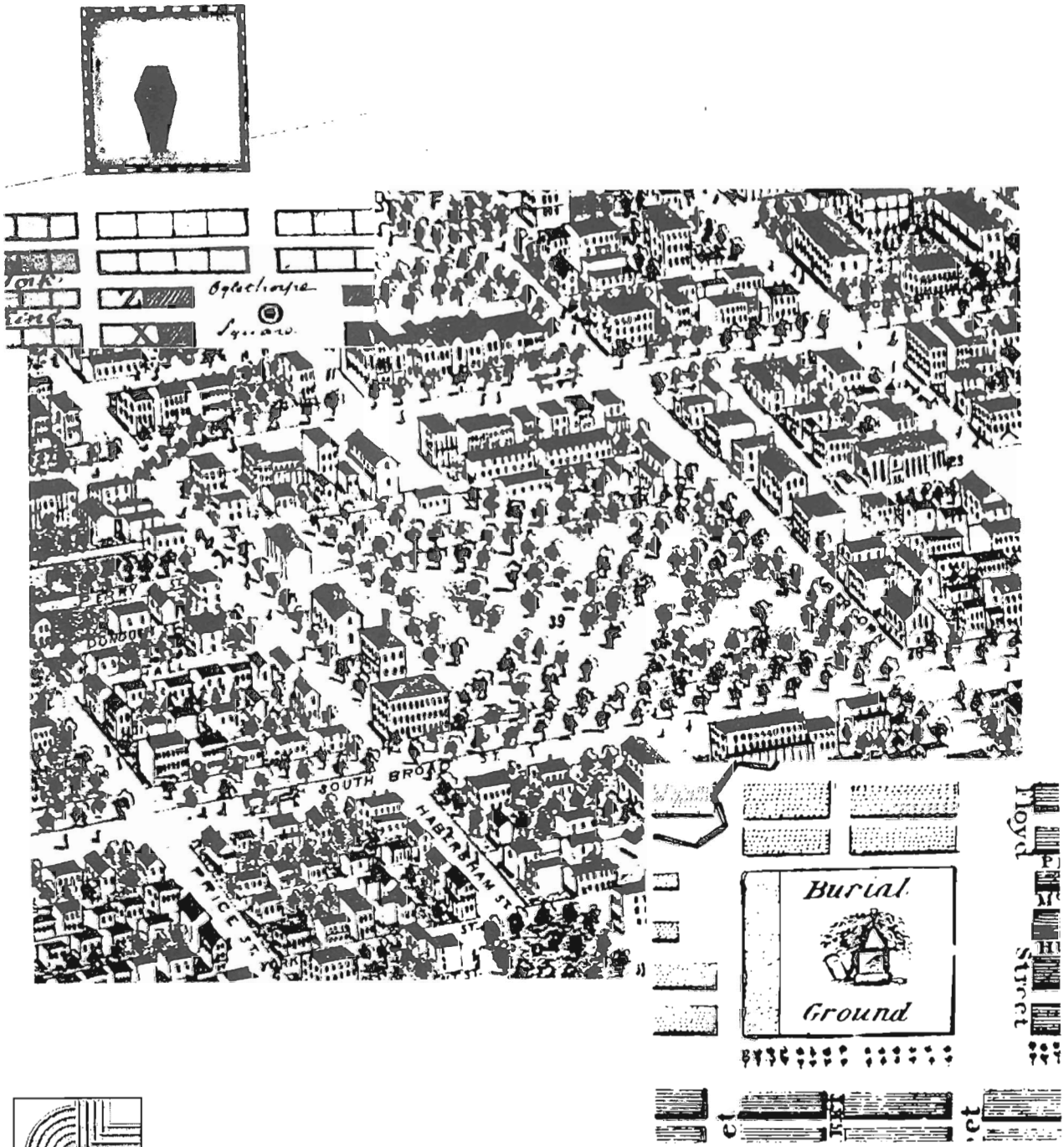
AN ARCHAEOLOGICAL EXAMINATION OF FOUR FAMILY TOMBS AT COLONIAL CEMETERY, SAVANNAH, GEORGIA



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Front cover: detail of Ruger's 1871 Bird's Eye View of Savannah showing Colonial Cemetery, with insets from an 1800 map (showing the cemetery denoted by a "toe pincher" or hexagonal coffin) and the 1818 Stouf map of Savannah, by which time the eastern edge of the cemetery seems to have been taken over for other uses.

Savannah is a living tomb about which there still clings a sensuous aura as in old Corinth.

-- Henry Miller

AN ARCHAEOLOGICAL EXAMINATION OF FOUR FAMILY TOMBS AT COLONIAL CEMETERY, SAVANNAH, GEORGIA

Research Series 58

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ABSTRACT

This study is a second phase of research at Savannah's Colonial Cemetery, given the archaeological site number 9CH906. The cemetery, best known today as Colonial Park, is situated in the block bounded by Oglethorpe to the north, Abercorn to the west, the old Police Barracks to the east, and a small area used as a children's park to the south. Colonial is Savannah's oldest graveyard, laid out in 1753 and used until the opening of Laurel Grove cemetery in 1853.

One of the more visible, and certainly characteristic, features of the cemetery are the brick tombs or family vaults. These tombs have either gabled or barrel roofs, parapet walls on the east and west elevations, and were constructed at least partially below grade. They continued to be built at Laurel Grove Cemetery and are also found in Savannah's Catholic Cemetery. The style, although not as common, is also known from such diverse locations as Georgetown, South Carolina and Wilmington, North Carolina.

This study was designed to examine the construction methods of these tombs — examining such details as the depth below grade they were constructed, the nature of the footers and below grade walls, the nature of access to the tombs, and whatever additional details might be evidenced through subsurface investigations. The goal was to collect sufficient information to help the City maintain and repair tombs as such work became necessary, as well as to assist in the development of a typology of the tomb forms.

The examination was also to help identify episodes of filling and perhaps renovation or restoration which have characterized the last 120 years of the cemetery's history. The historical records, while incomplete, provide a variety of tantalizing suggestions regarding possible activities at the cemetery which archaeology is best able to verify.

Finally, the research was also designed to help collect more traditional archaeological information regarding the nature of the cemetery's use through time. This would include both the use of tombs and associated areas when the cemetery was active, as well as the area's use during the last half of the nineteenth century and the entire twentieth century, when the area was either largely abandoned or used as a park.

The research included the excavation of five units at four different tombs, identified as C-65, J-4, I-83, and I-86. At three tombs the excavations were carried to the base of the foundations, completely revealing external construction features. In one case the close proximity of burials around the tomb prevented excavation to the base of the tomb's foundation. At two of the tombs the entrance was found to be open, allowing us the opportunity to also document some aspects of internal construction and use. In both cases (at tombs C-65 and I-83) coffins and human remains were still present.

The research provides a wealth of information concerning the cemetery. We have documented episodes of filling, with up to a foot of soil being added to some areas of the graveyard. We have also documented two distinctly different tomb openings — an above grade arched opening which required removal and replacement as the tomb was used and an at-grade stair entrance usually covered with slate. We have also documented what seems to be considerable variation in internal tomb details.

Archaeological evidence of use of the cemetery included information on the very dense number of in-ground burials, the frequent use of the area by children during the late nineteenth century, and the general absence of refuse or other materials deposited during the cemetery's most active use.

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ACKNOWLEDGMENTS

This work was funded by the Mayor and Aldermen of the City of Savannah, through the Park and Tree Department's Director, Dr. Don Gardner. We must first and most importantly thank all of these individuals for their interest in exploring and preserving Savannah's history and their willingness to fund this additional research on the details surround Colonial's unusual brick tombs.

We also need to thank Ms. Lynette Strangstad for her interest and vision in supporting archaeological investigations of the cemetery. We greatly appreciate her confidence in our work and interest in delving more deeply into the issues surrounding the tomb architecture at Colonial Cemetery. To the best of our knowledge, this study is among a very small body of literature dealing with cemetery history, architecture, and use — aside from those studies generated by the need to relocate bodies.

We also appreciate the time and effort provided by Ms. Sharyn Thompson of the Center for Historic Cemeteries Preservation in providing us with historical documentation of the cemetery. Our numerous questions were always cheerfully received and promptly answered. She has provided most of the background material incorporated into this report, although we certainly accept full responsibility for any misinterpretations or misinformation that may have slipped into our work.

The human skeletal material identified in the collection was examined by Ms. Amy Borys Carrico and we appreciate her willingness to assist in the study.

We also want to thank the numerous individuals in Savannah who were interested in our work. Many came by to see what has happening at the cemetery and offer their support. In particular, we thank the local fire department, right across the street from the cemetery, for not only their interest, but also their willingness to allow us access to their restroom facility.

We also appreciate the interest of the Savannah Police Department, including Captain Long and Officer Johnson, who visited our excavations. We also appreciate the assistance of the Department of Anthropology at the University of Georgia in Athens in providing a site number for the cemetery, as well as for assistance in curating the collection resulting from the work.

Finally, we want to thank both Rachel Campo and Andrea White of our staff. They were responsible for the bulk of the field investigations and we appreciate their diligence, interest, and enthusiasm for the work.

INTRODUCTION

The Nature of the Project and Goals

Colonial Park is Savannah's oldest public cemetery, laid out in 1753. By the late eighteenth century the graveyard measured about 500 feet square — or about 5.7 acres. It is bounded by Oglethorpe Street (previously known as Broad Street) to the north, Abercorn Street to the west, the old Police Barracks to the east, and a small area used as a children's park to the south on Perry Lane (Figure 1).

As part of a multi-year, comprehensive preservation effort at Savannah's Colonial Park, Ms. Lynette Strangstad of Stone Faces and Sacred Spaces asked Chicora Foundation to propose archaeological techniques that might help further the preservation or understanding of the cemetery. Our initial on-site meeting was during early November 1997. At that time we toured the cemetery, looked at a number of different tombs, and briefly reviewed some of the earlier investigations at the site.

As a result of that initial meeting, we proposed a series of five tasks:

- the recordation of all graves in the cemetery;
- the examination of areas where vaults have been removed or demolished;
- the investigation of access to standing vaults;
- the examination of areas outside the extant cemetery; and
- the examination of additional cemetery features, such as paved areas around graves, original walkways, and the location of several brick walls.

These topics have been previously discussed in Trinkley and Hacker (1999:5-9).

The first phase of that work was approved by Stone Faces and Sacred Spaces and the City of Savannah in late 1998 and a detailed penetrometer study, followed by mapping, was conducted in the fall of 1998. As a result of that work a new map of the cemetery was produced, incorporating the 560 existing monuments, as well as the location of 8,678 probable graves. We found that the cemetery contained a very large number of graves and, in some areas, it was impossible to distinguish between the multiple graves which had been excavated in very close proximity to each other (Trinkley and Hacker 1999).

A decision was made by Stone Faces and Sacred Spaces, in conjunction with the City of Savannah, to conduct a second phase of investigations during the fall of 1999. This study was aimed specifically at investigating several of the brick tombs or vaults which are characteristic of Colonial Cemetery.

The archaeological field investigations, which extended over seven days in mid-October, were designed to examine construction methods, explore the entranceways, and collect information on the archaeological remains which are present in the cemetery around the tombs.

The interest in examining construction methods was generated by several factors. First, there is interest in **better understanding these tombs** — essentially developing a typology of the tomb types — and we hoped that architectural information might provide some additional clues on which to base this typology. As discussed in a following section, Ms. Sharyn Thompson has gathered information on similar tombs from a number of different cemeteries, including several others in Savannah, as well as from other parts

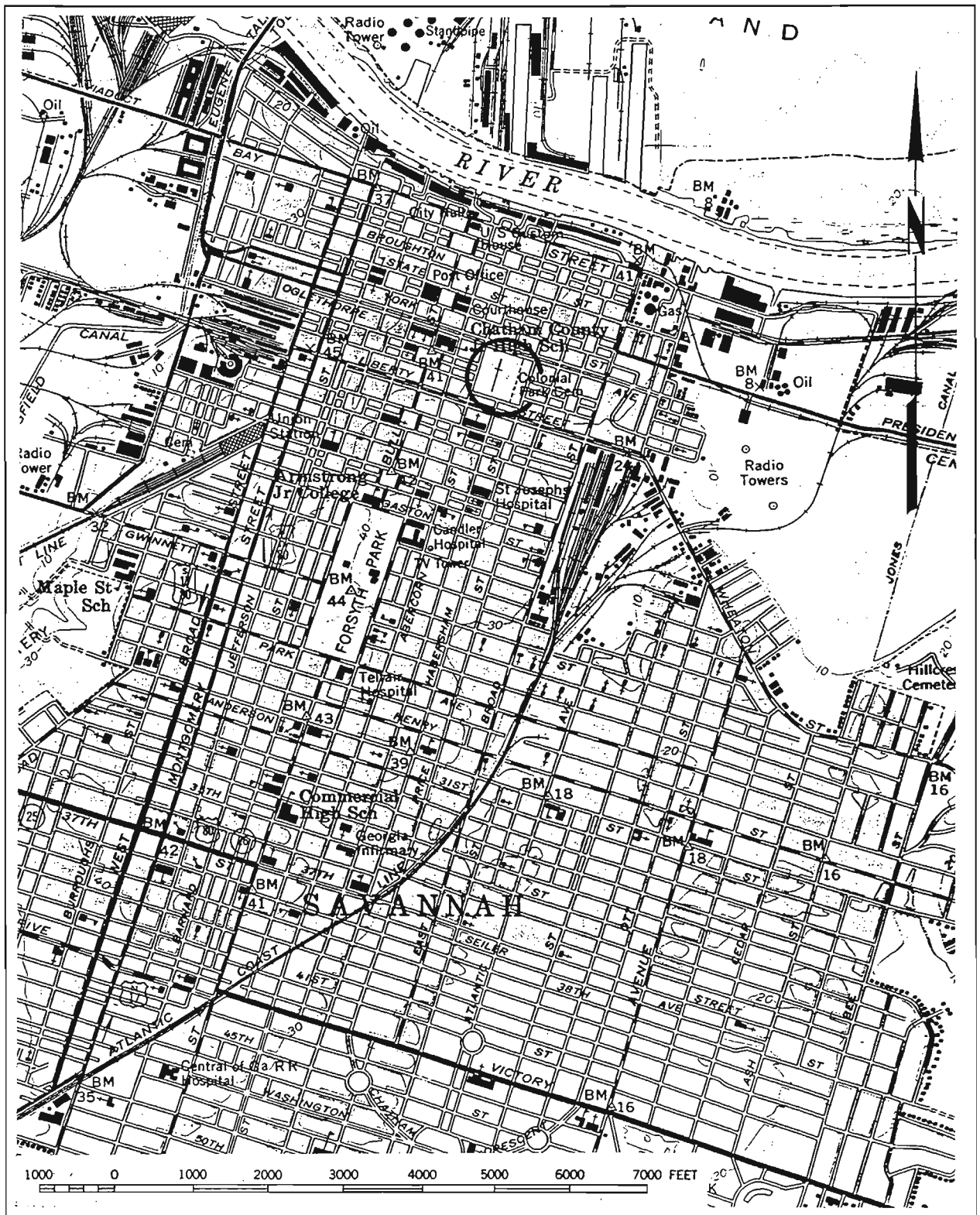

Figure 1. Topographic map of the project area (Savannah 7.5' USGS 1955PR71).

of the Southeast. Our efforts are very modest in comparison and include only the collection of information on the few extant tombs remaining in Colonial Cemetery — recognizing that these tombs have gone through a series of alterations. Nevertheless, we hope that the information we are able to provide will assist in the overall understanding of these tombs.

Second, by better understanding construction techniques, it was felt that it would be easier to **conduct appropriate renovation efforts**. In particular, it seemed likely that if construction techniques were understood, it would be easier to recognize the cause associated with several problems identified at tombs, such as settling cracks in the brickwork.

The interest in the tomb entranceways was originally reflected in work conducted by Frank Matero and his students from Columbia University in the early 1990s. During that work Matero attempted to integrate some archaeological investigations into his study, examining the entrance to tomb I-68. Very limited work (see Trinkley and Hacker 1999:1-2 for a summary) revealed stairs leading to the tomb entrance. His results, however, were only generally reported and it has been difficult to ascertain the exact construction methods, as well as how the entranceways were sealed. Moreover, one study cannot hope to reveal any variations which might exist in the construction of entranceways. Consequently, the current study was conceived to better document this feature of the tombs, as well as to explore variations which might be found between different tombs. We also sought to examine at least one tomb which clearly had an above grade arched entrance — which suggested a very different type of entranceway than those with at-grade stairs.

The final goal of the study — exploring the type of cultural materials which might be found in the cemetery is probably a more conventional archaeological effort. There is virtually no historic documentation of either tomb openings or closings. Nor is there much information on the daily activities which might have taken place in and around the cemetery and its tombs. There are some accounts, for example, of the cemetery being used for the discard of household trash — is there evidence of this in the archaeological record? What other sorts of activities might have taken place in an old city cemetery in the center of town? We hoped the archaeological study would provide some clues.

These clues, in turn, could be used to further public interpretation of the cemetery. We weren't honestly sure if the public had much interest in this topic when we began our work and wondered if it might be too macabre for general tastes. Curiously, this was not the case. We had a number of cemetery visitors ask what we had found and to better explain exactly how these tombs functioned. As a result, we hope that this work will result in the City initiating a series of interpretative panels that explain more about the daily use of the cemetery to visitors.

While there are more details concerning the various restoration efforts, even these tend to be vague and often uncertain. There are accounts, for example, of fill being used, but no information on amounts or where the fill was placed. There are also accounts of gravel being brought in — by the train car load — but again no information on why or where it might have been used. The archaeological study was envisioned as being able to begin addressing (either verifying or refuting) some of the information revealed in the historic research.

The Natural Setting

Physiographic Area

Colonial Park is situated in the northeast section of Savannah, bounded to the north and west by streets, to the east by buildings, and to the south by a small park for children. Measuring about 500 feet on a side, the site today encompasses an area of about two blocks square (Figure 1). While the elevation of Chatham County (of which Savannah is the county seat) ranges from sea level to about 70 feet above mean sea level (AMSL), the downtown area ranges from about 37 to 48 feet AMSL — and the cemetery itself ranges from about 40 to 45 feet AMSL, making it one of the higher areas of the City. As DeBrahm noted, "the Plane of the City is at the highest Place, 30 feet above the surface of the Stream [the Savannah River]" (DeVorsey 1971:152). Located in the lower Atlantic Coastal Plain, Savannah's ecology is not appreciably different from that of Charleston, further north in South Carolina.

Looking at a map of early Savannah it becomes clear that the town was laid out on a sandy ridge between two low marshes which historically were used for rice cultivation. These low, swampy areas would cause extensive problems, encouraging disease well into the nineteenth century.

Soils and Geology

Although Francis Moore observed a "variety of soils" in the vicinity of Savannah, including what he described as "sandy and dry," "clay," and "black rich garden mould well watered" in the early eighteenth century (Moore 1840:I:n.p.), it would be the dry sands which would characterize Savannah. DeBrahm, for example, recounted that the soil was "a single Stratum of Sand from 24 to 30 feet deep down to the general Springs (water Root) in the Quick Sand, on which Dew and Rains strains" (DeVorsey 1971:154). Haunton (1968:26-27) also comments on the sandy streets which were impassible in wet weather.

In general, the area around Savannah is predominately flat to nearly level, interspersed with numerous drainages. While some areas, such as the bluff on which the city is situated, are well drained, there are many areas which are naturally poorly drained (at least in part accounting for the city's frequent health problems). The soils are underlain by and developed from beds of unconsolidated sands, sandy clays, and clays of recent geologic origin. Most of the soils are light colored and contain small amounts of organic matter. All of the soils range from medium to strongly acid in reaction. The most common association are the Coxville-Portsmouth-Bladen associations. On better drained soils, such as those on the bluff overlooking the Savannah River, are Norfolk, Ruston, and Dunbar sands with light colored A horizons and yellow sandy B horizons at about 20 inches (U.S. Department of Agriculture 1939:1111).

Climate and Health

The climate of this section of the Atlantic Coastal Plain province may be classified as humid subtropical. Most of the air masses which reach Savannah are continental, having been chilled in winter and heated in summer, before ever reaching the City. Because of these continental air masses the seasons change abruptly. During intervening periods, however, the weather may be tempered by air from the Atlantic Ocean. The temperatures range from cold in winter (with frequent periods of striking warmth) to hot in summer (with the climate made more uncomfortable by the high humidities). The growing season is about 273 days.

The average annual precipitation is 45 inches, with a prominent summer peak and reduced amounts in the winter. This rainfall pattern, however, is subject to tremendous variation — often the wettest year has twice the rainfall as the driest and droughts have been known to cause serious water shortages. DeBrahm notes that 1760 (the year he built his house in Savannah, only a few blocks north of the Colonial Park) was "a Season remarkable for extraordinary Drought" (DeVorsey 1971:152).

DeBrahm, considering the healthfulness of Savannah, remarked that:

> The City of Savannah continued from its first Settlement, for near 30 years to be accounted a very healthy Place. The South Carolinians used to come here for recruiting their Health.

However, as soon as Hutchinson's Island and nearby swamps were converted to rice cultivation:

> the Vapours hanging upon them . . . rolled in . . . and all the Streets and Houses filled with them, to the Prejudice of its Inhabitants, whose Diseases are in every respect similar to those in the Neighboring Province of South Carolina (DeVorsey 1971:160).

Savannah suffered outbreaks of yellow fever in 1801, 1807, 1808, 1817, 1818, 1819, 1821, 1827, 1831, 1839, 1850, 1852, 1853, and 1854. The most severe, however, was the last epidemic in 1876, with perhaps 10,000 cases and nearly 1,100 deaths. The community began to understand the climatic events that

promoted yellow fever, even if they did not yet comprehend the role of the mosquito:

> In 1820, 1854, and I add 1876, when yellow fever raged here as a general epidemic, a very peculiar and almost identical condition of the atmosphere . . . existed; that is, each of these epidemics was preceded by a mild winter, an early spring, with a rainfall sufficient to fill the ponds, swamps, and low grounds surrounding the city, with stagnant water, and finally, with the intensely hot and oppressive month of July. From September 6th to October 6th the epidemic raged with terrific violence. At this latter date, the temperature lowered (mean 61°), a change occurred in the direction of the wind (N.E.), and new cases gradually decreased in number but the epidemic did not entirely disappear until the occurrence of a light frost on the 14th of November (Dr. J.C. De Hardy, quoted in Usinger 1944:149).

These frequent outbreaks, coupled with "ague," "remittent fever," or "billious fever," now known as malaria (Meade 1980), were enough to encourage Savannah to remove the wet culture of rice from the outskirts of the city (Gamble 1901:145).

Richard H. Haunton, in his discussion of Savannah a decade before the Civil War, remarked that:

> to the problems of a semi-tropical climate were added those common to an urban environment in an age of primitive sanitation facilities. Trash and litter were thrown into the City's streets and lanes, which, said the *Georgian* in 1857, were "in a condition fit to be classed among the dirtiest and most unwholesome thoroughfares in the South." "Offal and other putrying matter" lay exposed on the outskirts of town. The City's privies, inadequately ventilated and infrequently cleaned, presented the most serious problem to the health authorities (Haunton 1968:283).

Hardee (n.d.: 127) reports that "in almost all private houses of any importance there was a well" during the colonial and early antebellum periods. These water sources, often no deeper than 16 feet, were frequently contaminated with privy seepage or overflows. In 1854 Savannah's first waterworks began supplying filtered water from the Savannah River. In 1887 the City switched to artesian wells, significantly improving the quality of the potable water supply (Hardee n.d.: 47).

Wastes, as previously mentioned, were often simply thrown into the streets, although Savannah did have a Scavenger Department by at least 1820 (Anderson 1856:16a). It's also interesting to realize that the individual responsible for burials at Colonial Cemetery was, at one time, also responsible for the Scavenger Department (Sharyn Thompson, personal communication 1999). By at least 1839 city residents were required to stockpile wastes for removal between April and October (Wilson 1858). While these city sponsored garbage services continued into the late nineteenth century, they did little to stem the tide of privy waste. Perhaps the earliest city ordinance, dating from 1839, required at least one privy per residence, although it is likely that most wealthy households had multiple privies. Each privy was required to be built of brick or stone, sunk at least six feet below surface with at least one foot of the vault constructed above ground surface, and possess a flue or vent pipe extending one foot above the privy roof.

"Dry wells" were a nineteenth century alternative to privies, largely nurtured by the availability of city water. They were, as the name implies, wells that did not penetrate the water table and were designed to allow wastes to percolate into the soils. The dry wells, however, were seen as a worse health hazard than the privies, since they often overflowed. The city sewer system began in 1872 and by 1888 privies were allowed only when houses were more than 300 feet from a sewer

line. Apparently privies and perhaps even dry wells lasted into the early twentieth century (Haunton 1968:295-296; Lester 1889:201-202; Wilson 1858:12, 339).

Considering all of the problems of the city it seems odd that anyone would have noticed the cemetery, but in all urban areas the public cemeteries were the focus of periodic reform and the grounds were typically seen as festering caldrons of disease, contaminating both the ground and the air. Even as late as 1859 in Charleston, South Carolina, the *Report of the Committee of City Council of Charleston on Burial Grounds and City Interments* reported on the terrible consequences of the city's numerous burial grounds. In New Orleans there were efforts in 1784 and again 1788 to move burials outside the city (Christovich 1989:4). As early as 1807 a special committee on health reported to the City's Aldermen that "burial places near a city have an unhealthy tendency," (Gamble 1901:81).

Floristics

Francis Moore, traveling through Savannah in 1735 left one of the few early accounts of the region's natural vegetation, noting that in the Trustee's Garden just east of the City was a stand of:

> old wood, as it was before the arrival of the colony here. The trees in the grove are mostly bay, sassafras, evergreen oak, pellitory [prickly ash, also known as the toothache tree], hickory, American Ash, and the laurel tulip (Moore 1840:I;n.p.).

This natural vegetation, however, had been almost totally cleared away by Oglethorpe's original settlers. In its place were introduced a broad range of exotic plants, such as lemons and olives. Alice G.B. Lockwood observed that the settlers were still struggling, in 1742, "with the culture of such fruits as oranges and 'limmons,' loath to believe that they could not raise them here as well as they could in the same latitude on the other side of the world" (Lockwood 1934:II:272). In spite of the problems, DeBrahm noted thriving "two large Olive Trees, some Sevil Orange, Apple, Plumb, Peach, Mulberry, honey Locust, one Apricot, and one Amerel Cherry Tree" upwards of a decade after abandonment of the Trustee's Garden (DeVorsey 1971:155).

Visitors to Savannah during the early eighteenth century were greeted with unpaved streets, many of which were covered in grass (1819 account by Adam Hodgson, quoted in Lockwood 1934:II:275). By 1829 a visitor noted the presence of "groves of trees planted in the streets." In particular:

> in all the streets and squares of Savannah, most of which are very tastefully laid out, numerous rows of Pride-of-India trees [China-Berry] have been planted, which serve to shade the walks, and give a tropical air to the scene" (1827 account by Captain Basil Hall, quoted in Lockwood 1934:II:275).

Yet another visitor to Savannah, in 1833, remarked that, "its streets are planted so thick with Pride-of-China that the small dark houses are hardly seen," while an 1829 visitor, Charles Joseph Latrobe, remarked that:

> the broad rectangular streets are lined with luxuriant Melia [China-Berry] and Locust-trees, and there are frequent open squares with grass-plots" (quoted in Lockwood 1934:II:275).

While all of these accounts emphasize the regularity and beauty of Savannah, it is likely that as an urban environment the town possessed its "seedier" side. It is also certain that Savannah's biotic community was largely shaped by the intentional (i.e., garden planning and deforestation) and unintentional (i.e., fire) actions of its inhabitants. Both, however, created an unnatural, disturbed habitat open to plants typically called "weeds," many of which are stenothrophic and thrive on enriched (or polluted) conditions.

