 1974 Springfield During the Civil War Years: 1861-1865. Historical Journal of Western Massachusetts (3)2:25 37.
- 1991 Why Dig Another Mill Site? Archaeological Investigations of the East Creek Mill. North American Archaeologist (12)2:93 108.

### Papers:

- 2003 Location! Location! Interplay of Topography and Material Life at the Landing, 1720 to 1775. Paper presented with Wade P. Catts in the Session, "A New Jersey Port Community: Raritan Landing, 1720 -- 1870." Society for Historical Archaeology Conference, Providence, R.I.
- 2001 The Virginia Shipbuilding Corporation, 1918 to 1928. Paper presented in the Session, "Industrial Archeology at Government Facilities." Society for Industrial Archeology, Washington, D.C.
- 1997 Excavation, Preservation and Interpretation: The Pennsylvania Canal in Saltsburg. Paper presented in the session, "Archeology and Tourism in Southwestern Pennsylvania." Council for Northeast Historical Archaeology, Altoona, Pennsylvania.
- 1995 Saltsburg and the Pennsylvania Canal: Excavation, Preservation and Interpretation. Paper presented in the session, "Beyond 106: Contributions from National Park Service 'Compliance' Archeology." Society for Historical Archaeology Conference, Washington, D.C.
- 1994 Excavation of the Pennsylvania Canal in Saltsburg: A Synthesis of Four Field Seasons. Paper presented at the Middle Atlantic Archeological Conference, Ocean City, Maryland.
- 1991 Waterfront Technology Along the Eastern Seaboard: An Archaeological Overview. Paper presented at the 1991 Society for Historical Archaeology Conference, Richmond, Virginia.
- 1990 The Archaeology of Philadelphia's Waterfront: The Meadows Excavation. Paper presented at the 1990 Oliver Evans Chapter Meeting, Society for Industrial Archaeology, Philadelphia, Pennsylvania.
  - The Meadows Site. Paper presented at the Forks of the Delaware Chapter, Archaeological Society of Pennsylvania, Easton, Pennsylvania.
- 1989 Archaeological Excavations at Locks 4 and 6A of the Delaware and Raritan Canal. Paper presented at the quarterly meeting of the Archaeological Society of New Jersey, Trenton.
- 1988 The East Creek Sawmill, 1782 to 1910. Paper presented at the 1988 Society for Historical Archaeology Conference, Reno, Nevada.
  - Why Dig Another Mill Site? Archaeological Excavations at the East Creek Sawmill, 1782 to 1910. Paper presented at the annual meeting of the Council for Northeast Historical Archaeology, Quebec, Canada.
- 1987 The East Creek Sawmill Site: A Preliminary Report on Excavations. Paper presented at the Roebling Chapter, Society for Industrial Archaeology Seventh Annual Symposium, Drew University, Madison, New Jersey.

The Hamlin Site, 1780 to 1856. A Study of Rural Consumer Behavior. Paper presented at the 1987 Society for Historical Archaeology Conference, Savannah, Georgia.

1986 The Hamlin Archaeological Site, 1780 to 1856. Paper presented at the annual meeting of the Archaeological Society of New Jersey, New Brunswick..

Rural Life in Northwestern New Jersey, 1800 to 1860. Paper presented at the Forks of the Delaware Chapter, Archaeological Society of Pennsylvania, Easton, Pennsylvania.

## Education:

B.A./1973/Wayne State University Anthropology/History

## **Professional:**

Society for Historical Archaeology Council for Northeast Historical Archaeology Wedgwood International Seminar

## **Experience:**

Mr. Miller has over thirty years of experience conducting historical archaeological investigations, with a focus on the study of material culture. He is nationally recognized as an expert on eighteenth and nineteenth-century ceramics; and developed a set of ceramic index values that is used by virtually all historical archaeologists working in the United States. Mr. Miller has served as a Laboratory Director and Senior Laboratory Analyst for several archaeological laboratories including St. Mary's City Commission, Parks Canada, and Colonial Williamsburg.

1994 to Present: Laboratory Director, URS Corporation, Florence, New Jersey.

Baltimore/Washington International Airport, Hiker-Biker Trail, Section 3 Trail. Laboratory Director for Phase I archaeological survey of proposed hiker-biker trail surrounding airport. Project conducted for the Maryland State Highway Administration.

Phase II Testing, Harmans Site (18AN29A) and Site 18AN965, BWI Airport, Anne Arundel County, Maryland. Laboratory Director for Phase II testing of two prehistoric sites. Conducted for the Maryland State Highway Administration.

