### October 11, 2013

Prepared for:

Pennsylvania Horticultural Society

# Phase IB Archaeological Investigations of the Mother Bethel Burying Ground, 1810 – Circa 1864

ER No. 2013-1516-101-A





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Prepared for:

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### Abstract

In July 2013, the URS Corporation (URS) conducted a Phase IB archaeological investigation of the Mother Bethel African Methodist Episcopal Church Burying Ground (1810–circa 1864), located in the Queen Village neighborhood of Philadelphia. This investigation was performed on behalf of the Pennsylvania Horticultural Society (PHS) and in advance of planned renovations to the City of Philadelphia's Weccacoe Playground property (circa 1906–present). Proposed improvements to the playground have the potential to impact portions of Mother Bethel's cemetery, which remains preserved below the southwest corner of the larger property. This investigation was conducted in order to collect critical information that would allow playground renovations to move forward in a manner that would not impact historic burials, and that will ensure the long-term preservation of this significant African American burying ground.

Phase IB testing involved the excavation of four backhoe trenches within and along the boundaries of the cemetery. Trench excavations only extended to the point below surface at which archaeological evidence associated with the cemetery was encountered. In most instances, the burial-related evidence identified consisted of well-preserved grave shaft features; however, in a handful of cases, trench excavation was halted when decayed, intact coffin wood was exposed. At no point during this investigation were intact human skeletal remains exposed, uncovered, or disturbed.

Trench excavations succeeded in producing a significant amount of information related to the Mother Bethel Burying Ground. In particular, testing was able to determine that soils containing evidence of intact burial features are present immediately below the playground asphalt and gravel sub-base. While the depth below surface at which burial evidence was identified did vary somewhat across the cemetery, the shallowest depth at which grave shafts appeared was approximately 1.8 feet below the present surface. Evidence of intact burial remains was identified at depths of between 2.5 and 3 feet below the surface. Additional findings from this investigation included:

- the identification of the intact north and east walls bounding the cemetery;
- no indication that burials extend beyond the known limits of the cemetery and its perimeter walls;
- evidence that the cemetery grounds were filled in and leveled—most likely in the midnineteenth century, toward the end of its period of active use;
- the determination that intact burials are contained within these later fill soils;
- historical documentation suggesting that the cemetery could contain a significantly greater number of burials than originally thought; and
- evidence suggesting that some unknown number of burials have been disturbed during prior construction and renovation activities within the playground

Information from this testing is currently being used by the PHS and the other project partners to refine and alter existing playground improvement plans, so that intact burials will not be impacted during the renovation process. Given the shallow depth at which grave shafts and associated burials evidence was identified, URS recommends that steps should be taken to ensure that renovation-related disturbances within the cemetery do not extend more than 1 foot below the current surface. Archaeological monitoring during the renovation process is also recommended.

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Appendix I: Resumes of Key Personnel

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### 1 Introduction

The following report documents the methods and findings of a Phase IB archaeological investigation of the Mother Bethel Burying Ground, located beneath parts of the Weccacoe Playground in the Queen Village neighborhood of Philadelphia, Pennsylvania. This investigation was conducted on behalf of the Pennsylvania Horticultural Society (PHS) in advance of planned improvements to the existing city-owned community playground, and in order to determine whether or not proposed renovations could potentially impact intact burials that remain preserved within the cemetery grounds. Archaeological investigations were requested by the Pennsylvania Historical and Museum Commission (PHMC) in accordance with the provisions and regulations of Section 106 of the National Historic Preservation Act of 1966, as amended.

In April 1810, Reverend Richard Allen and the Trustees of Mother Bethel originally purchased the cemetery ground, an area occupying slightly more than one-quarter acre of space in what eventually became the southwest corner of the playground. It remained in active use by the congregation until sometime around 1864–1868, and was later purchased by the City of Philadelphia and transformed into a small "pocket park" known as Weccacoe Square. By the early twentieth century, the square had been enlarged and was transformed into a community playground. Existing historic research indicates that, at a minimum, more than 1,400 interments were made in Mother Bethel's cemetery over the period of its use, and suggests that burial remains had not been relocated prior to its sale to the city. Previous Phase IA archaeological investigations of the playground parcel, completed in March 2013, confirmed that intact burials are still preserved within the burial ground, determined the approximate placement of the cemetery with respect to the existing playground property, generated preliminary information related to the distribution of possible burial-related anomalies across the site, and yielded data about existing conditions below the current playground surface.

This Phase IB study was intended to generate additional and more accurate information related to the preservation of the cemetery—information that could be used to allow proposed playground renovations to move forward without impacting or damaging surviving historic burial remains. All aspects of this investigation were performed in accordance with the Pennsylvania Historical and Museum Commission's *Guidelines for Archaeological Investigations in Pennsylvania* (2008) and were carried out by URS staff members who meet the Secretary of the Interior's standards for archaeological professionals. The following document presents URS' findings and interpretations regarding the cemetery, and provides a series of recommendations intended to ensure the continued preservation of the Mother Bethel Burying Ground.

#### STUDY AREA AND PROJECT DESCRIPTIONS

The current Weccacoe Playground property lies within the Southwark National Register Historic District, and is bounded by Queen Street to the south, Lawrence (formerly Cobb) Street to the west, Catharine Street to the north, and Leithgow (formerly Weccacoe) Street to the east (Figure 1.1). It encompasses an approximate area of slightly more than three-quarters (0.78) of an acre and is bounded on all sides by a tall iron fence and pedestrian sidewalks. With the exception of a few small garden and planting spaces, ground within the property is entirely paved and contains a number of different sports and play facilities, including a separately fenced tennis court in the northwest quadrant, multiple children's play structures (some associated with a soft play surface) and benches in the northeast quadrant, and a small community center building in the south-central area (Figures 1.2–1.4). The historic burying ground sealed beneath this playground was listed in the Philadelphia Register of Historic Places on June 14, 2013.



Figure 1.1 Project location map (Source: USGS 2011).



Figure 1.2 Satellite image of the Weccacoe Playground, showing existing conditions at the site.



Figure 1.3 Overview of the Weccacoe Playground, looking south.



Figure 1.4 Overview of the playground and tennis court, looking northwest.

The Philadelphia Department of Parks & Recreation (PPR) and Philadelphia Water Department (PWD), in conjunction with the PHS and the Friends of Weccacoe Playground, are proposing to make renovations and improvements to the current playground. In accordance with the components of the project master plan, designed by the Community Design Collaborative and Austin-Mergold Architects, the project partners plan to undertake a number of landscaping, storm water, and equipment improvements within the playground property (Figure 1.5).

Specific proposed improvements include the planting of new trees; the installation of new planting beds, safety surfaces, play elements, and site furnishings; the resurfacing of the existing tennis court; the creation of a "wet zone" play area; the repair and replacement of extant asphalt; and regrading to address storm water management issues. Collectively, these improvements will encompass nearly the entire existing playground space.

#### SUMMARY OF PREVIOUS INVESTIGATIONS

This investigation follows an earlier Phase IA study (Mooney 2013) of the larger Weccacoe Playground property that sought to generate preliminary information about belowground conditions within and around the cemetery. Previous work involved the initiation of consultation with the PHMC, conduct of a ground-penetrating radar (GPR) study of the entire playground parcel, and limited subsurface testing at a single accessible location within the boundaries of the Mother Bethel Burying Ground. It also incorporated a review of existing historical background documentation related to the cemetery, as well as a detailed review of historic maps and playground site plans to document the transformation of the study area over time.

Historic map research helped to refine the precise placement of the Mother Bethel Burying Ground in the southwest corner of the playground, and indicated that it actually extended somewhat outside the limits of the active playground space. On its western side, the cemetery extends beneath the adjacent sidewalk, to a point at or near the east curb line of Lawrence Street. Along its southern margins, the cemetery boundary corresponds with the existing iron fence line bordering Queen Street. The northern and eastern boundaries of the burial ground were estimated based on the known size of the original 1810 parcel, and were firmly established during the course of the Phase IB investigation.

The GPR survey extended over the entire playground space and delineated a series of subsurface anomalies that were interpreted as being associated with nineteenth-century domestic residential structures, active utility lines, possible individual burial shafts, and possible clusters of graves. Potential burial-related anomalies were delineated throughout the limits of the cemetery, as well as in areas that extended well outside the boundaries of that parcel. The analysis of historic maps and earlier playground plans, however, suggested that many—if not all—of the anomalies located beyond the cemetery boundaries could be reasonably accounted for by non-burial-related factors. Some of these anomalies fell within the locations of former historic basements or where former residential structures had been located, while others were situated within former backyards and could be associated with privy (outhouse) shafts or other common historic features. Still others clustered in parts of the study area that had been extensively and repeatedly disturbed during previous playground renovations.

Subsurface testing was limited to a single 2-x-3-foot hand-excavated test pit (designated EU 1), situated near what had been the north-central portion of the cemetery. Excavations at this location showed the upper 2.5 feet of ground to consist of fill soils, but encountered a remnant of the cemetery's original historic ground surface (A horizon) immediately beneath the fill. At approximately 3 feet below surface, evidence of an intact grave shaft was identified, and subsequent excavations within this shaft encountered



Figure 1.5 Plans for proposed renovations/improvements within the Weccacoe Playground.

decayed coffin wood and coffin nails at a depth of 4.4 feet below the playground surface.<sup>1</sup> Although no intact skeletal remains were exposed in this test, the presence of coffin wood and absence of obvious prior disturbance to the grave shaft indicated that preserved interments still remained in this section of the burying ground. Based on these findings, it was presumed that the entire Mother Bethel Burying Ground was preserved substantially intact below the present playground surface.

#### SCOPE AND GOALS OF PHASE IB TESTING

The purpose of the Phase IB investigation was to gather additional critical initial information about the Mother Bethel Burying Ground that can be used to ensure that proposed playground renovations are able to move forward without disturbing or impacting any historic burial remains. In particular, this testing was designed to determine the depth below the existing playground surface at which evidence of the cemetery and its intact interments could be identified. The investigation also sought to: 1) more accurately establish the boundaries of the cemetery; 2) assess the likelihood that some burials could be located outside of those boundaries; 3) more thoroughly document subsurface stratigraphy both within and on the exterior of the cemetery parcel; and 4) collect information regarding the nature and organization of interments within the burial ground. This information will be used to guide any necessary modifications to the proposed playground renovations plan in order to ensure that future construction activities will not impact the cemetery and its historic burials.

Fieldwork for this investigation involved the excavation of four test trenches in select locations within the Mother Bethel Burying Ground and adjacent parts of the playground. Two of these trenches targeted areas near the existing Community Center building, closer to the middle of the burial ground, while two others overlapped the probable northern and eastern limits of the cemetery. All trenches extended only to the depth necessary to confirm the presence of intact burial-related features, specifically grave shafts, and to document the exposed site stratigraphy. More detailed information about the specific methods used during this investigation is discussed in Chapter 3.

#### ACKNOWLEDGEMENTS

Douglas Mooney, M.A., served as the Principal Investigator for this investigation. Kimberly Morrell served as Field Director, while Joelle Browning and Fernando Ramirez-Cotto comprised the field crew. Artifact processing and analysis was performed by Tom Kutys and Brian Seidel, under the direction of URS Laboratory Manager Rebecca White. Mechanical excavation and site rehabilitation services were completed by J. D. Crozier Contractors, Inc. Mr. Mooney and Ms. Morrell co-authored this report, Nina Shinn produced the report graphics, and Paul Elwork edited the report for style and consistency. URS would like to thank historian Terry Buckalew for generously sharing his research related to the Mother Bethel Burying Ground and other topics discussed in this report.

<sup>1.</sup> The term "grave shaft" refers to the hole dug into the ground for a burial, and into the bottom of which a deceased person's remains were placed. As used in this report, the term "burial remains" refers to the physical evidence of the burial itself, including preserved parts of the wooden coffin, associated coffin hardware and decorations, and human skeletal material. During this investigation, no intact human skeletal remains were exposed; however, in a small number of cases, evidence of decayed coffin wood was identified.

### 2 The Mother Bethel Burying Ground and Weccacoe Playground

The Mother Bethel Burying Ground at Weccacoe Playground is one of the oldest surviving African American cemeteries in Philadelphia, and is associated with a religious organization and congregation of great local and national significance. Founded in 1810 and in active use for slightly more than 50 years, this burial ground is purported to hold the remains of thousands of once-forgotten individuals, and who are only now being afforded the recognition they deserve. The people interred within these grounds include members of the founding generations who labored to establish the city's seminal free black community in the late eighteenth century, as well as those who carried on and endured the struggle for autonomy and equality in subsequent decades. This cemetery has survived despite myriad changes to the surrounding cityscape and repeated alterations to the land in which it rests. In order to better understand the findings of these archaeological investigations, it is necessary to trace the history of this burial ground and of the playground space that now enfolds it.