It's likely, then, that one of the most overgrown portions of town was Colonial Park. With constant use, constant disturbance, and constant enrichment, the 5 acres likely became weed infested with some regularity. Although the City, as early as

1810, was paying to have grass cleared away from the bases of the city's trees three times a year, there is no mention of any efforts to maintain, clear, or care for the burial grounds (see Gamble 1901:84). It's ironic that the southern edge of the cemetery, the area today used as a children's park, was during the first part of the nineteenth century a nursery for Pride-of-India trees (Gamble 1901:84).

Today the project area resembles a typical urban park with manicured grass, interspersed live oaks, alternating palmetto and crepe myrtle, and various ornamental plantings. No landscape theme is immediately detected and the park appears to be a refuge for eclectics. The historic research suggests that the cemetery has gone through so many renovation and restoration projects that there is little, if any, original vegetation (Sharyn Thompson, personal communication 1999).

A Brief History of the Cemetery

We do not intend this overview to be anything more than a quick, synoptic history. Our project did not include historical research and our overview is obtained entirely from secondary sources or from notes graciously provided by the historian, Sharyn Thompson, working for Stones Faces and Sacred Spaces. Our goal is simply to help place the cemetery in some reasonable framework and help the reader better understand its evolution.

Savannah's earliest public burial ground, designed by Oglethorpe along with places for worship and public meeting, was in Percival Ward, Holland Tything, Lots 2 and 3. It was in use for only 17 years, being closed in 1750 (Center for Preservation Research 1991:3). It is noted that as the land was converted to residential use memory of the cemetery lapsed until March 1950, when bones were found during construction at 9 West York Street. This was long before any interest in either Savannah's history or concern with the treatment of human skeletal material and there seems to have been little concern generated by the discovery.

A new graveyard was established in 1750 by the City to the southeast, just outside the city walls. DeBrahm's 1757 Plan of the City of Savannah and Fortifications shows the location of the palisade, including its three bastions and two gates. Although it appears to encroach on the northern edge of the graveyard, the drawing also identifies the western gate on the southern line as the "Burying Ground Gate," suggesting that the burials were placed entirely outside of the earthworks. It would be interesting to determine if any evidence of this early palisade still remains at the cemetery — although such an effort would require extensive excavation. In 1758 the City transferred the graveyard to Christ Episcopal Church, an action which would have serious ramifications on the care and maintenance of the cemetery in the nineteenth century.

This 1750 cemetery was largely filled by 1762 when a "Committee appointed to view the Condition of the Cemetery or Burying Ground" reported that additional space was desperately needed. As a result, an April 1763 Act by the Royal Legislature was passed stating:

> whereas the cemetery in the parish of Christ Church, belonging to said parish, is become too small for the occasion . . . the said cemetery be enlarged and extended to the line of Abercorn street to the westward, and one hundred feet to the southward, he whole to contain two hundred and ten feet square; and the church wardens and vestry men of the said parish are hereby empowered [line missing] to complete, enclose and finish the same . . . . And be it further enacted . . . that there be laid out and enclosed in a line with the said cemetery, adjoining the lines of the common, towards the five lots, a place of two hundred feet square, for the conveniency of a burial ground for negroes (*Colonial Records of Georgia* 18:568-569).

It was again enlarged in 1768, adding 170 feet to the east (*Colonial Records of Georgia* 19:74). This act, like the last, authorized the church vestry to enclose the cemetery, although it is uncertain whether each of the

different enlargements was actually fenced.

By the early 1780s it seems clear that the cemetery was still situated outside of Savannah's fortifications, and at least one map shows the cemetery fenced, with a gate on its east side (Georgia Historical Society, Waring Map Collection 2:2). The city's earthworks were maintained until the end of the American Revolution, at which time they were apparently leveled.

In 1789 the graveyard was enlarged one last time. The ordinance allowed it to be enlarged 120 feet to the east and 290 feet to the south, bringing the total size of what was still known as the Christ Church Burying Ground to 500 feet square (Gamble 1901:61).

The 1770 plan of Savannah shows the layout of Savannah at that time, with the cemetery encompassing an area measuring 211 feet north-south by 346 feet east-west. This rectangular shape, of course, fits the combined additions of 1763 and 1768, although the legislative acts indicate that the measurements should be 210 feet by 370 feet.

A somewhat different evolution is offered by the 1968 reconstruction by Shelby Myrick, Jr., County Ordinary (Waring Map Collection, Georgia Historical Collection, reproduced here as Figure 2). Without going into the details of the drawing, it seems that there is some confusion regarding how the cemetery grew through time.

As part of the recovery efforts after the Revolution, attention turned to restoring the city graveyard, and in 1783 a subscription account was opened at the Attorney General's Office to accept contributions to rebuild the wall which apparently had been damaged or destroyed by the British occupation. Matero's Center for Preservation Research study observes that:

> apparently not enough funds were collected, for in 1785, a list of grievances was published by the citizens, including the need for a fence to enclose the burial ground. Later that same year, after reports that dogs and wild animals were digging up corpses in the yard, a group of men formed the Charitable Society with the mission to raise funds to build an enclosure wall by putting on theatrical performances. Their first attempt on February 17, 1786 raised £34, which was later supplemented with an additional £600 by the City in 1790. Contained within the City's allotment were £80 collected from merchants by ladies of the City. There is also an indication that George Washington himself, while on a visit to Savannah in May of 1791, may have contributed to the fund for the construction of the brick wall (Center for Preservation Research 1991:4; see also the City Council Minute Books, 1790:24-25).

The construction of the wall, however, appears to have taken nearly five years, beginning in 1791 with the letting of a contract to James Meyer. Meyer died in 1793 and a new contract was let to Dennis Moriority, Thomas Swinton, and Daniel Bacon (Gamble 1901:61). It appears that this was later modified to include John Armour (1796 City Council Minute Books:340). Gamble reports that apparently about 300,000 bricks were used to build the wall, which was variously reported to be six feet high, with periodic pillars or columns, probably to buttress the wall (Gamble 1901:62).

If we assume a series of four walls, each 500 feet (154 m) on a side, and figure 6 feet above grade and 2 feet below for a footer, for a total height of 8 feet (2.5 m), a wall a single brick in width (perhaps set in Flemish bond for strength), would require approximately 194,000 bricks (allowing about 5% for wastage) (Lynch 1994:205). Of course, there would have been gates, but there were also apparently columns, not figured into this estimate. The difference between this estimate and the number of bricks suggested by Gamble may reflect a more substantial wall, perhaps two brick in width, rather than one.

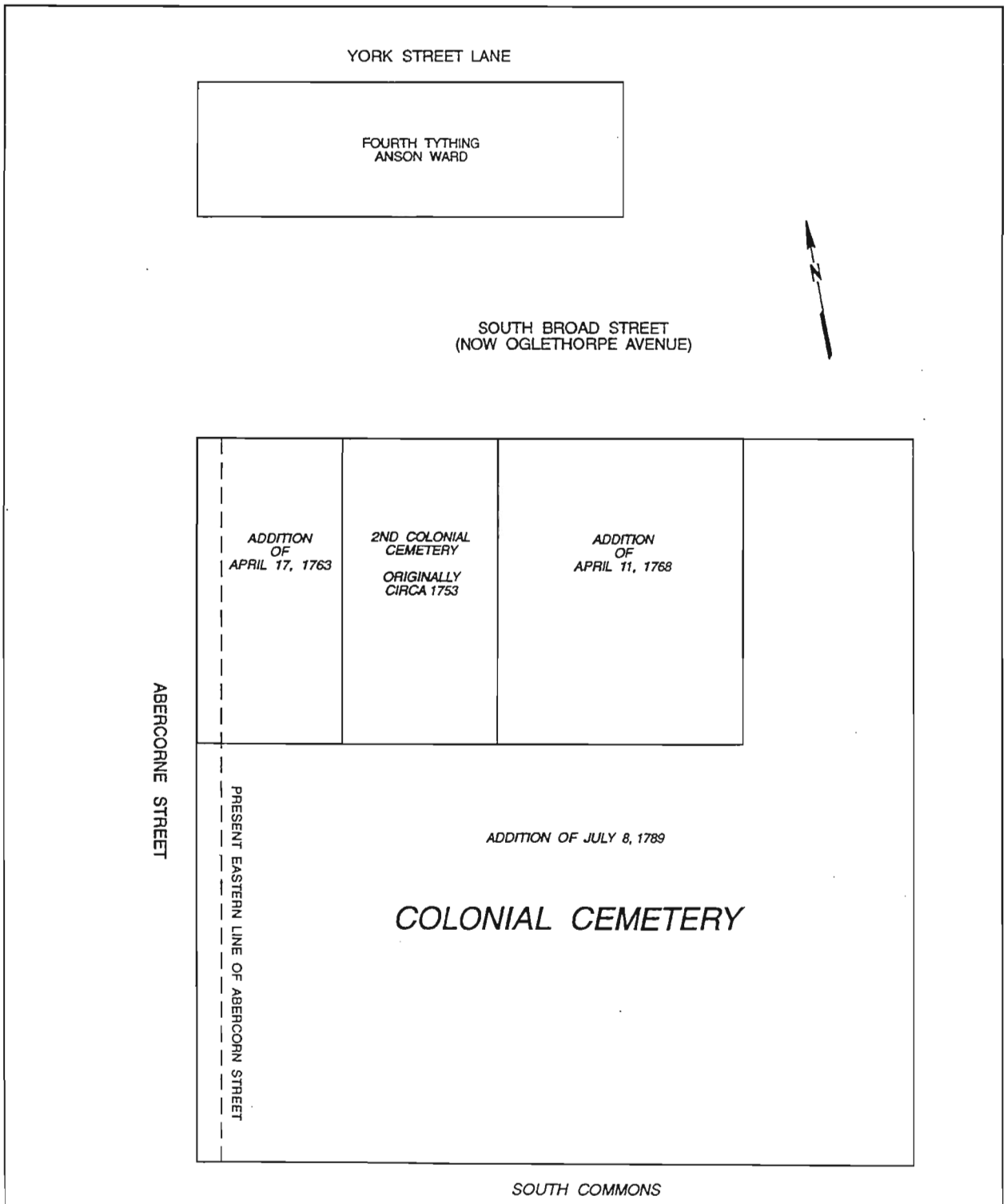

Figure 2. Posited evolution of Colonial Cemetery (adapted from a plan in the Waring Map Collection, Georgia Historical Society, prepared in 1968 by Shelby Myrick, Jr., County Ordinary).

Regardless, Matero and his colleagues note that this new wall had its gate on the north wall, "directly across from the intersection of South Broad and Lincoln Streets" (Center for Preservation Research 1991:4). They also note that there was a brick pathway through the graveyard (perhaps accounting for the extra bricks?) running from the main entrance at South Broad southerly to an exit at Perry Lane. They also report a second entrance gate at the north end of the west wall, in the vicinity of the main entrance today.

By 1803 the Broad Street Burying Ground had been in use for 53 years, but there never had been any record maintained of those buried there (which seems odd, given that it was maintained by Christ Church). Nevertheless, by the end of 1804 a burial register was begun and placed in charge of the City's Board of Health (Gamble 1901:81). If we take the years of 1794 and 1798-1799 as typical, and average the 78 and 113 citizens from the two samples to yield 95 burials a year (*Georgia Gazette* April 9, 1795 and *Georgia Gazette* February 6, 1800), then the cemetery would already have held over 5,000 individuals. Little wonder that by 1807 the City was already concerned over the health aspects of the cemetery and urged plantings along the edges to remove "the impurities of the surrounding atmosphere" (Gamble 1901:81).

By 1812 the city was already laid out completely around the burying grounds and Houstoun's *Map of the City of Savannah* reveals only one entrance, still centered on the north wall, facing Lincoln Street. The cemetery is shown as a full 500 feet square, with no development or lots on any side. This is odd, since Gamble comments that by 1810, "the tree committee was ordered to establish a nursery for Pride of India trees in the margin of the burial ground so that old and dying trees could be readily replaced" (Gamble 1901:84) and, in fact, such a nursery does appear on maps in the 1880s. Perhaps this earlier nursery is never shown because it was located at the grave yard for only a short while, being moved in 1817 (Gamble 1901:123).

More interesting are efforts to establish a strangers' burial ground, beginning as early as 1812, when a committee was established to explore the expansion of the existing Broad Street Burying Grounds (Gamble 1901:123). Gamble observes that nothing must have been done, since another committee was appointed in 1819. In that year an ordinance was passed establishing the strangers' burial ground 565 yards south of the "present burying ground" (*The Columbian Museum*, September 21, 1819). Thompson notes that it was likely between Abercorn and Lincoln, and Wayne and Gaston streets (Sharyn Thompson, personal communication 1998). In spite of this, the 1813 *Plan of the City of Savannah in Chatham County* (Figure 3), shows that a "Stranger's Burial [Ground]" may have been established adjacent to, and immediately east of, the Broad Street "Church Cemetery." It would have fronted Habersham Street and measured about 100 feet east-west by 500 feet north-south.

The 1840 *Map of the City of Savannah* by Stephens shows the site as "Old Cemetery". It is still 500 feet square, but the Strangers' Burial Grounds are not shown to the east and Habersham Street, like Floyd (now Abercorn) to the west, is shown as widening adjacent to the cemetery. This view is essentially unchanged on Vincent's 1853 *Subdivision Map of the*

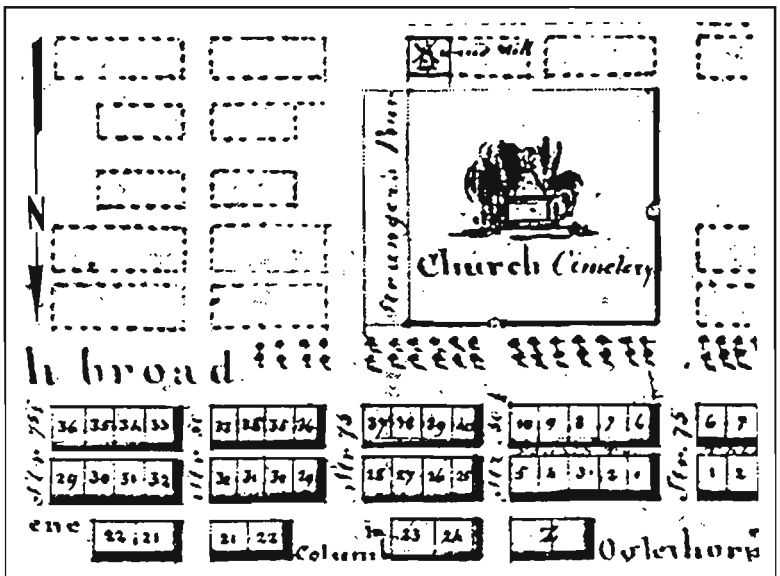

Figure 3. Colonial Cemetery in 1813.

City of Savannah (Figure 4), except that a row of shallow lots has been added to the southern edge of the cemetery, extending into what had been a relatively wide east-west street. By this time there were three separate clusters of buildings, one of which backed up to the cemetery.

About this time there was increasing concern over the cemetery. In 1846 trees were ordered planted and there continued to be suggestions that the cemetery should be moved outside of the city's limits. Gamble notes that, "on April 11, 1850, citizens petitioned

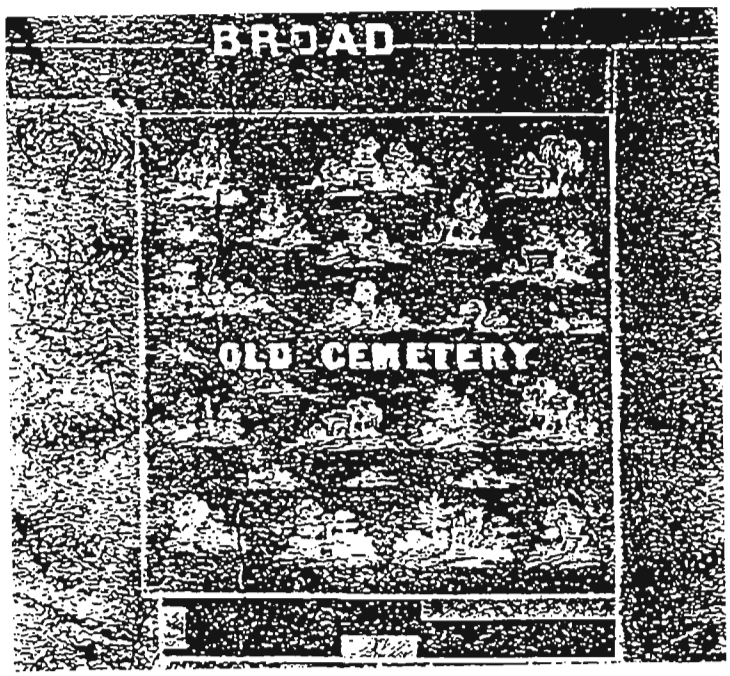

Figure 4. Colonial Cemetery in 1853, with developments in the alley to the south.

Council to establish a new cemetery, it being impossible to dig a grave without disturbing the remains of those already interred" (Gamble 1901:199). This provided the impetus for the purchase of Springfield Plantation in 1850 and the establishment of Laurel Grove Cemetery the following year (Gamble 1901:205-206).

By October 1852, 280 lots in the new Laurel Grove cemetery had been sold and it was decided to close the old cemetery (along with the potter's field and the negro cemetery) to additional burials in 1853. Gamble tells us that:

> Early in 1855 all bodies in potter's field and the negro cemetery were ordered exhumed and removed to Laurel Grove. Many bodies were also removed from the old South Broad street burying ground (Gamble 1901:207).

The exact number moved, the circumstances of the moves, the thoroughness of the removals, and how the resulting holes were dealt with by the city are not discussed in the historic records and, of course, are at least partially questions additional archaeological research at the cemetery intends to address.

During the Civil War there are a variety of local legends concerning the damage inflicted at the cemetery by Union troops, who supposedly even quartered their horses in the graveyard. Yet it seems that there is little or no evidence to support any of these accounts. A fairly detailed analysis of Union military records and regimental histories has failed to reveal that the cemetery was used. In fact, the only documentation found concerning Colonial Cemetery was the observation by one Union officer that the cemetery was in poor condition (Sharyn Thompson, personal communication 1999). After the Civil War, during one of the periodic clean-up efforts, there is an account of tree limbs and other debris being thrown into open vaults (or tombs) as part of the "cleaning" efforts (Sharyn Thompson, personal communication 1999). The historic records are quiet concerning which vaults — or even how many — may have been so damaged that they were open and available for trash disposal.

The removal of bodies to Laurel Grove, begun before the Civil War, appears to have caused some considerable concern at Christ Church. Gamble

suggests that it was the fear that the old cemetery might be, in the end, used for some other purpose, that pushed the Episcopal Church to put on record their claim to a portion of the cemetery measuring 380 by 210 feet — apparently representing the original cemetery and first two additions (Gamble 1901:207). Christ Church petitioned the City to vest them the title to the property and allow the construction of church on the cemetery. The Catholics quickly picked up on this and insisted that they, too, had a right to a portion of the tract since their members were also buried there. Not surprisingly, they also wished to build a church on the cemetery. The city rejected both petitions and, in 1872, the care of the cemetery was placed under the committee on squares (Gamble 1901:213).

A series of maps for the period from about 1868 through 1888 reveal that changes were modest. In 1860 the City had established police barracks on lots to the east of the cemetery, essentially taking the area shown on the one 1813 map (Figure 3) to be a burial ground for strangers (Gamble 1901:241-242). At the south end of the cemetery was the City Pond (probably "pound"). The cemetery itself, however, still measured about 500 feet square. By the time the 1871 *Birds Eye View of the City of Savannah* was published, there were three buildings adjacent to the cemetery along Habersham and four on the lots to the south. In 1888 the *Map of the City of Savannah and Vicinity* reveals the presence of the "Police Barracks" and "County Jail" to the east and the "Street and Lanes Lot" and "City Pound" to the south (Figure 5).

During this period it seems certain that the "old cemetery," as it was most often called, continued to deteriorate. Gamble refers to it as an "eyesore," "overgrown with weeds," with graves "fallen down" and "broken into" (Gamble 1901:387). He notes that, "those laying claim to the ground were evidently averse to expending any money in its care and the City, denied the right of ownership, likewise refrained from the expenditure of any money" Gamble 1901:388). In 1881 the City resolved to preserve the cemetery "for the purposes for which it was originally designed" and it was decided that the wall fronting Abercorn and South Broad streets would be removed. This action appears to have stalled and five years later, in 1886, the City Council again determined that removing the walls and

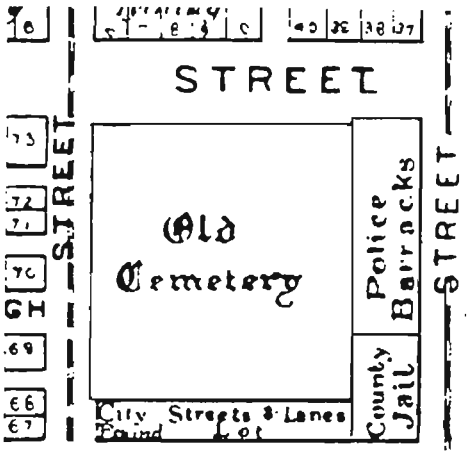

Figure 5. "Old Cemetery" in 1888.

cleaning up the cemetery was a priority. This time, however, Christ Church objected to the proposed undertaking and an equity suit regarding the ownership of the cemetery (filed years earlier, but placed in suspense) finally went to court (Gamble 1901:388).

While court action was underway, it appears that there was some interest on the part of the County to use the old cemetery as the location for a new courthouse. This suggests that all of the parties in the suit — and even some outside — were far more interested in the "adaptive reuse" of the burying grounds then they were in preserving this sacred ground where, as Gamble observed, "the dust of the colonists and their descendants lay" (Gamble 1901:388).

The Superior Court handed down a verdict in favor of the City, but the case was immediately appealed to Georgia's Supreme Court, where the lower court's decision was reversed in 1889. This encouraged the City, once again, to do nothing to improve the condition of the old cemetery, with the Mayor complaining that:

> the remains in the vaults therein are in many cases exposed to view and the dilapidated condition of the vaults and surroundings are such as

> to impress one unfavorably in the extreme. It would be best to collect those remaining into one receptacle and place them in a portion of the cemetery where they would be undisturbed or remove them to another place of burial where they might rest free from interference of persons who often find their way into the cemetery without permission and desecrate it. In its present condition the cemetery is an eye-sore and will continue so as long as the question of title or the right of the City to improve it prevails. It would be much better if the old cemetery could be abandoned entirely as a relic, the wall removed and the streets opened through it (quoted in Gamble 1901:389-390).

It may have been these sentiments that spurred the first effort to record the cemetery. Matero and his colleagues report that in 1887 the Georgia Historical Society began copying epitaphs and making a map of the cemetery. Although over 700 epitaphs were reportedly gathered, today all that can be identified are about 100 and the others are assumed to be lost (Center for Preservation Research 1991:7). Also generated by this work was the Weymouth Plat — a sketch map of the cemetery which includes some of the more historically important markers and tombs (Sharyn Thompson, personal communication 1999).

Although the equity suit was settled, there were yet matters of law before the court and the City Council pushed forward with those suits. In 1895 the Superior Court determined that title to the property was vested in the City. The judge's decision was based at least partially on the City's agreement that the cemetery would be forever preserved (Gamble 1901:390-391). Moreover, the City agreed to pay Christ Church $7,500. Upon payment of this amount the City had the authority to remove walls and make repairs on the property, creating "Colonial Park" on the site.

The settlement also stipulated that although the City would have title in the property, it did not:

> have the right to lay off, run or project streets through the same, nor shall it have the right to convey or sell said tract, or any lot or portion of the same, to any person or persons whatsoever (Gamble 1901:391).

The settlement also stipulated that Abercorn Street could never be widened and that the City would be responsible for the care of the graves, tombstones, monuments, and vaults in the cemetery.

The new park was placed under the control of the Park and Tree Commission in 1895, which quickly took action the following year to remove the walls, lay out walkways, plant trees and shrubbery, and restore (or in some cases remove) the tombs. The firm of P.J. Berckmans of Augusta was employed to lay out and landscape the cemetery. It seems that the City did everything possible to disguise the cemetery. Some tombs were repaired, some were removed, and vines were thickly planted over others, converting them into masses of foliage.

It was also during this period that broken stones began to be gathered up and set in the eastern wall of the cemetery, a practice which continued well into the twentieth century (Center for Preservation Research 1991:10).

The Park and Tree Department also created the first detailed map of the cemetery, dated February 1896 (Figure 6). This map shows the cemetery as it was after years of neglect. The walls are shown on four sides, with an entrance opposite Lincoln Street on the north side, a small entrance on the west side, and a much larger opening on the south side. A series of pathways are shown in the northern third of the cemetery. Given the date of the map these must have been the paths being used at the time (not planned additions), although the way they terminate suggests that the surveyors simply chose not to place all of them on the map. Perhaps some paths were no longer recognizable, or were too overgrown to map.

The plan also included topographic lines, revealing that the cemetery had high points in the northwest and southeast corners, sloping to a low spot

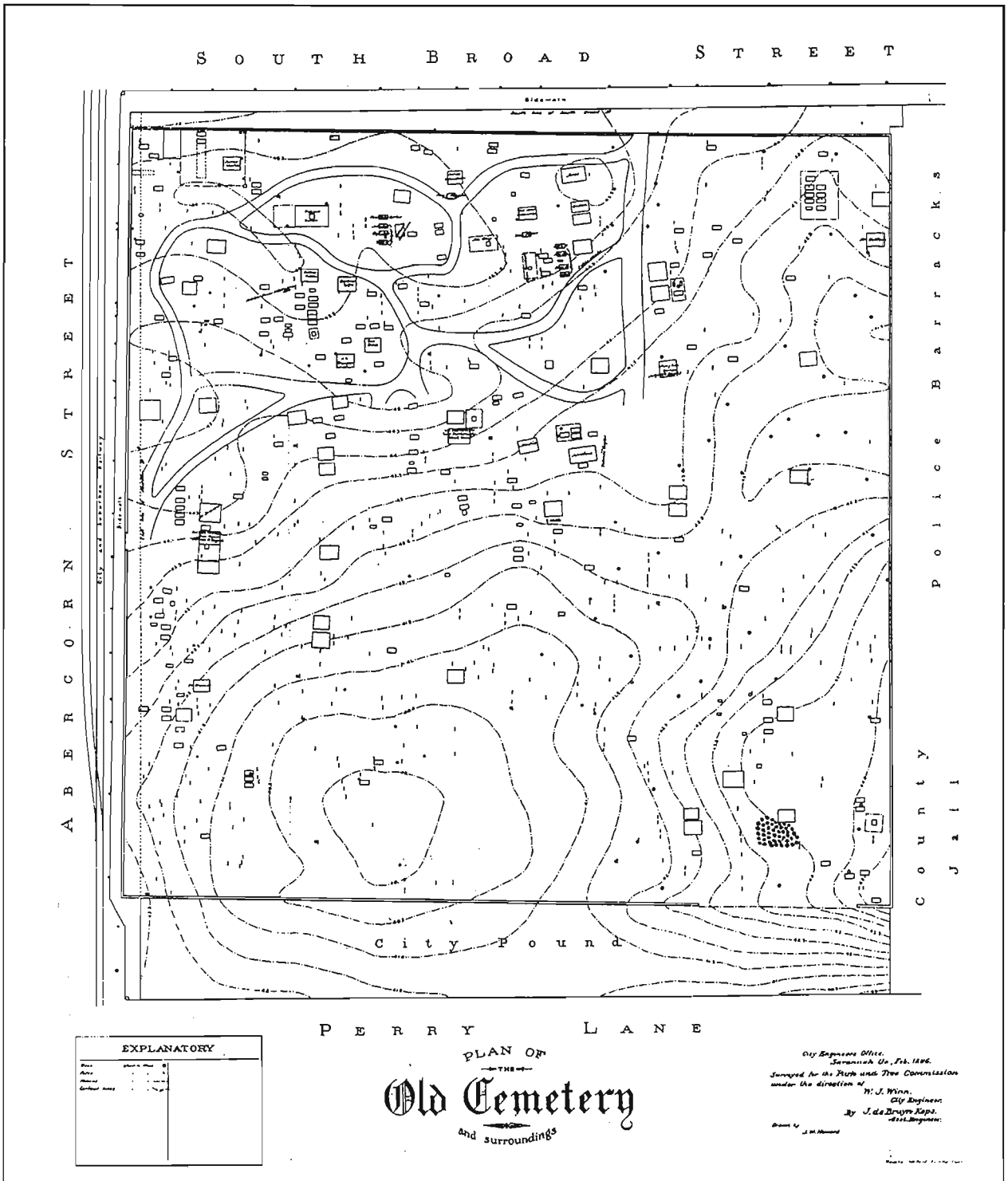

Figure 6. "Plan of the Old Cemetery and Surroundings," produced by the City in 1896.

in the southwest quarter of the tract. Trees are shown scattered across the cemetery, with lines along both Abercorn and South Broad. Abercorn is also shown as narrowing at the cemetery, although the typical right-of-way is shown cutting through the cemetery as a dashed line. The orientation of the cemetery, based on the brick wall, is slightly skewed from the alignment of the city plan, most obvious along South Broad Street. There is a pie-shaped wedge of ground outside the wall, adjacent to South Broad Street. Although no graves are shown in this area, our previous research (Trinkley and Hacker 1999) suggests that graves are present, probably dating from the period prior to the erection of the brick wall, when the cemetery was only roughly defined.