Antietam National Battlefield, Washington County, Maryland. Laboratory Director, Phase II testing, Locher/Poffenberger site and Phase I survey, West Woods, North Woods, and East Woods areas. Conducted for the National Capitol Region, National Park Service.

Old Betzwood Bridge Replacement, Montgomery County, Pennsylvania. Laboratory Director for the Phase II archaeological study. Phase II archaeological testing of bridge replacement project area, located in Valley Forge National Historic Park. Project area contained remnants of nineteenth-century industrial village. Conducted for the Pennsylvania Department of Transportation.

King of Prussia Inn, King of Prussia, Montgomery County, Pennsylvania. Laboratory Director Phase III data recovery of eighteenth through nineteenth-century tavern/inn in King of Prussia, Pennsylvania. Site contained extensive structural remains and eighteenth-century yard deposits. Conducted for the Pennsylvania Department of Transportation.

Route 21 Cultural Resources Mitigation, Passiac County, New Jersey. Laboratory Director for multiple data recovery program. The sites consisted of four (4) Late Woodland floodplain occupations along the Passaic River, one late-nineteenth-century iron foundry, and one multi-component site with a late-nineteenth-century domestic, early-eighteenth-century domestic, and prehistoric Woodland occupations. Conducted for the New Jersey Department of Transportation.

Sandy Island, South Carolina. Laboratory Director for Phase III excavations of some enslaved African American cabin sites from the first half of the nineteenth century. Conducted for the South Carolina Department of Transportation.

Muma farmstead site, Antietam National Park, Antietam, Maryland. Laboratory Director for a Phase III data recovery excavation conducted for the National Park Service. This was a farmhouse that was burned during the Battle of Antietam in 1862 and rebuild by the Muma family.

Locker/Poffenberger cabin site, Antietam National Park, Antietam, Maryland. Laboratory Director for a data recovery excavation around a surviving log cabin that was used as a field hospital during the battle of Antietam in 1892.

Riversdale Mansion site, Riversdale, Maryland. Excavated for the Washington, DC Park Commission. Laboratory Director for excavations done as part of the restoration of some outlying structures of the mansion, built in the first decade of the nineteenth century.

C & O Locks 44, 55, and 70, Maryland for the National Park Service. Laboratory Director for the analysis of historical artifacts from around the locks being repaired because of flood damage.

**Pompton Plains, New Jersey.** Laboratory Director for the analysis of the historical artifacts from a data recovery excavations in a wetlands mitigation.

Wilson Track Farmstead Site. Excavated for the Pennsylvania Department of Transportation as part of a widening of Highway 202 in West Chester County, Pennsylvania. Laboratory Director for the analysis of a Phase III excavation of a farmstead site dating between 1785 and 1820.

1992 to 1994: Material Culture Researcher, University of Delaware Center for Archaeological Research, Newark, Delaware. Created computer catalogs for glass and ceramic vessels, set up a computerized numbering system for the inventory control of artifacts from

historic sites, and analyzed the artifacts from four historic sites ranging from the late seventeenth century into the early twentieth century. Also trained catalogers, historical archaeologists, and students. Awarded an NEH Research Grant while at the university.

- 1983 to 1992: Senior Laboratory Analyst, Department of Archaeological Research of the Colonial Williamsburg Foundation. Revised computer cataloging system, improved the dating of artifacts, reviewed the analysis of reports and taught students. Awarded two grants and two fellowships while at Colonial Williamsburg and completed major research projects on ceramics prices, index values, and chronologies.
- 1976 to 1983: Material Culture Researcher, Parks Canada. Involved in a regional training program and worked on thematic research involving glass and ceramics. Also involved in designing a computer catalog for glass artifacts, resulting in the publication of *Parks Canada Glass Glossary*. Awared a fellowship while at Parks Canada.
- 1972 to 1976: Curator of the archaeological laboratory for the St. Mary's City Commission, St. Mary's City, Maryland. Designed the vessel cataloging system still in use at St. Mary's City.
- 1969 to 1971: Western Reserve Historical Society of Cleveland, Ohio. Wrote a history of the Franklin Glass Works.

Western Reserve Historical Society. Laboratory curator for excavation of the Jonathon Hale log cabin, Bath, Ohio.

Western Reserve Historical Society. Conducted the excavations of the Franklin Glass Works site house area.

1966 to 1969: Case Western Reserve University Department of Anthropology. Field crew leader for the excavation of the Franklin Glass Works site in Portage County, Ohio.