Most of the information related to this important cemetery presented here was borrowed from historian Terry Buckalew's extensive research, and unless otherwise noted, comes from the timeline he compiled for the cemetery and playground (Buckalew 2012). In conjunction with this investigation, URS researchers conducted additional background research within a number of online digital databases and in the collections of the Historical Society of Pennsylvania and the Philadelphia City Archives. Information regarding past modifications and renovations of the Weccacoe Playground was contained in a series of plan maps the PPR and the PHS provided.

#### EARLY AFRICAN AMERICAN BURYING GROUNDS IN HISTORIC CONTEXT

In 1794, the year that the Mother Bethel African Methodist Episcopal and St. Thomas African Episcopal Churches were founded, the white population of Philadelphia had already created at least 22 churches within the boundaries of the city, and these organizations had, in turn, established some 31 different burial grounds for the interment of their deceased members (Torres 1997). In addition, an unknown number of private cemeteries had been created by those families who could afford properties of a sufficient size to contain them. The carefully tended yards of these sacred spaces were, and in some cases still are, filled with stately rows of sturdy stone markers and monuments—some of them elegantly simple, others elaborately ornate, and each of them intended to act as a lasting memorial of a life.

From the late 1600s through the first few decades of the 1800s, African Americans in Philadelphia suffered discrimination and segregation in death, as in life, and were denied the right to be interred within the burial grounds of the established white churches. Instead, their earthly remains were consigned to the city's various public burial spaces, commonly called "potter's fields"<sup>2</sup> and "strangers burying grounds," or in the grounds of the almshouse (Appendix A). These public burial places were reserved for the city's outcasts, and in them black people were laid to rest alongside the indigent poor, convicted criminals, the mentally ill, persons who belonged to no organized church, foreigners, and other non-residents (Nash 1991). As the final resting place of the "lower sort," these public grounds were often uncared for and unregulated, and quickly became overcrowded with the remains of thousands of people. Those who could not afford the price of a coffin were frequently interred without one and, in contrast with the white churchyards, most persons were entombed in anonymity, without the benefit of even the simplest

<sup>2.</sup> The term "potter's field" is taken from the New Testament text of Matthew 27:8 ("And they took counsel, and bought with them the potter's field, to bury strangers in"), and historically referred to ground unfit for any other purpose than the digging of clay by local potters (Bahde 2006).

marker to record their passing.

The primary burial ground for African Americans during the eighteenth century was the potter's field located in what is today Washington Square. Fragmentary historical information suggests that this cemetery may have been internally segregated, with separate areas set aside for the burial of persons of European descent, Catholics, and people of color (Rabzak 1987). Although members of the local white citizenry held this ground in low regard, those in the black community instead claimed their corner of the potter's field as their space in the city, a place to be revered, and as ground made sacred by the remains of their relatives and ancestors. Historical accounts record that enslaved Africans would periodically congregate in the square in great numbers to hold dances "after the manner of their several nations in Africa, and speaking and singing in their native dialects." Another account recalled that black people would often "visit the graves of their friends early in the morning" and leave behind gifts of food and rum (Watson 1830: 351-352). It was also a place that was seen as requiring protection, by force if necessary, against the nightly activities of body-snatchers and grave robbers hired by local physicians to obtain cadavers for illegal dissections (see sidebar). Toward the end of the eighteenth century, the importance attached to this potter's field was evidenced by a decade-long effort waged by leaders of the emergent free black community to obtain a measure of control or legal authority over the "Negroe" section of the burial ground, by way of petitioning the local government. By the early 1790s, this hallowed ground may have come to be seen as a worshipful space in its own right, as it was considered the initial choice as a place to build the city's first independent black church (see Appendix B).

The earliest black owned and governed cemeteries in Philadelphia were established sometime in the mid-1790s, in the yard spaces behind the Mother Bethel A.M.E and St. Thomas African Episcopal Churches. It is not known whether or not these burial grounds went into active use in 1794, the year both houses of worship were founded, but the "Bills of Mortality" published by Zachariah Poulson in his annual *Town and Country Almanac* indicate that the cemeteries at each church were receiving interments by at least 1797 (Klepp 1995). Over the next quarter century, the number of African American graveyards increased gradually as more black churches were founded in the city or the townships bordering it. By 1831, the year in which Bishop Richard Allen of Mother Bethel Church passed away, there were a total of

#### **DEFENDING THE POTTER'S FIELD**

The following account, related by Dr. William Shippen Jr. in a letter to his son dated December 18, 1787, describes the determined efforts of the Philadelphia African American community to stop the robbing of graves from the Washington Square potter's field. As this account shows, the stealing of bodies was one issue that united both the black and white communities in a common cause. The letter reads in part:

...We have and are still at a great loss for want of a Subject for dissection and demonstration, few die and the negroes have determined to watch all who are buried in the Potters field – the young men have been twice driven off by arms, once fired on and two wounded, with small shot, on Saturday night with the assistance of six invalids with muskets they beat off the negroes and obtained a corps [sic]. I lodged it in the [anatomy] Theatre. The resolute impertinent blacks broke open ye house, stole ye subject and reburied it – This transaction was made known to ye friends of the dead who joined ye negroes in great numbers on Sunday night and swore death and destruction to ye Faculty [of the College of Philadelphia].

A few days later, Shippen related a second incident:

...after 10 days peace I procured a subject from the Bettering house [Almshouse] as secretly and properly as it was possible but no sooner had Beatly and Clark put it in at the back window of the Theatre ... they were met by 15 or 20 blacks armed (who patrol every night around the Potters field and down our street, I saw them), ...the blacks broke 2 locks, entered ye Theatre, brought out the body, paraded it before the door, crossed the alley and buried it in the Potter field. I say they determined I shall not have a subject this winter. We have no police in this city to correct this lawless proceeding, and  $9/10^{th}$  of the citizens join or countenance these black devils – 'tis difficult to find out in ye night who they are, and if I would prosecute them to punishment my house and life might answer for it...

William Shippen Jr. was a professor of anatomy and surgery at the College of Philadelphia and the University of Pennsylvania, and a physician at the Pennsylvania Hospital (Kelley and Burrage 1920: 1046–1048).

The original Shippen letter is held in the Library of Congress. A transcript of the letter was provided by Dr. Randall M. Miller of St. Joseph's University.

10 black churches in the city and its surrounding townships, with each likely possessing its own active churchyard cemeteries (Cooperman and Hopper 2010; see Appendix C). With the establishment of Lebanon and Olive Cemeteries in 1849, the black community of Philadelphia finally had access to the same kind of large rural places of interment as their white neighbors. Despite this rapid growth in African American churches and burial grounds, large numbers of black people in Philadelphia—especially the very poor—continued to be buried in the various public burial grounds through the mid-nineteenth century and beyond.

#### MOTHER BETHEL BURYING GROUND, 1810–1889

Throughout the first 20 years of its existence, the Mother Bethel Church experienced an exponential growth in the size of its congregation. Tallying 108 members at the end of 1794, its first year of existence, the congregation had grown to 211 by 1799, and five years after that could count 457 official members. Nine years later, in 1813, total membership had leaped 278% to 1,272 persons (Nash 1991: 193). This stunning growth, while good for the church overall, certainly would have placed a burden on the churchyard's capacity to hold the growing number of congregants who were passing away each year. While little is known about how much of the church's property had been set aside for use as a cemetery, the annual bills of mortality published in city papers indicate that at least 285 individuals had been reported interred in the churchyard by the early months of 1810<sup>3</sup> (see Appendix C for information on the relocation of burials from this cemetery later in the nineteenth century).

Likely seeing a critical need for additional burial space, Reverend Allen and the leaders of Mother Bethel began to look for additional property where their dead could be laid to rest. On April 28, 1810, they paid \$1,600.00 to Matthew and Hannah Waring for a square of ground fronting on Queen Street, between 4<sup>th</sup> and 5<sup>th</sup> Streets, that measured 121 feet, 2<sup>1</sup>/<sub>3</sub> inches east-west by 103 feet north-south. Encompassing a total area of just over a quarter of an acre (0.28 acres), this ground became the first privately owned, non-churchyard focused black cemetery established in the city, and predated the founding of Lebanon and Olive Cemeteries by 39 years. Information contained in the surviving Philadelphia City Death Certificates indicates that this cemetery was commonly referred to in its day by several different name variations, including the "Bethel Church Burial Ground," "Bethel Colored Burial Ground," or "Bethel Burying Ground" (FamilySearch.org 2013). A single entry in the Mother Bethel Trustees Minutes also referred to this property as the "Queen Burial Ground." The name used for the cemetery in this report—Mother Bethel Burying Ground—though not strictly historically accurate, is intended to reflect the ties between the burial ground and the modern church and congregation.<sup>4</sup>

The year it was purchased, the burial ground was situated in a sparsely developed section of the Southwark Township, near the end of Queen Street. Historic maps from this time suggest that few homes had been constructed around the cemetery when it was first purchased, but surrounding land filled in quickly over the succeeding decades. Newspaper advertisements indicated that at least one residence had been constructed on Catharine Street by 1819, with its property bordering the cemetery on the north side (*Franklin Gazette*, June 29, 1819). Lots on Catharine Street continued to fill in during the 1820s and 1830s, while those on Queen Street were likely purchased and built on sometime after 1835 (City Survey Office 1844). Additional lots bordering the east side of the cemetery were developed after Weccacoe Street (now Leithgow) was established in 1839 (McElroy 1839). Cobb Street (now Lawrence), on the west side of the cemetery, was created sometime in 1840 or 1841 (McElroy 1841) (Figures 2.1–2.4).

<sup>3.</sup> This number is an estimate based on the total burials listed in the bills of mortality for Mother Bethel between 1797 and 1810, and likely underestimates the actual total interments made over that period.

<sup>4.</sup> The church was originally incorporated under the name "Bethel"; the name was not legally changed to "Mother Bethel" until 1953 (Beck 1988).



Figure 2.1 1810 map of Philadelphia, showing the newly established Mother Bethel Burying Ground (Source: Paxton 1810).



Figure 2.2 Manuscript survey of the block bounded by Catharine, 4<sup>th</sup>, Queen, and 5<sup>th</sup> Streets, March 19, 1825, revised to September 7, 1844 (Source: Philadelphia City Survey Office 1844).



Figure 2.3 Map showing the Mother Bethel Burying Ground in 1849 (Source: Sydney 1849).



Figure 2.4 1862 map of Philadelphia, showing the Mother Bethel Burying Ground (Source: Smedley 1862).

The Mother Bethel Burying Ground remained in the possession of the church for 79 years, from 1810 until 1889, and is believed to have been actively used for interment for about 54 years—from the date of its purchase to approximately 1864. Historic records have preserved precious little information about the management of this property, or about the numbers and identities of the people laid to rest in it. Manuscript records maintained by Mother Bethel, which would have been the best source of information related to their cemetery, were unfortunately lost sometime around 1850, during an internal schism within the congregation. Handwritten minutes kept by the Union Benevolent Sons of Bethel, a burial assistance charity established by Reverend Allen in 1826, have survived in part; however, these record little more than the election of officers and members, the collection of money for the organization, and the fining of members for sleeping during meetings and other offenses (Mother Bethel African Methodist Episcopal Church 1826–1844). What is known is that not all of the people interred in this ground were members of the congregation. Richard Allen believed that one of the fundamental duties of the church was to provide proper Christian burials for the poor and destitute members of the African American community living in the neighborhoods surrounding Mother Bethel.

Very little is known about the people who were buried in this ground. Most would have been of very modest means and lived simple lives that made little mark in the historic record. A great many likely passed away without any mention in the newspapers of the day. One notable exception was a man named John Bliss, whose obituary reads:

A colored man, named John Bliss, formerly a member of Frank Johnson's Band,<sup>5</sup> was buried yesterday from his residence in Fitzwater Street above Sixth. The members of the colored Masonic Order, of which he was one, were out in full numbers, clothed in their rich regalia, while the band played appropriate and solemn airs. The coffin of the deceased was ornamented in a costly manner. The remains were interred in the burying ground in Queen Street, above Fourth, several hundred persons being in attendance [*Philadelphia Inquirer*, March 14, 1848].

Absent the church's own cemetery records, the best source for identifying some of these individuals is the Philadelphia City Death Certificates, among the collections of the Philadelphia City Archives. Though a remarkable documentary resource, not all of the death certificates that were created have survived, and there are now multiple and sometimes large gaps in the surviving collection. Moreover, not everyone who died in the city had their passing recorded by an official death certificate. Through his extensive research, historian Terry Buckalew has to date identified a total of 1,405 persons for whom death certificates do exist, and who are recorded as being interred in Mother Bethel's Queen Street ground between 1810 and 1864. In many cases, these documents list little more than the deceased person's name, age, and cause of death. Sometimes, however, other aspects of a person's life are also listed, including place of birth, residential location, parents, names, and occupation.

