

**PRESERVATION PLANNING FOR ST.
ELIZABETHS WEST CAMPUS CEMETERY,
ST. ELIZABETHS HOSPITAL,
WASHINGTON, DC**



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WASHINGTON, DC**

Research Contribution 472

Michael Trinkley
Debi Hacker

Chicora Foundation, Inc.
PO Box 8664 ▪ 861 Arbutus Drive
Columbia, SC 29202-8664
803/787-6910
www.chicora.org

June 2007

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ISBN 978-1-58317-071-7
ISSN 0882-2041

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The neglected cemeteries . . . insult life itself, for death is an inevitable consequence of birth. By treating the disposal of the dead as though the problem were one of refuse collection, society devalues life.

-- James Stevens Curl, *A Celebration of Death*

MANAGEMENT SUMMARY

The St. Elizabeths West Campus cemetery is an exceptionally historic resource for the District of Columbia, and especially for the hospital grounds. In fact, the cemetery is a portion of the grounds listed on the National Register of Historic Places. This is recognized by the General Services Administration (GSA), as evidenced by this study. Cemeteries, however, are very different from virtually all other types of properties that GSA administers.

- ❖ They are sacred sites – consecrated within are the remains of loved ones deserving of the utmost of care and respect.
- ❖ They are artistic sites, such as sculpture gardens or outdoor museums, representing permanent collections of three-dimensional artifacts requiring the same level of care that museums provide.
- ❖ They are archives – storehouses of genealogical information, representing our individual and collective pasts.
- ❖ And they are scenic landscapes – like parks or open spaces, but requiring far more focused and specific care.

In sum, cemeteries are social, historic, architectural, and archaeological artifacts. When there is little else physically remaining of a community's earliest history, the local cemetery provides a unique tie to the past that would otherwise be lost.

Therefore cemeteries require very specific consideration and different care from the other types of open sites found in most communities.

In the case of the St. Elizabeths West Campus cemetery, the cemetery includes both military dead from the Civil War, as well as what were termed “friendless” patients, buried by the hospital “without ceremony.” The cemetery reflects an extraordinarily rich history; yet, this history was not sufficient to prevent the hospital from recreating the graveyard's history and developing a myth of a white cross that persists even today.

In addition, over the years the West Campus cemetery has failed to receive the care and attention that it both deserves and requires. As a result of these years of deferred maintenance, a number of issues – many of them critical and costly – require the immediate attention of the GSA.

This report evaluates these needs, classifying them into three broad categories:

- ❖ Those issues that are so critical – typically reflecting broad administrative issues and issues that if delayed will result in significantly greater costs – that require immediate attention during the first fiscal or calendar year after receipt of this study.
- ❖ Those issues that, while significant and reflecting on-going deterioration and concerns, can be spread over the next 2 to 3 years. This allows some budgeting flexibility, but this flexibility should not be misconstrued as a reason to ignore the seriousness of the issues.
- ❖ Finally, those issues that represent on-going maintenance and preservation issues. These costs can be spread over the following three to five years. Like

the Second Priority issues, this budgetary flexibility should not be interpreted as allowing these issues to slide since further delay will only increase the cost of necessary actions.

The First Priority Issues have a budget of approximately \$51,200.

- ❖ The bulk of these costs are for work recommended by Bartlett on the cemetery trees, including the removal of four (but not including stump grinding which is not appropriate in a cemetery context), replanting four oaks, pruning all of the trees in the cemetery, and basic fertilization. The total estimated for these activities is \$41,000.
- ❖ The other major expenditure involves first priority conservation needs, including the repair of several stones, consolidation treatments, and replacement of 22 stones. These costs are estimated to be about \$10,000.
- ❖ We also recommend the removal of the existing cemetery sign on the stone wall. The name “Civil War Cemetery” is inappropriate since the cemetery was initially intended for the use of patients – and by all accounts continued serving that function throughout its history. The existing sign as perpetuates the myth of the white cross – created late in the cemetery’s history and having no basis in reality. The cost of removal is estimated to be \$200.
- ❖ Other actions have negligible costs since they are administrative or planning related. For example, we recommend that all decisions concerning the cemetery be made in the context of the Secretary of the Interior’s Standards for Preservation and that all historic fabric be preserved whenever possible.
- ❖ We recommend that security patrols continue on a regular basis, although an

effort should be made to allow public access at reasonable times.

- ❖ In terms of planning, it is critical that the setting be protected from visual intrusions. It is equally critical that planning incorporate clear provisions for the cemetery’s adequate long-term maintenance, clearly a responsibility of the government.
- ❖ Current maintenance should be continued, but improved. For example, we have noted a great deal of recent stone damage from mowers and trimmer lines. Crews responsible for the cemetery upkeep should be held accountable for all damage; mower decks should be padded; and trimmer line should not exceed 0.065 inch.

Second priority issues are estimated to cost about \$115,000, although this may be spread out over several years.

- ❖ Approximately \$52,000 will be needed to establish an appropriate turf grass for the cemetery. This is not simply an aesthetics issue; a good turf grass will minimize maintenance and reduce damage to the stones.
- ❖ We recommend \$15,000 for additional historical research. In particular this research should seek to identify the civilians patients buried in the cemetery. It is important that GSA give a voice to these “friendless” individuals who currently lay forgotten in unmarked graves.
- ❖ An additional \$15,000 is allocated to the improvement of the vista and road shoulders on the route to the cemetery. This will involve removing downed timber, refuse, and other debris. The access road should remain graveled, although it requires approximately \$8,000 of work to stabilize the road base.