Individual grave markers, what are probably box tombs, and what are referred to as "family vaults," as well as fenced plots are all shown on the plan, although only a few are given names. Although the graves form rough north-south lines there is considerable variation in the east-west axes. These variations provide some indication of the very long, and frequently unplanned, use of the burying grounds. This plan, produced by the City as part of their restoration efforts, would became the base map for virtually all future work at the cemetery.

The City's efforts extended beyond simply planting vines over the tombs. One of the first acts, it seems, was to burn the weeds and grass off the property. Although no visible evidence of this "controlled burn" remains today, it seems likely that it would have caused at least some damage to the stones and brickwork. Afterwards, the City apparently plowed the cemetery, turning under the burn and allowing the grounds to be planted in grass (Sharyn Thompson, personal communication 1999; Park and Tree Commission Minutes, vol. 1, pp. 13-14, January 20, 1896). At this time it is almost certain that the plowing was done by mule, so the depth of the plowing was likely not greater than about 0.5 foot.

There is also an account of the City purchasing several train car loads of gravel for use as "fill" in the cemetery (Sharyn Thompson, personal communication 1999; Park and Tree Commission Minutes, vol. 1, pp. 38-39, March 30, 1896). This is one of the more problematical accounts, since the penetrometer survey identified only a very few areas of gravel (typically along the edges of the extant pathways and in the north central portion of the cemetery at the location of the old pathways). It also seems odd that efforts to establish a landscaped park would use "gravel" for fill. Gravel might have been appropriate for walkways, but it seems unlikely that it would have been used to support plantings.

In 1913 the Daughters of the American Revolution (DAR) began a second phase of "improvements" to the cemetery, erecting the current granite memorial archway at the northwest corner of the cemetery (Center for Preservation Research 1991:9). This created the main entrance to the park, still in use today. Other than this entrance and some brickwork, little seems to remain of their efforts.

In 1922 the City attempted to cut a road through the cemetery, continuing Lincoln Street from South Broad (by this time known as Oglethorpe) to Perry Lane. The public outcry was apparently significant and Matero and his colleagues quote one citizen who complained:

> the very thought of vehicles running carefree over the bodies of Savannah's former citizens and builders is abhorrent . . . . Most certainly nothing is to be gained by the idea that tourists might remain in their automobiles and carriages and view the cemetery (Center for Preservation Research 1991:9).

The city chose to drop the plans for the street, although curiously, it appears from a variety of maps that a central pathway (dating to perhaps the nineteenth century) continued to be recognized and used.

The next phase of "restoration" was conducted by the Colonial Dames in 1924. Matero observes that the work included the recordation of the epitaphs, published as *Some Early Epitaphs in Georgia*. Another map was generated as a result of this work. Although untitled, it includes a brief listing of the more "significant" (i.e., wealthy and powerful) individuals in the cemetery and the notation, "Harry A. Chandler,

Delin." is likely a reference to the compiler of the plan. Comparison of this map (see Trinkley and Hacker 1999:Figure 21) to Figure 6 reveals that the Colonial Dames borrowed heavily from the original plan by the City. By this time, however, the park walkways had been installed and are shown as heavy, dark lines. While most of the pathways were rambling, there is a nearly straight cut from South Broad to Perry Lane — likely a remnant of a relatively early access road through the graveyard.

It was also in 1924 that Samuel Elbert and his wife, who had been buried on their plantation, Rae's Hall, were removed and placed in Colonial Park. Matero explains that the move was made because the remains 'were threatened by development," although it seems likely that this move was at least partially inspired by a desire to promote the restoration efforts. Elbert's new grave was marked by a large granite box tomb, which Matero observes, "bears witness to his historical importance to the state of Georgia" (Center for Preservation Research 1991:11).

The fourth "restoration" phase was conducted under the Federal Emergency Relief Act (FERA) in 1935. The Savannah Historical Research Association surveyed and indexed the burials and markers. The resulting list was published in serial form in the *Saturday Evening Press* in that year and a third map was produced (Trinkley and Hacker 1999:Figure 22).

Pathways have changed somewhat, with perhaps the most obvious difference being the "softening" of the major north-south artery through the cemetery shown on the Colonial Dames plan. The sidewalk along Oglethorpe now abuts the cemetery, with the open space previously noted now incorporated into the street scape. Likewise the street edge along Abercorn is now unified, with the resulting loss of perhaps 20 feet along the west edge of the cemetery.

For reasons that have not been explored, it appears that in the late 1930s and early 1940s the use of the park as a promenade declined and vandalism increased. Matero and his colleagues note that by 1945 the Park and Tree Department had removed 39 desecrated stones and 34 loose legs of table tombs, placing them in storage for safe keeping. It may be that the stone remains thought to be associated with Button Gwinnett (see the discussion below) were among those finding their way into storage. The City, discovering that they were facing the same problems observed by Gamble for the end of the nineteenth century, began exploring the idea of erecting another fence around the cemetery. This came to fruition in 1956 when a wrought iron railing around the north and west sides of the cemetery and a chain link fence between the cemetery and the children's park (Center for Preservation Research 1991:10).

Matero notes that a "special burial" in Colonial Park was allowed for Private Joseph Brown, who died in 1945. Yet he also observes, "very little specific information was uncovered pertaining to this burial, and it is possible that this stone is another moved or misplaced marker" (Center for Preservation Research 1991:12). This would seem to discount the earlier conclusion that Joseph Brown was a "special burial." This stone, a small modern granite lawn style marker, is found in the southeast quadrant of the cemetery, near the east wall. Our study found a burial in this spot, although it is not possible to determine if the burial is associated with this particular stone.

By 1966 Colonial Park had again fallen into disrepair and the City began looking for someone to care for the park. The Trustee's Garden Club agreed to begin work on the project in 1968 and their work continued over three years. Matero indicates that they were responsible for the installation of a sprinkler system and new lamps, created new paths, added benches, and installed two new gates. Damaged sections of the fence were repaired and ironwork within the cemetery was extensively reworked. It was also during this period that many stones were reset, often in brickwork. Many of the tombs were apparently repointed during this episode (Sharyn Thompson, personal communication 1999). It is also during these renovation efforts that we have the only good evidence that "fill dirt" was brought into the cemetery.

Nine stones were apparently reset in concrete, with the assistance of Leggett Marble and Granite Company. Matero also reports that all of the stones being stored by the Park and Tree Department were returned to the park, although it seems unlikely that all

34 table tomb legs found their way back to the cemetery. Some of the tombs were rebuilt, although there is no real discussion of how this was accomplished or which tombs were involved — there seems to be no real record of the activities undertaken during this period. Matero also reports that, "most probably at this time additional stones, possibly removed earlier from Laurel Grove Cemetery, were installed on the east wall," although no documentation is provided to support this speculation (Center for Preservation Research 1991:10). Unlike earlier efforts, the Trustee's Garden Club did not create a map documenting their efforts.

During the Trustee's work, in May 1967, excavation associated with the laying of a utility cable in Abercorn Street adjacent to the cemetery discovered at least three burials about 3½ feet below the street level. Skulls were found on the west side of the trench, with leg bones on the east, reflecting a traditional Christian interment practice of ensuring that the deceased faced the east. In addition, the three recognized during the work were apparently evenly spaced, with the construction foreman reporting, "that fragments of many other skeletons probably could be found in the trench if further probing were done" (*Savannah Evening Press*, May 2, 1967). The bones were in good condition and apparently coffin wood was also recovered. The newspaper reported that the remains would be reinterred in Colonial Park and Matero reports that they were located near the east wall, in the southeast corner, marked today by a plain concrete post (Center for Preservation Research 1991:12).

In 1990 "restoration" efforts were again attempted, with Columbia University's Center for Preservation Research contracted to map the cemetery, conduct some "archaeological" excavations, and prepare condition reports for the stones. This work has been previously discussed, but it is important to note that a map of the cemetery was prepared (Trinkley and Hacker 1999:Figure 23). This plan reveals that the pathways were altered, albeit in relatively minor ways.

Previous Archaeological Studies

Most of the archaeological research conducted at cemeteries has been associated with burial removals — often necessitated by cemetery relocation efforts. Bell (1994), for example, lists 892 archaeological reports associated with cemeteries. Many of these are either not in the Southeast, involve Native American graves, deal with cemeteries in rural rather than urban areas, or have very limited distribution.

Investigations of Georgia cemeteries has primarily included work in the Atlanta area. Garrow and his colleagues (Garrow et al. 1985) explored the Nancy Creek Primitive Baptist Church Cemetery in Chamblee, Georgia, just northeast of Atlanta. There they examined a cemetery in preparation for its removal because of impending MARTA construction. Dating from the late nineteenth and early twentieth centuries, the artifacts from this work were primarily associated with individual graves and all of the interments were in coffins below grade. Dickens and his colleagues also examined a portion of Atlanta's historic Oakland Cemetery (Dickens and Blakely 1979). The cemetery sought to expand into an area for which little historic documentation was available. What was present, however, suggested that it was a potter's field — a conclusion borne out by the identification of very closely spaced grave shafts.

Research in Savannah is perhaps best characterized by the efforts to identify — and recover — the burial of General Nathanel Greene from Colonial Cemetery (Rhode Island General Assembly 1903). During these efforts several family tombs were entered and eventually remains thought to be Greene's were found and removed. While a great deal of effort was spent in the effort to identify Greene, given the conditions of the remains and the sophistication available at the time, it is difficult to determine if Greene was, in fact, found. Although the accounts provide considerable information on the efforts, they are quiet on issues of tomb construction and entryways.

Later the process was repeated in an effort to locate the remains of Button Gwinnett, Georgia's signer of the Declaration of Independence. Spearheaded by a Savannah legislator, Arthur Funk, Dr. Lewis Larson was sent in 1953 by the Georgia Historical Commission (later merged into the Georgia Department of Natural Resources) to excavate at the spot Funk felt Gwinnett would be found. The location, as best as can be reconstructed now, was identified on the basis of a

fragmentary stone found "lying in the city public works property yard" and matching the stone to the "still-embedded stump of a headstone in the cemetery" (Dr. Lewis Larson, personal communication 1999).

The spoil was removed by city workers and Larson then completed the excavation of the skeletal material. In the limited space thought to be Gwinnett's grave, about nine individuals were actually encountered, "more or less stacked on top of one another." Funk identified the lowest-most individual as Gwinnett, based on the erosion of the proximal end of a tibia, since Gwinnett's death was the result of a duel in which he received a pistol ball in the knee.

Larson notes that a brief report was prepared, but that he was unwilling to endorse the identification. In fact it seems that at least some of the skeletal material may have been sent to T. Dale Stewart at the U.S. National Museum (now the Smithsonian) and Dr. Stewart identified the remains as female and "saw the bone destruction as something other than a pistol ball" (Dr. Lewis Larson, personal communication 1999). It seems that Funk was unwilling to accept this professional opinion and was successful in getting the City to accept his claim — leading to the eventual construction of the Gwinnett monument at Colonial Park.

We have thus far been unable to identify Larson's report. It may still exist, perhaps being misfiled, or it may have been lost with the various changes that have taken place within the agency. The Smithsonian was contacted in the hopes that some record might still exist of the skeletal material. They indicate that the materials were not curated into their permanent collections and that Stewart likely examined the items, returning them after he wrote his letter.

Perhaps the most important conclusion from Larson's work is that the northern area of the cemetery — that portion predating 1789 — seems to be densely filled, perhaps even with multiple individuals in the same grave shaft or overlapping grave shafts. Larson also commented that at least the one individual had been wrapped in a shroud which was pinned in place. The body was then placed in a wood coffin, although the only remains were some wood stains and corroded nails. The human skeletal material, however, seems to have been in reasonably good condition.

In essence, there is very little comparative information available for the research conducted at Colonial Cemetery. The information generated by this study offers some unique perspectives on the activities not only at Colonial Cemetery, but perhaps at urban Southern city cemeteries in general.

Curation

The field notes, photographic materials, and artifacts resulting from Chicora Foundation's investigations have been curated with the University of Georgia, Athens, Georgia under archaeological site number 9CH906. The specimens have been cleaned, although no conservation treatments were undertaken on any of the materials.

All original records and copies have been provided to the facility on pH neutral, alkaline buffered paper. Black and white photographic materials have been processed to archival permanence. Color slides, consisting of Fujichrome materials, are not considered archivally stable, nevertheless, they do possess generally fair dark storage stability. There are also two rolls of color print film, taken of tomb interiors. These are also not considered archivally stable and have the shortest lifespan of the photographic materials. Where appropriate copies of these photographs are incorporated into this report to ensure that the information they contain is preserved.

EXCAVATIONS

Strategy and Methods

Given the goals of this project, we needed to ensure that we would be able to acquire architecturally related information, while still ensuring control over the recovery of material culture remains. In this regard our concerns were two-fold.

First, it seemed likely that the excavations would be deep — so it was critical that the work be conducted in a manner compliant with OSHA's guidance on trenching safety. We intended to lay units out to ensure that at least one wall was against the brick tomb in order to provide stability. In addition, we anticipated stepping the units in, to provide additional stability. We also realized that we would need to ensure that screens and other equipment were maintained at least four feet from the side walls of the unit.

We were fortunate that as the units were opened, we were often able to use the stair support wall, in conjunction with the tomb wall, to provide two support walls. Where this wasn't possible, units were stepped in. Although this is not a perfect solution — at least from an archaeological perspective — it was a safe option and it still allowed us to achieve our goals at the different units.

Second, we needed to ensure that we would be able to recover materials helping us to round-out our knowledge concerning the cemetery in a cost-effective manner. We anticipated screening all soil from each level, unless initial efforts revealed few or no artifacts. Then we would simply sample the strata. This would allow us to collect cultural remains where present, but quickly excavate through deep strata with few or no remains.

We were again fortunate that once below Level 1 or 2 (discussed below), artifact density dropped dramatically. This allowed us to move a very large quantity of soil — 530 cubic feet — in a very short period of time — the excavations incorporated only 163.5 person hours (inclusive of backfilling and other tasks).

Another concern was public safety. Recognizing that we would have deep units open, each excavation area was enclosed by a safety fence and appropriate signage. Moreover, we scheduled the work to ensure that no unit was left open more than one evening. As work was completed at one unit, it was backfilled prior to another being opened.

In spite of the need to make some changes in normal strategy, most of the work followed very standard procedures. Horizontal control was maintained in relationship to the individual tombs — we did not attempt to create a grid system for the cemetery. Our approach, using architectural features to locate units, is cost-effective and ties the individual units to the structures they were intended to investigate. For the sake of convenience and consistency, we identified the cemetery as being oriented precisely magnetic north-south (with north toward Oglethorpe Avenue). In practice, magnetic north is about 10° west of our grid north.

Vertical control was maintained by using an arbitrary datum, situated on the shell concrete walkway in the center of the southern gate to Colonial Cemetery. The assumed elevation (AE) of this datum is 40 feet AMSL. While not tied into any elevation control point, this datum, based on historic maps, is likely within one or two feet of the actual or "real" elevation of the site. Regardless, since all measurements are tied into this one point, all of the elevations are comparable.

Excavations were conducted by hand, using mechanical sifters fitted with ¼-inch inserts for standardized recovery of artifacts. Units were excavated by natural soil zones with all materials except brick and mortar retained by provenience. Brick and mortar were weighed and discarded on-site. Where the natural soil

zones appeared thick or confusing (such as when units consisted largely — or entirely — of grave shaft fill), we chose to take out relatively thick zones, often a foot in depth. Our goal was to quickly as possible move through these deep zones in the effort to identify the base of the individual tombs. A one-quart soil sample was retained from each zone.

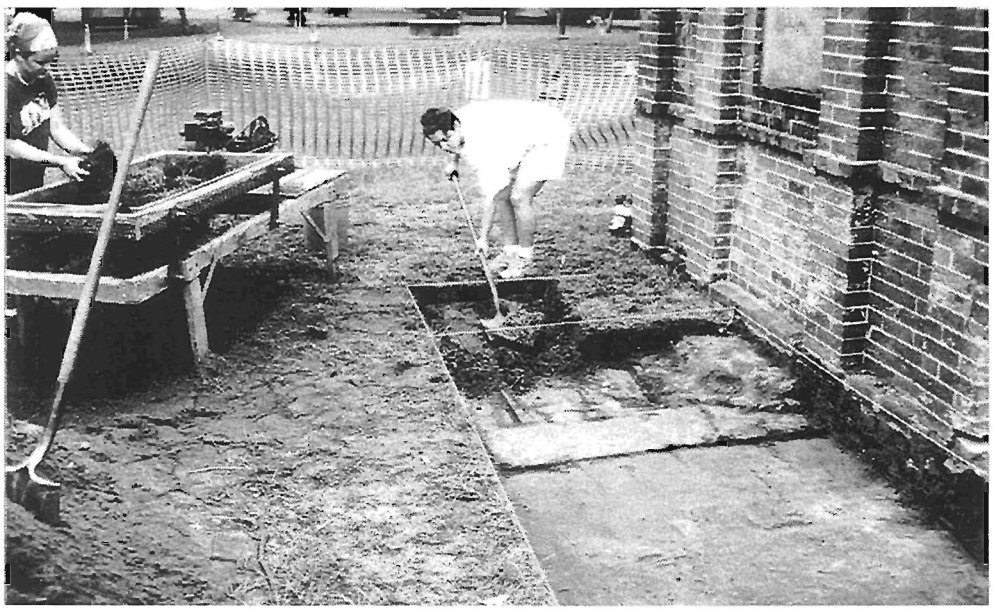

Figure 7. Excavation in Units 2 and 3, Tomb I-86, view to the north-northeast.

Units were troweled and photographed using black and white negative and color transparency film at the base of the excavations. Often cleaning and photography also took place at the base of levels which exposed significant features or provided important clues to the construction of individual tombs. Each unit was drawn at a scale of 1 inch to 2 feet, again often at the base of several different levels.

Features were designated by consecutive numbers, but were not excavated during the course of this work, with one exception (discussed below).

At the conclusion of the excavations, prior to backfilling, open weave red safety fence was cut and placed at the base of the excavations. Because of the extensive mottling of the site's soils, we felt that this would help any future archaeologists identify the location of our excavations. It was used rather than black plastic since it is thicker and allows water to pass more easily.

Even our selection of tombs to investigate was impacted by the unusual nature of the site. Stone Faces and Sacred Spaces requested that we select tombs which were not associated with anyone of particular significance (since these have attracted considerable attention historically and may have been altered); that we not examine tombs which are known to have been previously entered (such as I-68, investigated by Matero or the series of tombs opened in the effort to recover Nathanel Greene, identified as A-49, A-54, A-55, and A-57); and that the tombs not be near main streets (since excavations here might attract more attention and potentially vandalism). In addition, it was necessary to minimize the effort associated with getting equipment to and from the tomb (meaning tombs near walkways would be preferred), as well as find tombs that would allow us the needed space for excavations (meaning that there be no other monuments in near proximity).

The only tomb specifically requested by Stone Faces and Sacred Spaces for investigation was C-65. This was the only marked tomb, identified with the Foley Family. The tomb suggests a date of 1849, although there may have been interments as early as Daniel Foley (1836). Consequently, the precise date of construction is not, at present, known (Sharyn

Thompson, personal communication 1999). This tomb was selected since it is in the Catholic section of the cemetery and also exhibits a sandstone slab at-grade, thought to perhaps cover the tomb entrance. As will be discussed in more detail later, the tomb measures 9 feet 11 inches in width (north-south) by 11 feet in length (east-west). It has a stepped parapet on the west elevation and a barrel or vaulted roof.

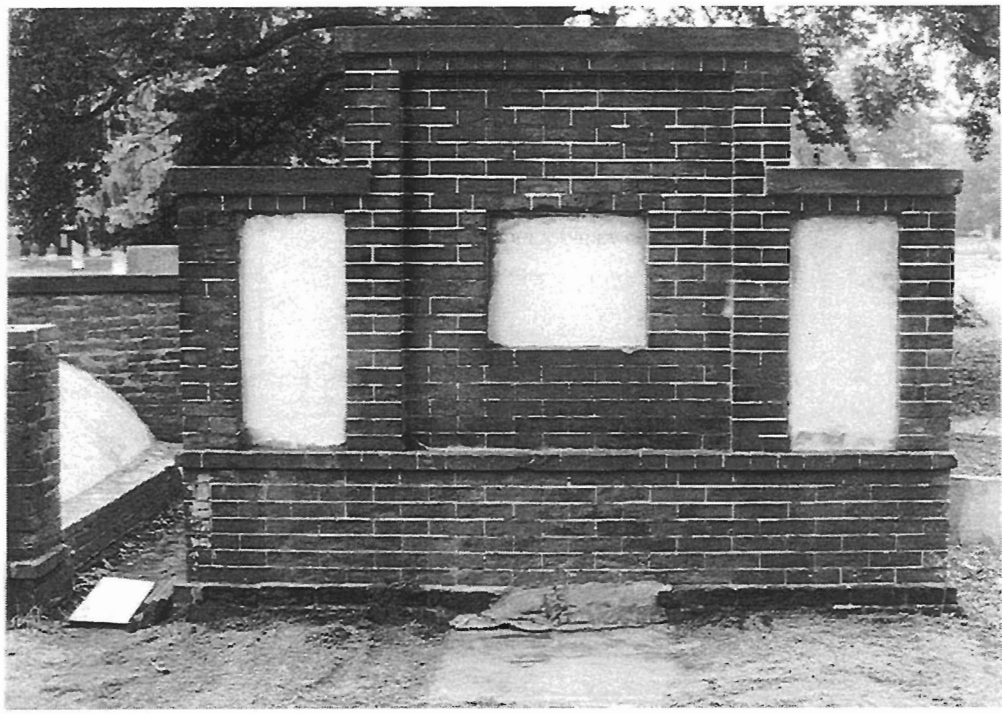

Figure 8. Tomb C-65, west elevation.

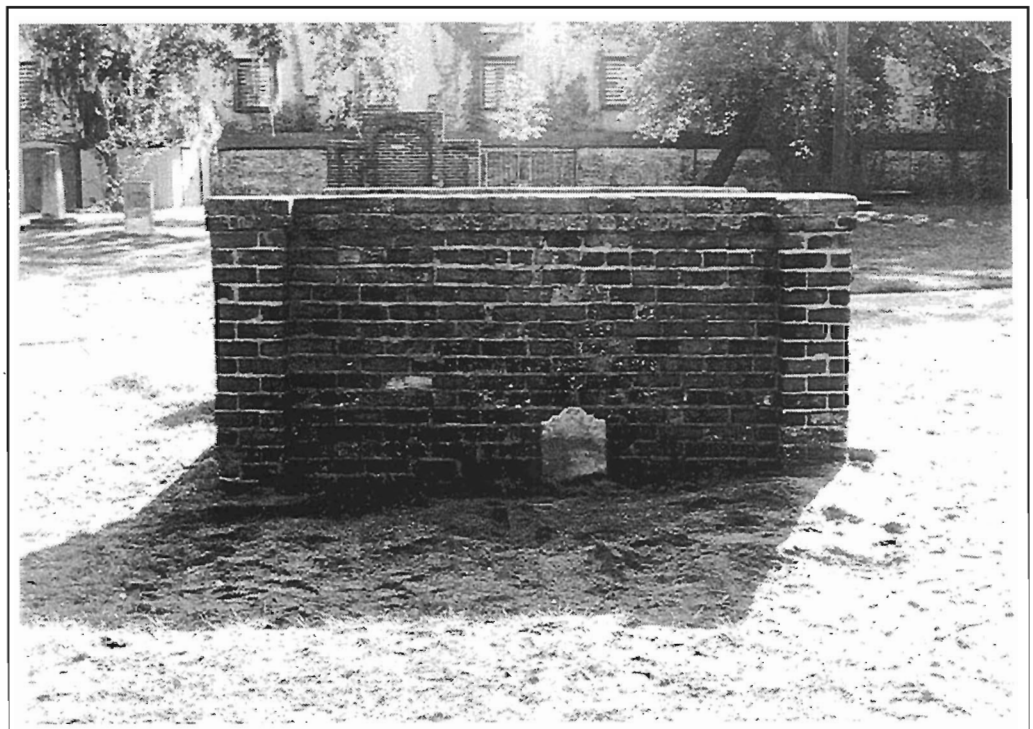

Figure 9. Tomb J-4, west elevation.

The other tombs — J-4, I-83, and I-86 — are all situated in the southeast corner of the cemetery — in an area which is accessible and which receives relatively little public use. None of these tombs are marked or in any way identified. No construction dates are known for any of the tombs.

Tomb J-4 measures 9 feet 1

Figure 10. Tomb I-83, west elevation.

inch in width by 11 feet 1 inch in length. It has a square parapet on the west elevation and a barrel roof. No entryway was visible at this tomb — making it an interesting choice for study.

Tomb I-83 measures 10 feet 9½ inches in width by 13 feet 8 inches in length. It has a stepped parapet wall at the west end of the tomb and the roof is a complex barrel. A large rock or concrete mass was observed butting the base of the western facade, but no other information concerning the entrance was known.

Tomb I-86 measures 8 feet 6 inches in width by 11 feet 1½ inches in length. It has a gable roof and on the west facade there is a stepped parapet. At grade there is also evidence of a bricked-in archway measuring about 2 feet 6 inches in width and at least

Figure 11. Tomb I-86, west elevation.

1 foot 6 inches in height.

Excavation Results

This section is intended to provide some general information concerning the excavations at each of the tombs, although much of the analysis or syntheses of this work is held for a later section where the tombs are discussed in more detail. Consequently, these discussions are intended primarily as an overview of the work at each unit. The discussions are in the order of the tomb designations (while the unit designations follow the order in which the units were laid out and excavated).

Tomb C-65, Unit 5

As previously mentioned, this is the Foley tomb and it was likely constructed in the second third of the nineteenth century, possibly between 1836 and 1848. Although the marble plaque in the center of the west facade indicates a date of 1849, this is likely the date of the plaque's erection, rather than the date of the tomb's construction.