Nauvoo Restoration, Inc. Nauvoo, Illinois. Supervisor for laboratory, cataloged artifacts, work on iron conservation, and wrote a report on the artifacts from the Edwin Webb Blacksmith Shop.

Contract for a nine-week excavation of the Walker Tavern in Cambridge Junction, Michigan for the Michigan Department of Conservation.

Nauvoo Restoration, Inc. Supervised archaeology laboratory under the direction of J.C. Harrington for summer excavations.

# **Selected Publications:**

- "Time Expended for Archaeological Excavations vs. Technical Analysis of Artifacts from the Franklin Glass Works Site, Kent, Ohio." *The Michigan Archaeologist*. Vol. 17, No. 2, pp 91 95.
  - "The Application of the South Mean Ceramic Date Formula to a Nineteenth Century Site." *The Conference on Historic Site Archaeology Papers*. Vol 6,pp 193 194.
- "A Tenant Farmer's Tableware. Nineteenth Century Ceramics for Tabb's Purchase." Maryland Historical Magazine. Vol. 69, No. 2, pp 197 – 210.
- "Classification and Economic Scaling of 19<sup>th</sup> Century Ceramics." *Historical Archaeology* Vol.14, pp 1 40.

Reprinted 1988 in *Documentary Archaeology in the New World*, Mary Beaudry, editor. Cambridge University Press, New Directions in Archaeology,pp 172 – 183.

Reprinted 1991 in Approaches to Material Culture Research for Historical Archaeologists compiled by G. L. Miller, O.R. Jones, L.A. Ross and T. Majewski for the Society for Historical Archaeology, pp 37 – 58.

- "Jean Carl Harrington, a Founding Pioneer of Historical Archaeology." *The Society for Historical Archaeology Newsletter*. Vol. 15, No. 1, pp 14 17.
- "Marketing Ceramics in North America: An Introduction." Winterthur Portfolio. Vol. 19, No.1, pp 1 5.

"George M. Coates, Pottery Merchant of Philadelphia, 1817 – 1831." Winterthur Portfolio. Vol. 19, No. 1, pp 37 – 49.

"Ode to a Lunch Bowl: The Atlantic Lunch as an interface between St. Mary's County, Maryland and Washington, D.C." *Northeast Historical Archaeology*. Vol 13, pp 2 – 8.

Reprinted 1988, *Chronicles of St. Mary's*. Vol 36, No. 2, St. Mary's County Historical Society, Leonardtown, Maryland, pp 113 – 117.

"History of the Franklin Glass Works, Portage County, Ohio." *The Glass Club Bulletin of the National Early American Glass Club*. No. 152, Spring 1987, pp 3 – 9.

"The Second Destruction of the Geldermalsen." The American Neptune Vol. XLII, No.4, Fall 1987, pp 275 – 281.

Reprinted in 1990 in the *Bermuda Journal of Archaeology and Maritime History*. Vol. 2, pp 157 – 170.

Reprinted in 1991 in *Historical Archaeology*. Vol. 25, No. 4, pp 124 – 131.

A forward to *Consumer Choices in Historical Archaeology*, edited by Suzanne M. Spencer-Wood, Plenum Press.

"Origins of Josiah Wedgwood's Pearlware." Northeast Historical Archaeology, Vol. 16: 80 – 92

Reprinted in 1989 the *Thirty-fourth Annual Wedgwood International Seminar*. Atlanta, Georgia, pp 167 – 184.

"A Revised Set of CC Index Values for Classification and Economic Scaling of English Ceramics from 1787 to 1880." *Historical Archaeology*. Vol. 25, No.1, pp 1 – 25.

"Thoughts Towards a User's Guide to Ceramic Assemblages: Newsletter Council for Northeast Historical Archaeology." Part One Newsletter April 1991 No. 18 pp 2-5. Part Two Newsletter November 1991 No. 20 pp 4-6. Part Three Newsletter July 1992 No. 22 pp 2-4. Part Four "Some Thoughts on Classification of White Wares." Newsletter November 1993 No. 26, pp 4-7.

"Arnold Remington Pilling, 1926 – 1994." Historical Archaeology Vol. 29 (4): 4 – 10.

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### George L. Miller and Catherine Sullivan

1981

"Fabrication Mecanique des recipients en verre et de la production artisanale des bouteilles par soufflage al la bouche." *Bulletin de Recherches Number 171*. Parkes Canada, Ottawa.

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Reprinted 1991 in Approaches to Material Culture Research for Historical Archaeologists. G. L. Miller, O.R. Jones, L.A. Ross and T. Majewski, compilers. Published by the Society for Historical Archaeology, pp 99 – 112.