- ❖ Second priority conservation treatments, consisting largely of stone resetting, are estimated to cost approximately \$15,000. This work may be combined with the Phase 1 work at a savings to the government.
- ❖ Placement of new informational and regulatory signage is estimated to cost \$5,000, although this figure will vary with the type of signage chosen. We provide critical regulatory information that should be posted. The informational signage should balance the story of the military dead with the burial of civilian patients from St. Elizabeths. Both stories must be told.
- ❖ Finally, we recommend that the iron Confederate crosses, apparently placed on graves prior to the federal government allowing use of military stones at public expense, should be recast, using the one recovered as a model. These should be reinstalled in the cemetery, while the original is conserved and stored in a suitable repository, such as the Smithsonian Institution. A sum of \$5,000 is allotted to this task.

The items listed as third priority are those that can be spread over five years - perhaps extending into FY 2012-2013. These issues, however, are no less significant and will have a cost of about \$66,700 (not reflecting inflation or continued deterioration; nor does the cost reflect the on-going salaries of the staff needed to maintain the cemetery). These costs are also similar to those previously outlined, but are able to be postponed *short-term*.

- ❖ The cemetery's conservation status should be re-evaluated in five years, at an estimated cost of \$5,000.
- ❖ The largest budget allocation is \$40,400 for the completion of the Bartlett recommendations, including necessary cabling and bracing, pest control activities, and lightning protection.

- ❖ Finally, we allocate \$21,300 for the replacement of the chain link fence with a more historically appropriate wood picket fence, based on the available historic photograph.

While the allocation of just over \$233,000 is not inconsequential, it represents a small sum given the extensive work proposed for the remainder of the St. Elizabeths Campus. In addition, much of the work necessary at the cemetery is the result of deferred maintenance, with damage accumulating over the cemetery's 150 year history. Failure to act will not save the taxpayers money, it is result in the loss of this historic resource.

It is equally critical that the cemetery not be "lost" in the planning process. Long-term care and maintenance are critical for the resource's survival.

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INTRODUCTION

The Project

In October 2006 Mr. William Willis, AIA, on behalf of the U.S. General Services Administration (GSA) in Washington, DC contacted Chicora Foundation and requested investigations culminating in a “preservation plan” for the St. Elizabeths West Campus Cemetery (also known as the Civil War Cemetery). Specifically, the GSA requested site investigations that would compare a 1992 cemetery map with the current conditions, examine the area immediately around the cemetery for evidence of additional graves, document the existing stones, research historical documents associated with the cemetery, and make a series of recommendations. These recommendations would generally cover restoration efforts and more specific recommendations concerning conservation treatments that might be needed for the stones, as well as overall maintenance of the cemetery.

A proposal addressing these concerns was submitted to the GSA on November 10, 2006 and that proposal was accepted in mid-December. Our proposal involved essentially four discrete tasks:

1. Site investigation, which was to include the comparison of the 1992 map of the cemetery to current conditions, updating vegetation, stones, and other features, as well as visually investigating the perimeter of the cemetery for evidence of additional burials. This work was to also include the use of a penetrometer - a device to measure ground compaction. We coordinated these efforts with previous geophysical work, including ground penetrating radar and metal detecting.
2. Documentation of the individual stones. This included documenting each stone using a standardized form, photographing each stone, assigning a discrete identification number (which included correlating all of the various previous stone numbers), and evaluating both the condition of the stone and the grave.
3. Conducting historic research for the West Campus Cemetery. This work was to include the examination of data previously gathered by ZAI, supplementing that information with additional research at the National Archives and Library of Congress, examining available burial lists and registers, comparing historic photographs to current conditions, comparing the historic photographs to the various lists of stones, and evaluating the numbering on the stones and replacement stones.
4. Preparation of cemetery restoration, stone assessment, and maintenance plans. This work would include the development of recommendations concerning cemetery restoration, including such issues as access and appearance; the development of recommendations specific to the individual stones, considering issues such as preservation of original, historic fabric versus replacement; and the development of recommendations for the long-term maintenance of the cemetery.

Because of weather constraints, work at the cemetery did not commence until Monday,

January 22 and continued in Washington, DC through January 26. The investigations were

This document reminds us – at least at a general level – of what we need to be thinking

about as we begin a cemetery preservation plan. Although the GSA works daily with preservation issues, it is still a good idea that everyone with responsibilities for the care of this cemetery should be intimately familiar with the eight critical issues it outlines.

For example, all other factors being equal, a cemetery should be used as a cemetery – not to walk dogs, not as a play ground, and not as a park. And until we are able to do what needs to be done, it is our responsibility to make certain that the site is preserved – it must not be allowed to suffer damage under our watch.

We must work diligently to understand – and retain – the historic character of the cemetery. In other words, we must look at the cemetery with a new

vision and ask ourselves, “what gives this cemetery its unique, historical character?” Perhaps it is the landscape, the old and stately trees, the large box woods, the magnificent arborvitae. Perhaps it is the very large proportion of complex monuments, or the exceptional slate markers. Whatever it is, we become the guardians responsible for making certain those elements are protected and

Table 1.

Secretary of the Interior’s Standards for Preservation

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color, and texture.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

conducted by the authors, Ms. Nicole Southerland and Ms. Julie Poppell.

Preservation Fundamentals

Preservation is not an especially difficult concept to grasp, although admittedly some work diligently to make it seem so. The fundamental concepts are well presented in the Secretary of the Interior’s Standards for Preservation (see Table 1).

INTRODUCTION

enhanced (whether they are particularly appealing to us or not).