The southeast corner of the unit, measuring 5 by 10 feet, was laid at the southwest corner of the tomb, so that the unit's entire east wall is the west elevation of the tomb. Ground level in this portion of the cemetery ranges from 40.04 to 39.86 feet AE along the tomb. The top of the sandstone slab just visible above the ground level was at an elevation of 40.04 feet. The top of the tomb's parapet is at 47.66 feet, while the top of the barrel roof (exterior) is at 44.20 feet.

Excavation in this unit consisted of the removal of four levels. Level 1, about 0.7 foot in depth, consisted of a very dark grayish brown (10YR 3/2) humic sand , in some areas underlain by a brown (10YR 4/3) sand. This appears to represent the "original" A horizon of the cemetery — which of course has developed only since the graveyard was no longer used for interments. All of Level 1 was screened through ¼-inch mesh.

Level 1 revealed that along the north, south, and west sides of the sandstone slab there was a brick foundation (at an elevation of 39.80 feet AE). We interpreted this to represent the stair supports, providing access into the tomb, with the sandstone slab serving as a cover. The brick were found to be randomly laid up, in many cases with little or no mortar. The wall was one brick in wythe. At grade it extends out from the tomb 2.9 feet.

Below, Levels 2-4 consist of heavily mottled soils, largely representing grave shaft fill. These included a mottled very dark grayish brown (10YR 3/2) sand and

Figure 12. Tomb C-65, Unit 5, base of level 4, view to the east.

pockets, often representing "shovel loads," of light yellowish brown (10YR 6/4) sand and pale brown (10YR 6/3) sands. As the artifact content appeared to decline, only 50% of Level 2 was screened and 20% of Levels 3 and 4 were screened. Levels 2 and 3 incorporated the entire 5 by 10 foot unit, while Level 4 was taken out only in the southern third of the unit, in an effort to reach the base of the tomb foundation.

Figure 13. Unit 5, south side of stair support, view to the north.

This effort, however, was unsuccessful since at the base of Level 4 we exposed at least two coffins, both hexagonal in form and situated within 0.15 foot of each other (Figure 12). One to the north (Feature 11) appeared to be the coffin of an infant, while the southern example (Feature 10) appeared to be full-sized. Feature 11 fill consisted of dark grayish brown (10YR 4/2) sand, while the fill of Feature 10 was a brown (10YR 4/3) sand. Feature 10 also revealed coffin wood stains — which prompted us to cease excavation before bone was encountered (several bones were, in fact, encountered in the fill, suggesting that Feature 10 may have intruded on another coffin, not identified in Unit 5. The top of the coffin associated with Feature 10 was encountered at 36.04 feet AE — 3.8 feet below grade. Allowing an additional 1.5 feet for the coffin itself, the grave would have been excavated about 5.3 feet below the historic land surface.

As excavation continued we discovered that the stair support was very poorly constructed, unevenly stepping in toward the tomb (Figure 13). The stairs — and the support walls — survived only because the surrounding soil helped hold them in place. Bricks were laid in a variety of fashions, both as stretchers and bull headers. The application of mortar in the joints increased with depth, but was nowhere very consistent. The base of the stair support was encountered at 36.96 feet AE (about at the elevation of the lowest stair tread).

During the excavations a crack in the sandston e slab covering these stairs gave way, allowing us to remov e several portions in order to examine the stair supports from inside the stair well. The stairs were formed in brick, with treads at 38.99, 37.9 4, and 36.94 feet. The stairs themselves evidenced mor tar, although the mortar joints of niether the interior nor exterior side walls had been finished. Our investigation also revealed that the stair supports were not tied into the tomb wall.

The stairs led rather precipitously to the tomb opening 2.3 feet in width and 2.9 feet in height. Placing a coffin in the tomb, using these stairs, must have been something of a challenge. It seems likely that with one individual in the tomb, and another outside, the coffin would have been slid down the stairs, rather than actually carried. In this sense the stairs are far more symbolic than functional.

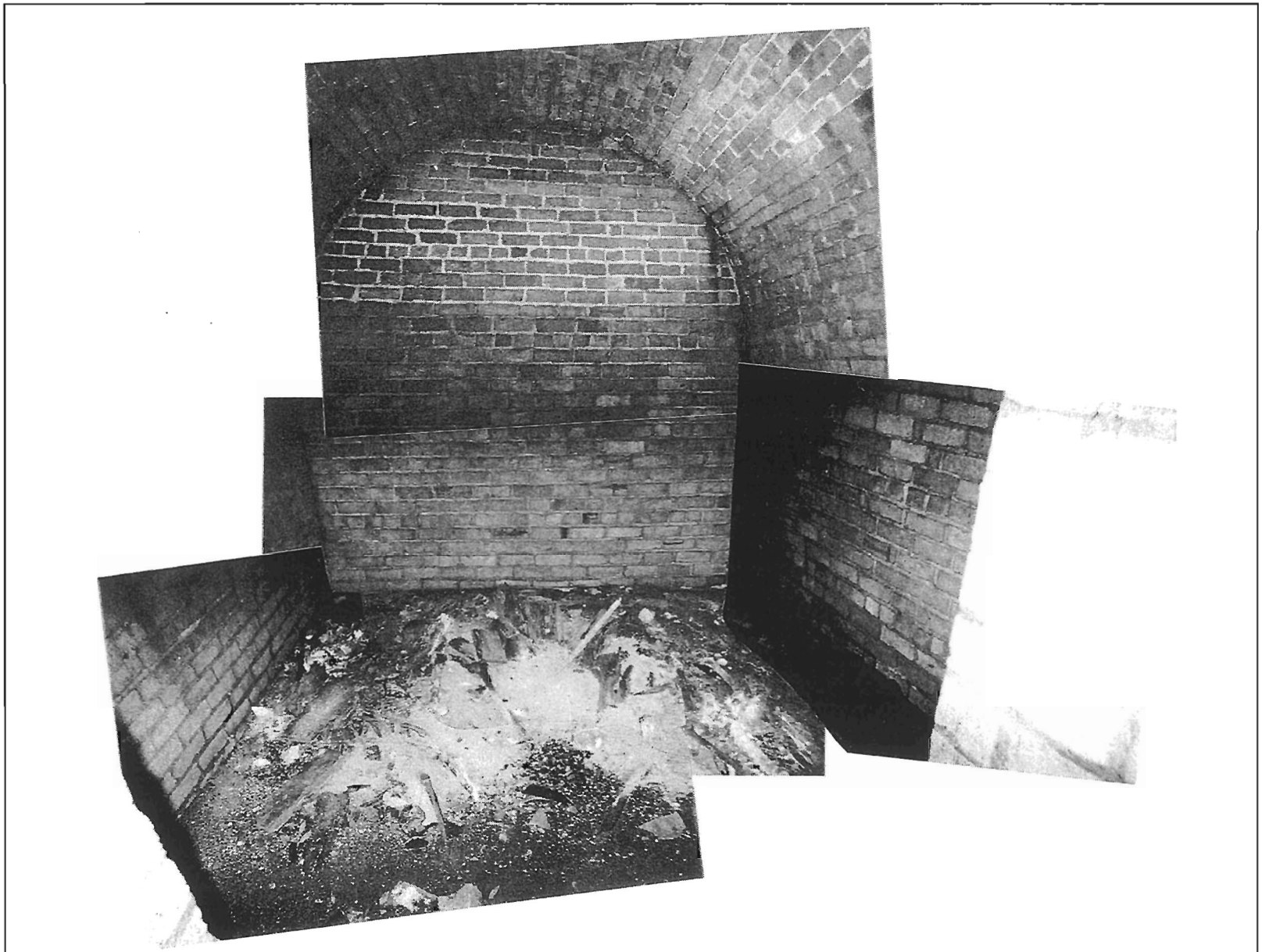

Figure 14. Composite photograph of the interior of Tomb C-65, view through the opening, looking east.

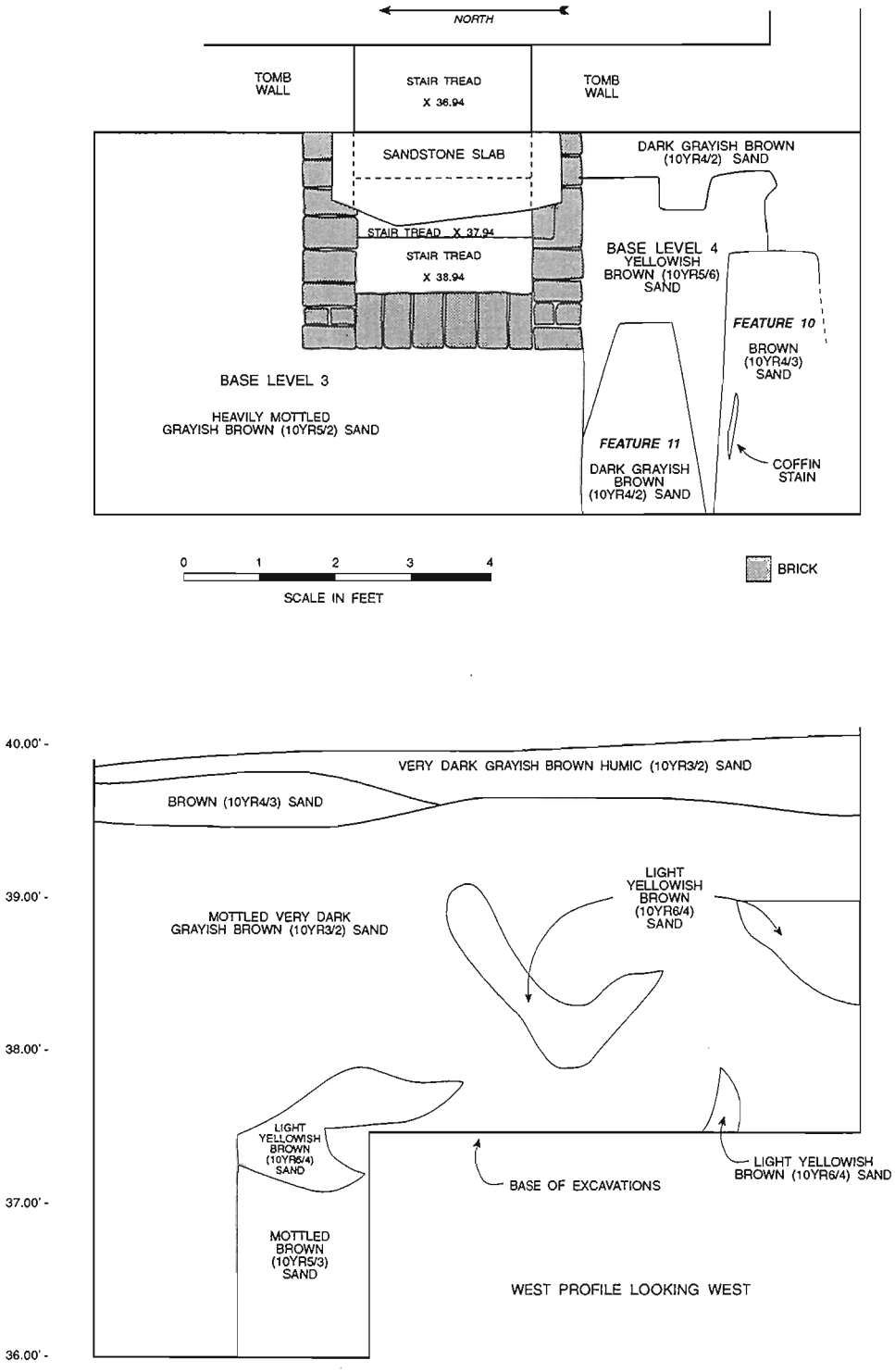

Figure 15. Plan and profile views of Unit 5 at Tomb C-65.

Although the base of the tomb wall was not encountered, our ability to see into the tomb itself (as explained on page 24), allowed us to measure the elevation of the tomb floor — 34.15 feet AE, or about 1.3 feet below the last step. We also determined that the tomb wall was 1.1 feet in thickness — the equivalent of a 13-inch wall.

The interior of the tomb was moderately well finished (Figure 14). Although the mortar joints appear finished, it was not possible to determine the style, or care used. There was, however no parging or whitewash within the tomb. Just as the outer roof was vaulted or barrel shaped, so too was the inner roof. The inner walls were laid up in American common bond (with headers every sixth courses) — typical in the nineteenth century. There was a brick floor, although it was not possible to determine how it was laid.

Within the tomb, on the floor, are the remains of at least four (perhaps five) wood coffins. Determining the exact number was impossible during this investigation since all of the coffins had been unevenly burned. In some areas the wood had been reduced to ash, while in other areas the wood was still intact and appeared to have been painted. No hardware was identifiable. Further confusing the individual coffin definitions was the fact that it appeared some "stirring" or other disturbance had taken place in the coffin piles.

The amount of disturbance, however, was uneven, since one coffin, completely fallen away, revealed a well articulated vertebral column and pelvis. Skulls, however, appeared to have been redeposited in several areas. The bones also evidenced burning varying from charring (leaving the bone blacked) to complete calcination (resulting in white bone). Furthermore, there is also evidence of ashing in some cases.

The interior walls of the tomb also bear evidence of the fire. The bricks appear lighter in color, suggesting they have been refired at a temperature higher than the original brick clamp. Sooting on the walls, while present, is limited, suggesting that the fire was hot and readily supplied with oxygen (indicating that the tomb may have been open at the time). The stirring observed in some bone piles may have resulted from efforts to extinguish the flames.

None of the coffins appears on top of another, suggesting that all were laid on the tomb floor and that there were no interior supports or tiers for stacking the bodies. It is possible, of course, that some sort of wood support was present and has been completely consumed by the fire.

Returning to the exterior of the tomb, some evidence of a builder's trench was encountered along the east wall of the unit, adjacent to the tomb wall, south of the stair supports (Figure 15). This trench, identified as Feature 12, began close to the ground surface and continued almost to the base of the excavations before merging with the grave shaft fill of Feature 10 and becoming indistinct. The feature, however, appears to be 0.5 to 1.0 foot in width. The soils of the feature were a dark grayish brown (10YR 4/2) sand. The feature contained no artifacts and only occasional brick rubble or mortar.

It seems likely that the tomb was excavated as a large hole, with the wall laid up from the inside. However, some effort was made to keep the outer wall clean and the joints at least somewhat finished as the side walls were put into place. The quality of the stairs continues to stand in contrast to the quality of the tomb brickwork itself. It may be that the stairs were simply not thought of as important (perhaps being largely vestigial).

Tomb I-83, Units 2 and 3

This tomb has no exterior marking and its construction date is uncertain. Unit 2, a 5 by 10 foot trench, was placed against the west wall of the tomb, with its southeast corner 4.15 feet south of the tomb's southwest corner. As excavation began to reveal a brick wall supporting the south half of a slate cover, a second unit, measuring 5 by 3 feet was added to the north of Unit 2, allowing the entire tomb entrance to be examined.

Ground level adjacent to the tomb varied from 41.28 to 41.34 feet AE. Here, like elsewhere in the cemetery, the ground level is relatively flat, with very little slope.

Level 1 consisted of a dark brown (10YR 3/3)

sand about 0.6 foot in depth, overlying a mottled brown (10YR 4/3) sand also about 0.6 foot in depth. With the removal of these two strata (both identified as Level 1), we found a very dark brown (10YR 2/2) humic loam, at a level of about 40.40 feet AE. Designated Level 2, this represents the original A horizon soils in this part of the cemetery. We screened 100% of Levels 1 and 2 for recovery of artifacts.

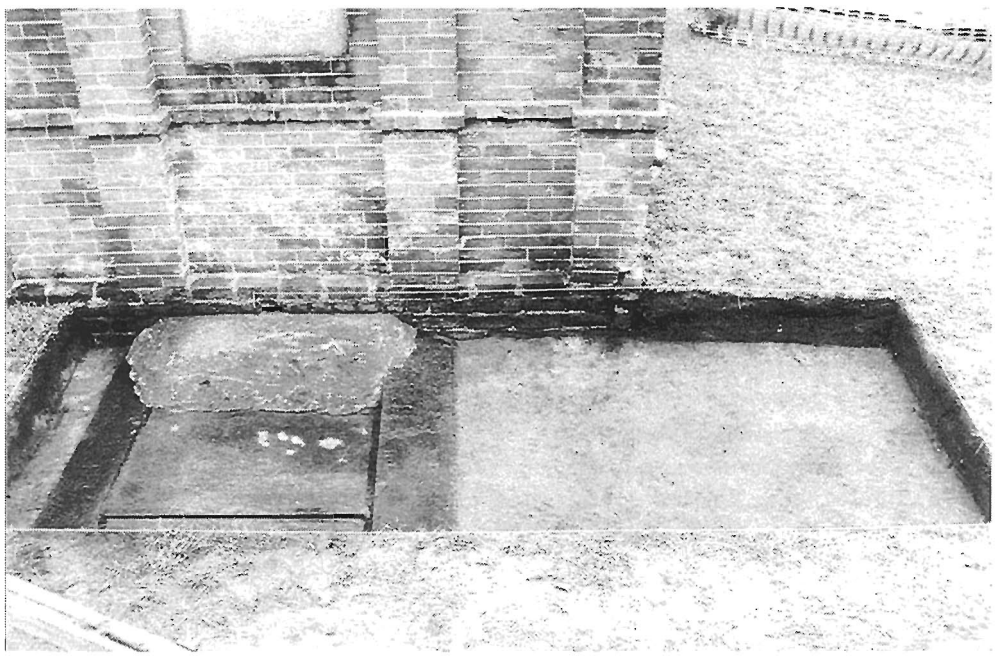

Figure 16. Tomb I-83, Units 2 and 3, base of Level 1, view to the east. Tomb entrance exposed. Note also the failure at the corner of the tomb.

Level 2 began grading into a dark yellowish brown (10YR 3/4) sand, at which time excavations were halted (at a depth of 39.88 feet AE). At this level the base of the excavation unit revealed heavily mottled dark yellowish brown (10YR 4/4) sands, with two grave shafts clearly visible. Feature 4 represented a grave shaft at the far southern end of the excavation, beyond the tomb. This shaft had dark brown (10YR 3/3) sand fill. Feature 5, a grave shaft about 2 feet to the north, had similar fill, but was distinct only toward the west edge of the unit.

Work was halted at Level 2 not because the excavation was intruding into graves, but because we were able to gather considerable information from the tomb opening, making additional excavations less important.

As Level 1 was removed, the slate cover over the tomb entrance was fully exposed (Figure 16). The cover, which measures 3.9 feet east-west by 3.2 feet north-south, was surrounded to the north, south, and west, by slate coping measuring 0.85 feet in width. All of the slate was about 0.17 foot in thickness.

At the east end of the cover, adjacent to the tomb, there was a mass of slate and concrete — appearing to represent a second slate slab with concrete smeared over it. While the concrete was fairly well adhered to the upper slate, it was not adhered to either the brick tomb or the underlying slate cover. The concrete was carefully removed, revealing the second slate to be about 1.1 feet in width and the same length (3.2 feet) as the slate tomb cover. It measures about 0.5 foot thick. When this second slate was removed, it revealed that the underlying slate tomb cover had been damaged, with the southeast corner broken off (allowing access into the tomb). The upper slate was laid in place to cover the damage and then concrete was liberally applied in an effort to seal the two.

The excavation also revealed that the slate surrounds were placed just on the edge of a brick wall surrounding the tomb entrance and were largely supported by soil. These surrounds, and the tomb cover, would originally have been at the original ground level. They have been covered by the foot or more of fill soil brought into this section of the cemetery (Figure 17).

Figure 17. Units 2 and 3, view of slate cover with side slate removed and brick wall exposed. Tomb entrance is also exposed with the removal of the slate slab and concrete.

Excavation also revealed the brick wall — actually the stair support — to be laid up in American or stretcher bond. The outer joints were not finished, suggesting that the stairs were constructed from the stair well, with the bricks in close proximity to the earthen walls. In fact, no builder's trench was visible during the excavations, although we did encounter a quantity of brick rubble and large lumps of mortar adjacent to both the stair wall and the tomb wall. It is likely the builder's trenches are either not recognizable at this level or have been significantly disturbed by subsequent grave excavations.

This work also revealed what seems like a unique system for "locking" the slate cover in place with two iron bars (Figure 18). One bar crosses over the slate cover at the west end of the stairs, bending at the outer edges of the stair well and being set below the second course of brick. The other bar crosses under the slate, sliding through two

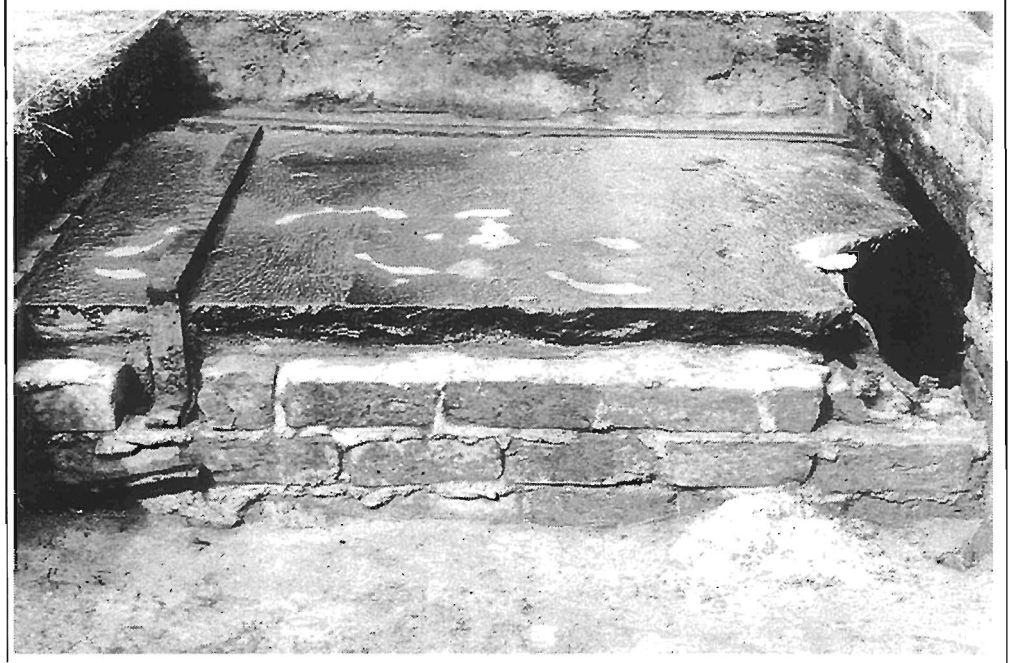

Figure 18. View of slate tomb cover and iron bars sealing the entrnace. View to the north.

large brass rings set into the underside of the slate cover using lead. This bar was also set below the second course of brick of the stair well support walls. Consequently, removing the slate cover would have required workers to take out all, or at least a portion of the north and south upper two courses of the stair supports, freeing the two iron bars and allowing the slate to then be removed. This would have exposed the stairs into the tomb.

Although the slab was not removed, we were able to gather some information concerning the stairs. The interior brick work was nicely finished and each stair tread consisted of a 0.17 foot thick slab of slate set on two courses of brick, making each of the five steps about a foot in height. With the stairs beginning four feet from the tomb entrance, this arrangement was far more functional than the stairs found at tomb C-65. Nevertheless, the nature of the opening would still have required one individual to be within the tomb, while others lowered the coffin in. The opening of this tomb was 3.2 feet in width and 2.5 feet in height.

Although the base of the tomb wall was not encountered, our ability to see into the tomb (because of the broken cover, see page 28) allowed us to measure the elevation of the tomb floor — 35.72 feet AE. We also determined that the tomb wall was 1.1 feet in thickness — the equivalent of a 13-inch wall.

The opening in the slate cover also allowed us to examine the interior of the tomb, which appea red well finished (Figure 19). Althoug h the mortar joints appear finished, it was not possible to determine the style, or care used. There was no parging of the side walls, although the vaulted or barrel roof wa s parged with what appeared to be a gray material (portland cement?). Cracks were present and there was some evidence of water leakage. The in ner walls were laid up in American common bond (with headers every sixth courses) — typical in the nineteenth century. There was a brick floor, although it was not possible to determine how it was laid. This floor was covered with about 0.3 foot of debris, largely soil. Whi le some of this may have filtered in from various roof cracks, we suspect that most came from the damaged slate stair cover.

The tomb interior was designed with a vestibule at the base of the stairs about 5 feet in depth. There was a center wall running from the vestibule to the back wall of the tomb, about 8.7 feet in length. This provided support for two tiers or shelves of slate. The shelves were supported by brick tabs in the side walls.

The shelves supported at least seven identifiable coffins and one bone pile. No remains were found on the floor. The two tiers, with the center support, divide the storage into four parts: upper right (south) and left (north), and lower right and left. In the upper left section there was one wood coffin, collapsing inward and exposing bones. In the upper center there is one pile of bones. In the upper right section there is one individual, in a wood coffin which has collapsed, again exposing bones. On the lower tier, left hand side, we found two adult metal coffins. On the right side of the lower tier there were three individuals, including a very small metal coffin, probably for an infant; a wood coffin, broken open with bones exposed; and a smaller wood coffin, probably sized for a child.

At least two of the metal coffins clearly revealed corroded brass name plates (neither of which could be read from the vantage point of the tomb entrance). In general these coffins were in good condition, although corroded. Both rectangular and hexagonal shaped styles are present and at least one has swing bale handles. The wood coffins appear to be hexagonal in form, with several also possessing swing bale handles and white metal coffin screws. At least one of the wood coffins appears to have a black coating.

The bone pile may represent parts collected from the tomb floor and stacked up on the shelf, although the quantity of remains suggests an individual whose coffin has either completely deteriorated or who was placed in the tomb only in a shroud.

The construction of this tomb in many respects seems identical to that identified for C-65, except that the technique (based on this very small sample) seems superior (Figure 20). The roof is parged, providing somewhat drier conditions. The interior of the tomb is far better appointed, with shelves built in to support the coffins. The stairs, while not truly functional, are far better constructed and exhibit more care with slate used for the treads. Even the closure was designed with more care, ensuring that breaking into the tomb would be difficult and would be immediately

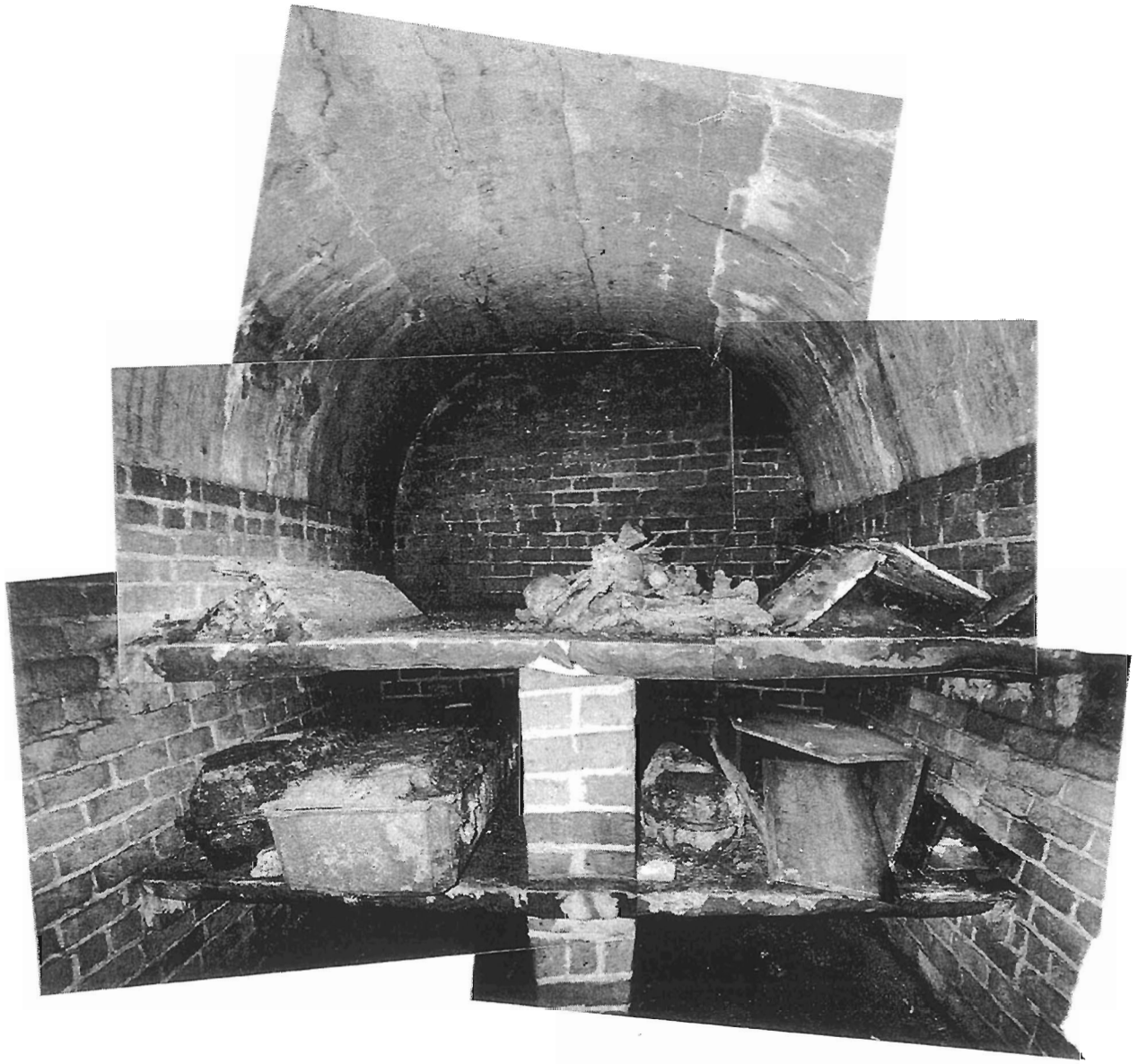

Figure 19. Composite photograph of the interior of tomb I-83, view to the east.