One question related to the cemetery has been frequently asked over the course of this investigation: What is the total number of people interred there? Based on his death certificate research, Buckalew has estimated that perhaps as many as 3,000 people may have been buried in the Queen Street property over

<sup>5.</sup> Francis "Frank" Johnson was born in Philadelphia on June 16, 1792, and was one of the most popular and influential bandleaders in Philadelphia—and eventually the nation—through the first decades of the nineteenth century. A talented multi-instrumentalist who played the violin, bugle, and cornet, he was the first African American in the nation to have his original musical compositions published (1818), and his band was much sought after by the city's social elite to perform in parades, military balls, and promenade concerts. In 1838, he and his band completed a highly successful tour of Europe, capped off by a command performance before Queen Victoria of England. The young queen was so taken with Johnson's performance that she rewarded him with the gift of a silver bugle. Johnson died on April 4, 1844, and was buried in the graveyard of St. Thomas' African Episcopal Church (University of Pennsylvania 2011).

the entire period of its use. However, data in the surviving annual bills of mortality for Philadelphia suggest that this estimate could be significantly too low. Until 1830, the bills of mortality compiled by Christ Church record the numbers of burials reported each year for every church in the city (Klepp 1991). This set of documents indicates a total of at least 1,075 burials occurring in the Queen Street cemetery between May 1810 (the property was purchased in April) and December 1830, with eight years for which no burial data has survived (Table 2.1). If Buckalew's compiled death certificate numbers are substituted to account for the missing bill of mortality data, this brings the total estimated number of interments to 1,716 in just the first 20 years of the cemetery's use life.<sup>6</sup>

Year # Burials # Burials					
1 Cur	(Bills of Mort.)	(Death Cert.)			
		(Death Certi)			
1810	45†	17			
1811	68	53			
1812	42	36			
1813	62	24			
1814	66	41			
1815	90	10			
1816	72	18			
1817	67	23			
1818	n.d.	20			
1819	n.d.	48			
1820	n.d.	70			
1821	98	95			
1822	93	79			
1823	n.d.	73			
1824	n.d.	146			
1825	n.d.	38			
1826	n.d.	86			
1827	108	8			
1828	n.d.	160			
1829	125	66			
1830	139	n.d.			
Total	1,075	1,111			
Est. Total	1,716††				
<ul> <li>n.d. = No data available; no bill of mortality has survived.</li> <li>† = Estimated burials after the purchase of the Queen Street cemetery on April 28, 1810.</li> <li>†† = Incorporates annual death certificate #'s for years with no</li> </ul>					
bill of mortality data.					

# Table 2.1Annual burial totals for the Bethel Burying<br/>Ground on Queen Street from 1810–1830

<sup>6.</sup> The numbers of surviving death certificates for these years vary greatly, and almost certainly underrepresent the number of actual burials occurring in the cemetery.

While there are many unknown and unaccountable factors that could have served to increase or decrease the number of burials occurring in this cemetery over the 34 years after 1830, it is possible to make some conservative approximations. If the number of burials for the first 20 years is simply doubled, it brings the estimated total for the entire life of the cemetery to more than 3,400. If the burial numbers remained consistent with those occurring in the last years covered by the bills of mortality (1827–1830)—and the cemetery continued to receive a minimum average of 100 burials annually—then it is conceivable that this burial ground actually holds the remains of more than 5,000 individuals. Given the variety of infectious disease outbreaks and periodic epidemics experienced by the city's residents during the nineteenth century, including those of typhoid, cholera, influenza, small pox, yellow fever, scarlet fever, measles, and whooping cough (all of which would have affected the poorer and more crowded parts of the city occupied by African Americans with greater impact), it is not difficult to believe that Mother Bethel's cemetery could receive an average of 100 deaths per year over this time period (Henry 1897).

Regardless of the exact number of persons buried in it or when interments ceased occurring, by the late 1860s, the cemetery had probably reached its maximum capacity. At this time, Mother Bethel appears to have experienced a period of economic hardship, and lacking the funding to move the burials to a new location, instead looked for other options for their Queen Street property. On January 1, 1869, the church trustees entered into a lease agreement for the cemetery with a man named Barnabas H. Bartol, a sugar refiner, for a period of 10 years. By the terms of the lease, Bartol was to pay the church \$200.00 a year and planned to use the property for the storage of wagons and drays.<sup>7</sup> Importantly, the trustees made sure to stipulate in the lease document that no uses to which Bartol put the property would be permitted to disturb any of the intact burials still preserved in the ground (Figures 2.5 and 2.6).

Ultimately, Bartol held his lease on the cemetery grounds for just four years and asked to be released from the agreement in 1873. The church trustees agreed to release him from the agreement in return for a cash payment and the erection of a good fence around the property. This is the first instance in historic documents that a fence around the cemetery was mentioned; however, it is probable that a fence or some other enclosure had been constructed around the perimeter of the grounds from the time it received its first graves. With numbers of residential lots bordering it on two sides, the construction of some sort of enclosure shortly after the original purchase of the lot would have been desirable in order to preserve the solemnity of the cemetery and protect it from desecration.

By the time this lease was ended, the burial ground appears to have fallen into a state of disrepair, with much of the responsibility for that condition due to Bartol's use, or misuse, of the property. In 1872, while the land was still in his possession, Bishop Benjamin Tanner published two articles in *The Christian Recorder* that called attention to the disgraceful condition of the once-beautiful cemetery. In the second of these entries, Tanner lamented that:

....it cannot be possible that Bethel church knows of the condition of these grounds. If she did, we feel sure that she would rise up in her might, and right the wrong, by putting away the disgrace. Her disgrace! It is nothing less... In that ground, lay the dead fathers and mothers of our Israel; and their children of this generation have made traffic of their bones... Visit that ground today, perfumed with the sweet odors of the dead, and which ought to be perfumed with sweetest flowers, and what do you see? A most shameful spectacle—old hogsheads, and barrels and lumber of every conceivable shape. Not a grave tone unbroken, not a grave to be seen—all is confusion and shame [*The Christian Recorder*, August 3, 1872].

A decade later, in the mid-1880s, the cemetery continued to crumble and was by then drawing nuisance complaints from the Philadelphia Board of Health. In particular, the city was concerned that a retaining

<sup>7.</sup> Drays were low carts without fixed sides, used for carrying heavy loads.

Lease She African M.E. Church of the bity for The Jose of Chila. to Barnabas & Bartol. Carty of 1st part 1869 leases to party of 2d part a lot on north side of I garmary Success St. Betibeen 4th and 5th, 118' × 102's", "the Same having been used and occupied by the parties of the first part hereto commonly known as the I that bhurch for the purposes of burial." yearly Pent, \* 200. Crovided "that the remains of the dead who are interved in the said lot of ground are to be allowed to remain there indisturbed." [Signed:] Deaton Dorrell, Crest. Wm. & Canton, Sec.; B. H. Bartol. Wits: Shos. Dallas, Wm. 9. Canby. Ack. 7 January 1869. Rev. Jan. 7, 1869. [Died Book J JO 209 fr. 30.]

Figure 2.5 1869 property lease to Barnabas H. Bartol (Source: Deed Book JTO 209: 30).



Figure 2.6 Map showing the Mother Bethel Burying Ground property in 1875 (Source: Hopkins 1875).

wall established around the burial ground had become defective, and may have collapsed in one or more locations. This growing interest from the city appears to have finally spurred Mother Bethel's trustees into action, and plans were discussed regarding the construction of some sort of building on the property, as well as the possibility of having the burials exhumed and relocated to Olive Cemetery. Unfortunately, the church did not possess the financial resources required for such a massive undertaking, and the burial ground continued to languish. Finally, in 1889, the *Philadelphia Tribune*, in a column called "The Pencil Pusher Points," reported that the city had offered the church \$10,000 for the cemetery so that it could be turned into a new public park. The author of that article, William Carl Bolivar, went on to state that:

Many a year has passed since a grave has been dug there, but within its enclosure lies the dust of some of the old, old members of Bethel Church; not only members, but persons who were not members, were buried there... Twenty-five years have rolled around since anyone was laid to rest there, and the wheels of time, together with the reckless behavior of urchins, have so disfigured the walls and interior that it presents a scene today pitiable in the extreme. The grounds now furnish a playground for the boys of the neighborhood, who romp over the graves of the dead with the freedom they would exercise on a baseball ground. Since it is apparent that the present officials of Bethel cannot or do not keep the ground in the condition it should be kept, Pencil Pusher thinks they should accept the city's offer [*Philadelphia Tribune*, March 30, 1889].

#### WECCACOE SQUARE, 1889–1905

The City of Philadelphia officially took ownership of Mother Bethel's burial ground on December 27, 1889, and promptly rebranded it Weccacoe Square. As related above, at that time the property seems to have been little more than a trash-filled lot with no visible evidence of headstones or graves, and frequented by local children as a play area. The city appears to have taken some early steps to clean up the lot and make it suitable for public use, and in 1890 hired a local contractor to make the square "ready for Promenaders" (*Philadelphia Inquirer*, August 20, 1890). By 1895, a system of interior walkways, and probably garden plantings as well, had been added to the interior of the park (Figure 2.7).

By the end of 1895, the City Parks Association, the agency which then oversaw the parks recently established in Philadelphia, began considering the possibility of expanding Weccacoe Square beyond the former limits of the Mother Bethel Burying Ground (*Philadelphia Inquirer*, September 20, 1895). Sometime after September of that year, the city acquired those residential properties that bordered the square on its east side, demolished the existing structures, and by 1901 had extended the park to Leithgow Street (Figure 2.8). In 1899, City Council approved the acquisition of the homes bordering the square on Catharine Street (*Philadelphia Inquirer*, June 20, 1899); however, the planned expansion of the square northward did not go as smoothly as hoped. At the time, these homes were rental properties occupied by a large number of "Hebrew" families—up to six families per building—who did not take kindly to relocating to new residences. Despite repeated warnings, the families refused to vacate these buildings until they were forcibly removed the day demolition was scheduled to begin (*Philadelphia Inquirer*, July 31, 1903). After the removal of the Catharine Street buildings, the city once again enlarged the square, and likely at that time added a sidewalk along the east side of Lawrence Street, over the westernmost margins of the former cemetery.

With Weccacoe Square now enlarged to include all the land bounded by Catharine, Leithgow, Queen, and Lawrence Streets (Figure 2.9), the property was handed over to proponents of the School Garden Movement. In 1904 and 1905, the park was transformed, under the jurisdiction of the Public Education Association, into a large garden subdivided into individual plots and tended each growing season by 250 local sixth and seventh graders (Figure 2.10). Preparation of the site for this activity required the entire garden area to be plowed and brickbats and other demolition debris to be removed. The first crops planted included beans, peas, lettuce, beets, and radishes (*Philadelphia Inquirer*, April 17 and May 24,



Figure 2.7

Map showing the newly created Weccacoe Square on the former land of the Mother Bethel Burying Ground (Source: Bromley 1895).



Figure 2.8 Map showing the expanded Weccacoe Square in 1901 (Source: Bromley 1901).



Figure 2.9

Map depicting Weccacoe Square as enlarged to occupy all land now contained within the Weccacoe Playground (Source: Bromley 1910).



in the heart of a crowded foreign district. The picture shows how the gardens are laid out in regular rows, which are subdivided into individual plots owned exclusively by the little farmers. A corner of the playground is shown at the right.

Figure 2.10 Overview looking east of the Weccacoe Square garden in 1905 (Source: *Appleton's Magazine*, Vol. V, Jan.-June 1905; reprinted in Buckalew 2012).

1904). Along with the garden plots, a small playground was also established within the square. It encompassed the southern one-third of the park and contained a softball field, basketball nets, a ring-toss area, and a punching bag.

#### WECCACOE PLAYGROUND, 1906–PRESENT

After 1905, Weccacoe Square was converted back into a park and playground under the jurisdiction of the Philadelphia Playgrounds Association, and later the Bureau of City Properties (1910) and the Board of Recreation (1912). Until the early 1920s, the square may have functioned as more park than playground, and appears to have had little in the way of public amenities. A survey of the property in 1912 shows the presence of a superintendent's office at the center of the square, various tree plantings and an iron fence around the perimeter, and a small pavilion and merry-go-round in the northwest section, near where the tennis courts are today (Figure 2.11). During these early years, this space was a favorite location for hosting religious meetings and revivals, carnivals, block parties, pageants, athletic competitions, and other public events (Figure 2.12). An image included in Terry Buckalew's timeline suggests that see-saws and other play equipment may have been added to the property by 1915.