Whatever conservation efforts are necessary must be done to the highest professional standards; these conservation efforts must be physically and visually compatible with the original materials; they must not seek to mislead the public into thinking that repairs are original work; and they must be documented for future generations. It is our responsibility as the steward of the property to retain a conservator appropriately trained and subscribing the Code of Ethics and Standards of Practice of the American Institute for Conservation (AIC).

The Secretary of the Interior reminds us that each and every cemetery has evolved and represents different styles and forms. It is our responsibility to care for all of these modifications and not seek to create a “Disneyland” version of the cemetery, tearing out features that don’t fit into our concept of what the cemetery “ought” to look like.

Likewise, we are reminded that there will be designs, monuments, and other features that characterize our cemetery – and we are responsible for identifying these items and ensuring their preservation. We must be circumspect in any modifications, ensuring that we are not destroying what we seek to protect.

Before acting, we are required as good and careful stewards to explore and evaluate the property, determining exactly what level of intervention –

what level of conservation – what level of tree pruning -- is actually necessary. And where it is necessary to introduce new materials – perhaps a pathway – into the cemetery, we must do our best to make certain these new elements are not only absolutely necessary, but also match the old elements in composition, design, color, and texture. In other words, if the cemetery has brick pathways, we would be failing as good stewards if we allowed concrete pathways – especially if our only justification was because they were less expensive.

Where conservation treatments are necessary, the Secretary of the Interior tells us that they must be the gentlest possible. However

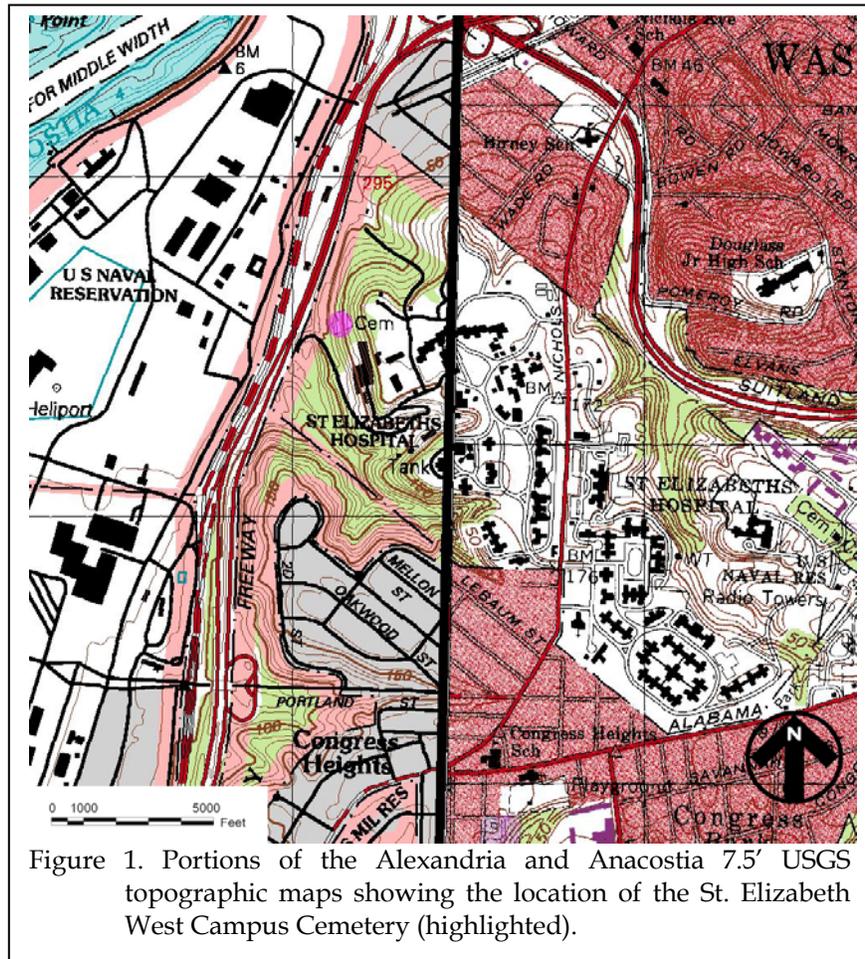


Figure 1. Portions of the Alexandria and Anacostia 7.5' USGS topographic maps showing the location of the St. Elizabeth West Campus Cemetery (highlighted).

you phrase it – less is more – think smart, not strong – we have an obligation to make certain that no harm comes to the resource while under