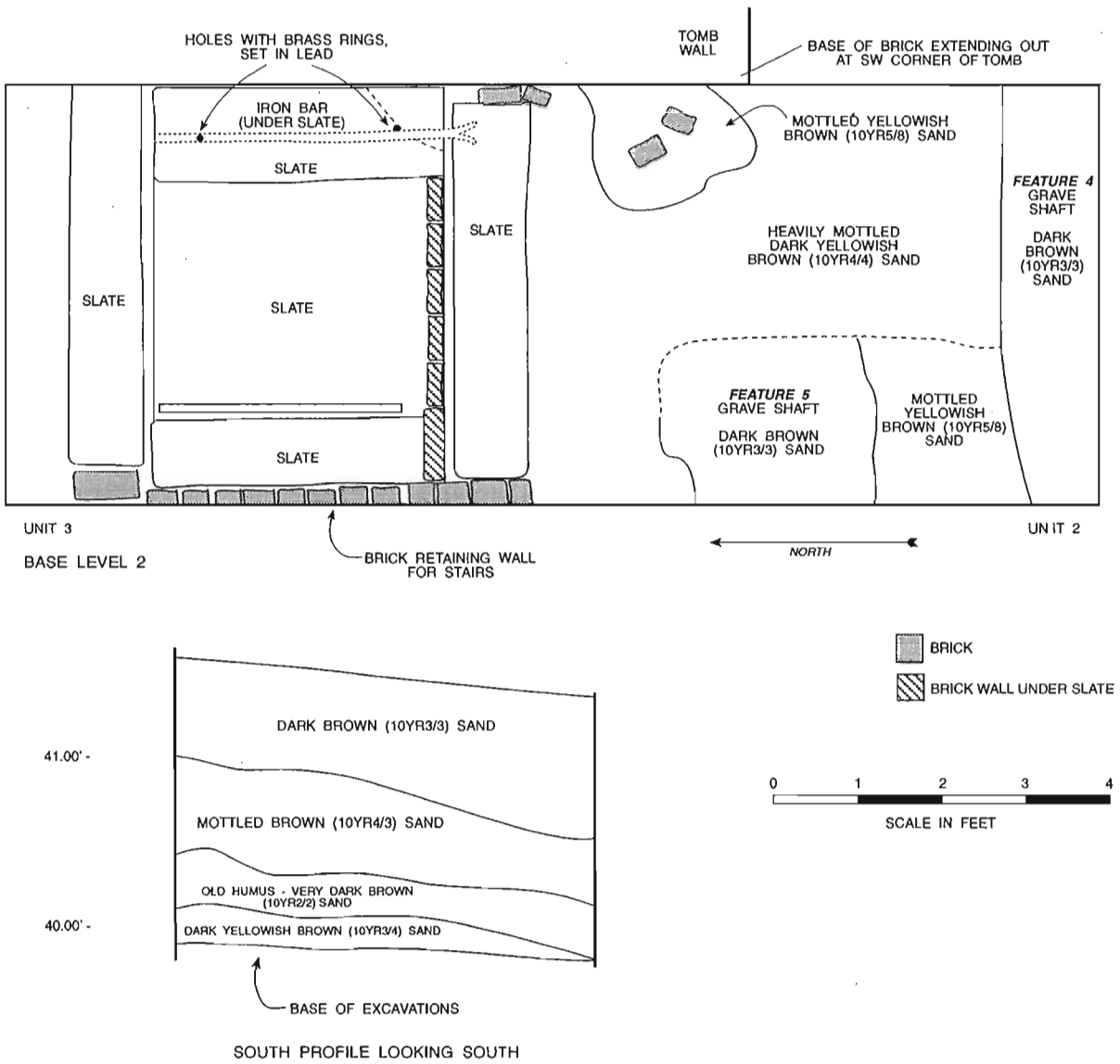

Figure 20. Plan and profile views of Units 2 and 3 at Tomb I-83.

recognizable. As a result, we are inclined to suggest that tomb I-83 is either earlier than C-65 or else that it represents more elaborate (and expensive) construction.

Tomb I-86, Unit 1

This is the only tomb we investigated with evidence of an arched opening clearly visible at least partially above grade. It is also the only tomb we examined with a gable, rather than vaulted or barrel, roof. Unfortunately it lacks any sort of family name or plaque indicating when interments took place.

A 5 by 10 foot unit was laid out along the west facade of the tomb, with the northeast corner of the unit 4.0 feet north of the tomb's southwest corner. Ground elevations adjacent to the tomb ranged from about 42.00 to 42.02 feet AE — again reflecting the very level topography in this section of the cemetery.

Level 1 consisted of a very dark brown (10YR 2/2) sand about 0.3 foot in depth overlying a mottled dark yellowish brown (10YR 4/6) sand with brick rubble. These two zones appear to represent fill deposits. The brick in the lower zone is likely brick rubble from the cemetery, probably scattered about and incorporated with the fill while it was being placed. All of Level 1 was screened through ¼-inch mesh.

Level 2 consisted of a black (10YR 2/1) loamy sand which represents the pre-twentieth century ground level at the cemetery. It occurs at an elevation of 41.5 feet, compared to 40.3 feet at tomb I-83 and about 39.9 feet at tomb C-65. Clearly there was considerable variation in the original topography. Some of this variation was undoubtedly natural, while some was perhaps the result of the cemetery's extensive use.

Penetrating into Level 2 along the west unit profile was a pit which contained a hose bibb. It appears that this water pipe was laid prior to the fill episode (of the 1960s) reflected by Level 1 and was completely covered over (and lost) by this later activity.

Below the old humus four additional levels (Levels 3-6) were excavated, primarily through very mottled yellowish brown (10YR 4/6) sand with charcoal fragments that graded into yellowish brown (10YR5/8) sands. Only 50% of Level 3 was screened, and only 20% of Levels 4-6 was screened — artifact density declined dramatically with depth.

Levels 3-6 appear to represent mixed grave shafts and the excavation was carried to this depth only in the northern half of the unit, adjacent to the tomb wall. In the southern half of the unit excavation was terminated at the base of Level 4. At that point individual grave shafts could still not be distinguished in the plan view. This is a lesson to archaeologists working

Figure 21. Tomb I-86, Unit 1, base of level 6, view to the west showing Features 2 and 3.

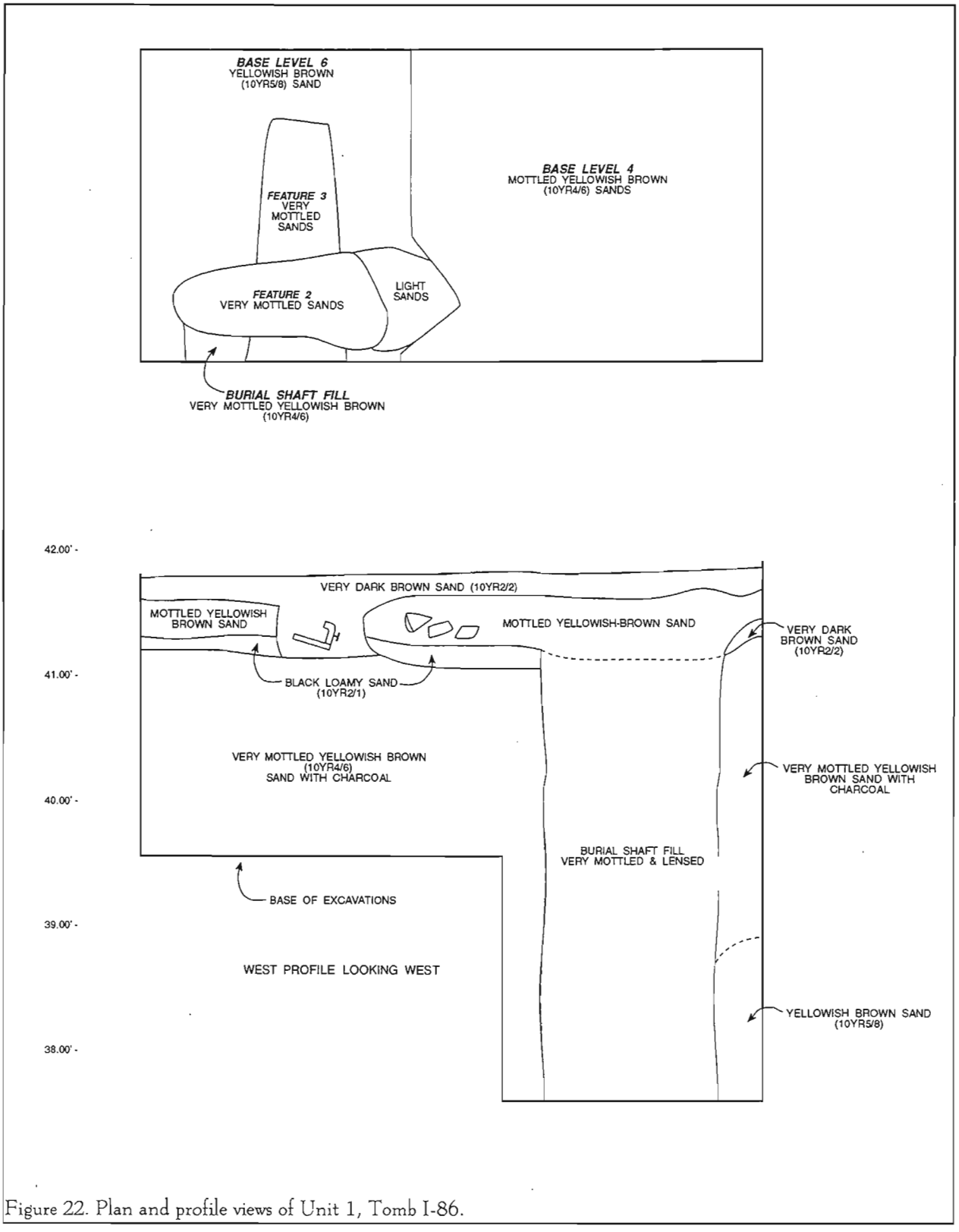

Figure 22. Plan and profile views of Unit 1, Tomb I-86.

at extremely crowded cemeteries such as Colonial Park — it may likely be difficult or impossible to distinguish individual graves until considerable excavation has taken place.

At the base of Level 6 in the north half of the unit we identified two coffins. Excavation terminated at the top of these wood boxes, at an AE of 37.68 feet, or 3.5 feet from the top of the original ground level (4.3 feet from the modern ground surface). Allowing an additional 1.5 feet for the coffin, the grave shaft would have had a depth of about 5 feet.

Feature 3 represents a hexagonal coffin oriented east-west, with the eastern 4 feet exposed by the unit. This orientation is typically found in Christian cemeteries, with the head oriented to the west and feet to the east. The fill of this feature was a very mottled brown (10YR 4/3) sand (Figure 21).

Bisecting Feature 3 was Feature 2, a second coffin stain oriented north-south. This stain was also hexagonal, with the head oriented to the south. The fill was slightly darker, allowing us to recognize that Feature 2 post-dated Feature 3. It appears that in an effort to "squeeze" one more burial into the cemetery, the coffin was placed north-south in front of the tomb. This, however, resulted in the displacement of the earlier burial.

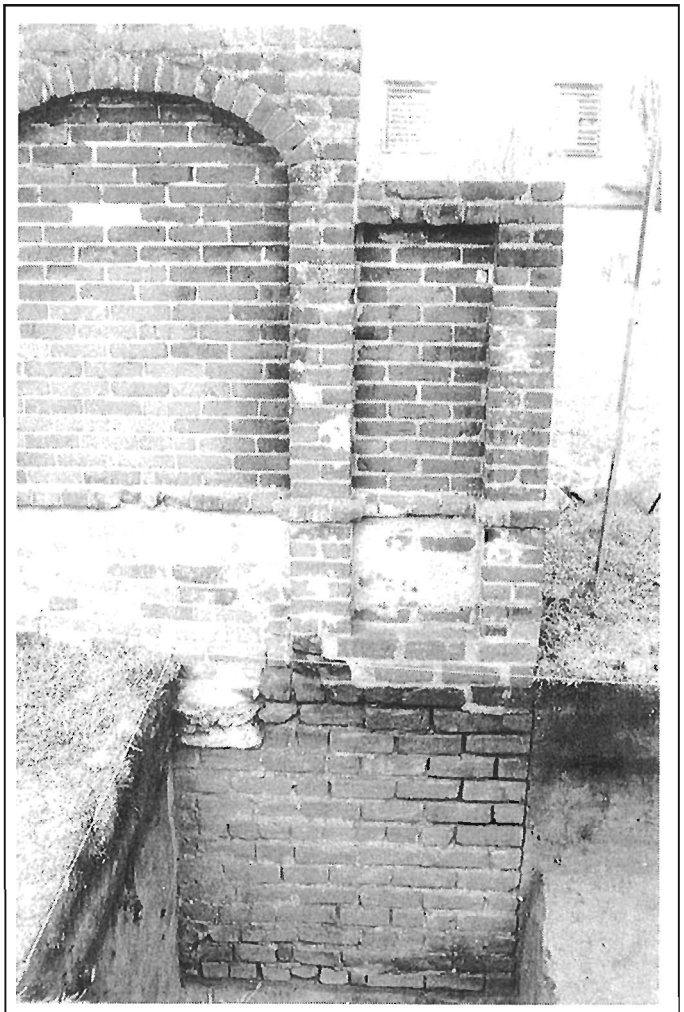

Figure 23. Tomb I-86 and excavation revealing base of wall and arched opening. View to the east.

The excavations identified the base of the tomb foundation at 37.84 feet AE. The lowest course of brick was dry laid in the sand — we found no evidence of mortar bed, nor could we discover any evidence of mortar in the joints of the bricks at this lowest level. Above, mortar was found consistently and in good condition, so it seems unlikely that it would have selectively eroded from only the lowest course. The brick in the tomb wall below grade were all "Savannah Gray" and were laid in a mixed bond: two courses of mixed headers and stretchers, five courses of stretchers, one course of headers, and then five to six courses of stretchers to the old ground level. It is surprising that no footers were found to help spread the weight of the tomb.

A very faint builder's trench was found at the tomb's southwest corner, about 0.5 foot in width and extending to a depth of nearly 3 feet before terminating against the tomb wall. The fill of the trench was a yellowish brown (10YR 5/8) sand. It seems likely that this represents the original construction trench as it slightly flared outwards from the tomb (Figure 22).

The base of the arched opening was tentatively identified at an elevation of 40.53 feet AE (Figure 23). The actual base is somewhat uncertain since there is a large mass of concrete, perhaps representing a repair, at the base of the arch. Without extensive removal (and serious potential damage to the bricks) it is difficult to determine exactly where the base of the arch occurs.

Our estimate, however, would place the arched opening 2.6 feet in width and 3.0 feet in depth — similar to those encountered in tombs with stairs.

Assuming that the interior base of the tomb is about 0.3 foot above the base of the foundation, there would be a drop down of about 2.4 feet from the base of the arched opening to the tomb floor. Consequently, placing coffins in these tombs would be a little easier, since they could be slid through the arched opening level, which would have been at ground level, and then placed either on shelves or on the tomb floor.

Interior head room at the center of the gable would have been about 8.3 feet, allowing relatively easy movement both during construction and also when placing bodies in the tomb.

Tomb J-4, Unit 4

This unit, measuring 5 by 10 feet, was also placed adjacent to the tomb's western wall. The southeastern corner of the unit was located 1 foot south of the tomb's southwestern corner. This allowed us to fully expose the tomb opening, as well as much of the tomb wall. Ground level in this area ranged from 40.92 to 41.13 feet AE against the tomb wall, suggesting a little more variability in this area than elsewhere.

Like Tomb I-83, this tomb evidenced no arch or slate in front of the tomb which might indicate a series of stairs. It has a barrel or vaulted roof and a simple straight parapet wall.

The soil profile at this tomb was somewhat more complex than that found at the other tombs, largely because of multiple fill episodes, as explained below. Level 1, about 0.5 foot in depth, consisted of a black (10YR 2/1) sandy loam humus representing a recent fill episode — identical to that found at Tombs I-83 and I-86. At the base of Level 1 we found two large marble fragments. They are not carved, but the size and shape suggests they were either tomb closures (although not the correct size for J-4) or perhaps the base to a table tomb. Broken, they were apparently covered by recent fill. We left these stones beside the tomb for eventual storage.

Below this we identified a brown (10YR4/3) sand about 0.9 foot in depth, designated Level 2. At first we associated this with the same twentieth century fill episode, until we realized that at least one burial penetrated this level, suggesting that it was far earlier than we anticipated. We eventually concluded that this brown sand is the fill from the excavation of this tomb or others in the area. Unlike the other examples excavated, where the soil must have been carted away (or spread thinly over a large area), the spoil from this tomb

Figure 24. Unit 4, showing brick repairs at the tomb corners, as well as the stair well. View to the east.

Figure 25. Unit 4, overhead view.

seems to have been spread around the immediate area, resulting in a noticeable build-up.

Within this level we also identified bricks dry laid as pavers at both corners of the tomb (Figure 24). Above them additional brick appear to be laid supporting the flaring corner projections of the tomb. Intermingled are variable quantities of very hard cement mortar. Although uncertain, it appears that these bricks represent an effort to repair the tomb.

For reasons that are not entirely clear, these corner projections were added only from just below grade up. Below that the tomb is essentially a rectangular box. Through time it seems that these corner projections began exhibiting failure. In an effort to "brace" them, areas under them were excavated, bricks were laid in an effort to distribute the weight, and then additional bricks were built up to the corner projections. The whole mass was then more or less smeared over with concrete. As might be imagined, the process was not entirely successful and

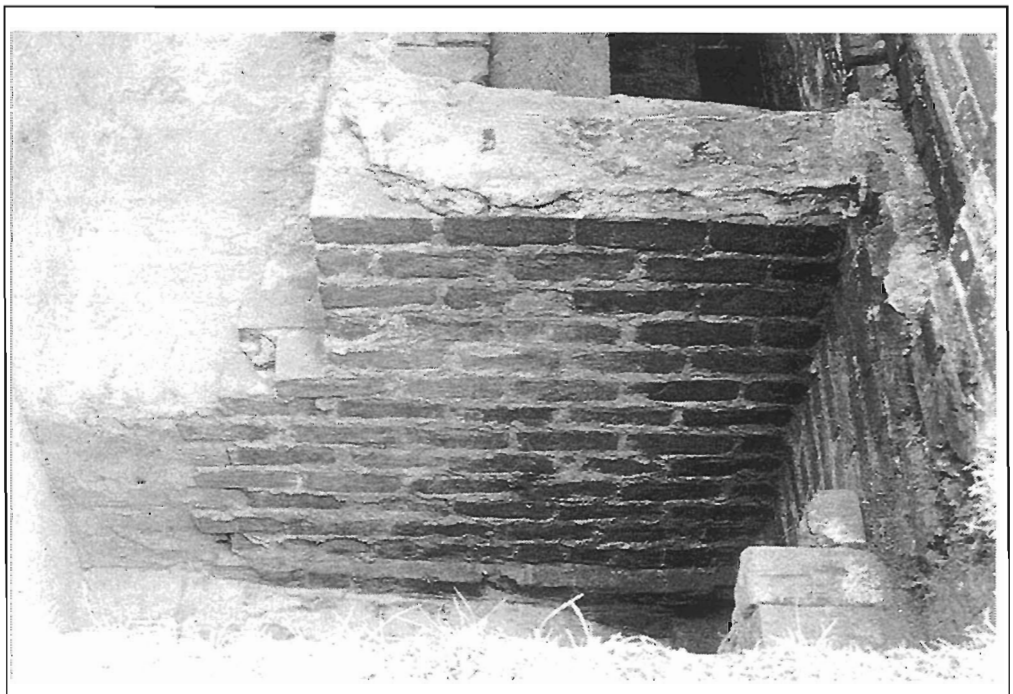

Figure 26. Unit 4, south stair support wall, view to the north.

there are still signs of corner failure.

Below is Level 3 — a black (10YR 2/1) loamy sand at an elevation of 39.6 feet AE which appears to represent an old humus or A horizon at the cemetery (with the tomb spoil built up over it). Some areas of this zone exhibit dense lenses (layers) of charcoal, suggesting that at some point the brush, stumps, or tree roots may have been burned off the cemetery (the level of this deposit, however, suggests that it predates any of the late nineteenth and early twentieth century restoration efforts).

Excavation in the north half of the unit stopped at the base of Level 3, while in the southern portion of the unit one additional level was removed. Level 4 consists of yellowish brown (10YR 5/4) sand — the same mottled fill found elsewhere on site and representing grave shafts (Figure 25).

At the base of Level 1 to just within the upper 0.1 foot of Level 2, we identified the brick stair support walls centered on the west elevation of the tomb. These walls were a brick and a half in width and revealed an opening measuring 2.4 feet north-south by 2.0 feet east-west. The stair area, however, was filled with black (10YR 2/1) loamy sand and was designated Feature 6. This fill was removed, revealing a series of three stair treads, each about 0.88 foot in height, with the opening to the tomb bricked closed (using hard portland cement mortar and bricks distinct from those used elsewhere in the tomb construction). Also revealed during the excavation of Feature 6 was an intact marble footstone, inscribed "MC WC". This stone was apparently tossed into the stair well during backfilling. We erected it in front of the tomb after the unit was backfilled.

The upper two stair treads were each 0.8 foot in depth and were slate covered brick. The third tread supported the brick infill of the tomb entrance.

At first glance it is tempting to suggest that the stair wall supports are poorly constructed, similar to those found at Tomb C-65. This, however, is not actually the case. It is true that west support wall is more shallowly laid than the southern side wall, and that the side wall appears to have been stopped in the midst of construction. Yet, we believe that the builders had intentions of creating very sound stairs and that they probably changed their construction plans as a result of discovering one or more burials.

The side stair support wall terminates at an elevation of 36.46 feet AE where there is a footer a half brick in width (Figure 26). The stair wall is also tied into the tomb wall. The southern or back stair wall, however, terminates at 38.64 feet AE, leaving the lower several feet of the side walls with staggered courses hanging free. In addition, the back stair wall was constructed to provide an opening only 2 feet from the tomb wall, while clearly the intent was to extend the wall to the west at least one more foot.

As previously mentioned, we believe that these plans were changed with the discovery of Feature 7 — a grave shaft placed within the stairway area. It seems likely that as the brick masons were excavating the stairway and putting up the side walls, they encountered something recognizable — either bones or a coffin. This resulted in them stopping their effort to create the original stairs as planned and a much shorter (and steeper) version were constructed instead.

This, however, was not the first burial into which the tomb intruded. At the southwest corner of the tomb, at the base of Level 4, we identified Feature 8 — another clearly defined grave shaft. The orientation of this burial seems to be north-south, with the tomb disturbing the northern quarter of the burial. A third grave shaft is visible just west of the tomb, identified as Feature 9. Additional graves may be present, but are difficult to detect because of the very mottled soils.

The tomb wall extends to a depth of 35.96 feet AE where there is a footer about two-thirds of a brick in width to help spread the weight of the wall (Figure 27). Again assuming that the floor of the tomb is perhaps 0.3 foot above this base (and that the roof is about a foot thick), the center of the tomb would have a height of about 7.5 feet.

The tomb opening is 2.4 feet in width by about 3.1 feet in height. While comparable to the other stairs, these (like those at C-65) are so steep that maneuvering a coffin down them would have been problematical. In fact, those handling the coffin would have had to tip it up in the air in order to slid it down the stairs into the

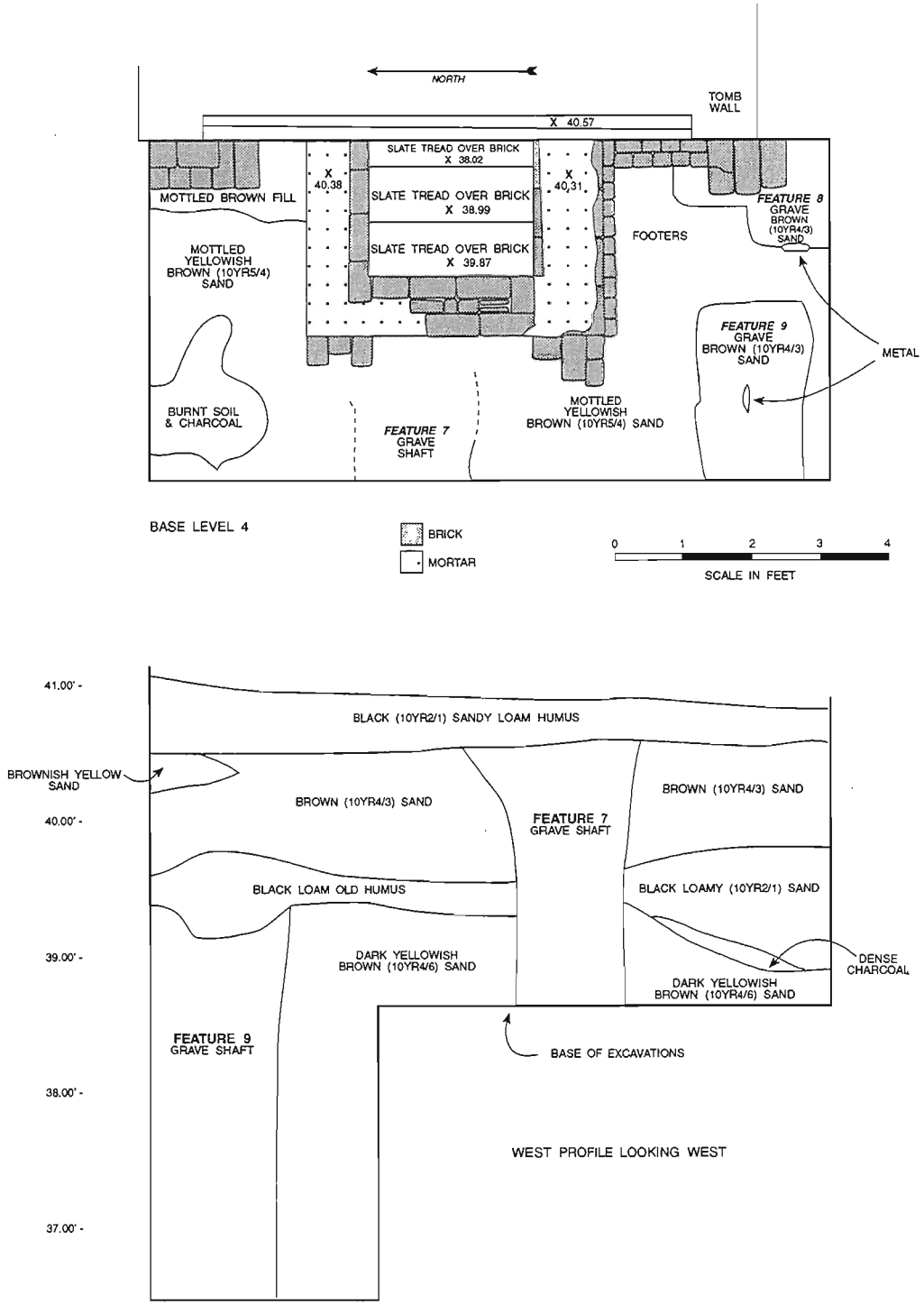

Figure 27. Plan and profile views of Unit 4 at Tomb J-4.

tomb. So, while well constructed, these stairs seem to be more for appearance than for function.