## George L. Miller and Silas D. Hurry

1983

"Ceramic Supply in an Economically Isolated Frontier Community: Portage County of the Ohio Western Reserve, 1800 – 1825." *Historical Archaeology*. Vol. 17, No. 2, pp 80 – 92.

# George L. Miller and Antony Pacey

1985

"Impact of Mechanization in the Glass Container Industry: The Dominion Glass Company of Montreal, a Case Study." *Historical Archaeology*. Vol. 20, No. 1, pp 38 – 50.

Olive Jones and Catherine Sullivan with contributions by George L. Miller, Jane Harris, Ann Smith and Kevin Lunn.

1985

The Parks Canada Glass Glossary. Studies in Archaeology, Architecture and History. Parks Canada, Ottawa.

### George L. Miller and Elizabeth A. Jorgenson

1986

Some Notes on Bottle Mould Number and Dominion Glass Company and its Predecessors. Parks Canada, Ottawa.

Explications sur le numberotage des de la Dominion Glass Company et da ses predecesseurs. Parks Canada, Ottawa.

### George L. Miller with an appendix by Meredith Moodey

1986

"Of Fish and Sherds: A Model for Estimating Vessel Populations from Minimal Vessel Counts." *Historical Archaeology*. Vol. 20, No. 2, pp 59 – 85.

#### George L. Miller and Ann M. Smart

"English Ceramics in America." In *Decorative Arts and Household Furnishings in America 1650-1930: An Annotated Bibliography.* Edited by Kenneth L. Ames and Gerald W.R. Ward, Winterthur Museum, Wintherthur, Delaware, pp 201 – 219.

### George L. Miller, Ann S. Martin, and Nancy S. Dickerson

1994

"Changing Consumption Patterns, English Ceramics and the American Market from 1770 to 1840." In *Everyday Life in the Early Republic*. Edited by Catherine E. Hutchins, Winterthur Museum, Winterthur, Delaware.

### George L. Miller and Robert R. Hunter, Jr.

1990

"English Shell Edged Earthenware: Alias Leeds Ware, Alias Feather Edge." Thirty-Fifth Wedgwood International Seminar, pp 106 – 135.

### Robert R. Hunter, Jr. and George L. Miller

1994

"English Shell-edged Earthenware." Antiques CXLV (3): 432 – 443.

George L. Miller, Olive R. Jones, Lester A. Ross, and Teresita Majewski, Compilers

Approaches to Material Culture Research for Historical Archaeologists: A Reader
From Historical Archaeology. For the Society for Historical Archaeology.

# **Publications Forthcoming:**

"Demand Entropy as a Byproduct of Price Competition: A Case Study from Staffordshire." Forthcoming in *Historical Archaeology*.

"War and Pots: The impact of Wars on Ceramic Consumption Patterns." Forthcoming in Winterthur Portfolio.

## **Education:**

**OSHA HAZWOPER 2002** 

Ph.D. Candidate\2003\Temple University Anthropology

B.A.\1992\University of Delaware Anthropology

# **Professional Memberships:**

Society for Historical Archaeology Middle Atlantic Archeological Conference Archaeological Society of Virginia Council on Northeast Historic Archaeology American Quaternary Association

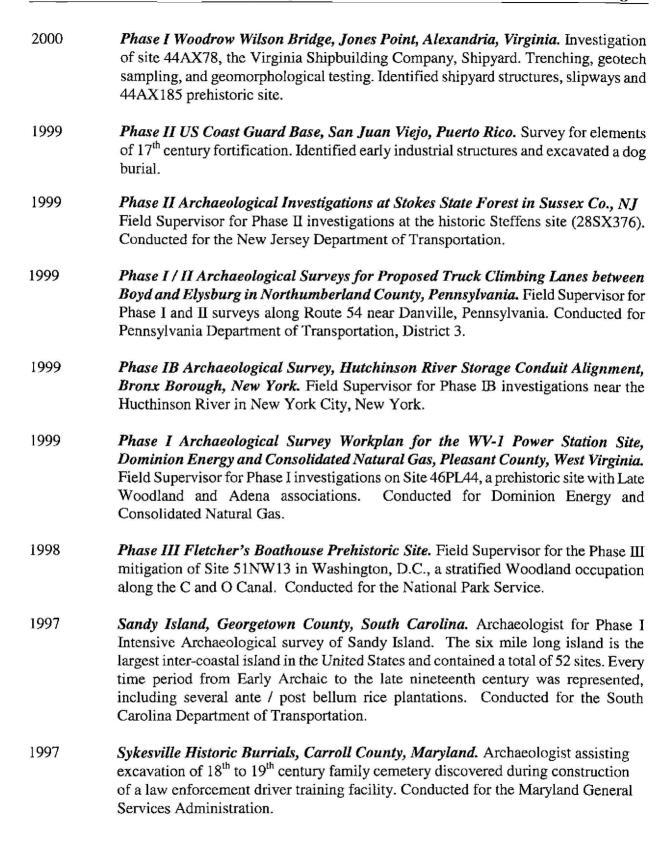
### Experience:

Mr. Harbison is a Field Supervisor with URS Corporation. He has 12 years experience participating in all field and laboratory phases of cultural resource investigation. He has participated in and supervised the excavations of historic and prehistoric sites in the Northeast and Middle Atlantic regions of the United States, as well as Puerto Rico. He has also assisted independent archaeological research in Venezuela.

### **URS Corporation**

- 2001-2002 Phase I and II Archaeological Investigations for the Dominion Greenbrier Gas Pipeline. Field supervisor for Phase I and II investigations from Charleston, West Virginia to Raleigh North Carolina. Testing covered over 350 miles and included geomorphological studies at river and creek crossings. A total of 73 sites were identified.
- 2001 Phase Ib Archaeological Monitoring Worth Street, New York City. Geomorphological test trenching and excavation of a well feature dating to the last half of the 19<sup>th</sup> century in downtown Manhattan. Prepared for Allee King Rosen and Fleming, Inc.
- 2000 Phase II and III Woodrow Wilson Bridge, Jones Point, Alexandria, Virginia.

  Testing and Mitigation of site 44AX185 prehistoric site and an early 19<sup>th</sup> century rope walk.
- 2000 *Phase III Wilmington Bypass, Wilmington, North Carolina.* Data recovery excavation of Site 31NH707. An early woodland period site on the Cape Fear River with localized clusters of pot sherds representing whole crushed vessels.



- 1996-1997 Route 21 Mitigation. Archaeologist for all phases of investigations. Projects (28PA143, 28PA145, 28PA40, and 28PA39). Sites worked on included the historic home of Scotto Nash (28PA39), breeder of the American Beauty rose, and an intact Woodland Period prehistoric village site (28PA143). Conducted for the New Jersey Department of Transportation.
- 1996 Inter-County Connector Phase I investigation. Crew Chief for Phase Ib survey associated with proposed Intercounty Connector north of Washington, D.C. in Montgomery and Prince George's County, Maryland. Involved the testing of over 30 properties with historic standing structures and the sample survey of over 30 miles of proposed highway corridors on new location and over 90 miles along existing roadways. Conducted for the Maryland State Highway Administration.
- 1995-1996 Route 206 Widening. Archaeologist for Phase I and II archaeological investigations.

  Project area contained remnants of late nineteenth century domestic and farmstead sites within Stokes State Forest and Delaware Watergap National Recreation Area.

  Conducted for the New Jersey Department of Transportation.)
- 1995-1996 Phase I investigations into the North Woods and the West Woods, Antietam National Battlefield, Maryland. Archaeologist for the Phase I and II archaeological survey of the West Woods and the North Woods, and the Locher/Poffenberger farmstead site in Antietam National Battlefield. Project involved comprehensive surveys of battlefield sites within the park and Phase II testing of a nineteenth century farmstead. Conducted for the National Capital Area of the National Park Service.
- 1995 Maryland Route 2/4 Interconnector, Calvert County, Maryland. Archaeologist for the Phase I Calvert County Maryland Route 2/4 interconnector survey, which consisted of over 7 miles of new roadway. Daily coordination with highway survey crews was necessary to complete this fast track project. Conducted for the Maryland State Highway Administration.

#### Hartgen and Associates

1995 Phase I survey conducted for the New York Power Authority, St. Lawrence River and Canal System, Mascena, New York. Field Archaeologist, searching for sites along the Saint Lawrence River.

#### University of Rhode Island Program in Public Archaeology

1993-1995 University of Rhode Island Program in Public Archaeology. Crew Chief and Laboratory Supervisor various, Phase I and Phase II projects in the state of Rhode Island. Projects conducted for the Rhode Island Department of Transportation.

### **Heite Consulting**

1995 *Phase I survey, Woodcock Farm, Golf Course Development, Maryland.* Supervisor, Identified sites including large shell midden on Sinipuxent Bay.

*Phase III Bloomsbury Site, Kent County Delaware.* Crew Chief, excavation of an isolated, late 18<sup>th</sup> century domestic site, Duck Creek Hundred. Project conducted for Delaware Department of Transportation.