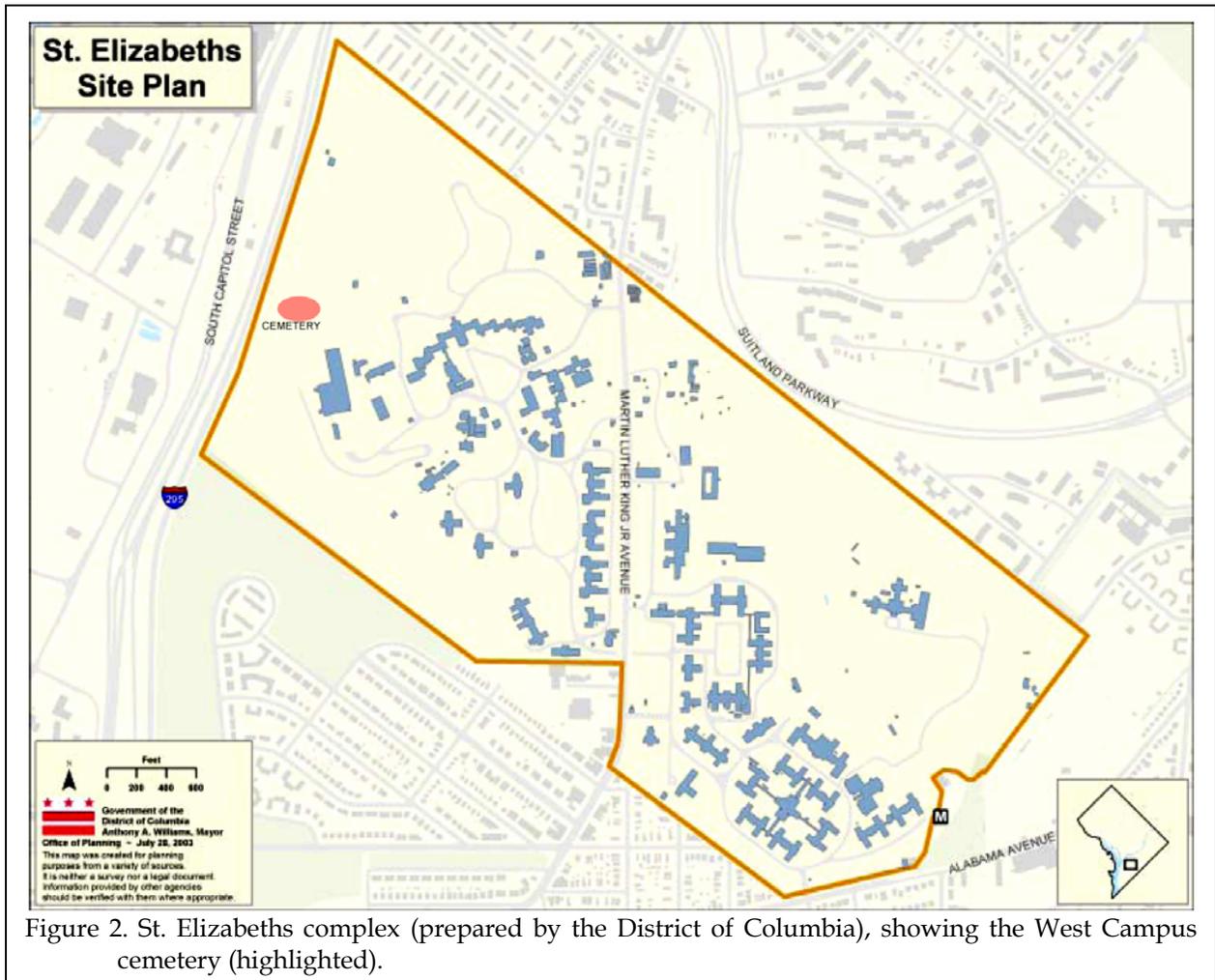


Figure 2. St. Elizabeths complex (prepared by the District of Columbia), showing the West Campus cemetery (highlighted).

our care. And again, one of the easiest ways to comply is to make certain that we retain a conservator subscribing to the ethics and standards of the American Institute for Conservation.

Finally, we must also recognize that the cemetery is not just a collection of monuments and the associated landscape – the cemetery is also an archaeological resource. We must be constantly thinking about how our efforts – whether to repair a monument, put in a parking lot, or resurface a path – will affect the archaeological resources – archaeological resources that just happen to be the remains of people buried at the cemetery by their loved ones.

It is clear that the stewards prior to the GSA have not always followed the Secretary’s Standards with any rigor and there have been several efforts to “recreate” the cemetery, causing extensive damage to different components. Consequently the GSA must seek to undo some of the damage that past caregivers have done to the cemetery. It is important that future maintenance and interpretation carefully follow the Standards established by the Secretary of the Interior.

The Cemetery Location

St. Elizabeths, originally a mental health facility for the U.S. military and civilians in the

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District of Columbia was long ago divided into two parts by what is today called Martin Luther King, Jr. Avenue, creating the West Campus – west of this road – and the East Campus – east of this road. The GSA is currently steward of the West Campus; the East Campus is operated by the District of Columbia.

The cemetery that is studied in this project is situated on what is called the West Campus, at the rear boundary of the property, adjacent to South Capital Street (Figures 1 and 2). It is in a quiet, relatively undisturbed area of woods overlooking the U.S. Naval Station along the Anacostia River. Separating the cemetery from the river bottomlands is I-295 (also known as the Anacostia Freeway) and South Capital Street, SE.

The Setting and Context

Historically, St. Elizabeths was outside of the District's business core, overlooking the Anacostia River and providing a rural setting that was thought to promote the physical and mental health of its patients. Over time, the District's Ward 8 has grown up around the hospital grounds.

To the north are the neighborhoods of Barry Farm and Buena Vista. Barry Farm is a small inner-city neighborhood. It was originally a farm owned by James Berry in the mid-nineteenth century. After the Civil War the property was acquired by the Freedman's Bureau and was parceled out as settlements for freed slaves. By the 1950s the city had built Suitland Parkway, isolating the community between busy traffic arteries. In 1954 the Redevelopment Land Agency, working on behalf of the District, purchased much of the property and constructed a large, public housing project that is still present. Only a few frame houses, mostly along the fringe of Barry Farm at St. Elizabeths, evidence remnants of the original freedmen community. While possibly the oldest African American neighborhood in Washington, it is today almost entirely occupied

by public housing projects and it has a reputation for violent crime, poverty, and neglect. In contrast, the homes making up the Buena Vista neighborhood to the northeast tend to be privately owned by higher-income residents. The topography is hilly, resulting in narrow and winding roads. However, these elevations also provide some with expansive views of downtown Washington.