Between 1924 and the first decade of this century, the square and playground appear to have undergone at least four major renovations, each of which altered the types and locations of sports/play facilities present. In addition, there have been numerous periodic upgrades to the various utilities and other individual amenities within the square. Around 1924, the first major overhaul of the park took place and resulted in the construction of a "shelter building" adjacent to Queen Street (Figure 2.13). Portions of that original structure have since been incorporated into the Recreation Building that still stands within the playground. Site plans also show a small pavilion in the far northwest corner and another small building along the eastern margins of the property that was to be removed. The iron fence that still marks the perimeter of the playground may also have been constructed at or by this time. The other major action that took place during this first renovation was the regrading of the entire property. Elevation information shown in the 1924 site map indicate that the resurfacing of the playground lowered the ground surface considerably, in some places up to a foot or more below the previous grade.

Thirty years later, in or around 1954, the playground was again remodeled, this time involving the addition of multiple new play features and athletic areas (Figure 2.14). At this time, the shelter building was enlarged slightly and new utilities installed; basketball and volleyball courts were created; a spray pool, swing sets, sliding boards, and jungle bars were added; and new trees were planted. A site plan from 1975 (Figure 2.15) shows the presence of numerous "cave ins" and depressions that had by that time developed in the playground and adjacent sidewalk, and that required filling in with either dirt, cement, or other materials. In most instances, these appear to have not been very deep, but many measured several feet across. Interestingly, the depressions shown on this map appear only inside the boundaries of the Mother Bethel Burying Ground, and it is possible that these features developed, at least in part, from the gradual subsidence of grave shafts.

The 1950s-era version of the playground remained relatively unchanged until approximately1979 (Figure 2.16). At that time, the Recreation Building was expanded to its present configuration, the spray pool was removed, the play features in the southeast corner were replaced by a hockey court, and the volleyball court in the northeast corner was replaced by new play equipment. In addition, new tree plantings were installed in 5-x-5-foot wells, and new benches and light fixtures were added.

The final renovation occurred sometime in the early 2000s, when the current playground configuration was established (Figure 2.17). This transition resulted in the creation of the present tennis court, the removal of the hockey court, replacement of play equipment, installation of new seating and other



Figure 2.11 1912 survey map of Weccacoe Playground.



Figure 2.12 Images of children participating in the "Carnival of Months" celebration at Weccacoe Square (Source: *Philadelphia Inquirer*, June 7, 1914).



Figure 2.13 1924 survey map of the Weccacoe Playground (Source: Molitor 1924)



Figure 2.14 1954 plans for the renovation of Weccacoe Playground (Source: Jelinek 1954).



Figure 2.15 1975 playground survey showing the location of "cave ins" and depressions that required filling (Source: Alon Engineering Associates, Inc. 1975).


Figure 2.16 1979 plans for the renovation of Weccacoe Playground (Source: Levin 1979).



Figure 2.17 2001 plans for the renovation of Weccacoe Playground (Source: Lager-Raabe Landscape Architects 2000).

features, the removal of some interior walls and curbing, the installation of new asphalt surfacing and cement walkways, and the creation of new tree and planting beds.

All of these transformations of Weccacoe Playground resulted in subsurface impacts of varying extent across the site, including areas that fall within the boundaries of the Mother Bethel Burying Ground. Within the cemetery, the most troublesome disturbances were likely those associated with the construction and gradual expansion of the Recreation Building, the installation of public utility lines, the creation and subsequent removal of the 1950s-era spray pool, and the planting of trees. One of the goals of this Phase IB investigation was to try and determine the extent to which previous construction activities within the playground, and earlier public park, may have affected the continued preservation of historic burials.

# **3 Testing Results and Findings**

This investigation was not a comprehensive archaeological study of the entire Weccacoe Playground property, but rather represents the results of investigation efforts conducted within and adjacent to the historical boundaries of the Mother Bethel Burying Ground. This investigation was intended to gather information regarding the nature and extent of prior impacts to the burial ground and to document the distribution of the historical interments in an effort to inform proposed renovations to the modern playground.

Fieldwork was performed over the course of four days, between July 22–26, 2013, with the first three days dedicated to trench excavation and the last day to returning the playground to a condition suitable for continued public use. URS' greatest concern and overall objective for this project was to ensure that no burials were impacted during the subsurface investigation of the cemetery, and to that end, no intact human skeletal remains were uncovered during field testing. The exposure of burial remains was never a component of this work, and was not necessary in order to achieve the project's stated goals. A secondary, but no less important goal was to define the minimum vertical occurrence, and the maximum horizontal extents of the historical cemetery and evidence of the burials within it.

### FIELD METHODOLOGY

The testing strategy for this archaeological investigation was developed in consideration of the known history of the Weccacoe Playground and the Mother Bethel AME Church cemetery. In particular, it took into account evidence of extensive prior subsurface disturbance attributable to the historical occupation of all but the southwest corner of the block, as well as modifications to the block during its adaptation into a functional play space. It also incorporated information generated during previous (Phase IA) geophysical (Geo-Graf 2013) and archaeological investigations of the property. The specific testing approach employed was formulated in consultation with the Weccacoe Playground project partners, representatives from Mother Bethel AME Church, and archaeologists with the PHMC. The number of trenches completed, and the placement of those test areas, was established to balance the need to thoroughly address project objectives and, at the same time, to minimize disruptions to the cemetery itself. Additional details are provided below.

# Mechanical Trenching

The Phase IB investigations consisted of the excavation of a series of four backhoe trenches within the area of the Mother Bethel Burying Ground (Figure 3.1). The purpose of these trenches was to provide more comprehensive information regarding the depth of near-surface fill material across the entire cemetery, and to determine the depth below surface at which evidence of intact burial-related features (grave shafts) appear. Two of the proposed trenches also targeted the northern and eastern margins of the cemetery in order to confirm the accuracy of the cemetery boundaries calculated during Phase IA work, as well as to try and assess the possibility that some burials might extend outside of the historic parcel limits.

During the mechanical trenching, a small backhoe equipped with a toothless bucket removed the overburden from four locations across the historical burying ground. The location of each trench was first marked on the surface with spray paint, and the perimeter of each was cut with an asphalt saw prior the start of digging (Figures 3.2 and 3.3). Trenches were oriented north-south and east-west on an arbitrary grid that had been applied to the entire playground. Although off-cardinal direction (diagonal) trenches



Figure 3.1 Site map showing the location of Phase IB trenches.



Figure 3.2 Cutting the trench profile.



Figure 3.3 Hand excavating to define grave shafts.

are typically considered optimal for maximizing the identification of grave shafts across multiple rows, in this case limitations associated with existing playground features prevented this approach. Moreover, the probable vertically stacked nature of interments in this ground led investigators to presume that neat rows of burials were unlikely to be encountered. All trenches were mapped within the site grid using Total Station survey equipment.

Members of the archaeological team closely monitored all backhoe activity to ensure that intact burials were not disturbed in the process, and the mechanized excavation of each trench was terminated once the first evidence of burial features was identified. Once machine work was terminated, the floor and sides of each trench were excavated by hand in order to more clearly delineate burial features and the exposed stratigraphy. Excavated fill soils were not screened, but were thoroughly examined by hand, and diagnostic artifacts from each soil layer were retrieved, placed in labeled plastic artifact bags, and retained for possible further study. All exposed trench floors, side profiles, and exposed archaeological features were thoroughly documented on hand-drawn maps and by way of high-resolution digital photography (Figures 3.4 and 3.5).

A total of three test pits were hand excavated within trench sections that extended into adjacent historic backyards bordering the cemetery. All (100%) soils removed from these tests were screened through <sup>1</sup>/<sub>4</sub>-inch hardware cloth to recover any artifacts present (Figure 3.6). Recovered artifacts were collected in labeled plastic bags and retained for further study and documentation. Test pit profiles were recorded on standardized field forms, through hand-drawn plan and profile maps, and via high-resolution digital photographs.

Each trench was completely backfilled by the end of the work day on which it was opened in order to maintain a safe environment within the playground, as well as to ensure that no burials remains were disturbed during off-work hours (Figure 3.7). All trenches were mechanically compacted at the conclusion of fieldwork and sealed with asphalt patch before the site was evacuated on the last day.

# Analysis and Inventory of Historical Artifacts

Non-funerary artifacts recovered from fill or other contexts within the site were taken to the URS archaeological laboratory in Burlington, New Jersey, at the conclusion of fieldwork. At no point in the investigation were any burial artifacts associated with a grave collected or otherwise disturbed from their mortuary context. All collected items were cleaned in water, allowed to air-dry, and then were identified with regard to form and material type, and any temporal and/or functional attributes were documented. Artifact information was entered into a Microsoft *Access 2003* database in English terms, rather than alphanumeric or numeric codes, using "pull-down" menus that include standard terms (e.g., bottle, nail, etc.). URS maintained a daily computer backup file of all data. The program automatically assigned individual record numbers to each entry as it was created. Record numbers are not shown on the data entry forms, but are visible on tables and queries.

# Public Outreach

In order to be as open as possible about the methods of this investigation, and to invite public input regarding its findings, the site was opened to representatives from Mother Bethel, interested members of the community, and the press on the afternoon of Wednesday, July 24. An estimated 65–70 people visited the site during that event to learn about what had been discovered and to ask questions of the archaeologists (Figure 3.8). Prior to that general gathering, approximately 25 students, parents, and teachers from the nearby Khepera School arranged a private visit to the site, viewed the excavations, and interacted with members of the archaeological team about this specific investigation and the profession of archaeology in a more general sense.



Figure 3.4 Mapping identified grave shafts in Trench 2.



Figure 3.5 Photodocumenting findings from Trench 3.



Figure 3.6 Screening soil excavated from EU 3 in Trench 3.



Figure 3.7 Backfilling a trench after excavation was complete.



Figure 3.8 URS archaeologists addressing visitors to the site.

## **TESTING RESULTS**

Across all trenches, the uppermost material encountered consisted of the present asphalt surface of the playground and an underlying layer of loose, black gravel which formed a sub-base for the asphalt. For the most part, this top component extended to a depth of about 1 foot below the surface, although in some more localized instances it extended to almost 1.5 feet below ground. The descriptions below detail the different soil and fill horizons, as well as features discovered beneath this common site component. Photographs are used to illustrate the results of testing; however, additional hand-drawn plan and profile maps of each trench are also included in Appendix D.

# Trench 1

Located in the southwest corner of the cemetery, Trench 1 measured 10 feet north-south by 5 feet eastwest. This short trench was located between the concrete shuffleboard pad and the west wall of the existing Recreation Building. The earlier GPR survey indicated the possible presence of both clustered grave shafts and more extensive subsurface disturbance in this general vicinity. One goal of this trench was to assess possible impacts to the cemetery that might have resulted from the construction of the Recreation Building and the spray pool built here in the 1950s.

Mechanical removal of the overlying asphalt revealed a large, irregular concrete footer or pad occupying the majority of the southern half of the trench. This cement may have been used to fill in the large depression identified immediately south of the spray pool in the 1975 playground survey (see Figure 2.15), and served to restrict full testing to the northern half of the excavation. The north half of the trench was examined to a maximum depth of 4.9 feet below ground surface (bgs).

Below the asphalt and gravelly sub-base, excavation of the northern part of Trench 1 first encountered an approximately 1-foot-thick deposit of black-stained sandy fill containing dense brick rubble, blocky concrete, and asphalt. The removal of this fill exposed a second previously disturbed fill layer that extended to a depth of approximately 4.5 feet below the surface. This bottom fill deposit was itself disturbed by the installation of a terra cotta sewer pipe of unknown age (Figure 3.9). The 0.8-foot-diameter pipe was identified at a depth of approximately 4 feet below the surface, extended east-northeast across the trench, and sloped gradually downward from the Recreation Building toward Lawrence Street. It is presumed that this utility had not been active for many years, as the pipe was cracked and thoroughly filled with dry silt. The small trench in which the pipe was laid had generally vertical sides and a gently sloping floor, and had been backfilled with a mix of yellowish brown, very dark gray, and brownish yellow silt sand that contained many small brick and coal fragments.

Below these successive layers of fill, archaeologists identified natural yellowish brown subsoil at a depth of approximately 4.5 feet below the surface of the playground. At the surface of the subsoil, immediately below the overlying fill deposits, archaeologists delineated a total of six intact grave shafts across the northern half of the trench floor. Each of these shafts was oriented east/west across the width of the trench, and all but one exhibited a distinct hexagonal outline indicative of a coffin of the same shape. Four of the burials were sufficiently close to the surface of the trench floor to expose faint coffin wood outlines, and two of these retained rectangular outlines surrounding the hexagonal coffin stains. Additionally, the foot end of one small burial retained coffin wood staining as well as two small *in situ* decorative white metal screw caps at both lid corners (Figure 3.10). Archaeologists documented the grave shafts and their locations within Trench 1 prior to backfilling the excavation.