## University of Delaware Center for Archaeological Research

1989-1993 University of Delaware Center for Archaeological Research. Field Archaeologist and Laboratory Technician various Phase I, Phase II, and Phase III projects in the state of Delaware. Projects conducted for the Delaware Department of Transportation.

## **Publications**

- Harbison, Jeffrey. Double the Canister and Give 'em Hell, in Archaeological Perspectives on the American Civil War. Clarence Geier and Stephen Potter Ed. 2000.
- Barse, William P. and Jeffrey Harbison. Phase II Archeological Testing on the Prehistoric and Historic Components of Site 44AX185, Jones Point Park, Alexandria, Virginia Jones Point Phase II. Prepared for Federal Highway Administration, Virginia Department of Transportation and the National Park Service. 2000
- Harbison, Jeffrey. Experimental Analysis of Lithics from a Replicated Manioc Graterboard. Prepared in 2000, Publication Pending.
- Cassedy, Dan and Jeffrey Harbison. Archaeological Survey for the Proposed Fink-Kennedy Improvements Lewis and Harrison Counties, West Virginia. Prepared for Dominion Transmission. October 2000.
- Scholl, Mike and Jeffrey Harbison. Phase I Archaeological Survey of the Landsdale Slip Ramp, Pennsylvania Turnpike, Route 476, Upper Gwynedd and Worcester Townships, Montgomery County, PA. 1998.

Clover Property, Old Dominion Electric Cooperative, Halifax County, Virginia. Phase I and II cultural resource survey. Conducted historical research on this late nineteenth-century tobacco plantation. For United Engineers and Constructors, Inc., and Old Dominion Electric Cooperative.

Proposed New Jersey Turnpike Widening Project, Interchange 8A to U.S. Route 46. Environmental Impact Statement. Wrote township histories and conducted research on land use of the New Jersey Meadowlands from the seventeenth through the twentieth centuries. For the New Jersey Turnpike Authority.

Submarine Escape Training Tank, Naval Submarine Base, New London, Groton, Connecticut. Historic structure documentation. Conducted background research on this historic engineering resource. For the U.S. Department of the Navy.

The Fort Drum Cultural Resource Project, New York. Conducted intensive historical research on nineteenth-century farmsteads in Jefferson and Lewis counties, New York, including tax, census, deed, and court records. For the National Park Service, Mid-Atlantic Region, and the U.S. Department of the Army.

Archaeological Excavation and Historic American Engineering Record Documentation at Locks 4 and 6A of the Delaware and Raritan Canal, Trenton, New Jersey. Responsible for background research on these historic canal features. For the New Jersey Department of Transportation.

Archaeological Evaluation of the Washington Metropolitan Area Transit Authority (WMATA) E-Route, Upper Mid-City Segment, District of Columbia. Developed a historical context for the evaluation of archaeological resources along this transportation route. For Wallace Roberts & Todd and the Washington Metropolitan Area Transit Authority.

Archaeological Survey for the Rehabilitation of Park Roads, Gettysburg National Military Park, Gettysburg, Pennsylvania. Conducted research on the Battle of Gettysburg and the history of monumentation in the park. For the National Park Service, Denver Service Center.

**Block 1101, Wilmington, Delaware.** Phase I, II, and III archaeological investigations. For the City of Wilmington, Department of Commerce.

Route 92 Cultural Resources Study, Somerset, Mercer, and Middlesex Counties, New Jersey. Investigations for the New Jersey Department of Transportation.

### **Education:**

B.A./1979/Douglass College, Rutgers University Archaeology

### **Professional:**

Society for Industrial Archaeology New Jersey Archaeological Society National Genealogical Society

# **Experience:**

Ms. Wuebber has over 20 years experience researching, analyzing, and writing contextual and site-specific histories for industrial, military, transportation, commercial, and residential properties in the Northeast, Middle Atlantic, Southeast, and Midwest.

1999 to Present \*Historian, URS Corporation. Archaeology and Historical Architecture Group. Key projects include:

Phase I Archaeological and Historic Architectural Survey of a section of State Route 9, New Castle County, Delaware. For the Delaware Department of Transportation.

West Virginia Historic Bridge Study. Historic Context of pre-1955 Highway Bridges. Conducted for the West Virginia Division of Culture and History, State Historic Preservation office.

King of Prussia Inn, S.R. 0202, Section 400, King of Prussia, Montgomery County, Pennsylvania. Conducted documentary, cartographic, and photographic research for the ca.1719-1952 King of Prussia Inn. For the Pennsylvania Department of Transportation.