To the south of St. Elizabeths is Congress Heights. This is a largely residential, poor inner-city neighborhood. Nevertheless, it is also the most economically diverse, containing the largest commercial district in Ward 8, along Martin Luther King Jr. and Malcolm X Avenues. The neighborhood, consisting of garden apartments and some older single-family bungalows, began in the late 1920s when it was established as the end of the Washington Streetcar line. The area experienced considerable urban neglect for several decades. Recently, a number of developments, valued at over \$450 million, have been conducted. Many include the West Campus in this neighborhood and see the property as encouraging development. Beyond Congress Heights is Bellevue, dominated by 1940s detached homes and yards.

To the east of St. Elizabeths is Douglass, named for Frederick Douglass, whose homestead is about a mile north. The neighborhood is on top of a high ridge, but the area is almost entirely occupied by two public housing complexes: Douglass Dwellings and Stanton Dwellings.

Thus, urban renewal and real estate speculation aside, St. Elizabeths is today situated in a regrettably poor section of the District. Historic preservation has been of little concern, as has infrastructure maintenance. Looking at the Ward as a whole, the poverty rate is 28.1% (the highest rate of the District), the unemployment rate is 13.4%, and only 15.7% of the homes are owner-occupied (the lowest rate of the District).



Figure 3. Access road to the West Campus Cemetery.

cut-off that then leads to the cemetery in a wooded section of the property. This route itself is not particularly attractive, running adjacent to a modern sewer line, through poorly maintained woods (Figure 3).

Visitors come upon a modern stone entrance to the cemetery that appears too formal and massive, especially given the historic nature of the property (Figure 4). The front (or east) boundary of the cemetery is enclosed by a modern metal fence. It, too, is out of place, evoking a more formal setting than is historically appropriate. The only entrance to the cemetery is

Crime statistics for Police Service Area 703 to the north of St. Elizabeths show that violent crime has increased 19% (177 to 211) and property crime has decreased 9% (270 to 245) over the past year. To the south, in Police Service Area 705, violent crime has gone down by 3% (232 to 226), while property crime has remained stable (442 and 440).

on this boundary. Along the remaining three sides is a chain link fence - at least the second to enclose the cemetery.

Access to the West Campus is off Martin Luther King, Jr. Avenue SE, using one of the two historic entrances to St. Elizabeths, now closed by the GSA. The campus is unoccupied and the various buildings are mothballed as the planning process is being conducted. The main roads are in generally fair to good condition. The primary access gently winds from the entrance past the Center Building. There is graveled



Figure 4. Entrance to the cemetery. The stone wall, iron gates, and iron fence create a sense or impression of the cemetery's importance and formality that is historically incorrect.



Figure 5. The abandoned hospital warehouse is situated immediately adjacent to the cemetery, creating a significant visual intrusion.

To the south of the cemetery is the architecturally rather undesirable hospital warehouse (Figure 5). Just east of the cemetery is a small, graveled parking area and a series of landscape timber steps up the slope to an area used by the District of Columbia Police for dog training. On this slope is a waste area, with dumped equipment and much debris. To the west is a very steep slope down to the highways separating the cemetery from the Naval Station.

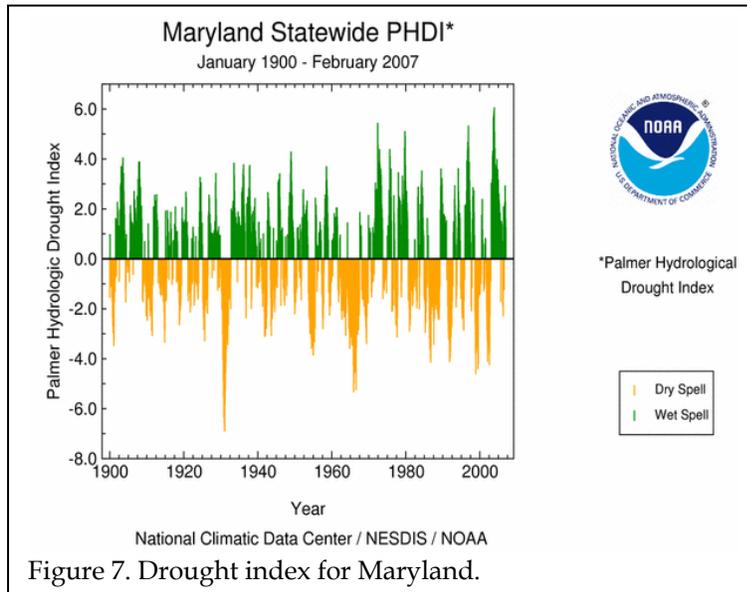
Although the view in the cemetery during the winter is spectacular (Figure 6) – allowing a nearly clear vista towards the Anacostia River – the overall setting has been allowed to deteriorate

significantly. The woods have lapsed into decay, the warehouse and sewer lines represent significant visual intrusions, detracting from the serenity and quiet dignity of the cemetery. Overhead there is a constant cacophony of helicopters circling the Naval Station. These intrusive elements have been allowed to significantly degrade the cemetery – which was listed on the National Register of Historic Places in 1979.

Ignoring the distractions and intrusions, the cemetery is dominated by its steeply sloping topography, surrounding woods, and simplicity of markers. In those few moments when the noise pollution declines, visitors are overwhelmed by the solemn simplicity of the grave yard. It is unique in providing such a rural setting within the District of Columbia. *These are the elements that are most critical to preserve as the West Campus is developed.*



Figure 6. Winter view from the entrance of the cemetery toward the Anacostia River in the background.



and Sassafras gravelly sandy loams with slopes from 15 to 40%.