# Trench 2

The second trench was located between the southern edge of the tennis court and the northern wall of the Recreation Building, and was opened in front of the main entrance to that structure. This excavation was



Figure 3.9West profile of Trench 1, showing deep disturbance and<br/>terra cotta sewer pipe intrusion.



Figure 3.10 Detail of intact burial in Trench 1, showing decayed coffin wood and *in situ* decorative coffin lid screw caps.

oriented east-west and measured 10 feet long by 5 feet wide. Earlier GPR studies had identified this as an area potentially containing individually recognizable grave shafts. Excavations here initially encountered a concrete-encased utility conduit at the extreme western edge of the trench, likely the electric line for the tennis court lights, at a depth of 1-1.5 feet below the surface. This conduit was left untouched and work continued on the easternmost 7 feet of the trench.

Removal of the asphalt and the underlying black sub-base in the eastern parts of the trench exposed findings that were very similar to those from the Phase IA test pit located in the planting bed bordering the south side of the tennis court. Compact yellowish brown fill extended from beneath the sub-base and a layer of gravel and crushed asphalt to a depth of approximately 2.5 feet below the surface, and overlaid the original soils of the burial ground. As Trenches 3 and 4 would subsequently confirm, this yellow brown fill deposit represented a distinctive horizon that appeared to extend over the entire cemetery parcel, and was quite different from fill deposits found in areas outside the burial ground.

The burial ground's original soils were represented by two small, isolated patches of preserved ground surface (A-horizon soils) that had been cut through and were surrounded by multiple overlapping grave shafts. Machine excavations were terminated at this point, and the trench floor was subsequently hand excavated to a depth of 3 feet bgs in order to better define the exposed grave features. Though the outlines were sometimes indistinct, a minimum of 18 hexagonal and rectangular east-west oriented grave shafts were delineated in the floor of the trench (Figure 3.11). Each of the defined grave shafts exhibited characteristics of having been partially truncated by the excavation of adjacent shafts; however, no evidence of ground disturbance that might be associated with disinterment activities was identified. Intact coffin nails were discovered along the edges of three shafts, indicating that intact coffins were located just below the floor of the trench at this depth.

In addition to the utility conduit, Trench 2 also produced evidence of past disturbance within the cemetery. Along the northeast profile of the excavation, a large, steep-sided pocket of loose, dark gravel fill that was very similar to the overlying asphalt sub-base intruded to an unknown depth below the floor of the trench (Figure 3.12). The source of this disturbance is currently uncertain; however it is possible that it represents a repair of one of the "cave ins" or depressions appearing on the 1975 site plan (see Figure 2.15). It is not known whether or not this intrusion resulted in the disturbance of any intact burial remains, but, depending on its full depth, it is possible that it did.

# Trench 3

Trench 3 was oriented north-south, measured 20 x 5 feet in size, and was placed just outside the southeast corner of the tennis court and immediately adjacent to a now-vacant tree planting box. At this location, it overlapped the mapped northern boundary of the cemetery and fell within an area where prior GPR studies found no potential burial-related anomalies.

The removal of the asphalt and underlying fill exposed a mortared stone wall of common micaceous schist representing the northern wall of the cemetery, at approximately 1.2 feet bgs. This 1.5-foot-thick wall spanned the width of the trench, extending east and west beyond the limits of the excavation, and was partially capped by a single course of mortared brick. The presence of this brick layer suggests that the lower stone portion was the foundation of the wall, while the visible aboveground parts were originally made of brick. The wall was located 102 feet north of the southern playground fence line, and within approximately 2 feet of where it had been predicted to appear based on earlier Phase IA mapping of the cemetery. Continued excavation in Trench 3 confirmed that exposed areas to the south of this wall fell within and were directly associated with the Mother Bethel Burying Ground; areas to the north fell within a former historic residential property that fronted on Catharine Street. More detailed descriptions of the findings in both of these trench sections follow.





Figure 3.12 North profile of Trench 2, showing intrusive disturbance.

**Southern Trench Section (Cemetery Associated).** The southern 7 feet of Trench 3 were contained within the historical burial ground boundary. Mechanical excavation exposed yellowish brown silt loam fill at a depth of 1.3 feet below the playground surface—slightly below the top of the stone cemetery wall. Machine excavation was halted at just 1.8 feet below the surface of the playground, when a number of grave shaft features became visible. Hand clearing of the trench floor eventually resulted in the identification of at least five distinct, and in some cases partially overlapping, grave shafts within this fill soil (Figure 3.13). As in previous examples, all delineated grave shafts were oriented along an east-west axis; however, in this case, excavation did not extend deep enough to expose any decayed coffin wood, coffin nails, or other intact funerary artifacts. No evidence of disturbances potentially associated with relocation efforts was identified.

In addition to the grave shafts, the backhoe also uncovered a marble headstone fragment along the eastern side of the trench, just south of the cemetery wall. When initially identified, the marker was standing more or less vertically in the ground, and it was first thought that it might have been completely intact. Further excavation around it, however, revealed that the headstone had previously broken in half above the base some unknown number of years after its installation, and had been evidently discarded within the upper fill soils at some later time. Careful investigation of this artifact confirmed that it was no longer in its original position, and did not mark any intact burial location. This fragment was represented by the entire upper half of the headstone, including the section bearing the full engraved epitaph (Figure 3.14); at the request of representatives from Mother Bethel, it was removed from the ground prior to backfilling the trench. Examination of this stone revealed it to be simply carved, with an inscription that read:

In memory of Amelia Brown who died April 3<sup>rd</sup> 1819 Aged 26 years

Whosoever live & believeth in me Thou we b dead yet shall we live.

Like Trenches 1 and 2, the southern half of Trench 3 also produced evidence of prior disturbances. The far southwest corner contained an intrusive pocket of coal, ash, and brick fragments, parts of which appeared to have partially truncated the southernmost mapped grave shaft. Because this disturbance was not further excavated, its full depth remains undetermined, and it is not known if any intact burial remains were impacted by it. In addition, areas along the eastern trench wall had been previously disturbed by the excavation for an adjacent tree planting. While the tree itself has since been removed, remnant tree roots did extend slightly into the trench floor. Again, it is not known whether this tree disturbance resulted in impacts to any undisturbed burials.

**Northern Trench Section (Historic Backyard).** This portion of the trench extended into what was originally the rear yard of a property that abutted the burying ground on its north side, and testing quickly exposed a mortared micaceous schist stone foundation that extended along the west edge of the trench—from the north side of the cemetery wall to the northern limits of the excavation. The southern end of this foundation abutted—but was not keyed into—the cemetery wall, indicating that it was associated with a structure that had been built after the construction of the burial ground wall.

Portions of the north half of the trench to the east of this later foundation were mechanically excavated to a depth of 3.4 feet below the surface, at which point a dark brown historic yard surface and artifactbearing sheet midden deposit was encountered (Figure 3.15). Within this midden layer, archaeologists observed a large amount of butchered and modified animal bone, along with increased quantities of glass



Figure 3.13 Overview of the south half of Trench 3, looking north, showing the north cemetery wall, identified grave shafts, and partial headstone.



Figure 3.14 Detail view of Amelia Brown's headstone with preserved inscription.



Figure 3.15 Overview of the north half of Trench 3, looking south, showing the north cemetery wall, abutting residential foundation, and backyard sheet midden deposits.

and ceramic historic artifacts. Excavated materials above this level were represented by stacked secondary fill deposits consisting of light gray mortar and brick, brown silt loam with brick and coal ash, and yellowish brown silt loam. None of these upper fills were observed to contain substantial quantities of artifacts (Figure 3.16).

Two test pits (designated EUs 3 and 4), each measuring 1.5 feet square, were excavated in the north half of the trench in an effort to more closely investigate the underlying soil sequence, and to search for any evidence of interments that may have been placed outside the cemetery boundaries. EU 3 was situated toward the northwest corner of the trench, against the east face of the later stone foundation, and was excavated from the floor of the trench (3.4 feet bgs) to a point approximately 4 inches (10 centimeters) into the underlying subsoil (4.9 feet bgs). The soil profile exposed in this test pit consisted of a 0.75-foot-thick layer of brown silt loam fill that contained the identified midden deposits, overlying an intact historical ground surface (A horizon, approximately 4–4.6 feet bgs) that sloped very gently downward to the east. Undisturbed yellowish brown silt subsoil (B horizon), containing no evidence of past burial excavation, was encountered at the base of the test pit (4.6–4.9 feet bgs). Somewhat unexpectedly, the findings from EU 3 revealed that the historic ground surface to the north of the cemetery boundary was situated more than 2 feet *below* the depth at which intact grave shafts were identified in the south half of this trench, and more than 3 feet below the top of the adjacent cemetery fill.

EU 4 was located immediately to the north of the cemetery wall and was excavated to a maximum depth of 5.2 feet below the surface of the playground. This test pit revealed a similar stratigraphy to that found in EU 3, including a midden horizon that extended to 4.5 feet bgs, an intact historic ground surface from 4.5–5 feet bgs, and undisturbed subsoil at the bottom (Figure 3.17). In addition to confirming that the historic ground surface to the north of the cemetery is situated more than 2 feet below the top of grave shafts to the south of the adjacent burial ground wall, EU 4's south profile also—and perhaps more importantly—revealed that the adjacent cemetery wall did not extend into the underlying subsoil. Instead, it terminated at the top of the historic ground surface. This finding indicated that the cemetery wall was almost certainly constructed at or about the same time that both the burial ground and the surrounding residential properties were filled in, and was primarily designed to retain the fill deposited on top of the cemetery's original ground surface.

# Trench 4

Trench 4 was placed to straddle the eastern boundary of the burial ground posited from Phase IA research, was oriented east-west, and measured 20 feet in length by 5 feet wide. Prior GPR studies had suggested that this location could contain subsurface anomalies associated with clustered burial features. As in Trench 3, testing in this location successfully identified the exterior cemetery wall, as well as areas associated with both the burial ground and adjoining residential backyards. The mortared micaceous schist cemetery wall was uncovered immediately beneath the asphalt and gravel sub-base and measured approximately 1.5 feet wide. As with its northern counterpart, the east cemetery wall was identified almost exactly where it was expected to lie, and was situated approximately 118 feet east of the eastern curb line of Lawrence Street (which represents the western boundary of the burial ground). More detailed findings from the trench sections east and west of this wall are discussed below.

**West Trench Section (Cemetery Associated).** Archaeologists excavated a maximum depth of 2.6 feet of fill from Trench 2, and beneath the gravel sub-base again encountered a mixed light yellowish brown and light gray fill, with brick fragments scattered throughout. At a depth of 2.6 feet bgs, mechanical excavations were halted when a series of east-west oriented—and somewhat more widely spaced—grave shaft features were identified (Figure 3.18). Subsequent investigation of the trench floor resulted in the documentation of a total of seven grave shafts at this depth, including both hexagonal and rectangular examples. With the exception of a single large outline extending into the trench from the northwest



Figure 3.16 East profile of Trench 3, showing the identified fill sequence.



Figure 3.17 South profile of EU 4 in Trench 3, showing intact historic ground surface and undisturbed subsoil.



corner, the other shafts were, based on their size, likely associated with the graves of children. Four of the grave shafts delineated were extremely small and probably indicate the burials of infants or newborns. During the examination of two of the infant grave shafts, archaeologists uncovered traces of decayed coffin wood and associated coffin nails. This discovery indicated that this yellow brown fill layer contains not just evidence of grave shaft excavations, but also intact burial remains. Evidence of prior disturbance in this trench section was limited to an irregular rodent burrow at the western end of the excavation.

**East Trench Section (Historic Backyard).** Below the asphalt sub-base, the eastern 10 feet of Trench 4 contained features and soil deposits located within the backyard of a former residential property that fronted on Leithgow Street (Figure 3.19). This section of the trench was excavated to a maximum depth of 3 feet below the surface of the playground, and along its northern edge exposed a square or rectangular mortared brick structure, the visible portions of which measured approximately 5.5 feet east-west by 2.5 feet north-south. The exact function of this structure remains unknown; however, its position at the rear of this residential lot suggests that it could be either a foundation associated with an underlying privy (outhouse) shaft or with a small outbuilding.