Summary of Tomb Openings

Since the nature of the tomb openings is a significant aspect of this research, we'll offer a very brief summary of four tombs here, recounting how they originally functioned and how they were closed.

At **Tomb C-65** we found that the west tomb wall had an open rectangular hole, against which stair supports had been crudely built. The stairs were very steep, making it impossible to do more than crawl through the opening. Placing a coffin in the tomb would have required the coffin to be stood on end and slid at an angle through the opening, on the stair treads, with someone in the tomb to receive the coffin and maneuver it to its final location. As we observed, in this case the stairs no longer function as traditional stairs (in the sense of providing a means of ambulatory ingress and egress). They do, however, frame the tomb wall opening. They also are essential for the closure of the tomb, since this was achieved by placing a stone slab over the stair supports (which were at the original ground level). Access to the tomb could be had by simply removing this stone — allowing free access through the stair well, into the tomb. During the use of the cemetery this stone cover would have been an integral visual aspect of the tomb — visitors would have seen the tomb, as well as the stone pad marking the subterranean stairs into the tomb.

At **Tomb I-83** we found a similar rectangular prepared opening in the west wall of the tomb, around which stairs had been very carefully constructed. These stairs were the most functional we identified, allowing walking (albeit in a stooped position) access to the tomb. The stairs were again covered with a stone slab, although in this case the slab was secured by metal bands which were anchored in the side stair wall supports. Entry into this tomb would have required that the top several courses of the stair walls to be removed (which would also have required some excavation around the stair wall supports. Although this is a little more elaborate, the tomb visitor would still have seen the tomb, and the stone pad in front of the tomb.

Tomb I-86 was distinctly different — presenting an arched opening at ground level. Access to this tomb was by removing the bricks, creating an access port. A new coffin would be slid through this opening, and positioned by individual receiving it in the tomb. Afterwards the opening would be again bricked over. Through time several things have happened to make these openings more difficult to interpret. First, there has been additional fill in the cemetery which, in some cases, has partially covered the arched opening, making it appear far smaller than it actually is. Second, the most recent tomb closures, perhaps taking place at one or more times of "restoration" have resulted in hard cementitious mortar being smeared on the openings, often obliterating their exact proportions and dimensions.

Tomb J-4 was found to be similar to the openings at Tombs C-65 and I-83, consisting of an opening in the western tomb wall surrounded by stair supports. At this opening, however, the stone cover had been lost or destroyed. As a result, restoration efforts included bricking the tomb wall closed at the base of the stairs and then filling the stair well with soil. The stair supports at this tomb were, like those associated with Tomb C-65, poorly constructed. These stairs also appear to stylized — built because that was what was expected, but never really functioning as stairs. Here again the coffin would have been slid on end through the opening, to attendants waiting to receive it and place it in the tomb. Afterwards the stone would have been replaced on the top of the stair supports — at the historic ground level — sealing the tomb.

It is clear that there appear to be only two forms of tomb openings — those with stairs which were sealed using a stone cover and those with an arched opening which were sealed using mortared bricks.

ARTIFACTS

Introduction

This section is intended to provide an overview of the material culture recovered from the excavations at Colonial Cemetery. Since the excavations were conducted by unit, with each excavation area associated with a specific tomb, these discussions are also organized in this manner. At the conclusion we have tried to combine the individual discussions to provide something of a synthesis — although we are painfully aware that this work represents a very small sample from a single cemetery. A general overview of the recovered artifacts, their contribution toward architectural or feature reconstructions, and information on dating, are provided for each tomb area.

Laboratory Processing and Conservation

The cleaning of artifacts was conducted in Columbia, after the conclusion of the excavations. Cataloging and analysis of the specimens was conducted at that time. The artifacts were evaluated for conservation needs, but none of the materials warranted any treatments.

As previously discussed, the materials have been accepted for curation by the Department of Anthropology at the University of Georgia. The collection has been cataloged using this institution's accessioning practices. Specimens were packed in plastic bags and boxed. Field notes were prepared on pH neutral, alkaline buffered paper and photographic materials were processed to archival standards. All original field notes, with archival copies, are also curated with these facilities. All materials have been delivered to the curatorial facility.

Analyses

Analysis of the collections followed professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains. The temporal, cultural, and typological classifications of the historic remains follow such authors as Cushion (1976), Godden (1964, 1985), Miller (1980, 1991), Noël Hume (1978), Norman-Wilcox (1965), Peirce (1988), Price (1970), South (1977), and Walton (1976). Glass artifacts were identified using sources such as Jones (1986), Jones and Sullivan (1985), McKearin and McKearin (1972), McNally (1982), Smith (1981), Vose (1975), and Warren (1970).

The analysis system used South's (1977) functional groups as an effort to subdivide historic assemblages into groups which could reflect behavioral categories. Initially developed for eighteenth-century British colonial assemblages, this approach appears to be an acceptable choice for the Colonial Cemetery collection. The functional categories of Kitchen, Architecture, Furniture, Personal, Clothing, Arms, Tobacco, and Activities provide not only the range necessary for describing and characterizing most collections, but also allow typically consistent comparison with other collections.

The observant reader will also note that both metric and English units of measurement have been used in the analysis. We recognize that this departure from consistency may be troubling, and may require some conversion back and forth. We have, however, tried to ensure an internal consistency. Where the artifact was likely described by its maker or user in English measurements, they have been retained. The only exception to this is when there has been extensive research on the artifact class which uses metric measures. When the maker or user of the object probably had no reason to refer to a specific measurement (such as the length or diameter of a pencil), we have used metric units.

In the following discussions, the first time a particular artifact type, or class, is encountered, it will be discussed in greater detail than it is when found in

subsequent contexts. While this may cause some difficulty for those interested in only one particular area of the site, it will reduce the sheer volume of text and will make these discussion flow in a more readable fashion.

We have also attempted to reduce the "jargon" in these discussions, although readers should be aware that some degree of technical discussions are occasionally essential to ensure accuracy and understanding among other professional archaeologists.

Material Remains

Tomb C-65

Level 1 produced a total of 203 artifacts, itemized in Table 1. This level, of course, is associated with the current A horizon soils at the cemetery, but in this area does not appear to represent fill or outside deposits.

The Kitchen Artifact Group is dominated by container glass, although a single ceramic was identified in the assemblage. The fragment of white porcelain with a blue tinted interior likely dates from the last half of the nineteenth century or perhaps from as late as the early twentieth century.

Container glass, accounting for 184 specimens, includes a range of nineteenth and twentieth materials. Earlier remains likely include the two fragments of black glass, typical of nineteenth century beer and ale bottles, as well as the glass "club sauce" stopper, commonly used with small mouthed commercial bottles during the late nineteenth and early twentieth centuries (Jones and Sullivan 1985:152). It was used not only on various condiment bottles, but also as closures for those containing alcohol.

The manganese glass was most common during the last quarter of the nineteenth century and first decade of the twentieth century (Jones and Sullivan 1985:12-13). Many of the glass specimens exhibit crown finish. This finish and its associated crimped metal cap were patented in 1892 (Jones and Sullivan 1985:163). Some of the material may date from the early twentieth century, although some is clearly much later, clearly being deposited within the past several decades. Also present were several examples of threaded jar lips. In general these post-date 1850; those found at Tomb C-65 all appear modern (i.e., twentieth century).

Architectural remains are limited to three fragments of window glass, one fragment of roofing slate, five unidentifiable nail fragments, and one 12d machine cut nail. None of these items offer much assistance in dating the assemblage. Although machine cut nails were first introduced about 1780, they became common only during the nineteenth century and are still manufactured today. The 12d size is most commonly used in framing.

A single Clothing Group artifact was recovered from Level 1 — a clear glass "jewel." The presence of two holes in the glass indicates that it was probably intended to be sewn onto cloth, perhaps as a button. The specimen has a considerable date range, from at least the last half of the nineteenth century through the mid-twentieth century.

One only Personal Group artifact was recovered — a 1979 US penny.

South's Activities Artifact Group, which essentially represents miscellaneous materials that would be difficult to place elsewhere, is represented by five specimens. Toys are most common, and include a bisque porcelain doll fragment and a white clay marble. The doll part is rather generic and, like most of the collection, may date from the late nineteenth or even early twentieth century. Clay marbles were produced from at least the eighteenth century and continued to be made at least to 1928, although their popularity declined as glass became more common and affordable. Baumann (1991:138-147) briefly reviews the various games of chance which used marbles. Although we commonly think of marbles as a child's game, it is important to realize that they were just as often used by adults in gaming. Games such as "ringer" and "spanner" were likely played for cash wagers and formed the nucleus of urban backlot gaming.

Also included in the Activities Group are two screw fragments and the remains of an arc lamp graphite rod. This last item (also found at a variety of

Table 1.
Artifacts Recovered from Unit 5, Tomb C-65

Material	Level 1	Level 2	Level 4
Kitchen			
white porc., tinted	1		
"black" glass	2	5	
brown glass	14		
blue glass	4		
bright green glass	2		
light green glass	13		
aqua glass	7		
manganese glass	36		
clear glass	105		
clear glass stopper	1		
crown cap	1		
Architectural			
window glass	3		
roofing slate frag	1	1	
UID nail frags	5	2	4
machine cut nail	1		
Clothing			
clear glass "jewel"	1		
Personal			
US penny, 1979	1		
Activities			
bisque porc. doll part	1		
clay marble	1		
screw frags	2	1	
arc lamp graphite rod	1		

other tombs) is interesting since it likely provides some information concerning the lighting of Colonial Park. The arc lamp was rather complex, containing a variety of parts allowing it to start and operate under various voltages. The item recovered is one of the two graphite electrodes present in the lamp. These electrodes were together when the lamp was off, and when separated created the arc or light. The electrodes were gradually consumed through use, but unlike modern lamps the arc-lamp could be easily repaired. One of the few "disposable" parts were the electrodes. The lamp's most popular use was for lighting streets and public areas in the larger cities from about 1877 through about 1950 (Woodhead et al. 1984:75).

Level 2 included only five fragments of black glass, two unidentifiable nail fragments, and one screw fragment. Level 4 produced an additional four unidentifiable nail fragments, as well as several fragments of human bone.

The black glass fragments, while certainly not common, are somewhat unexpected in a cemetery. They represent alcohol bottles of both the eighteenth and nineteenth centuries. Their origin cannot be determined — they may represent trash, may represent materials deposits by grave diggers, or may represent items discarded by cemetery visitors.

On the other hand, the small quantity of highly corroded nails and single screw are all likely associated with the various coffins buried in the cemetery. The "scatter" of nails in the grave shaft fill suggests that a number of coffins, through time, have been disturbed. As coffins were dug through the various parts became scattered and widely distributed in the fill. This seems also to be the case with the several bone fragments found in Level 4.

Tomb I-83

A total of 818 artifacts were recovered from Level 1 in the combined Units 2 and 3 on the west side of Tomb I-83. This level represents fill soil brought into the cemetery, possibly during several different episodes. It seems likely, however, that at least some materials from the pre-existing A horizon were incorporated into the fill — during landscaping, tomb repairs, and just general activities in the cemetery. Moreover, materials from activities taking place in the cemetery would have been incorporated into these deposits.

The Kitchen Artifact Group is significantly larger and more diverse than was found in Unit 5 at Tomb C-65. We recovered 22 ceramics, including one undecorated creamware, two undecorated pearlware, four undecorated whitewares, one green transfer printed whiteware, 13 white porcelains, and one industrial stoneware with an albany interior glaze.

Developed in the 1750s by Josiah Wedgewood, the cream colored earthenwares known as creamware

Table 2.
Artifacts Recovered from Units 2 and 3, Tomb I-83

Material	Level 1	Level 2
Kitchen		
white porc.	13	
creamware, undec.	1	
pearlware, undecorated	2	1
whiteware, undecorated	4	
whiteware, green tp	1	
stoneware	1	
"black" glass	4	
brown glass	32	
green glass	57	
milk glass	6	
blue glass	8	
bright green glass	39	
aqua glass	11	
manganese glass	20	
clear glass	494	2
clear glass stopper	2	
tumbler glass	6	
crown cap	3	
pop tabs	1	
Architectural		
window glass	19	
linoleum frags	13	
roofing slate frag	6	
UID nail frags	3	
wire nails	3	
lock hardware	2	
Arms		
pellet gun slugs	3	
9 mm bullet	1	
Clothing		
buttons	1	
Personal		
beads	2	
eye glass lens	1	
ring or pin setting	1	
Activities		
bisque porc. doll part	2	
clay marbles	3	
glass marbles	2	
toy teapot	1	
misc. hardware	12	
arc lamp graphite rod	20	
other	6	

was considered a revolution in ceramic production. It provided a fine glazed ware at a relatively inexpensive cost, and came in sets with a wide variety of vessel forms and styles. Creamwares are generally given a date range of 1762 through 1820 and a mean date of 1791.

As potters continued to experiment with creamware, in an effort to imitate the Chinese porcelains, pearlware was eventually produced. By 1779 Wedgwood had produced pearlware, what he called an "improvement" on the creamware (Walton 1976:77; see also Noël Hume 1978:129-132). By 1790 the ware was further "improved" by Spode who added a small trace of cobalt to the formula to serve as a "blue whitener" (Feild 1987:54). Today pearlwares are recognized by the blue puddling of the glaze and overall bluish cast. These ceramics span the period from 1780 to 1830 and have a mean date of 1805.

The whitewares represent yet another development or stage in the effort to produce a truly white ceramic. Whiteware is a fine bodied earthenware developed by C.J. Mason in 1813. The date range typically used is 1813 through 1900, with a mean date of 1860, although in practice whitewares are still in production. The green transfer printed style dates from 1826 through 1875, with a mean date of 1851.

Container glass, however, was far more abundant and is represented by 684 specimens. These include a range of materials and although some likely date from the early to mid-nineteenth century, far more exhibit threads or crown finishes, characteristic of the late nineteenth century through the last decade of the twentieth century. Although there is a quantity of glass, the bulk can be characterized as representing either soda bottles (including a number of identifiable brands) or alcohol bottles. Also present in the collection were two examples of "club sauce" clear glass stoppers.

This assemblage also produced six examples of tableglass — all tumbler fragments. Three of these were identifiable as commercial containers with anchor closures (Jones and Sullivan 1985:143). These were tumblers sold filled with contents such as peanut butter or jelly, but intended to be reused afterwards. These are typically twentieth century items.

Also present in the Kitchen Group collection are three crown caps and one aluminum pop tab.

The Architectural Group artifacts include 19 fragments of window glass (including seven fragments of frosted "privacy" glass), 13 fragments of "linoleum" fragments, six roofing slate fragments, three unidentifiable nail fragments, three wire nails (including two 9d specimens and one 8d), a small lock box fragment, and a latch arm.

At least some of these materials are suggestive of trash or perhaps materials brought in with the fill. There is, for example, no source of privacy glass on the cemetery. Nor is it likely that the lock box originated on site. Nevertheless, these remains are all characteristic of the late nineteenth or early to mid-twentieth century.

These two units produced a small number of materials that would be placed in the Arms Group. Included are three lead slugs for a pellet gun, each measuring about 9.2 mm in diameter and about 14.8 mm in length (before impact). Also present is a lead 9 mm bullet, also impacted. All are modern and their presence in such an urban area is a little surprising.

The Personal Group artifacts include one eyeglass lens and one ring or pin setting. The latter has a gold surround with an amber colored stone having an octagonal step cut. Both of these items likely date from the twentieth century. Also present in the area immediately at the entrance of the tomb are two glass beads. One is a transparent blue glass tube bead with a length of 9.5 mm and a diameter of 10.0 mm. The other is an opaque green glass tube bead with a length of 5.2 mm and a diameter of 5.6 mm. These beads are also probably mid-nineteenth century examples.

Clothing Group artifacts include one metal button which was originally fabric covered. It is identical to South's Type 24 button and has a diameter of 18.9 mm. This specimen probably dates from the second half of the nineteenth century.

There are 46 specimens which have been placed into South's "miscellaneous" category of Activities Group artifacts. Eight of these are typically classified as toys, including three clay marbles, two glass marbles, a toy teapot fragment, and two white bisque porcelain doll parts (one is unidentifiable and the other is a leg with a molded and painted shoe).

Other materials in the Activities Group include an iron wrench head, a brass rivet fragment, three machine screw fragment, two flower pot fragments, a phonograph record fragment, a nut, a bolt fragment, a washer, a staple, a link to a chain, a brass rod (possibly representing a rivet), a fragment of a bisque porcelain tube (probably an electrical part), a fragment clear lucite, one unidentifiable molded plastic object, and 20 fragments of graphite tubes from arc-lamps. Also included in this category is a large mass of lead with a brass attachment, representing a damaged and replaced ring attachment similar to those found on the slate tomb cover. This may represent one which broke and was replaced on site.

Level 2, in contrast, produced only a single undecorated pearlware ceramic and two fragments of clear glass.

Tomb I-86

Unit 1 was located on the west elevation of this tomb, with Level 1 representing fill brought in to level the cemetery. The 364 items recovered from this level, therefore, represent either items incorporated with the fill (which seems unlikely, based on the nature of the recovered items) or artifacts deposited in the cemetery during the final decade of the nineteenth century and the subsequent twentieth century.

The assemblage is dominated by Kitchen Group artifacts, accounting for 317 specimens, or 87% of the level 1 collection. Ceramics, however, include only one undecorated whiteware, one hand painted over glazed white porcelain, and four fragments of bristol slip stoneware with a blue sponge decoration. These are all characteristic of the late nineteenth and early twentieth centuries.

Container glass is again the most abundant material, with a range of both modern (i.e., twentieth century soda bottles, such as Coca Cola, aluminum pull tabs, and even a plastic twist-top lid) and older wares. As elsewhere in the cemetery we recovered small quantities

Table 3.
Artifacts Recovered from Unit 1, Tomb I-86

Material	Level 1	Level 2	Level 3
Kitchen			
white porc., hpog	1		
whiteware, undecorated	1		
stoneware	4		
"black" glass	5	1	
brown glass	24		1
green glass	2		
blue glass	2		1
bright green glass	21	3	
light green glass	45	1	
aqua glass	25	3	
manganese glass	1		
clear glass	166	21	2
gray glass	1	1	
clear glass stopper	1		
tumbler glass	1		
crown cap	1		1
pop tabs	2		
plastic twist top	1		
Architectural			
window glass	13	2	
linoleum frags	18		
UID nail frags	10	3	2
hand wrought nail frags	1		
machine cut nail frags	1		
wire nails	2		
UID spike frag	1		
iron leader hook		1	
staple			1
Arms			
pellet gun slug	1		
.22 cal shell casing	1		
.38 cal shell casing	1		
Clothing			
buttons	1		
Personal			
beads	1		
Tobacco			
pipe stem frag	1		
Activities			
glass marbles	1	1	
arc lamp graphite rod	3		
UID brass strip			1

of manganese glass, most common in the late nineteenth and early twentieth centuries. Also present in this assemblage was another example of the "club sauce" clear glass stopper found at other tombs and likely representing the consumption of alcoholic beverages.

Some of the materials from Level 1 may have functioned as containers for flowers, but far more appear to represent either soda or alcohol bottles brought into the park and then discarded. One specimen, otherwise unidentified, is of aqua glass with "SAVANNAH" molded on the base and having the city name also molded into the side of the bottle. Also abundant are fragments of crown cap lip treatments.

The only tableware item recovered from this collection is a stainless steel table knife blade. This is an example of the type commonly used in commercial restaurants and is likely modern (i.e., post-dating 1950).

Architectural remains include 18 fragments of linoleum and 13 fragments of window glass. The nails from level 1 represent considerable temporal variation. There is one hand wrought nail fragment, one machine cut nail fragment, and two wire nails (9d and 20d in length). Also present is a single spike fragment. Although these remains span at least the late eighteenth through twentieth centuries, it is impossible to determine their function in the cemetery.

There are three Arms Group artifacts, including a fragment of a lead slug similar to those identified at Tomb I-83. Also present are two brass shell casings: one .22 caliber and one .38 caliber. Both are likely early twentieth century specimens.

These excavations also produced one Tobacco Group artifact — a fragment of a kaolin pipestem fragment.

Clothing objects included two specimens of white porcelain buttons (South's Type 23; South 1964:122). The faces and backs are convex with a central portion of the face depressed for the holes. The buttons are 11.0 and 11.7 mm in diameter. The style was common during the nineteenth century, peaking in popularity between 1837 and 1865 according to South (1964:122). This particular style, however, retained its popularity throughout the second half of the nineteenth

century and is therefore not particularly useful for dating. These materials most likely represent items dropped by cemetery visitors.

Included in the Personal Group is a single yellow translucent glass wire wound bead. The specimen has a diameter of 8.8 mm and a length of 6.3 mm.

The Activity Group is represented by a fragment of a blue and white swirled glass marble and three fragments of carbon rods from arc lamps.

Not tabulated in any group are 16 small, worked marble fragments and two worked sandstone fragments which appear to be pieces of damaged or destroyed grave monuments. None exhibit writing.

Level 2 in this unit consisted of the old humus at the cemetery. Associated materials, therefore, have the potential for some antiquity, although as the specimens recovered reveal, there is mixing.

A total of 38 specimens were recovered from the level, including 31 Kitchen Group artifacts, six Architectural Group items, and a single toy from the Activities Group category. In addition, there were two additional fragments of worked marble.

The kitchen remains include a single fragment of "black" glass, suggestive of at least the nineteenth century, but it was associated with a variety of modern glass, including bright green specimens and several examples of crown cap lips. The architectural remains also include several fragments of "privacy" glass, probably originating from the upper soil zone and characteristic of the late nineteenth century. Also present, however, were three unidentified nail fragments which are consistent in form and condition with those associated with coffin remains elsewhere on the site. There is also an example of an iron leader hook. These devices were driven into mortar or wood to support gutters or down spouts. Although such items might have been found on some tombs, it seems far more likely that this originated on one of the nearby structures and found its way into the cemetery as trash. The single toy recovered from level 2 is a glass marble.

In level 3 we recovered 10 specimens, although again it seems clear that there is some downward movement of later materials. The recovered items include, for example, one fragment of a crown lip. The other items, however, are more suggestive of an early to mid-nineteenth century deposit, although clearly there was not a great deal of deposition in the cemetery based on these findings.

The nail fragments from level 3 are consistent with coffin nails. The small strip of curved brass may represent a coffin decoration. These items provide further evidence that the cemetery received heavy use, with many graves being intruded by later excavations.

Tomb J-4

Excavation of Unit 4 on the west edge of Tomb J-4 produced a total of 950 specimens — far more than any of the other tombs investigated. In spite of the abundance, the Kitchen Artifact Group still dominated the assemblage, consisting of 787 specimens or nearly 83% of the assemblage. Like level 1 at tombs I-83 and I-86, this level consists of soil brought into the cemetery and used for leveling. The artifacts, however, seem to largely represent items deposited during the cemetery's late nineteenth and early twentieth century use, combined with later twentieth century trash.

Ceramics include one specimen of pearlware and three examples of whiteware. One of the whitewares, a green transfer print, has a maker's mark placing its manufacture between 1836 and 1842 (Godden 1964:535). Also present is a specimen of bristol slip stoneware and a bisque porcelain.

Container glass is far more common and also exhibits a greater temporal range. Although specimens of "black" glass are present, so too are a number of twist-top and crown lips. As at other tombs, another consistent find is a "club sauce" stopper, as well as six fragments of clear glass tumblers, at least four of which exhibit evidence of anchor closures and were originally filled with some product, such as jelly. There is also an example of a manganese glass tumbler, as well as two fragments of footed vessels, probably wine glasses.

Architectural remains include a number of

Table 4.
Artifacts Recovered from Unit 4, Tomb J-4

Material	Level 1	Level 2	Fea 6
Kitchen			
bisque porc.	1		
pearlware, blue trans print	1		
whiteware, undecorated	7		
whiteware, green tp	1		
stoneware	1		
"black" glass	7		
brown glass	25		
green glass	3		
milk glass	4		
blue glass	5		
bright green glass	6		
aqua glass	7		
manganese glass	42		
clear glass	558	7	13
light green glass	100	3	
clear glass stopper	1		
tableware glass	9		
crown cap	2		
pop tabs	2		
metal twist top	5		
Architectural			
window glass	19		
linoleum frags	6		
roofing slate frag	3		
UID nail frags	7	2	
wire nails	1		
machine cut nails	2		
Arms			
shell casings	3		
bullets	2		
iron shot	1		
lead shot		1	
Tobacco			
pipe stem	1		
Furniture			
iron tacks	1		
Clothing			
buttons	1		
other	2		
Personal			
beads	3		
coins	3		
hair comb	1		
Activities			
doll parts	3		
jacks	2		
clay marbles	5		
glass marbles	3		
misc. hardware	2		
arc lamp graphite rod	79	2	
coffin hardware	3		
other	10		1

nails and slate fragments. The latter are likely remains of tomb roofing. More interesting are specimens of linoleum and window glass (including privacy glass). Similar materials found at other tombs were assumed to represent items brought in with the fill dirt of level 1. This, however, doesn't seem to be the case since they are found in these excavations and there is no fill episode in this area of the cemetery. We must assume, therefore, that there was some other source of these architectural components nearby — perhaps some of the structures on the south edge of the cemetery?

The Arms Group artifacts include three .22 caliber shell casings, one .32 caliber bullet, and one .38 caliber bullet fragment. All of these items are relatively modern, probably dating from the twentieth century. Also present, however, was one solid shot, 1-inch in diameter. This specimen may represent either grape shot, used extensively during the American Revolution (Sprouse 1988:3) and occasionally during the Civil War (Dickey and George 1980:16-17), or Union case shot characteristic of the Civil War (Dickey and George 1980:15). This represents the only specimen recovered from these excavations which is suggestive of the activities which took place in this area during these two conflicts.

Unit 4 also produced one specimen typically identified as an iron furniture tack. These tacks, however, are also known to have been used to attach fabrics to both the interior and exterior of coffins during the nineteenth century.

The Tobacco Group is represented by a single clay pipe stem, having a diameter of 5/64-inch. On the stem is "[GLA]SGOW." This is frequently associated with McDougall pipes. The McDougall Company of Glasgow was the largest export manufacturer of pipes in the mid-nineteenth century. The firm opened in 1846 and continued business until 1867 (Humphrey 1969:17-18).