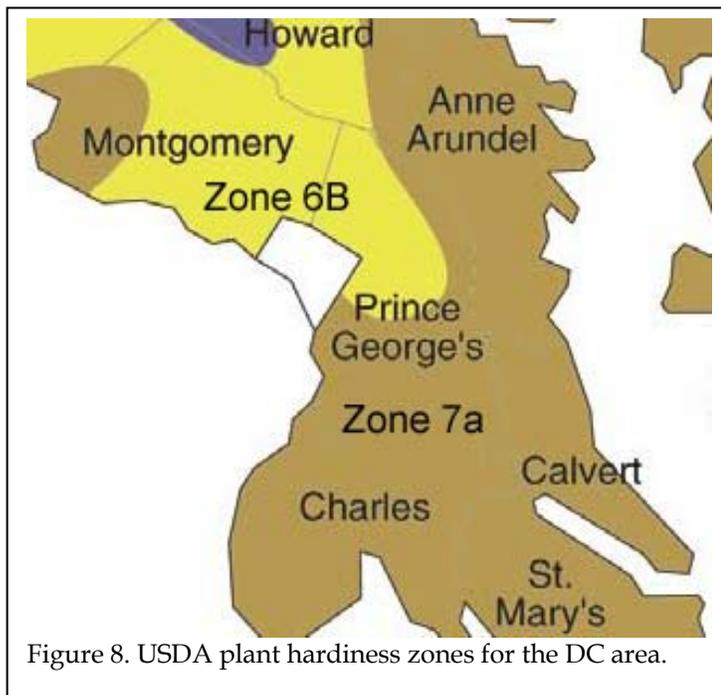
The Croom Series consists of very deep, well drained soils on uplands with moderately slow to moderate permeability. They formed in coastal plain fluvial and deltaic deposits of gravel, sand and clay. The Sassafras Series consists of very deep, well drained soils on summits and side slopes with moderate to moderately slow permeability and slow to medium surface run off. They formed in coastal plain sandy marine and old alluvial sediments.

Factors Affecting the Landscape Character

The District of Columbia covers an area of about 65 square miles on the northeast side of the Potomac River, adjacent to the mouth of the Anacostia River. The District is situated in two physiographic provinces, the Mid-Atlantic Coastal Plain and the Piedmont Province. The two regions are separated by the Fall Line, which roughly follows Rock Creek from southwest to northeast across the District. St. Elizabeths is entirely found within the Coastal Plain, in spite of the rolling topography. Elevations range from sea level in the southern part of Washington, where the Anacostia and Potomac are tidal estuaries, to 420 feet in Tenleytown in the west of the city. The West Campus Cemetery ranges in elevation from about 70 to 120 feet.

The District of Columbia is characterized by chilly, damp winters and hot, humid summers. The normal daily mean temperature is 58°F, ranging from 35°F in January to 80°F in July. The average annual relative humidity, however, ranges from 75% in the morning to 53% in the afternoon. Precipitation averaged 39.4 inches yearly from 1971 through 2000.

The geology of the St. Elizabeths area is dominated by the Potomac Group's clay and silt facies, along with River Terrace Deposits. The dominant soil in the vicinity of St. Elizabeths is the Beltsville-Urban Land Complex with 0-8% slopes. In the immediate cemetery area, however, are Croom very gravelly sandy loams with slopes from 8 to 40%



Precipitation is distributed fairly evenly throughout the year, with an average annual precipitation of about 39 inches. Figure 7, however, reveals considerable potential for drought. While 2002-2004 were generally wet years, the period between 2004 and 2006 showed episodes of considerable drought. The area has an average growing season of about 207 days, although this will vary by specific location, with low areas often evidencing late frosts. Figure 8 shows that while the District of Columbia is split between two Plant Hardiness Zones (7a and 6b), the immediate area of St. Elizabeths is found in Zone 7a, with average annual minimum temperatures of 5 to 0°F.

This is often classified as an area of Northern or Cool Season turfgrass, although technically it is a transition zone - an area where neither cool nor warm season species are ideally suited. As a result, it is one of the most difficult areas in which to manage turf.

Recommendations

All decisions regarding modifications, alterations, additions, or other actions affecting the West Campus Cemetery should be carefully evaluated against the Secretary of the Interior's Standards for Preservation.

The remaining historic fabric and context of the cemetery should be protected. In particular intrusive elements should be removed, buffered, or minimized. Recently added elements that are not consistent with the cemetery's setting, context, or history, such as the stone entrance, should be considered for removal.

Much of the cemetery's character derives from the surrounding dense forest vegetation, the steeply sloping topography, and the simplicity of the cemetery. These elements have particular importance and should be closely guarded.

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The Hospital

Initially called the Government Hospital for the Insane, St. Elizabeths was in operation by 1855, largely through the work of Dorothea Dix, a leading health reformer of the period. The hospital's mission was to provide, "the most humane care and enlightened curative treatment of the insane of the Army, Navy, and the District of Columbia (U.S. Code, Title 24, Section 161, Establishment).

Based on Dix's recommendation President Millard Fillmore appointed Charles H. Nichols, MD as the institution's first Superintendent in 1852. Nichols was also assigned the responsibility for selecting the property, as well as overseeing the design of the hospital (National Archives, RG 418, Letters Received and Other Records, 1851-1902). The first structure was Center Building, constructed in three phases: west wing, east wing, and the center administrative section.