To the south of the brick structure, excavation encountered a highly mixed brown and dark yellowish brown fill deposit that was observed to contain brick, coal ash, fragmentary animal bone, and small quantities of glass and ceramic artifacts. At 3 feet bgs, excavations exposed a dark brown horizon with more concentrated sheet midden artifact deposits, and that appeared similar to the midden layer found in Trench 3. A single 2-foot-square test pit (EU 2)—located along the north trench profile, between the brick structure and the east cemetery wall—was hand excavated through the bottom of the trench in order to examine the underlying stratigraphy and to search for possible evidence of burial features. EU 2 was excavated to a maximum depth of 4.5 feet below the surface and, similar to EUs 3 and 4 in Trench 3, revealed a 0.6-foot-thick, intact historic ground surface (A horizon) below the midden layer, and below the historic surface, subsoil deposits (B horizon). The historic ground surface exhibited a gentle downward slope to the west and contained few historical artifacts. As in Trench 3, the historic ground surface identified in this backyard sat below the depth at which intact grave shafts were encountered on the opposite side of the cemetery wall (Figure 3.20). In this instance, the ground surface was identified approximately 1 foot below the delineated tops of adjacent grave shafts, and 2 feet below the top of the fill in which those grave shafts were contained.

# Human Remains

While no intact burial remains were exposed during Phase IB testing, a small handful of previously disturbed, positively identified, or probable human skeletal fragments were identified in Trenches 2, 3, and 4. In all but one instance, these bone materials were highly fragmented and unidentifiable as to specific body element. The one exception was a small section of upper frontal maxilla bone, with empty tooth sockets, that was recovered from the fill beneath the asphalt and gravel sub-base in Trench 2. These remains were stored on site throughout the investigation, and at its conclusion were reburied in Trench 3.

# Recovered Artifacts

Phase IB investigations resulted in the recovery of a total of 816 individual historical artifacts (see Appendices E and F). These included samples of artifacts contained in the upper cemetery fill soil in Trenches #2 and 3, and those screened from the intact midden and historic ground surfaces (A-Horizon) in EU 2 (Trench #4), and EUs 3 and 4 (Trench #3). An additional 15 ceramic artifacts had been previously recovered from the cemetery's historic ground surface in EU 1, during Phase IA testing.



Figure 3.19 Overview of the east half of Trench 4, looking east, showing the east cemetery wall, residential brick structure, and exposed sheet midden deposits.



Figure 3.20 North profile of EU 2 in Trench 4, showing intact historic ground surface and undisturbed subsoil.

The artifacts from EU 1 consist of a small number of domestic ceramic tableware sherds, including examples of redware, creamware, pearlware, whiteware, and white graniteware varieties. All of these items were recovered from a small patch of preserved historic ground surface immediately adjacent to the intact grave shaft identified in the test pit. Dateable ceramics in this assemblage had starting manufacturing dates that collectively spanned to time from 1762 through 1842.

A total of 52 historic artifacts were pulled from the upper yellow-brown fill soils within the boundaries of the cemetery. This layer sat immediately on top of the burial ground's historic ground surface and extended upward to the bottom of the overlying asphalt and gravel sub-base, and was observed to contain relatively small numbers of cultural materials. Artifacts collected included 46 fragmentary ceramics, 6 pieces of olive bottle glass, a nail, and one oyster shell. Additional quantities of both oyster and clam shells, brickbats, and nails were observed in this fill, but were not collected. The ceramic pieces included examples of redware, creamware, pearlware, whiteware, salt-glazed stoneware, white graniteware, porcelain, and Nottingham. Individually, these items exhibited a variety of different glazes and decorations, and diagnostic pieces are associated with beginning dates of manufacture ranging from 1683 through 1842.

Artifacts recovered from the historic backyard portions of Trenches #3 and 4 were screened from intact midden layers and underlying historic ground surface deposits, and represent the largest proportion of the overall artifact collection. In both cases, exposed midden soils were observed to contain significant quantities of varied historic artifacts. Artifacts in the midden layer were only sampled by way of the deeper test units (EUs 2-4) excavated through the floor of the trenches; those contained in other sections of that deposit were left preserved in place. No artifacts were recovered from underlying subsoil deposits in either of these trenches.

In Trench #3, the excavation of EUs 3 and 4 produced a total of 744 historic artifacts, of which the vast majority (N=553) consisted of butchered and fragmentary animal bone (fish, turtle, bird and mammal) contained in the midden layer. Artifacts recovered included a variety of architectural debris (brick, window glass, unidentified nails), 9 clay pipe bowl and stem fragments (bore diameters between 3/64 and 6/64's of an inch), 1 clam shell fragment, 15 pieces of colored container and bottle glass, a single 4-hole bone button, and a section of button blank from the manufacture of bone buttons. Ceramic sherds were represented by a similar range of varieties as was found in the cemetery fill, plus examples of Philadelphia Queensware and Rockingham. Collectively the diagnostic sherds exhibited a range of beginning manufacture dates between 1683 and 1835, with the majority likely manufactured in the late 18<sup>th</sup> through early 19<sup>th</sup> centuries.

EU 2, in Trench #4, produced many fewer artifacts than Trench #3, with all 20 items having been recovered from the midden and underlying A-Horizon soils. This artifact assemblage was represented by a small assortment of architectural debris (brick fragments, window glass, unidentified nails), 1 oyster shell, a single graphite crucible fragment, pieces of a clear glass container of some sort, and 10 ceramic sherds. Ceramic pieces consisted of examples of redware, Pearlware, Tin-enameled, Jackfield type, Philadelphia Queensware, and whiteware. Beginning dates of manufacture for diagnostic ceramic styles spanned the years 1625 through 1825. Also included in the artifacts collected from this test were three potential prehistoric / Native American artifacts -2 pieces of quartzite fire-cracked rock, and a single possible flake of grainy chert - all of which were recovered from the midden layer.

# Interpretations, Conclusions, and Recommendations

4

These Phase IB investigations were able to generate a large amount of information regarding the Mother Bethel Burying Ground and the human burials still preserved within it, and successfully answered all of the specific questions it set out to address. In at least one instance, new data was useful in changing preliminary interpretations resulting from the earlier Phase IA study. Critical findings have helped to accurately locate the cemetery within the existing playground. Trench excavations have allowed a detailed characterization of the subsurface conditions within the boundaries of the burial ground and the depth below surface at which evidence of intact interments is likely to appear. Most importantly, the information collected during this study will enable the Weccacoe Playground project partners to critically reevaluate proposed renovation plans, and to make any changes necessary to ensure that the burial ground will not be impacted by this or future undertakings.

The most fundamental information necessary to ensure the continued preservation of the cemetery is knowledge of where this parcel is located within the larger playground property, and where precisely its boundaries lie. Previous background research established that the burial ground was located in the southwest corner of the playground, and earlier Phase IA comparative map analysis suggested that the western edge of the cemetery extended under the eastern sidewalk of Lawrence Street. Findings from this investigation have both confirmed and further refined the placement of the cemetery in space, and positively identified the northern and eastern limits of that property inside the playground. Investigations in Trenches 3 and 4 uncovered, documented, and mapped the burial ground's outer walls in very nearly the exact location at which they were anticipated to be found. The location of these two points, taken in concert with the known historic dimensions of the burial ground and available historic survey data, have confirmed that the cemetery does in fact extend westward under the adjacent Lawrence Street sidewalk to a point at or very near the eastern curb line of that road. To the south, the edge of the cemetery property aligns closely with the existing southern fence line for the playground (Figure 4.1).

The cemetery walls themselves additionally provide information regarding their likely appearance and the timing of their construction. The exposed sections of walls consisted of both mortared stone and brick components. The stone portions probably represent the belowground foundations for this enclosure, while the aboveground parts were made of brick, in order to provide a neater, more orderly outward appearance. Though it cannot be confirmed at this time, the brick section of the wall may have additionally incorporated a decorative iron fence at its top when initially built. This wall may have replaced an earlier enclosure around the cemetery, but the nature and appearance of any such earlier fence or wall remains unknown.

The fact that the cemetery wall is not anchored into the underlying subsoil—but rather sits on top of the buried historic ground surface—and is bounded on either side by visually distinct fill deposits—strongly suggests that this enclosure was originally constructed at or about the time that fill soils were deposited both inside the cemetery grounds and in the adjacent backyards, in order to fill up low-lying areas and level the ground surface. Based on findings from the Phase IA investigation, it was previously thought that this fill was perhaps brought in after the cemetery was closed—possibly during the tenure of Barnabas H. Bartol (1869–1873) or in conjunction with the city's first improvements to Weccacoe Square in the early 1890s. However, information from the Phase IB study now suggests that this fill material was probably put down at a time relatively late in the period that Mother Bethel was still actively using the burial ground. Artifacts collected from the yellow brown fill that caps the historic ground surface of the cemetery include one fragment of a white graniteware or white ironstone plate, a type of ceramic that was first manufactured around 1842. The presence of this artifact in the fill suggests that this layer of soil was



Figure 4.1 Current site plan, showing the location of Phase IB trenches and the mapped boundaries of the Mother Bethel Burying Ground.

deposited within the burial ground sometime after that date. A similar sherd of white graniteware was also recovered from these same fill deposits in EU 1, during the earlier Phase IA investigation.

The establishment of a *terminus post quem*<sup>8</sup> (TPQ) date of 1842 for the upper cemetery fill is corroborated by artifacts recovered from the midden layer and intact ground surface in the historic backyard portion of Trench 3. The latest dated ceramic from that assemblage is represented by a fragment of sprig-painted whiteware, in chrome colors, that has a manufacturing start date of 1835. The presence of this artifact in that backyard indicates that overlying fill material there must have been deposited after that date. Evidence indicating that the cemetery was still in active use when this fill was deposited comes from the identification of grave shafts within and extending through this soil layer. The dating of fill deposits on either side of the cemetery walls to sometime between 1842 and circa 1864 means that the walls themselves must have been constructed during this time frame.

Evidence from the excavations indicates that the surface of the cemetery and the surrounding backyards was originally not uniformly level, and that lower-lying areas eventually requiring filling were present. In Trench 2, the remnant historic ground surface of the burial ground was identified at a depth of 2.5 feet below the present playground surface. However, in Trench 4, the ground surface in the adjacent backyard was approximately 3.5 feet deep, and in Trench 3 the backyard A horizon was identified some 4–4.5 feet below the asphalt. Even after accounting for differences in the present surface of the playground, this information suggests that the original ground surface of the cemetery was probably highest to the west and near its center. From the center, the ground sloped down noticeably to both the north and the east. The fact that the burial ground was filled in and leveled at some time is not at all surprising or without precedent. Historian John Fanning Watson noted that the process of depositing massive amounts of fill in this part of Philadelphia was well underway by the third decade of the nineteenth century, and recorded that "most of the ground in the south-western direction of the city, and Southwark, having been raised by two to three feet, has generally caused all the streets in that direction to be formed of earth filled-in there" (Watson 1830: 213).

The filling-in of the cemetery would have created perhaps 4–5 feet, or more, of new ground in previous low-lying areas, and would have established additional space within which people could be interred. In effect, the in-filling of the cemetery may have helped to extend its use-life. Interments represented by grave shafts appearing in the overlying fill represent the very last interments made in the cemetery before the church closed it.

In terms of the burials within the cemetery, each of the four trenches completed uncovered evidence of intact burials. This evidence came in the form of grave shaft outlines and, in a handful of instances, of decayed coffin wood with associated coffin nails or lid screws. In total, the excavations resulted in the identification of at least 36 individual burials, all of which were oriented west to east in accordance with common Christian burial practices.<sup>9</sup> Grave shafts and coffin evidence was found both within the original soils of the cemetery (Trenches 1 and 2), as well as within the overlying fill deposits (Trenches 3 and 4).

<sup>8.</sup> Latin term meaning "limit after which"; archaeologists use this term to describe the earliest date at which some specific event may have occurred, or at which a particular artifact deposit could have been created.

<sup>9.</sup> In Christian cemeteries, the orientation of burials with the head to the west and feet to the east takes on special significance, and is rooted in a powerful image of rebirth. In the New Testament, Matthew (24:27) foretells that Jesus, at the time of his Second Coming, will arrive from the east: "For as the lightning commeth out of the east, and shineth even unto the west; so shall also the coming of the Son of man be" (American Bible Society 1999). In accordance with this belief, burials in Christian cemeteries are oriented in the above manner, so that on Judgment Day, when the dead are called to rise from their graves, they will sit up to face the resurrected Christ.

In Trench 4, the identification of decayed coffin wood and coffin nails indicates that, in some parts of the burial ground, intact burial remains are contained *within* this fill.