Phase I/II Archaeological Surveys for Proposed the Route 54 Truck Climbing Lanes between Boyd and Elysburg in Northumberland County, Pennsylvania. Conducted general background research on the Route 54 project corridor and site specific historic research on three areas selected for Phase II excavation. For the Pennsylvania Department of Transportation, District 3.

Route 21 Cultural Resources Mitigation, Passaic County, New Jersey. Researched and wrote walking tour brochure for an ethnically diverse industrial neighborhood in Passaic. For the New Jersey Department of Transportation.

Phase I Investigation for Proposed Electric Generating Facility in Cass Township, Muskingum County, Ohio. Compiled archaeological and historical background data and wrote historical context for the project area. For the Dominion Resources, Inc. and Consolidated Natural Gas (DRI-CNG).

1983 to 1999 Louis Berger Projects include:

Raritan River Crossings Historic Study. History of crossings between Raritan Landing and Raritan Bay. For the New Jersey Department of Transportation.

Georgetown Incinerator Site, Square 1189, Washington, D.C. Intensive historical research for the eastern half of a block located along the historic waterfront area. For Millennium Partners of Washington, D.C., Inc.

Edison National Historic Site, West Orange, New Jersey. Ethnographic overview and assessment for the Thomas Edison National Historic Site. For the U.S. National Park Service.

Randolph BRF 0241(29) Project, Bridge Number 42, Vermont Route 12, Town of Randolph, Orange County, Vermont. Phase I archaeological and historical investigations of industrial sites in the village of Randolph, Vermont. For the Vermont Agency of Transportation.

New Jersey Route 18, East Brunswick and Old Bridge, Middlesex County, New Jersey Phase I and II cultural resource investigations for Route 18 bridge improvements. For the New Jersey Department of Transportation.

**Philadelphia**, **Pennsylvania**, **Metropolitan Detention Center**. Intensive historical investigation of half a city block in Center City, Philadelphia. For the U.S. Department of Justice, Federal Bureau of Prisons.

Delaware SR 1 Corridor, Pine Tree Corners, New Castle County, Delaware. Phase I and II investigations at the John Henry Site (7NC-J-223). For the Delaware Department of Transportation.

New Jersey Route 21(2N), City of Newark, Essex County, New Jersey. Phase II historical investigations for Route 21(2N) bridge replacement and roadway improvements. For the New Jersey Department of Transportation.

Clarksburg, West Virginia, proposed federal facility. Phase I archaeological survey at 306-344 West Pike Street, West Clarksburg. For the U.S. General Services Administration, Region 3-

Houston, Texas, Metropolitan Detention Center. Intensive historical investigation of two city blocks in downtown Houston. For the U.S. Department of Justice, Federal Bureau of Prisons.

Clark-Cochran Farm at the Appoquinimink North Site (7NC-F-13), New Castle County, Delaware. Phase III investigation of a multi-component prehistoric and historic site. For the Delaware Department of Transportation.

Erie Federal Courthouse Site, Erie, Pennsylvania. Phase II historical and archaeological investigations. Intensive documentary research of a city block in downtown Erie. For the U.S. General Services Administration, Middle Atlantic Region.

Greater Sandy Run Acquisition Area, Marine Corps Base, Camp LeJeune, North Carolina. Archaeological and architectural study of Camp Davis, a World War II military facility. For the U.S. Department of the Army, Wilmington District Corps of Engineers.

Naval Air Station Reserve Base, Willow Grove, Pennsylvania, and the Aviation Supply Office, Philadelphia, Pennsylvania. Architectural resource assessment and Phase IA archaeological survey of naval facilities. For the Department of the Navy, Northern Division, Naval Facilities Engineering Command.

Conrail Pennsylvania Clearance Improvement Project. Archaeological and architectural assessment of bridges and tunnels throughout Pennsylvania. For the Consolidated Rail Corporation.

Survey and Evaluation of Historical and Archaeological Resources at the Former United States Coast Guard Station, City of Gloucester, Camden County, New Jersey. Phase I and II investigations of a former Coast Guard Station and U.S. Immigration Detention Center. For the U.S. Coast Guard Maintenance and Logistics Command Atlantic, Governors Island.

Historic American Engineering Record. Gohlson Bridge, Mansion Truss Bridge, Clarkton Bridge, Oak Ridge Bridge, Kerr's Crossing Bridge, Mount Meridian Bridge, Knightly Bridge, Wallace Mill Bridge, and Carpenter's Ford Bridge, Virginia. Intensive background research for nine bridges. For the Virginia Department of Transportation.