Typical of the period, the Center Building was designed according to the principles of what was known as the Kirkbride Plan¹ by architect Thomas U. Walter, who is

¹ This refers to a system of asylum design advocated by Philadelphia psychiatrist Thomas Story Kirkbride in the mid-nineteenth century. His requirements were based on the philosophy of "Moral Treatment" - a form of treatment popular at the time based on humane psychosocial care and moral discipline. The typical floor plan consisted of long, rambling wings staggered ("en echelon") so that each connected building would receive sunlight and fresh air. It was thought this design promoted privacy and comfort (Levin 2005). For more information see www.kirkbridebuildings.com.

perhaps better known as the primary architect of the U.S. Capitol expansion, begun in 1851.

Another part of the Kirkbride Plan focused on the grounds, which were intended to be "highly improved and tastefully ornamented," thereby contributing to the curative properties. Thus the location, overlooking the Anacostia and Potomac rivers, providing a panoramic view of the city, was as important as the buildings themselves. The situation was described in the October 1860 Superintendent's Report (p. 20):

A tract of one hundred and ninety-five acres of land, situated on the southeast bank of the Anacostia river. It is nearly due south from the United States Capitol, and about two miles from it in direct line. It is the most prominent part of what has been known ever since the settlement of the country as the St. Elizabeths tract it is perfectly healthy. The site of the hospital edifice commands a panoramic view of the entire District, and of an equal extent of the country in Virginia When this tract of land came into the possession of the government, about one-half of it, or one hundred acres, were under cultivation. Since that time its productiveness has been increased at least fifty per cent., and about twenty acres have been reclaimed from the forest, and put under cultivation - about the same number that have been appropriated to the

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Figure 9. Center Building in the early twentieth century.

site of the buildings, and the grounds and yards for their immediate accommodation.

The Annual Report of the Board of Visitors for Fiscal Year Ending June 30, 1860 (p. 17) expands, noting:

This tract has upon it many fine old forest trees, and several miles of winding carriage roads have already been laid out and roughly graded. Where the forest was too dense for a large and handsome growth, the surplus trees have already been carefully cut out, and used as firewood or sawed into lumber. Two of the handsomest wards in the hospital have just been finished and furnished, one with cedar and the other with chestnut which grew upon the premises.

Other construction activities during this period included the creation of a large wharf, gas-works, and an engine house. Even the bricks were fired on the grounds of the hospital (perhaps in the front of Center Building) in

order to reduce the cost (Nichols complained that the appropriation was entirely too small for the planned hospital²).

The first patient was admitted on January 15, 1855; by mid March 1855, 51 paupers from the District of Columbia, previously housed in Baltimore, were transferred (Overholser 1956:4). Meanwhile additional construction continued,

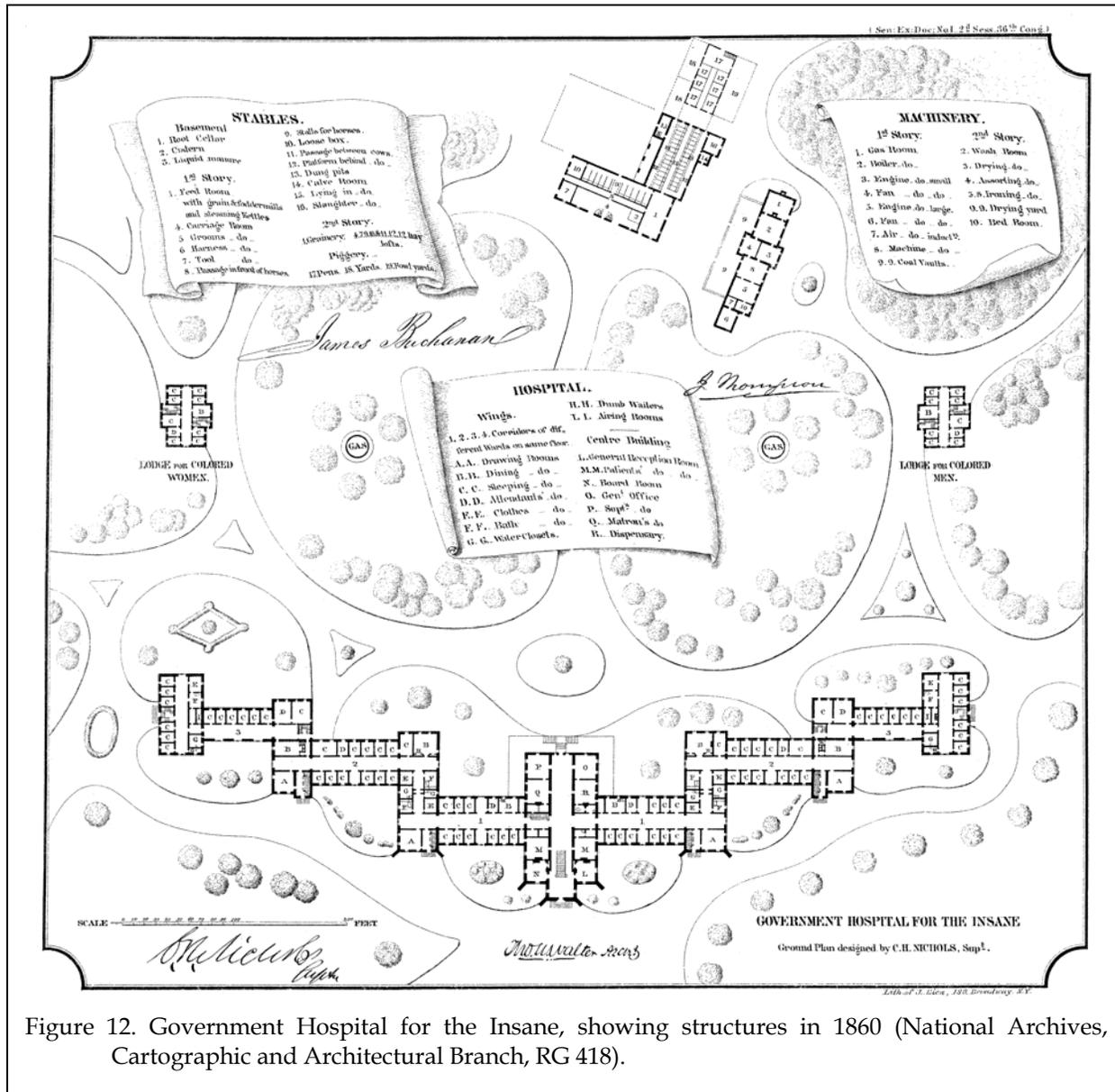
with the erection of an ice house, extension of the stables, building of a green house, and the creation of two bowling alleys in the basement of the Center Building wings (Report of the Superintendent of Construction, October 1, 1861).