By the time the cemetery ceased being used for interments, it was certainly filled to maximum capacity. This is demonstrated by the 18 closely spaced and overlapping grave shafts found in a 5-x-7-foot space in the floor of Trench 2. Given the small size of the cemetery, and the large number of people known or estimated to be interred in it, burials in this ground are no doubt stacked one on top of the other, possibly to depths of perhaps 10–12 feet below the present surface of the playground. While the earliest graves would have been organized into neat, orderly rows, the addition of more burials over time would likely have served to obscure and complicate this internal order. While all of the grave shafts found during this investigation marked the final resting place of individual people, it is entirely possible that larger burial pits containing the remains of multiple persons, perhaps the victims of epidemic diseases, could also be present in other parts of the parcel.

Evidence suggests that most, if not all, of the people interred in this ground were buried in hexagonal wooden coffins. Because many of those buried here would have been from the poorest segment of Philadelphia society, it can be expected that a large percentage of the burials would have been comparatively simple affairs, and were associated with coffins that were undecorated and attended with little extravagance. At least one of the graves uncovered in Trench 1, however, involved a coffin constructed with decorative white metal screw caps adorning the screws used to seal the coffin lid. Considering that not insignificant numbers of people in the black community during this time were more financially well-off, including members of the church clergy and leadership, it should be expected that a wide range of decorative elements would be present on many of the coffins preserved here. John Bliss' coffin, for one, was reported to have been decorated "in a costly manner." None of the burial artifacts observed during this investigation (screw caps, nails) were removed from the ground, or from the grave with which they were associated.

The only funerary artifact removed from the site was the partial headstone for Amelia Brown. Her marker was not found in association with her grave, and so the exact location of her remains within the cemetery is not known. Amelia died in the late winter/early spring of 1819, and her passing was not documented by way of a surviving official death certificate. Though the authors of this report and Terry Buckalew have conducted some additional research to learn more about her, to date her exact identity, the details of her life, the members of her family, and the cause of her death remain unknown. The fact that she or her family could afford the cost of a headstone does suggest that she was not among the poorest members of the local community, or it could indicate that providing grave markers was one of the regular services the church performed for individuals too poor to purchase one themselves. The headstone, at their request, was turned over to representatives of Mother Bethel Church for safe-keeping and possible reconstructive preservation. Current plans are for the church's historians to use Amelia's grave marker to help interpret and tell the story of this important burial ground. While Amelia's headstone was the only one of its kind found during this investigation, there is no doubt many others like it are still preserved in the ground beneath the playground.

One other cemetery-related question which the Phase IA and this investigation sought to answer was whether or not burials extend outside the known boundaries of the Mother Bethel property. The Phase IA GPR study did initially suggest that burials could be located across large areas of the playground, but subsequent map analysis demonstrated that a variety of past non-cemetery-related activities could have created subsurface anomalies that might account for these findings—including the digging of trash, privy, and other pits in backyards, as well as the installation and removal of earlier playground features. Direct testing beyond the walls of the burial ground was limited in scope during the Phase IB investigation, but found not one shred of evidence to suggest that burials were made outside the walls of the cemetery. Of course, it cannot be said with certainty that no graves are outside the cemetery walls; however, based on

the information collected during this study, that possibility seems unlikely. Historic records show that the cemetery was bordered by at least some residential properties from early in its history, and these would have served to restrict the practice of interring people beyond the property boundaries. It is also likely that at least some sort of rudimentary fence or other enclosure would have been built around the cemetery from its founding in order to set that land apart from the neighborhood and help protect the grounds from unwanted trespassing, desceration, or destruction.

In addition to the information above, the findings of this investigation also include evidence of past disturbances within the cemetery. Specific disturbances were varied in their extent and likely cause, as well as in their possible effects on intact burial remains. The most extensive disturbance identified was exposed in Trench 1. There the construction of a spray pool in the 1950s, and its subsequent demolition and removal in the 1970s, has resulted in impacts that extend to a depth of at least 3 feet below the surface of the playground. This location was also impacted by the installation of a terra cotta drainage pipe at some point in time, although it is uncertain if this pipe was originally associated with the adjacent Recreation Building or some other past feature of the playground. The trench for that pipe further disturbed the cemetery to a depth of about 4.5 feet below ground. It is likely that the installation of this pipe, if not the spray pool as well, did result in the disturbance of an unknown number of burials; however, no dislocated human skeletal remains were found in the soil of that excavation. At this time, the full horizontal extent of these related disturbances is unknown, but it is thought that they are probably localized to the immediate vicinity of Trench 1.

Other known disturbances were significantly more restricted in size and included the natural burrowing of rodents (Trench 4), tree planting (Trench 3), the installation of posts (Phase IA test pit), and the repair of "cave ins" (Trenches 2 and 3), possibly resulting from the gradual subsidence of grave shafts. Excepting the rodent burrow, all of these disturbances extended to depths sufficient to impact the ground of the cemetery, but it is not known if intact burial remains were affected. Although testing resulted in the collection of only a small number of identified or suspected previously disturbed human remains, their presence does suggest that past activities within the playground have disturbed some unknown number of burials. Also, just because these trenches exposed only small amounts of disturbed remains does not mean that denser concentrations of previously impacted skeletal material are not present in other parts of the cemetery ground.

Testing also found no trace in the cemetery fill of a plowzone or other sign of the ground having been previously used for agricultural purposes, as Weccacoe Square was in 1904 and 1905. The absence of this evidence suggests that the upper portions of the cemetery soil may have been removed during past surface grading efforts. This idea is also supported by information in the 1824 plan of the square indicating the scheduled removal of soil across the site (see Figure 2.13). While it is unlikely that these activities resulted in the disturbance of intact burials, it has left all burials in the cemetery perhaps 1–1.5 feet closer to the surface than they were originally. Other likely cemetery disturbances, which were not directly documented during the investigation, include the construction and expansion of the Recreation Building and the installation of utilities to that building. Although past renovations of the playground have been extensive and repeated, most of the work associated with the installation and removal of play equipment appears to have been conducted outside the boundaries of the burial ground.

Lastly, while the detailed analysis of historic artifacts from the backyard portions of Trenches 3 and 4 is beyond the scope of this investigation, some interpretations will be offered. The north section of Trench 3 fell within the rear yard of the house at 412 Catharine Street (Figure 4.2). It is believed that the stone foundation wall uncovered along the west wall of that trench was associated with a small frame structure of unknown function built at the back edge of the property during the nineteenth century. The presence of buildings in this general location are suggested on the 1849 Sydney map, and it is presumed that this structure was likely built around that time. It is interesting to note that this foundation was not picked up



Figure 4.2 Map showing the location of Phase IB trenches with respect to the identified cemetery walls and adjacent historic house lots.

during the earlier GPR survey. Yard midden deposits exposed in the trench, which most likely predate the construction of this building, include a variety of fragmentary glass and ceramic artifacts that provide a TPQ date of 1835. Artifacts from the midden also include large quantities of butchered and modified faunal bone, including bone button blanks, and suggest that one of the occupants of this property may have been engaged in some business that involved the slaughtering or processing of animals.

Trench 4 crossed over into the rear yard space of 816 Weccacoe Street. Excavations here resulted in the recovery of a small number of glass, ceramic, and faunal artifacts that provided a TPQ date of 1842 (based on a single sherd of white graniteware plate) for the yard deposits. A brick structure of uncertain size was uncovered along the north side of the trench and may be a foundation associated with an underlying brick privy (outhouse) shaft or small outbuilding. This structure could have been one of the anomalies picked up in this area during the earlier GPR survey. The narrow gap between this brick structure and the adjacent stone cemetery wall may represent the remnants of a small interior alleyway indicated on historic maps. A check of online city directories through the mid-1860s returned no information related to this address or its possible occupants.

Based on the findings of this investigation, the Mother Bethel Burying Ground is a historic property that is clearly and unambiguously eligible for listing in the National Register of Historic Places. Testing in two of the adjacent residential backyards has also produced information suggesting that archaeological deposits and features are present in these and nearby properties, as well. However, at this time, a full determination of National Register eligibility for these domestic properties cannot be made based on the limited testing completed and artifact assemblage recovered.

# RECOMMENDATIONS

One of the primary objectives of this investigation was to determine the minimum depth below the current surface at which evidence of the cemetery appears. These test trenches have demonstrated that soils associated with the burial ground, and that now hold the intact remains of individuals interred in this graveyard, are present beginning at a depth of approximately 1–1.5 feet below the surface of the playground. These soils, representing a fill cap placed on top of the burial ground during its later years of operation, appear immediately below the asphalt and associated gravel sub-base throughout the majority of the cemetery property. Intact grave shafts have been documented within this fill between 1.8 and 2.5 feet below the present playground surface. Intact interments, indicated by the appearance of decayed coffin wood and associated coffin artifacts, have been identified at approximately 2.5–3 feet below the top of the asphalt in several locations. However, the possibility that more shallowly buried remains could be present in this ground cannot be ruled out based on current findings.

It is generally recommended that any planned renovation-related excavation within the footprint of the burial ground that extends deeper than 1-1.5 feet below the top of the asphalt, or below the bottom of the gravel sub-base, should be considered an impact to the cemetery and as having the potential to disturb intact burial remains. It is also recommended that proposed plans for the playground be revised, if possible, so that any deeper impacts are restricted to areas outside the delineated boundaries of the Mother Bethel Burying Ground. Based on conversations with the project partners, this effort is already under way. The possibility has been previously discussed of adding fill to the playground in some locations in order to raise the ground above the cemetery. This option would certainly provide more protection for this important site, and could be a way to avoid unwanted impacts in select locations. It is further recommended that any excavations within the cemetery boundaries that will extend deeper than 1-1.5 feet below the surface be monitored by a qualified professional archaeologist in order to ensure that no intact human remains are impacted.

One exception to the above basic recommendations applies to that portion of the cemetery lying to the west of the Recreation Building, in the vicinity of the current shuffleboard court. Here, Phase IB testing indicated that the past construction and removal of the former spray pool, the installation of utility lines, and the repair of near-surface depressions has disturbed the ground in this location to a depth of approximately 3–4.5 feet below the surface. According to current plans, the removal of the shuffleboard pad and the creation of a "natural play area" in this vicinity will likely involve both limited excavation, to remove existing surface features, and the subsequent deposition of new fill material. Based on the results from Trench 1, excavation to remove the pad and adjacent surface material is unlikely to threaten the preservation of burial remains. Because the full extent of previous disturbances remains uncertain in this location, it is recommended that any excavation that extends beyond the vicinity of the former spray pool should be archaeologically monitored.

The results of testing suggest that potentially significant domestic archaeological resources could be contained in the backyards of the residential properties that once bounded the cemetery. Current information also suggests that archeological deposits associated with these properties are likely sealed beneath approximately 3–4 feet of fill. As a result, it is possible that most impacts associated with planned renovations in these backyard areas, including the planting of trees with a maximum required root ball excavation of 3 feet, will have no serious effects on these resources. For any new playground features that would require excavation below this depth, and that are presently cited within former backyard areas, one possible option would be to consider relocating these features to within the footprints of the historic houses that formerly lined the periphery of the block. These houses were constructed with basements, and any impacts that will be restricted to the locations of former building basements are unlikely to disrupt or harm the preservation of archaeological resources. Any deep excavations that will be confined to the location of building basements will not require archaeological monitoring.

As a precaution against unintended or inadvertent disturbance of the cemetery and other historical resources, URS recommends, as stated above, that archaeological monitoring be performed during the renovation process. Monitors would be on site during any excavation activities located within the most sensitive portions of the cemetery and playground, and for any deep excavations in areas outside the cemetery boundaries that have the potential to contain significant domestic archaeological resources. In the cemetery, monitors would have the authority to halt excavation if intact burial remains are threatened. For the surrounding historical properties, monitors would have the authority to temporarily halt any deep excavations that could impact potentially significant resources and, if necessary, to evaluate the effects of those impacts through archaeological excavation and documentation.