Clothing Group artifacts include a two-hole white porcelain button, a small iron buckle (perhaps associated with a belt, although it may also represent a tack item), and a fragment of a brass cufflink with a head diameter of 8.7 mm.

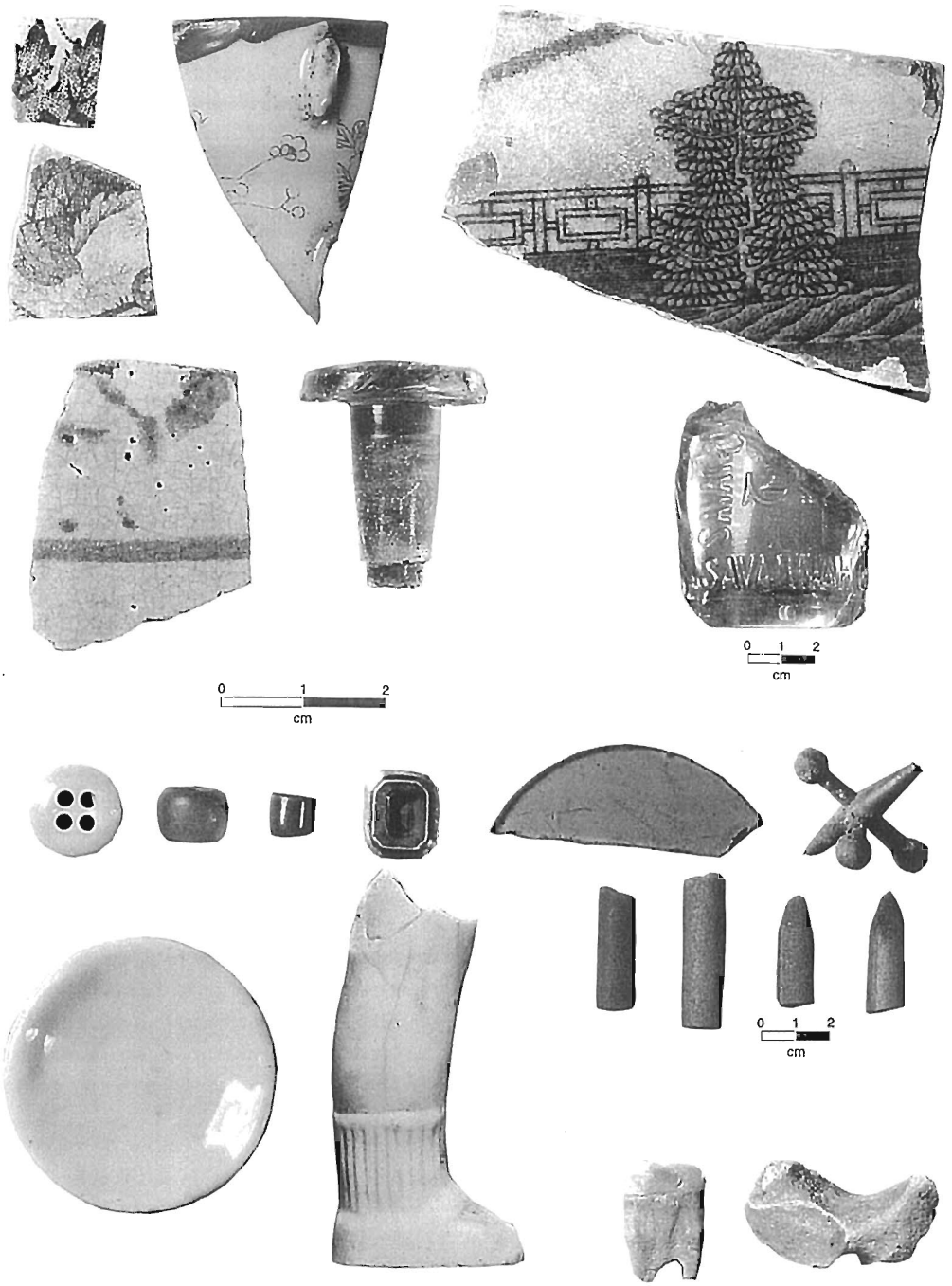

Figure 28. Artifacts recovered from excavations at Colonial Cemetery. A, green transfer printed whitewares; B, hand painted overglazed Chinese porcelain; C, blue transfer printed pearlware; D, Bristol slip stoneware with cobalt blue decoration; E, sauce-style glass stopper; F, aqua bottle fragment; G, porcelain 4-hole button; H, clear glass bead; I, opaque green glass bead; J, jewel in gold setting; K, eye glass fragment; L, brass jack; M, toy saucer; N, bisque porcelain doll's leg; O, arc-lamp graphite tubes; P, human bone from Unit 4 (molar and vertebra fragment).

Personal Group artifacts include three US coins, all one-cent pieces, dating from 1908, 1910, and 1918. Curiously, all were found in very close proximity to one another. While this may be nothing more than a coincidence, it seems also possible that these coins were intentionally deposited at the tomb entrance.

Also recovered from immediately in front of the tomb entrance were three beads — one translucent clear wire wound bead with a diameter of 7.5 mm and a length of 8.0 mm, one opaque black glass wire wound bead with a diameter of 8.8 mm and a length of 9.7 mm, and one opaque black glass wire wound bead with a diameter of 10.0 mm and a length of 9.8 mm.

The only other Personal Group artifact was a fragment of a tortoiseshell hair comb.

The Activities Artifact Group is second only to the Kitchen Group in terms of size, with 107 specimens recovered from level 1. Thirteen of these are toys, including three glass marbles, three white clay marbles, and two red clay marble. Also present were two"jacks," one iron and one brass. Two doll parts were recovered, including one made of pink plastic and one of bisque porcelain tinted pink. The final toy was a white porcelain doll's saucer, with a diameter of 32 mm.

The most common artifact, however, were the 79 fragments of carbon or graphite rods for arc lamps. The abundance of these items at this tomb suggests that an arc lamp must have been situated nearby.

This unit also produced a number of miscellaneous items that tend to wind up in the Activities Group, including two small carbon cores that probably represent battery cores, an iron bolt, a wood screw fragment, two lead seals, a fragment of brass wire, a fragment of a brass rod, a fragment of a brass bushing, a fragment of asbestos, and two unidentified iron objects which may be part of lamp fixtures.

The collection also includes three items which are most likely coffin hardware, probably decorative screw caps. Like remains from other excavations, these suggest that there has been considerable disturbance of graves in the cemetery.

Level 2 produced only 15 artifacts. As with several of the previous units, there is evidence of some mixing — for example, this level included two arc lamp graphite cores, indicative of the late nineteenth century park facilities. But the level also produced a single lead shot measuring 16.7 mm or .658 inch in diameter. Although this is in the range of the solid shot used by some muskets during the American Revolution, it is also within the range of .69 caliber round shot used in smoothbore muskets both immediately prior to, and during, the Civil War (Thomas 1997). So, materials are also found in level 2 which date at least from the mid-nineteenth century.

Feature 6, the fill from within the stair well, included 13 fragments of clear container glass and an iron horseshoe. Since the brick used to close the tomb seem late (i.e., late nineteenth or early twentieth century), the abundance of clear glass seems appropriate. The horseshoe is not out of place, even at this time, since horses were a prominent mode of transportation in Savannah into the early twentieth century.

Feature 8, fill from one of the grave shafts, produced three nail fragments, all likely associated with a wood coffin.

Human Remains

During the analysis of the material culture remains a few bone fragments were encountered. When examined, all proved to be human. Since none of the identified graves were excavated during this study, all of these remains represents skeletal material disturbed during the operation of the cemetery and incorporated into the backfill.

The material from Tomb C-65, recovered from level 4, includes a mandibular molar, either M1 or M2. Too much enamel is missing to determine the side, but a small carious lesion was observed on the side (either buccal or lingual) of the tooth. Also recovered is a proximal epiphysis of a tibia from a subadult.

A single fragment of an unidentifiable long bone was recovered from Tomb 1-86. Since this specimen was found in Level 1, it may suggest that some tombs were

"cleaned up" during the initial restoration efforts.

Material from Tomb J-4, level 1, includes a left maxillary molar, most likely M2 based on crown and root morphology. Also recovered was a maxillary incisor, probably the second or lateral incisor. Like the molar from Tomb C-65, too much enamel is missing to determine the side. The final item recovered from this unit is a fragmentary first cervical vertebra. The contact facet is the right inferior articular facet.

Although the teeth are in generally good condition, the other bone was in much poorer condition. This suggests that the preservation of skeletal material in the cemetery is variable. Although the materials reported historically seem to have been in good condition, it is likely that other burials are in far worse condition.

Ethnobotanical Remains

Although ethnobotanical remains, such as charcoal, are typically not considered artifacts, they are briefly discussed here for convenience.

These ethnobotanical remains were recovered entirely as handpicked materials from general unit excavation. No features appropriate for flotation were excavated and general unit fill was not selected for flotation. A total of six samples were collected from the four tomb excavations — two samples from Tomb C-65 (Unit 5, Lv. 2 and Lv. 4), one sample from Tomb I-83 (Unit 2, Lv. 2), two samples from Tomb I-86 (Unit 1, Lv. 1 and Lv. 4), and one sample from Tomb J-4 (Unit 4, Lv. 3). Handpicked samples typically produce little information on subsistence since they often represent primarily wood charcoal large enough to be readily collected during either excavation or screening. In the case of this collection, the materials were collected from either the old humus at the cemetery or from underlying zones representing spoil from grave excavations.

One of the most interesting questions — and one which, unfortunately, cannot be adequately addressed by this study, is what these woods represent. One sample (Tomb C-65, Unit 5, Lv. 4), for example, was noncarbonized and collected from what appeared to be wood associated with a coffin. The others, however, are all carbonized. Do they represent woods found on the cemetery property and periodically burned off by the cemetery caretakers? Do they simply represent wood ashes that were thrown into the cemetery?

Procedures

The samples were examined under low magnification with the wood charcoal identified, where possible, to the genus level, using comparative samples, Panshin and de Zeeuw (1970), and Koehler (1917). Wood charcoal samples were selected on the basis of sufficient size to allow the fragment to be broken in half, exposing a fresh transverse surface. A range of different sizes were examined in order to minimize bias resulting from differential preservation.

Results

Table 5 illustrates the results of the hand picked charcoal analyses by percentage. The probable coffin wood found in front of Tomb C-65 is pine (*Pinus* spp.). That the wood was of local origin (as opposed to a more expensive wood, such as mahogany or walnut, both of which are documented coffin woods) suggests that the burial from which this wood originated may have been of an individual of middling economic means.

It was surprising that only two woods (plus one unidentifiable wood) were found in the samples. Of the two woods, pine is clearly dominant in all units and all levels. Small amounts of oak (*Quercus* sp.) are found in only two samples (one from the area of Tomb I-86 and one from the area of Tomb C-65).

It seems unlikely that all of this burned wood represents coffins, and in fact much of the wood was probably unsuitable for structural use. The sample from Tomb J-5, for example, is composed entirely of what appears to be pine heartwood — dense wood that was full of pitch and burned very hot, resulting in deformation of the cell structure and characteristic rosin remains. This wood may have been used to start another fire, or it may have been used as a torch for some night activity. Since pine heartwood is difficult to work it is unlikely that it was used in coffins. The woods used to make coffins, however, has not been carefully documented and does require additional study.

Table 5.
Ethnobotanical Remains, by percent

Provenience	Pine	Oak	UID
Tomb C-65			
Unit 5, Lv. 2	60	20	20
Unit 5, Lv. 4	100*		
Tomb I-83			
Unit 2, Lv. 2	86		14
Tomb I-86			
Unit 1, Lv. 1	83	17	
Unit 1, Lv. 4	100		
Tomb J-4			
Unit 4, Lv. 3	100**		

* sample consists entirely of noncarbonized wood
** sample is pine heartwood

The remaining pine is not particularly characteristic of any one activity or function over another. Some appears appropriately sized to represent small second growth that might have been burned off the site, while other fragments are suggestive of much larger pieces of wood.

While it is tempting to suggest that the wood simply represents debris dumped in the cemetery, this does seem entirely plausible. There is little evidence of other nineteenth century trash dumped around any of the studied tombs. Rather, it seems more likely that the charcoal found in these excavations has its origins in activities conducted in the cemetery — perhaps periodic clearing or perhaps even bonfires associated with some grave side activity.

THE TOMBS

An Above-Grade View

One of the more intriguing features of Colonial Cemetery are the numerous brick tombs or family vaults found both more-or-less intact and also as only foundation ruins. The previous historical commentary reveals that at least some of these tombs were moved to Laurel Grove — where in fact similar types of structures are found. The historical documentation also reveals that some tombs were torn down once the city took ownership of the cemetery in 1895. At least some of these tombs have been found as at-grade foundations (Trinkley and Hacker 1999). Some, perhaps many, of the tombs have gone through several periods of repair. It is reported that at least some of the tombs have seen dramatic stylistic changes resulting from these periods of "restoration." One example, the Scarborough tomb (A-33), was once similar to the LeMoine vault (B-30), considered to be an anomaly and very different from the other tombs at Colonial Cemetery (Sharyn Thompson, personal communication 1999). As a consequence, these comments concerning the above-grade stylistic components of the tombs must be very cautiously interpreted.

There is surprisingly little written on these brick tombs. In fact, the only reference we have found is the few pages devoted to them by Ruth Little (1998) from her work in North Carolina. Although she doesn't provide any detailed discussion — or offer any typological assessments — she comments that there are a number of different styles. She notes that the term "bricking the grave" seems to be commonly used from the eighteenth through nineteenth centuries to describe brick grave vaults, either for individuals for multiple interments (Little 1998:45). For those areas with high water tables, she suggests that this sort of tomb would protect the burials — although it seems unlikely that this is a universal explanation (at least for Colonial Cemetery, where the site's high elevation precludes this concern). She illustrates both barrel vault and gable roofs connected by low end walls, as well as both barrel vault and gable roofs on much larger family tombs, with and without end walls (Little 1998: Figures 2.13, 2.15, 2.16, 2.17). She also notes that a variation on the theme includes "submerged brick vaults with only the top of the vaults visible" (Little 1998:47). Similar "submerged" tombs are found at Colonial Cemetery and also in the Quaker section of the Camden, South Carolina cemetery.

Little, in tying together the variety of brick tombs encountered in North Carolina, comments that, "this variety of impressive vaulted structures, whose masons are as unknown as most of the individuals buried in the structures, reflects the continuation of an age-old tradition and an ingenuous use of local materials to fashion permanent monuments" (Little 1998:47). In fact, it seems that these tombs are far more widespread than might at first be imagined, with variations occurring along not only the North Carolina coast, but the South Carolina coast as well (at such locations as Charleston and Georgetown). There does, however, seem to be a clear concentration of these tombs in Savannah and this suggests that we may be in the "core area" of the tradition, with the other locations reflecting either gradual spread of the idea or a reduced acceptance of the theme.

Regardless, it is worthwhile to at least briefly discuss the different tomb styles still evident at Colonial Cemetery and Table 6 provides some information concerning these tombs and their measurements.

In terms of stylistic features, one of the most immediately noticeable differences is that some tombs permit at-grade access, while others involve some means of access that is hidden below-grade (this study has revealed that this access is by way of stairs). For those with at-grade access there may be a further division between tombs with squared or rectangular openings (usually with a sandstone lintel) and those with arched openings. This difference, however, is seen more as a

Tomb #	N-S Dimensions	E-W Dimensions	Parapet	Parapet Height	Roof	Western Entrance	Dimensions	Eastern Side	Date	Brick Types	Other
A4	8.5	11.4	stepped	6.25	gable	arch	2.5x0.6		1839	fr	
A14	8.3	10.8	stepped	1.1	gable				1812	sg	1808 & 1812
A29	9.25	11.25	square	5.2	gable	unknown			1849	stucco	opening not visible
A32	8.2	11.25	square	3.5	gable	arch	2.7x0.7			sg	
A33	10.4	15	square	5.5	complex barrel				1827	sg	
A42	8.75	11.25	square	4.25	barrel	square	2.2x0.75			sg/fr	
A49	8.5	12.2	arched	8.1	barrel	arch	3x1.2			ssg	
A54	7.7	14.25	stepped	6.75	gable	unknown				ssg	much repair
A55	7.5	14.25	arched	7.25	gable	unknown			1786	ssg	much repair
A57	9.7	14.8	stepped	7.5	gable	unknown				ssg	much repair
A74	6	8	square	2.7	gable					sg	
A76	7.7	10.5	square	6.3	gable	arch	3x0.75			sg	
A77	9.6	11.75	square	5.8	gable	unknown			1843	stucco	opening not visible
A85	8.5	11.2	stepped	5.6	barrel	arch	2.0x0.2		1822	fr	
A101	8.7	10.25	stepped	8.3	gable	unknown			1775	stucco	opening not visible, 1763 & 1775
A134	8.5	11.25	stepped	6.8	gable	arch	2.8x1.2		1838	fr	1821 & 1838
B13	8.3	10.25	stepped	5.75	barrel				1807	sg	
B30	12.2	13.1	none	5.75	gable	unknown			1794	sg	entrance poss behind plaque
B34	8.25	10.5	square	4	gable	arch	2.4x0.75			sg/fr	
B46	12.2	14.7	square	5.6	gable	arch	3.5x1.8		1857	sg	
B57	8.6	14	arched	9.7	gable	arch	3.5x1.75		1830	sg	1822 & 1830
B99	7.6	10.1	square	4.9	gable	square	2.3x1.75			sg	
B121	8	10.1	square	3.75	gable	arch	1.7x0.5		1837	sg	
B122	7.8	10.1	stepped	5.25	gable	square	2.7x0.9		1830	sg	
B123	8.3	11.25	square	5.3	gable	arch	2.75x1.75			sg/fr	
C16	8	10	stepped	4.6	barrel	unknown			1831	stucco	opening not visible
C20	8.2	10.2	stepped	5.3	gable	arch	3x1.4			sg/fr	
C65	9.9	11	stepped	7.6	barrel	at grade			1849	fr	sandstone slab 2.75' square
C67	9	10.1	stepped	5.25	barrel	square	2.3x0.3		1849	sg/fr	
F33	9.7	11	square	5.5	gable	unknown				sg	
F37	10.2	17.25	square	6.5	gable				1822	stucco	opening not visible
F43	8.75	12	square	5	barrel	arch	2.25x0.75		1817	fr	
G40	8.4	11.4	square	4.75	barrel				1841	sg	
H11	12.2	11.75	arched	10.6	gable	arch	2.75x1.3		1829	sg	
H12	9.75	11.8	square	3.9	barrel	arch	3x1.25			sg	
I9	9.8	12	square	4.2	complex barrel			police station wall		sg	
I12	9.1	11.3	stepped	6.8	gable	square	2.5x1.3		1847	sg/fr	1846 & 1847
I18	10	11.8	damaged	6.25	barrel	arch	2.9x1.25			sg	
I23	9.2	11.5	square	5.7	gable	unknown			1845	sg/fr	opening bricked
I26	8.75	11.9	square	5.3	gable	square	2.5x1.25			sg/fr	
I28	8.4	11.25	square	3.75	barrel						
I31	11.6	11.3	stepped	6.2	gable	arch	2.5x0.8		1838	sg/fr	1837 & 1838
I68	9	11.1	stepped	7.7	gable					sg/fr	
I83	10.8	13.7	stepped	6.75	complex barrel	at grade				sg/fr	
I86	8.5	11.1	stepped	6.75	gable	arch	2.5x1.5			sg/fr	
J4	9.1	11.1	square	3.9	barrel	at grade					

Table 6. List of tombs at Colonial Cemetery.

variation on a theme, rather than two distinctly different styles.

We have thus far identified only 11 tombs with below-grade entrances, while there are at least 24 with at-grade entrances. Of those 24, 18 (or 75%) have arched openings. The square openings with sandstone lintels seem rather uncommon at Colonial Cemetery.

When these opening styles are evaluated by probable construction date, based solely on the information contained on associated plaques, the below grade tombs have an average construction date of 1827 (n=5, range of 1807 to 1849). The above grade tombs date slightly later. Those with arched openings have a mean date of 1834 (n=18, range of 1817 to 1857) and those with square openings have a mean construction date of 1843 (n=3, range of 1830 to 1849).

If this evidence can be taken at face value (and there is some concern in this regard), then it appears that the tombs with stairs are perhaps the first and oldest form, followed by more simply constructed tombs with arched above grade entrances. These were further simplified by converting the arched entrance to a square entrance using a sandstone lintel.

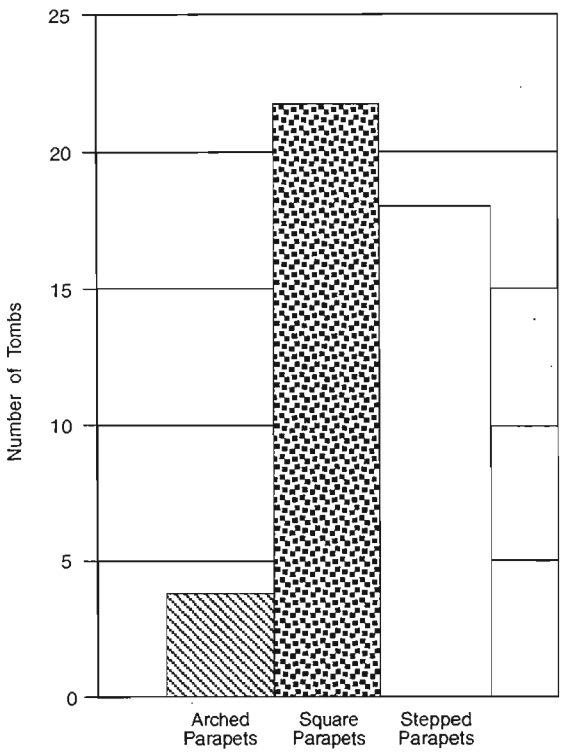

Figure 29. Tombs by style of parapet wall.

Another seemingly significant attribute are the end walls — they can be absent, flat, stepped, or arched. However, of all the features, this one seems to have been the most tampered with by various restoration efforts. The arched parapets are very uncommon, while the square and stepped patterns occur in about equal proportions (Figure 29).

The end wall forms can also be examined by date of construction, although even greater caution is warranted here considering the likelihood that these walls have been reworked. Regardless, accepting the current data at face value, the stepped parapets are among the oldest forms, dating from 1775 through 1849, with a mean date of 1828. Although the range places the arched parapets as slightly later (originating about 1786 and continuing in use through 1830), their mean date of 1815 suggests that they may be contemporary or perhaps even earlier than the stepped walls. The flat or straight walls seem to be the latest, exhibiting a range from 1817 through 1857 and a mean date of 1837. These data suggest that perhaps the more complex arched parapets gradually evolved into the simpler stepped walls, which in turn were further simplified, resulting in flat end walls. This would seem to correspond to evolution of simpler access.

Curiously, this evolutionary sequence seems to also be exhibited by the mean height of the various parapet walls. The arched parapets have a mean height above grade of 8.9 feet, followed by the stepped parapets with a mean height of 6.1 feet. The lowest are the flat end walls, with a mean height of only 4.8 feet. In fact, as Figure 30 reveals, the parapet walls tend to decline in height through time when only those with dated plaques

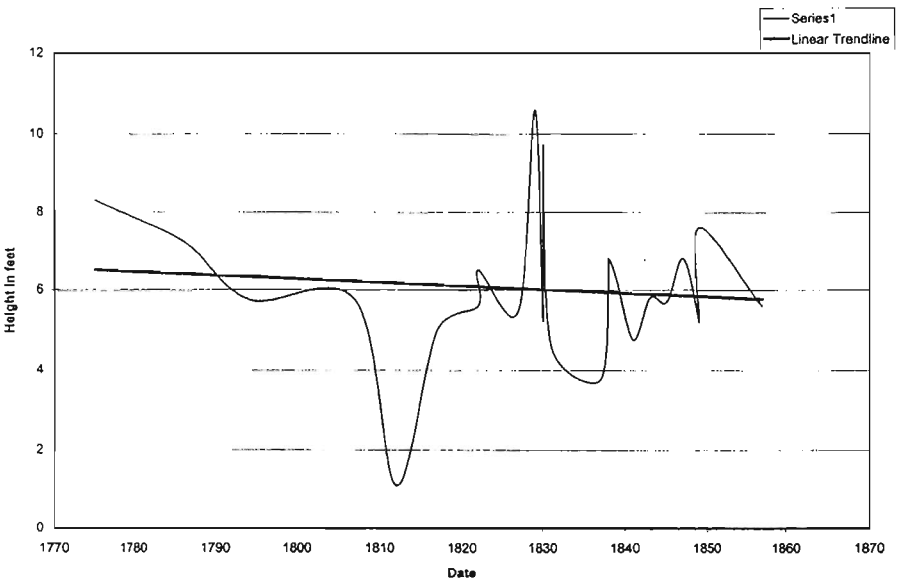

Figure 30. Trend analysis of parapet wall height through time, based on tombs with plaques.

are considered.

Another potentially significant difference is the roof form — with either gable or barrel vault styles found. The gable roofs may be in brick or slate slabs, while the barrel vaults (likely as a constraint of technology) are always brick. The barrel vaults can also be either simple or complex in form, with the major distinction being the more complex having gutters or other unusual devices. Again, however, it seems likely that these are only variations on the theme and are not, in themselves, significant differences. We should also point out that there are several tombs with what might be considered a hybrid roof style, seemingly a cross between the gabled and barrel vaulted styles.

When parapet styles are classified by roof form (see Figure 31), there seem to be very few differences. In each case, gable roofs are far more common, always accounting for over 60% of the tombs. Nor does there seem to be a strong correlation between roof style and height of the associated parapet wall. For barrel vaulted roofs the mean parapet roof height is 5.3 feet, while for gable roofs the mean parapet height is 5.9 feet.

If we look at the date ranges, again using only the data available from the attached plaques, the gable

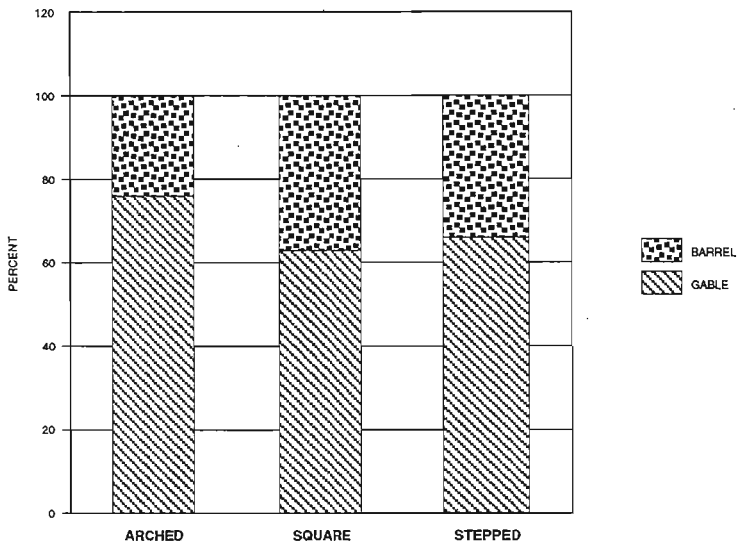

Figure 31. Parapet types by roof form.

roof forms seem older, exhibiting dates from 1775 to as late as 1857 (with a mean date of 1828). The barrel vaulted roofs, in contrast, date from only 1807 through 1849 (with a mean date only two years later than the gable form — 1830).