Rowland's Mills (28Hu475), New Jersey Route 31 Dualization, Readington Township, Hunterdon County, New Jersey. Phase II archaeological and historical investigations of a nineteenth-century milling community. For the New Jersey Department of Transportation.

Route I-287 (5T, 6N, 7H through 8N, and 9R) HOV Lane Additions, Morris and Somerset Counties, New Jersey. Phase I and II cultural resource investigations of alternatives for the Canal Parkwaya 15-mile-long corridor in Morris and Sussex counties. For the New Jersey Department of Transportation.

*U.S. Route 113, Sussex County, Delaware.* Archaeological and architectural study of U.S. Route 113 between Milford and Georgetown. For the Delaware Department of Transportation.

Historical Research for Liberty Gas Pipeline, Middlesex County, New Jersey, and New York City. Prepared historical overview for assessment of archaeological potential within proposed gas pipeline corridor. For Transcontinental Gas Pipe Line Company.

Route 9A Reconstruction Project, New York, New York. A contextual study of nineteenth-century manufacturing sites along Manhattan's West Side. For the New York State Department of Transportation, in cooperation with the Federal Highway Administration and the City of New York.

Historical Research: 1626-1990, Salem Maritime National Historic Site, Massachusetts. Responsible for tax and deed research used in development of a site history and series of base maps for the park. For the National Park Service, Denver Service Center.

Historic Sites Inventory, Delaware Water Gap National Recreation Area, New Jersey and Pennsylvania. Responsible for compiling an inventory of historic standing structures in park, and conducted site-specific research on potentially National Registereligible structures. For the National Park Service, Mid-Atlantic Region.

Youngstown, Ohio, Proposed United States Courthouse. Intensive historical investigation of one city block in downtown Youngstown. For the U.S. General Services Administration, Region 5.

*I-95 Ramp Completion Project, Philadelphia, Pennsylvania.* Archaeological data recovery. Conducted property research on waterfront lots in Center City, Philadelphia. For Urban Engineers, Inc.

East Creek Sawmill Site (28CM20), Cape May County, New Jersey. Phase II historical and archaeological study. Conducted historical research to identify property ownership and develop historical context for interpretation of mill remains dated circa 1782 to 1913. For the Federal Highway Administration and the New Jersey Department of Transportation.

Vandeventer-Fountain House Site (A085-01-0007), Staten Island, New York. Phase III historical and archaeological data recovery. Conducted historical research related to this late eighteenth- to late nineteenth-century farmstead. For the Department of the Navy, Northern Division, Naval Facilities Engineering Command.

Florence Historic Archaeological District, Colorado. Phase III historical and archaeological data recovery. Conducted historical research related to this late nineteenth-/twentieth-century oil field in Fremont County, Colorado. For the U.S. Department of Justice, Federal Bureau of Prisons.

Clover Property, Old Dominion Electric Cooperative, Halifax County, Virginia. Phase I and II cultural resource survey. Conducted historical research on this late nineteenth-century tobacco plantation. For United Engineers and Constructors, Inc., and Old Dominion Electric Cooperative.

Proposed New Jersey Turnpike Widening Project, Interchange 8A to U.S. Route 46. Environmental Impact Statement. Wrote township histories and conducted research on land use of the New Jersey Meadowlands from the seventeenth through the twentieth centuries. For the New Jersey Turnpike Authority.

Submarine Escape Training Tank, Naval Submarine Base, New London, Groton, Connecticut. Historic structure documentation. Conducted background research on this historic engineering resource. For the U.S. Department of the Navy.

The Fort Drum Cultural Resource Project, New York. Conducted intensive historical research on nineteenth-century farmsteads in Jefferson and Lewis counties, New York, including tax, census, deed, and court records. For the National Park Service, Mid-Atlantic Region, and the U.S. Department of the Army.

Archaeological Excavation and Historic American Engineering Record Documentation at Locks 4 and 6A of the Delaware and Raritan Canal, Trenton, New Jersey. Responsible for background research on these historic canal features. For the New Jersey Department of Transportation.

Archaeological Evaluation of the Washington Metropolitan Area Transit Authority (WMATA) E-Route, Upper Mid-City Segment, District of Columbia. Developed a historical context for the evaluation of archaeological resources along this transportation route. For Wallace Roberts & Todd and the Washington Metropolitan Area Transit Authority.

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**Block 1101, Wilmington, Delaware.** Phase I, II, and III archaeological investigations. For the City of Wilmington, Department of Commerce.

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