# References

Agnew, D. Hay 1890	res, Alfred Stille, Lewis P. Bush, Charles K. Mills, and Roland G. Curtain History and Reminiscences of the Philadelphia Almshouse and Philadelphia Hospital, Vol 1. Philadelphia: Detre & Blackburn.
Alon Engineeri 1975	ng associates, Inc. Topographic Survey & Plan of the Catharine & Lawrence St. Site. Plan map prepared for the Philadelphia Department of Recreation, January 13, 1975.
American Bible 1999	e Society Holy Bible, Containing the Old and New Testaments, King James Version. New York: American Bible Society.
Bahde, Thomas 2006	"The Common Dust of Potter's Field", <i>Common-Place</i> , Vol. 6, No. 4. http://www.common-place.org/; accessed August 2013.
Barker, Charles 1943	R. A Register of the Burying Grounds of Philadelphia. Manuscript study in the possession of the Genealogical Society of Pennsylvania.
Beck, Carolyn 8 1988	S. "Our Own Vine and Fig Tree: The Authority of History and Kinship in Mother Bethel." In <i>Review of Religious Research</i> , Vol. 29, No. 4, Black American Religion in the Twentieth Century (Jun., 1988), pp. 369-384.
Buckalew, Terr 2012	y Weccacoe: Burying Ground, Garden, Park and Playground – A Historical Sketch and Timeline from 1800 to 2012. http://preciousdust.blogspot.com, accessed April 2013.
Cooperman, En 2008	nily T. Inventory of African American Church Resources, 1787-1949, City of Philadelphia. Report prepared for the Preservation Alliance for Greater Philadelphia. ARCH Historic Preservation Consulting.
	nily T., and Matthew S. Hopper "African American Churches of Philadelphia, 1787-1949." National Register of Historic Places Multiple Property Documentation Form. Harrisburg: Pennsylvania Historical and Museum Commission.
Crist, Thomas A 2013	A. Personal communication, Aug. 15, 2013
Crist, Thomas A 2011	A., and Molly H. Crist "Skeletal Evidence for the Dissection of Children at the Philadelphia Almshouse, 1732- 1834." Presented at the 80 <sup>th</sup> Annual Meeting of the American Association of Physical Anthropologists, Minneapolis.

Douglass, Reve	rend William	
1862	Annals of the First African Church in the United States of America, Now Titled the African Episcopal Church of St. Thomas, Philadelphia. Philadelphia: King & Baird.	
Drayton, Joseph	1	
1824	"Plan of the City of Philadelphia." J.H. Young sc. <i>Philadelphia in 1824, or, a brief account of the various institutions and public objects in this metropolis.</i> Philadelphia: H.C. Carey & I. Lea.	
Eden Cemetery 2009	<i>The History of Eden Cemetery.</i> http://www.edencemetery.org/History/about.htm; accessed August 2013.	
FamilySearch.c	rα	
2013	Pennsylvania, Philadelphia City Death Certificates, 1803-1915. Online database; http://www.familysearch.org; accessed August 2013.	
Fowler, Rachae 2013	el E., Philip Ruth, and Kenneth J. Basalik <i>Phase I Archaeological Survey</i> . Report prepared for Shoemaker/Synterra, a JV. Cultural Heritage Research Services, Inc.	
Gambardello, Joseph A. 2009 "Philadelphia: City of Forgotten Burial Grounds". <i>Philadelphia Inquirer</i> , December 15.		
Geo-Graf, Inc. 2013	<i>Geophysical Investigation Report, Cemetery Mapping, Weccacoe Park, 409 Catharine St.</i> <i>Philadelphia, PA.</i> Report prepared for the URS Corporation, Burlington, New Jersey. Report prepared by Geo-Graf, Inc., West Chester, PA.	
Henry, Frederic 1897	ek P., ed. Standard History of the Medical Profession of Philadelphia. Chicago: Godspeed Brothers, Publishers.	
Hannan Matthews C		
Hopper, Matthe 1998	<i>From Refuge to Strength: The Rise of the African American Church in Philadelphia,</i> 1787-1949. Historic context report prepared for the Preservation Alliance of Greater Philadelphia.	
Jelinek, Sydney		
1954	Additions to Weccacoe Recreation Center. Plan map prepared for the Philadelphia Department of Recreation, July 10, 1954.	
John Milner As 1988	sociates <i>Phase I Archaeological Survey of the Byberry Industrial Development Site, Philadelphia</i> <i>County, Pennsylvania.</i> Report prepared for the Philadelphia Authority for Industrial Development.	
Jones, Robert 1894	<i>Fifty Years in the Lombard Street Presbyterian Church</i> . Philadelphia: Lombard Street Presbyterian Church.	

Keels, Thomas 2003	H. <i>Philadelphia Graveyards and Cemeteries</i> . Arcadia Publishing, Charleston, SC.
Kelley, Howard 1920	A., and Walter L. Burrage American Medical Biographies. Baltimore: the Norman, Remington Company.
Klepp, Susan E 1991	The Swift Progress of Population: A Documentary and Bibliographic Study of Philadelphia's Growth, 1642-1859. Philadelphia: American Philosophical Society.
1995	"Zachariah Poulson's Bills of Mortality: 1788-1801." In <i>Life in Early Philadelphia: Documents from the Revolutionary and Early National Periods</i> . Billy G. Smith, ed. University Park: Pennsylvania State University Press.
Lager-Raabe La 2000	undscape Architects Weccacoe Playground. Plan map prepared for the Philadelphia Department of Recreation, July 21, 2000.
Lawrence, Char 1905	les History of the Philadelphia Almshouses and Hospitals. Philadelphia: Charles Lawrence.
Levin, Rubin 1979	Renovations & Additions to Weccacoe Playground. Plan map prepared for the Philadelphia Department of Recreation, July 25, 1979.
Lewis, Thomas 2010	R., and Kenneth J. Basalik <i>Phase Ib Archaeological Survey of the Sister Cities Café Pavilion and Discovery Garden</i> <i>Project.</i> Report prepared for the Center City District. Cultural Heritage Research Services, Inc.
Library Compar 2010	ny of Philadelphia Building a City of the Dead: The Geography of Burial. Online exhibit accessed August 2013; http://www.librarycompany.org/laurelhill/geo.htm.
	Associates, Inc. <i>Phase II Historical Research and Archaeological Testing of the Byberry Meeting African</i> <i>American Cemetery, Philadelphia County, Pennsylvania.</i> Report prepared for the U.S. General Services Administration.
Lombard Centra 2009	al Presbyterian Church <i>Our History</i> . Lombard Central Presbyterian Church website; http://www.lombardcentral.org/about/; accessed September 2013.
McElroy, A. 1839	Philadelphia Directory for 1839. Philadelphia: A. McElroy.
1841	Philadelphia Directory for 1841. Philadelphia: Orrin Rogers.
Molitor, John 1924	Improvement & Development of Weccacoe Playground. Plan map prepared for the Philadelphia Department of Welfare and Bureau of Recreation.

Mooney, Douglas, and Thomas A. Crist

2007 Archaeological Recovery and Investigation of Disturbed Human Remains, Washington Square, Philadelphia, Pennsylvania. Report prepared for the PECO Energy Company and Independence National Historical Park. URS Corporation, Burlington, NJ.

# Mooney, Douglas

2013 Phase IA Archaeological Investigations of the Weccacoe Playground and Mother Bethel Burying Ground. Letter report prepared for the Pennsylvania Horticultural Society. URS Corporation.

#### Mother Bethel African Methodist Episcopal Church

1826–1844 Minutes of the Union Benevolent Sons of Bethel, 1826-1844. Manuscript document in the possession of the Historical Society of Pennsylvania (Collection #2017).

#### Nash, Gary B.

1991Forging Freedom: The Formation of Philadelphia's Black Community 1720-1840.<br/>Cambridge, Massachusetts: Harvard University Press.

#### Newman, Richard S.

2008 *Freedom's Prophet: Bishop Richard Allen, the AME Church, and the Black Founding Fathers.* New York: New York University Press.

#### Pennsylvania Historical and Museum Commission

2008 *Guidelines for Archaeological Investigations in Pennsylvania*. Harrisburg: Pennsylvania Historical and Museum Commission.

#### Philadelphia City Council

- 1789–1793 Philadelphia City Council Minute Book, 1789-1793. Bound manuscript in the collections of the Historical Society of Pennsylvania (Am. 3570). Additional manuscript copies are house at the Philadelphia City Archives.
- 1793–1796 Philadelphia City Council Minute Book, 1793-1796. Bound manuscript in the Philadelphia City Archives (RG 120.9).

#### Philadelphia City Survey Office

1844 Manuscript survey of the block bounded by Catharine, 4<sup>th</sup>, Queen, and 5<sup>th</sup> Streets, March 19, 1825 revised to September 7, 1844.

#### Rabzak, Denise R.

1987 *Washington Square: A Site Plan Chronology 1683–1984.* Independence National Historical Park, Philadelphia, Pennsylvania.

#### Roberts, Daniel G., and Tod L. Benedict

2000 Archeological Supervision and Monitoring of Restoration Activities at Washington Square, Philadelphia, Pennsylvania. Prepared for Fairmount Park Commission and Tony DePaul & Son. John Milner Associates, Inc., West Chester, PA.

### Roberts, Daniel G., and John P. McCarthy

1995 "Descendant Community Partnering in the Archaeological and Bioanthropological Investigation of African American Skeletal Populations: Two Interralated Case Studies from Philadelphia." In *Bodies of Evidence: Reconstructing History through Skeletal Analysis.* Anne L. Grauer, ed. New York: Wiley-Liss, Inc.

#### Scharf, J. Thomas, and Thompson Westcott

1884 *History of Philadelphia*, 1609-1884. Philadelphia: L.H. Everts & Co.

#### Stackhouse, Eugene Glenn

2008 The Potter's Field. In *Remembering Germantown: Sixty Years of the Germantown Crier*, Irvin Miller and Judith Callard, eds. Charleston: The History Press.

#### Torres, Rene L. C.

1997 *Cemetery Landscapes of Philadelphia*. M.S. Thesis, University of Pennsylvania, Philadelphia.

#### University of Pennsylvania

2011 *Music Master: Francis Johnson of Early Philadelphia*. Online exhibit by the University of Pennsylvania Libraries; http://www.library.upenn.edu/exhibits/music/fjohnson/; accessed August 2013.

United States Geologic Survey

2011 7.5 Minute Topographic map of Philadelphia.

#### Watson, John Fanning

1830

Annals of Philadelphia, Being a Collection of Memoirs, Anecdotes, and Incidents of the City and its Inhabitants, from the Days of the Pilgrim Founders, Vol. 1. Philadelphia: E.L. Carey & A. Hart.

#### NEWSPAPERS

Franklin Gazette, June 29, 1819. North American, May 29, 1841 Philadelphia Inquirer, June 16, 1857 Philadelphia Inquirer, April 16, 1884 Philadelphia Inquirer, Sept. 12, 1884 Philadelphia Inquirer, October 14, 1885 Philadelphia Inquirer, May 11, 1887 Philadelphia Inquirer, May 18, 1887 Philadelphia Inquirer, August 17, 1889 Philadelphia Inquirer, August 21, 1889 Philadelphia Inquirer, August 22, 1889 Philadelphia Inquirer, October 29, 1889 Philadelphia Inquirer, November 5, 1889 Philadelphia Inquirer, August 29, 1890 Philadelphia Inquirer, September 9, 1890 Philadelphia Inquirer December 28, 1890 Philadelphia Inquirer, February 18, 1893 Philadelphia Inquirer, May 19, 1893 Philadelphia Inquirer, September 15, 1895 Philadelphia Inquirer, September 20, 1895 Philadelphia Inquirer, August 16, 1898 Philadelphia Inquirer, June 20, 1899 Philadelphia Inquirer, July 31, 1903 Philadelphia Inquirer, April 17, 1904 Philadelphia Inquirer, May 24, 1904

Philadelphia Inquirer, August 21, 1907
Philadelphia Inquirer, March 6, 1908
Philadelphia Inquirer, June 7, 1914
Philadelphia Tribune, March 30, 1889
Poulson's American Daily Advertiser, December 27, 1804
Public Ledger, Sept. 2, 1836
Public Ledger, March 23, 1842
Public Ledger, December 23, 1843
Public Ledger, August 16, 1851
Public Ledger, December 30, 1861
The Christian Recorder, August 3, 1872

# HISTORIC MAPS

Bromley, George W.

1895 *Atlas of the City of Philadelphia*. G.W. Bromley & Co., Philadelphia. Accessed June 2013 at http://www.philageohistory.org.

Bromley, George W., and Walter S.

- 1901Atlas of the City of Philadelphia, Complete in One Volume. G.W. Bromley & Co.,<br/>Philadelphia. Accessed June 2013 at http://www.philageohistory.org.
- 1910 *Atlas of the City of Philadelphia*. G.W. Bromley & Co., Philadelphia. Accessed June 2013 at http://www.philageohistory.org.

# Hopkins, G. M.

1875 *City Atlas of Philadelphia, Vol. 6, Wards 2 through 20, 29 and 31.* G.M. Hopkins, Philadelphia. Accessed June 2013 at http://www.philageohistory.org.

# Paxton, John A.

1810 *New Plan of the City [Philadelphia] and its Environs.* n.p. Accessed June 2013 at http://www.philageohistory.org.

# Smedley, Samuel L.

1862 *Atlas of the City of Philadelphia*. J. B. Lippincott & Co., Philadelphia. Accessed June 2013 at http://www.philageohistory.org.

# Sydney, J. C.

1849 *Map of the City of Philadelphia together with all the surrounding Districts.* Smith & Wistar, Philadelphia. Accessed June 2013 at http://www.philageohistory.org.