A final obvious feature of these tombs is the brick with which they were constructed. Some seem to have been constructed entirely of a brick which many would probably describe as typical "Savannah Grays." Although not usually gray, but rather red and brown, these are generally larger and less well fired brick that are likely of local origin. They are certainly found throughout Savannah. Another brick seems to be called Philadelphia brick and is bright red, slightly undersized, and very hard. There seems to be even less known about this type of brick (Sharyn Thompson, personal communication 1999). Regardless, there are some indications that Savannah's masons were very familiar with northern brick — and that some brick may actually have been imported from the north. Lane comments that:

> to a surprising extent never before examined, New England merchants and builders were responsible for the creation of Savannah's early 19th-century architecture. (Communications were probably better between Savannah and Northern ports than between the coast and distant parts of interior Georgia.) In 1804 construction of Christ Church was delayed when the masons, who generally worked in Savannah during the winter, returned to their homes in the North for the summer (Lane 1990:72).

A house to be built in Savannah in 1821 was to be of "good Northern brick" (Lane 1990:82).

Many of the tombs with this so-called Philadelphia brick also exhibit penciling — the practice of ruling mortar joints with a narrow white line to enhance the appearance of the masonrym (Bucher 1996:330; Lounsbury 1994:266). Lounsbury (1994:266) reports that this was most common in the early nineteenth century. Careful inspection will also frequently reveal that while the upper portions of the tombs are laid up in this hard red brick, the foundations are built using Savannah Grays. However, it seems likely that with the extensive reworking of the tombs, the type of brick used is among the least reliable attributes. Therefore, we have chosen to ignore the type of brick in our discussions.

Considering the three styles of end walls (which we are here typically calling parapets), the two roof styles, and the two forms of entrance, there are at most 12 different tomb variations. Yet examination of Table 6 reveals that there are only 10 — missing (or at least not identified) are tombs with arched parapets and below grade entrances (with either gable or barrel vaulted roofs).

While all of the other styles are present, they are not present in equal numbers. For example, the two most common styles are tombs with flat or square parapets, gable roofs, and at-grade entrances (accounting for 23% of the tombs) and those with stepped parapet end walls, gable roofs, and at-grade entrances (accounting for an additional 20% of the known tombs). Together these two styles (whose only major difference seems to be parapet wall form, which may well have been altered through time) account for 43% of the tombs at Colonial Cemetery.

The next most common style is the tomb with a flat or square parapet end wall, barrel vaulted roof, and below-grade entrance — these tombs account for 14% of the collection at Colonial Cemetery. Identical tombs with stepped parapet walls account for an additional 9% of the tombs.

A last consideration is tomb size. North-south dimensions (which may be considered width) range from 6 to 12.2 feet, while east-west dimensions (length) range from 8 to 17.25 feet. So in each case the range is over double the smallest example.

We might expect that tomb size to be directly related to number of individuals expected to be interred, although it seems likely that status, wealth, prestige, and other factors may also have played roles. Regardless, Figure 32 reveals that there is a clustering of tomb sizes between 7.5 to 10 feet north-south by 10 to 12.5 feet

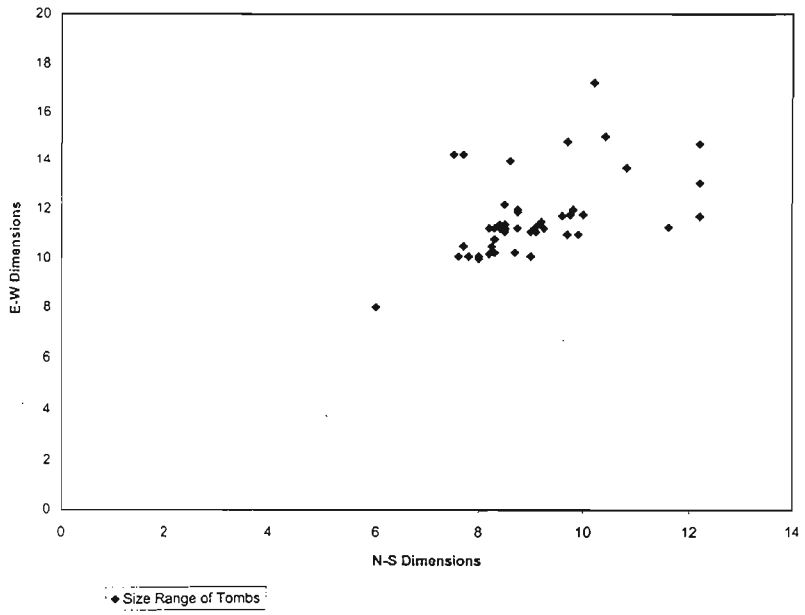

Figure 32. Size range of tombs at Colonial Cemetery (in feet).

east-west. Three of the largest "outliers" are tombs with square or flat parapets, perhaps reflecting late additions — perhaps at a time when money was flush.

Below Grade

These investigations have given us an indication of the below-grade construction techniques at four of the 46 tombs. Although representing only an 8.7% sample, we feel confident that we have a fairly good understanding of how the tombs were, in general, constructed (Figure 33).

In each case it seems likely that the tomb was excavated first, with the stair area (if that access style was being used) excavated last. In three of the four cases the spoil from the tomb was carried away from the tomb location, while in the last case at least some of the fill was spread around the tomb, slightly building up the elevation.

Excavations were typically 5 to 5.5 feet below grade. At the base the workers appear to have laid a brick floor, although we were was not able to determine whether this floor was mortared or dry laid. Then the walls were laid up in American common bond with headers every sixth course. There is little evidence of a functional builder's trench, so virtually all of the below-grade work seems to have been accomplished from within the tomb. The exterior wall mortar joints were finished only once the tomb reached the extant ground surface.

It was probably about this point that the builders put in the stair well, again constructing it from within the tomb and finishing only this inner surface. In several cases we discovered that as the stairs were being constructed the builders discovered that they were intruding into earlier graves. This seems to have resulted in several stairs being made far less solidly than was probably originally intended. In these cases the stairs take on more of a stylistic statement than any sort of real functionality.

There is also considerable variability in the finish of the stairs. Several reveal that the stairs were finished with slate treads — suggestive of considerable expense, as well as care. Only one reveals treads constructed of brick with no slate covering and these stairs are among the more abbreviated of those found.

We were not able to determine how much of the interior finish was applied prior to roofing the tomb, but it seems likely that as much as possible would be done while the tomb was open. Certainly the placement of slate shelves would have been far easier while the tomb roof was open.

The examined tombs also evidence considerable variation in terms of building features such as footers. It seems that often these were eliminated. This should

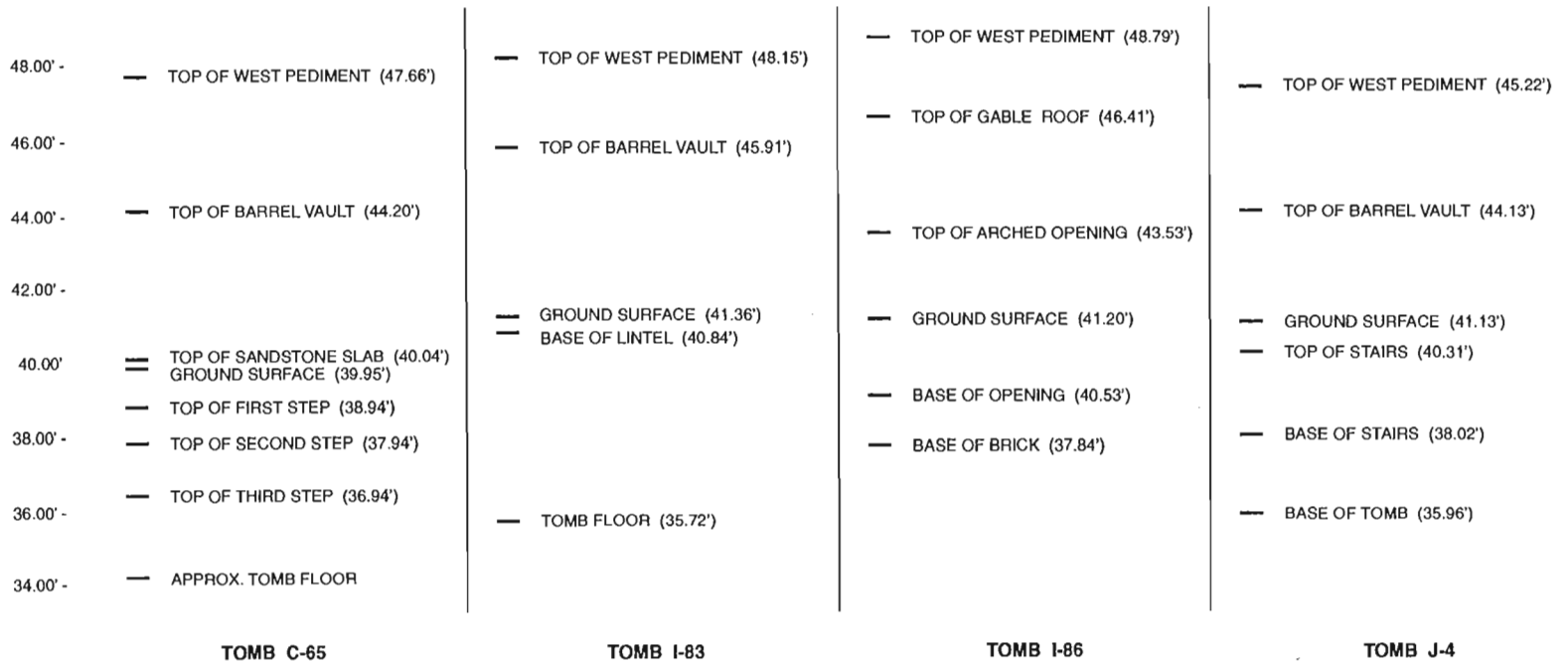

Figure 33. Comparison of construction feature elevations for the four investigated tombs.

not, however, be interpreted to mean that the craftsmen were unskilled or attempting to take "short-cuts." Although the purpose of footers is to help spread a structure's weight, especially in sandy soil, the tombs represent relatively light-weight construction. Walls were never more than about 14 feet in height and they carry relatively little weight. It seems almost that footers, in the one tomb were they were found, are overkill. Certainly none of the tombs seem to evidence any problem resulting from the absence of footers.

What is clear, however, is that as the existing ground surface was reached building techniques changed. For example, often Savannah Gray bricks were replaced with Philadelphia bricks. And, in several cases, the tomb walls (or at least side pillars) were shifted outward. In these cases there seems to have been no support of the brick and there is, in fact, evidence of failure on several tombs. This is an interesting design flaw in what were otherwise very well constructed structures.

Several devices (all at-grade) were identified for the closure of the tombs with below grade entrances. In one case the closure was actually rather elaborate, consisting of a slate slab into which were set brass rings through which a iron bar, set into the side stair well walls, was passed. Another bar, over the slate, was found at the opposite end of the covering. Acting together these bars prevented the slate cover from being moved aside or taken up, without the effort of removing the upper two courses of the side stair well walls. A more simple sandstone covering was used on another tomb. In that case it seems the cover's weight was felt to be adequate to keep it from being displaced.

In no case where these at-grade stone covers were used was there any evidence of a below-grade barrier. There only bricked entrance identified was clearly modern and had been put in place since the stone cover was missing.

It was only through time that these various covers have either been buried by the fill added to the cemetery or have had masses of concrete added to seal them (and confuse modern observers).

Those tombs with above-grade entrances relied on bricking the entrance after a body was added and removing the bricks in order to gain entrance. These might be considered a little more labor intensive, although they were likely simpler to maintain. Given the variability in stair construction they may also have actually provided easier access to the tombs. Of the three tombs with stairs only one comes remotely closed to being considered functional — and even at this tomb, placing a coffin within the vault would have required careful negotiation. In the case of one set of stairs, bodies had to be placed within the tomb by tipping the coffin nearly on end and sliding it into the tomb — requiring individuals both on the inside and outside of the vault, as well as resulting in considerable jostling of the corpse. Those tombs with above-grade access would allow the coffins to be slid through the opening, into the hands of waiting attendants.

There were two tombs where the stone closure slab was broken. In these two cases it was possible to see into the stairwell and through the tomb opening. In neither case was there conclusive evidence that the interiors received any routine maintenance. Patching which was observed was inconclusive and might simply represent late nineteenth or early twentieth century restoration efforts. We did not see, for example, any evidence that the roof parging had been renewed. This suggests that the tombs were constructed and that there was relatively little, if any, interior maintenance given to them.

We also sought to date some of the features identified during the archaeological investigations. Radiocarbon dating was inappropriate, both because of the features' recent age. A new technique, however, has been developed which is claimed to have applicability to more recent sites and features.

For several years researchers have been examining the charcoal and soil humic material found in features and buried soil profiles throughout the eastern United States. The studies suggest that the recycling of carbon and organic matter follow a linear progression through time. In other words, charcoal and soil humic material appear to be recycled at a slow, but measurable rate.

The effect of this degradation of charcoal and

soil humic material is measured by the ratio of the total carbon tot he readily oxidizable carbon in the sample. The ratio, called the Oxidizable Carbon Ratio or OCR, also gives the technique its name. To determine an age for a sample, a systems formula was designed to account for the influences of oxygen, moisture, temperature, and pH of the soil. Residual influences are included through a statistically derived constant.

Table 7.
Results of OCR Dating

Provenience	Sample ID	OCR_{DATE}
Feature 3, grave shaft	ACT #4108	40 YBP ± 1 year
Tomb I-83, under repair	ACT #4109	102 YBP ± 3 years
Tomb C-65, under stairs	ACT #4110	230 YBP ± 6 years

The sample used for this dating technique is a small quantity of soil. The smaller the sample and more tightly constrained the sample within the vertical and horizontal site plain, the more accurate the date. A variety of tests seem to suggest that the standard error for the OCR technique is 3% (see Frink 1992, 1994, and 1995 for additional details).

It is certainly fair to note that the technique is not yet widely accepted, although the major scholarly criticism appears to be that it is new and hasn't been widely examined. In addition, there seem to be relatively few blind tests on which skeptics can evaluate the technique's performance. From a logistical perspective the major problem is that soil samples are best collected with this dating technique in mind, providing the appropriately constrained sampling area.

A series of three samples were submitted for OCR dating. These include the grave shaft (Feature 3) in Unit 1 (hoped to yield the date of this grave), a sample from under the collapsed brick on the southwest corner of Tomb I-83 in Unit 2 (hoped to date the construction of the tomb), and a sample from under the brick stairs at Tomb C-65 in Unit 5 (hoped to date the construction of the tomb). The OCR dates are shown in Table 7.

Unfortunately, none of the dates specifically address the original concerns, although in each case they do provide insight on the site and offer guidance for the collection of future samples.

The sample of organic material from the grave shaft identified as Feature 3, dating about 1720, is in a secondary context, having originated within the pedogenically active surface soil prior to the excavation of the grave. Consequently, the OCR sample actually dates the pre-existing undisturbed soil. The results tell us that this grave post-dates 1720, but cannot tell us by how many years. For a more specific date it would be necessary to obtain a series of samples at 5 cm. intervals from the surface down to a depth of about 30 to 50 cm., depending on the age.

The sample from under the tomb repair in Unit 1, yielding a date of 1848, also comes from a situation where the organic matter contained in the sample is from a secondary deposit. As a result, it represents the age of the soils prior to the repair process. In other words, the repair post-dates about 1848. Of more interest, this sample may provide an approximate date of tomb construction. More precisely, it tells us that the soil developed about 102 years prior to the tomb repair; therefore, the tomb is at least 102 years old and may be older.

The final date, of 1910, from the area under the stairs at Tomb C-65, is also a secondary context. In this case, however, the date is telling us that these soils were deposited at least 40 years before the event of the tomb construction, so the 1910 calender date is actually misleading. Regardless, of the three, this date is the least useful, since it tells only that the tomb (or more precisely, the stairs) were built 40 years after the soils in front of the tomb were last disturbed — probably by a burial.

Although these dates are not all that we might hope for, they do demonstrate the usefulness of OCR dating in a cemetery context. Moreover, they also provide important guidance for future work at Colonial Cemetery. Not only should grave shafts receive more intensive investigation, but efforts should be made to collect samples for dating of architectural features only

from the builder's trench, which is more likely to provide reasonable accurate dates of initial construction. Like the grave shafts, these architectural features are best samples at incremental levels in order to determine the construction date (Douglas S. Frink, personal communication 1999).

Another aspect of this study was to explore the soil chemistry of several burials. Phosphate, derived both from bone and also from organic phosphorus-containing compounds in the fleshy parts of the body, is perhaps the best known indicator of animal (including human) matter. The problem, of course, is that bases are required to fix the phosphoric acids as an insoluble; otherwise, phosphates may readily leach from sandy soils and chemical tests often fail to detect any appreciable amounts. Cornwall observes that:

> the critical pH is close to 5.6, well on the acid side. Thus, if the pH of a soil is below this figure, its phosphate-content in the long run will be negligible (Cornwall 1958:195).

As a result, we were skeptical that the Colonial Cemetery soils would provide particularly sensitive results. Nevertheless, we chose to examine the soil chemistry in order to better determine if this approach might be used to help detect burials during archaeological investigations. A series of three samples, from known grave shafts or immediately on top of graves, were examined for pH, nitrogen, and phosphate. In each case the results revealed acidic soils and levels of phosphate and nitrogen so low as to be almost undetectable.

While soil chemistry has proven useful at other graveyards, it seems unlikely that it can provide much insight at Colonial Cemetery. The combination of soil acidity and sand, which allows rapid leaching, have removed almost all of the chemicals that are typically characteristic of human remains. Studies at Colonial Cemetery will need to rely on other techniques, such as direct excavation or penetrometer studies, to identify grave locations.

The Interior

The tomb interiors were nicely, although not necessarily elaborately, finished. Mortar joints were finished and there is evidence that an effort was made to leave the tombs in a clean condition (i.e., there was no evidence of spilled mortar). In the two tombs we were able to investigate only the roof was parged, likely thought necessary to create a watertight enclosure. One other tomb in Colonial Cemetery is reported to have had only finished joints, but no parging (Lynette Strangstad, personal communication 1999), suggesting some variation in interior treatment. Regardless, in each case there was an effort to make the interior something like a finished room or space.

Of the two we were able to see within, one indicated no effort to create shelving or holders for the coffins, which had been laid on the brick floor, seemingly spread or spaced out. In the other case the tomb interior was constructed with something like a vestibule in the front third, with the rear two-thirds supporting slate shelves on which the coffins were placed. In this tomb a central support wall was found running from the ceiling to the floor. Coffins were arranged on these shelves.

Since in neither case was the tomb filled to the point of crowding, we can't speculate on what families might have done when a tomb was "filled." Our study does reveal that wood coffins, even in the relatively dry atmosphere of these tombs, decayed and collapsed. It may be that bone piles would have been pushed to the back of the tomb, allowing room for another coffin.

In the one interior still in good order we found no evidence of flowers or other items placed with the coffins. However, the floor did have about 0.3 foot of spoil which may have hidden or obscured evidence of materials placed in the tomb with the bodies.

CONCLUSIONS

The Cemetery

This research begins to archaeologically document some of the activities which have been thought to have taken place based on the historic accounts. Other aspects of the historic record are still not well documented or understood.

For example, in the southeastern quadrant of the cemetery there is evidence that a foot of fill soil was spread out during the late nineteenth century. Our work found this fill to be generally clean loamy sand. It did not have building demolition or other refuse incorporated with it. Nor does it appear to have been waste soil, perhaps from dredging or some other activity. It seems to have been good fill, albeit culturally sterile. Not all areas of the cemetery, however, received this fill. Our investigations in the southwest corner of the cemetery reveal that almost no change in the cemetery ground surface has taken place in the past 100 years or so.

The archaeological research, however, failed to find any evidence of the gravel supposedly brought into the cemetery during the late nineteenth century. This suggests that the gravel was used only for pathways (which were not examined during this work) and not as general fill.

The most abundant artifacts were encountered in the post-1895 deposits and may provide a view of city park activities. The one item specifically — and clearly — related to the park function are the number of arc lamp carbon cores. As the cores burned down, they were replaced, with the old cores being tossed on the ground near the lamps.

Container glass, much of which likely represents either soda or alcohol, dominated the remainder of the collections, although there were a range of other materials — tobacco pipes, ceramics, personal belongs, and toys.

The collection of toys, consisting largely of marbles, but also including doll parts and jacks, suggest the use of the park by children once the tombs were camouflaged by vines and plantings. There are materials, however, which are curious and lead to speculation regarding other activities — such as the collection of coins outside one tomb, as well as the number of beads found at the entrance to several tombs. It may be that even into the early twentieth century there were activities taking place in Colonial Cemetery related to voodoo. This is certainly alluded to by authors such as Pinckney (1998).

Another curious finding from this late period are the numerous shell casings and bullets. If these materials had been found in lower soil deposits we might explain them as evidence of shooting rats in the overgrown and deserted cemetery. In the soil zone representing park activities, we can only wonder how often guns were being shot in the middle of the city.

Just as interesting is the failure to encounter any significant quantity of materials below the late nineteenth century fill. In those soil zones representing the developing of an A horizon after the cessation of burials (dating, in other words, from about 1860 through 1900) there are very few archaeological remains. We failed to encounter any quantity of trash or debris suggestive of the abandoned cemetery being used as a convenient dump for household trash.

In fact, as we went lower into the soils comprising the cemetery, the quantity of artifacts declined precipitously. In other words, there were even fewer items being incorporated into the cemetery during its use than there were added once it was abandoned. In fact, the most common materials from this early period seem to be miscellaneous skeletal remains and occasional coffin parts, both apparently representing earlier graves disturbed by later additions. The absence of clothing items and elaborate coffin hardware suggests (although far more work is required) that most of the

interments were individuals buried in shrouds inside plain wood coffins.

This archaeological study, beyond the recovery of skeletal material in the mixed soils representing various grave shafts, also encountered a number of burials immediately adjacent to the tombs. In several cases these burials had been partially intruded by tomb construction. In at least one instance two burials intruded into each other. While most of the burials assume a natural east-west orientation, there is at least one (and possibly two) oriented north-south. Whether this was simply an effort to crowd one more burial into a confined and limited space, or whether it may represent something more significant, is uncertain at this point.

The investigations, however, do document the exceptional number of burials present in the cemetery and projected by our earlier penetrometer study (Trinkley and Hacker 1999). It also reveals that the bulk of the burials (although not all) are at least 4 feet below the modern surface. This suggests that near surface activities (such as utility lines) are not likely to disturb intact burials (although human remains may be found in the spoil). Deeper excavations, however, should clearly be avoided.

The Tombs

Perhaps one of the most useful results of this work is that we are no longer confounded by Matero's vague and confusing description of the one tomb he excavated. We now much more clearly realize that there are essentially two varieties of tombs — those with above grade entrances, either arched or square, and those with at-grade (or today, because of fill, below-grade) entrance stairs.

Although additional research will certainly help clarify our understanding of tomb evolution (and likely correct some misconceptions), it seems that the tombs may have began with at-grade entrances and the above-grade styles were added later. These later styles may have begun with arched openings, being replaced by squared openings. In a similar fashion, we're tempted to suggest that the arched parapet walls evolved into stepped walls, and that those were eventually simplified, resulting in flat or straight parapet end walls. At the same time the height of the parapet walls seems to decline. Gable roofs seem to be older than barrel vaulted roofs, suggesting that as other elements of the tombs were simplified, the roof form became somewhat more elaborate. In sum, it seems that the style changed from large parapets and sharp lines to lower walls and more graceful roof forms.

We are certainly on more solid ground when we consider the variation in tomb entrances — well represented by our archaeological studies — as well as other below-grade construction features and attributes. The tombs, in general, were carefully constructed and finished. Stairs, however, show considerable variability, suggesting that they were considered separate from the tomb itself. In general, however, the stairs seem to be more for show than for function. It may, in fact, have been the difficulty in placing coffins in the tombs which encouraged the change from at-grade stairs to above-grade entrances. Even with this change, however, the placement of a new coffin in one of the tombs must have required a strong back, as well as a strong stomach.[1]

Future Research

The investigations at these four tombs in Colonial Cemetery have resulted in extraordinary documentation of tomb styles and construction. This is the first published description of tomb interiors or construction features. Yet, we suspect there is still more variation, especially among those with at-grade stairs.

As a result, we encourage the investigation of at least several more similar tombs. This will help us determine if the causal nature of stair construction is actually typical of the cemetery, or was simply a result of those we selected to examine. It will also help us document additional closure techniques. In particular, we are curious if there are additional examples of

[1] Although none of the tombs at Colonial Cemetery have vents, many of those at Laurel Grove do. Perhaps it was the foul air encountered in the tombs during their opening, combined with the number being removed from Colonial Cemetery in mid-century, that encouraged the addition of vents to the tombs at Laurel Grove.

"locked" tombs or if most were sealed simply by the weight and mass of the cover.

We also think it would be worth the effort to examine several of the tombs which have been opened in the past — such as those explored during in the search for General Greene. If these arched parapets are among the oldest of the tombs present, further investigation of their construction would be worthwhile. We would be especially interested in determining what sort of entrance was originally present at these tombs. This study might also better help to understand how the tombs had been entered during this search and the amount of disturbance caused by this early work.

There are also a number of unusual tombs that are in critical need for additional research. Among them are the LeMoine tomb, as well as another tomb which appears almost entirely "submerged," with only a small portion of the barrel vaulted roof above-grade. At present these represent unusual or rare tomb types, but we must understand their construction and archaeological footprint in order to evaluate tomb ruins. It may be, in fact, that these tombs are more common than we suppose. Archaeological attention should be turned to these more unusual tombs in an effort to understand their construction and function.

All of this work should seek to document internal tomb conditions. Just as architectural sites require not only exterior, but also interior documentation, so should tomb investigations. Such an effort provide us with critical information concerning tomb construction and use. In addition, by determining if tombs are still occupied, we can begin to evaluate the historical accounts which suggest that many individuals were removed from the cemetery. Thus far, both of the tombs found to be opened, were occupied — there was no evidence that anyone had been removed. Documentation of interior conditions can also help us address other historical accounts — including the suggestion that tombs had been desecrated and that trash was being thrown into open vaults. In fact, this research is so significant that we recommend that if at all possible, tombs be opened. The opening need not be large; for example, borescopes require an opening only 0.32 inch in diameter and the more powerful pipeline viewers or "sewer cams" require an opening of only 2-inches. The use of these devices would allow tomb interiors to be documented with minimal disturbance to the architecture.

There remain questions concerning the use of the cemetery. For example, Ruger's 1871 Bird's Eye View of Savannah (shown on the cover of this report), reveals several buildings which appear to be constructed within the southern boundaries of the cemetery. No evidence of them remains today. Were they actually built within the cemetery (which might explain the absence of tombs or monuments in these areas), or is this just an error on the plan? We have also no resolved the issue of whether burials exist under the current police barracks to the east. Nor have we examined whether burials extend northward into the sidewalk area of Oglethorpe Street (formerly South Broad). And it still isn't possible to ascertain the extent to which burials were actually removed from this cemetery (much less the care that was used). All of these questions are amenable to archaeological investigation and are worthy of the effort necessary to offer some resolution of the problem.

Finally, these tombs represent extraordinary forensic laboratories. Careful thought should be given to allowing osteological examinations of the remains in these tombs. There is almost no information available on the dietary patterns, physical conditions, health, and disease of early nineteenth century urban southern populations. There is even less information of this nature available for documented populations. Colonial Cemetery, where many of the tombs (and probably many more of the coffins) are marked, providing either family or individual names, offers an even more unusual opportunity for this sort of study. The number of well preserved coffins also offers an exceptional opportunity to examine changing patterns of mortuary behavior, such as the use of wood and metal coffins, the use of different hardware styles, the use of shrouds as opposed to clothing, and the association between these different forms of burial and both status and wealth. Although I realize, and respect, the concern over disturbing the dead, such studies can be done with dignity and care. Coffins and tombs can be replaced as originally found

afterwards. In this way the dead can teach the living far more about the past than could be learned in any other manner.

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