Almost immediately Nichols proposed the construction of a wall surrounding about 40 acres of the hospital, to have a foundation 20 inches wide, buried 24 inches deep. The 14-inch thick wall was to be 9 feet high and to be strengthened by “leaning pilasters on both sides.” A coping of blue flagging was proposed. Some progress had been made by 1859, although the wall (eventually surrounding three sides of the 190 acre property) was not completed until 1869.

Initially this wall was to be brick and bluestone, but the bluestone quarry ceased operation prior to the completion of the wall,

² Only \$100,000 was provided by the 1852 Civil and Diplomatic Appropriation Act for the purchase of the property, construction, furnishing, and making the hospital ready to receive patients. The St. Elizabeths property cost \$27,000 alone.

PRESERVATION PLANNING FOR ST. ELIZABETHS WEST CAMPUS CEMETERY



Lodge Cafeteria). Patients from nearby hospitals were transferred to St. Elizabeths to fit the prostheses and soldiers stayed until they learned to use their new limbs.

During the Civil War a portion of the hospital farm (intended not only for curative work, but also to provide essential supplies) was converted into a cavalry depot and an encampment for a marine company. Tents were placed on the grounds for convalescent patients

due to overcrowding. What was known as “Pencote Battery” was constructed by Commander John A. Dahlgren on the grounds of the hospital, across the Anacostia River from the navy yard (Schneller 2004). A fortification was also constructed on the Shepard Farm (today known as the east campus). Although the fate of Dahlgren’s Pencote Battery is not known, there is a brief reference to the other fortification being leveled in 1875. Remains, however, are likely still clearly evident archaeologically.

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It was during the use of the hospital by Civil War wounded that the name St. Elizabeths began. Soldiers were reluctant to write home announcing their confinement in the "Government Hospital for the Insane," so they began to refer to the hospital using the colonial plantation name (Board of Visitors Report, Fiscal Year Ending June 30, 1868, p. 10).

By 1864 a "handsome and convenient public road, bridge, and culverts" had been constructed across the Anacostia, linking the hospital with the District.

In 1866, Congress passed an act permitting the hospital to admit all men who had served as Union soldiers and were found insane within three years of discharge by reasons of continuation of mental illness, relapses after recovery, or mental illness relating to military service. It was found that many of these veterans were chronically ill, with their conditions requiring custodial care. Further

National Home of Disabled Volunteer Soldiers be sent to St. Elizabeths.

Because of the severe overcrowding the hospital embarked on a significant building program, adding the Dawes wing (1871) and Garfield wing (1872) to Center Building. Also added was Atkins Hall (1878), Relief Building (1879) and Home Building (1883). This program did little to solve the problem. The Home Building, intended to house 150 patients, was soon occupied by 450.

The Board of Visitors reported that by 1878 the grounds had grown to nearly 400 acres. By 1888 the hospital was also requesting funds to replace the original greenhouse, described as a "little wooden frame, never worthy of the name of greenhouse."

The Civil War patients, by this time elderly, severely disabled, and in poor health, were eventually separated from the criminally

insane with the construction of Howard Hall in 1887. Between 1898 and 1899, four Allison Buildings were constructed to care for the Civil War veterans.

By 1876 the care of the hospital's patients was being questioned. Although Nichols was exonerated, he resigned the following year (House of Representatives Report 793, 44th Congress, 1st Session). The new superintendent was William W. Godding whose fiscal attitude toward patient care was perhaps best portrayed

by the quote, "omit nothing essential to the proper care of the patient but . . . avoid



Figure 13. An example of "Moral Treatment," facilities such as these pigeon roosts were intended to be therapeutic (NA. RG 418-P-565).

enlarging the population at the hospital, Congress in 1882 directed that the insane at the

unnecessary expenditures.” He died suddenly in 1899 and was succeeded by Dr. Alonzo B. Richardson. Richardson himself died four years later and was replaced by Dr. William A. White.

By 1900 landscape architect Frederick Law Olmsted, Jr. was consulted on the proposed addition of the east campus. He noted that at present the grounds were “much cluttered and confused in arrangement (Library of Congress, letter quoted in Maggioncalda 2004). A formal report in 1901 was blunt, noting that buildings “have been huddled about in the vicinity of the

of “confusion,” the design called “bald and uncompromising.” Olmsted recommended that some of the minor buildings be removed, and that pathways and plantings simplified. But most of all he warned that future buildings should take heed of the problems.

Olmsted warned that buildings near Nichols Avenue should be avoided: “the sight of patients at their windows, their sometimes unseemly conduct, and the noises which they often make, [would] be a serious annoyance to the public.” He goes on to note that the land east

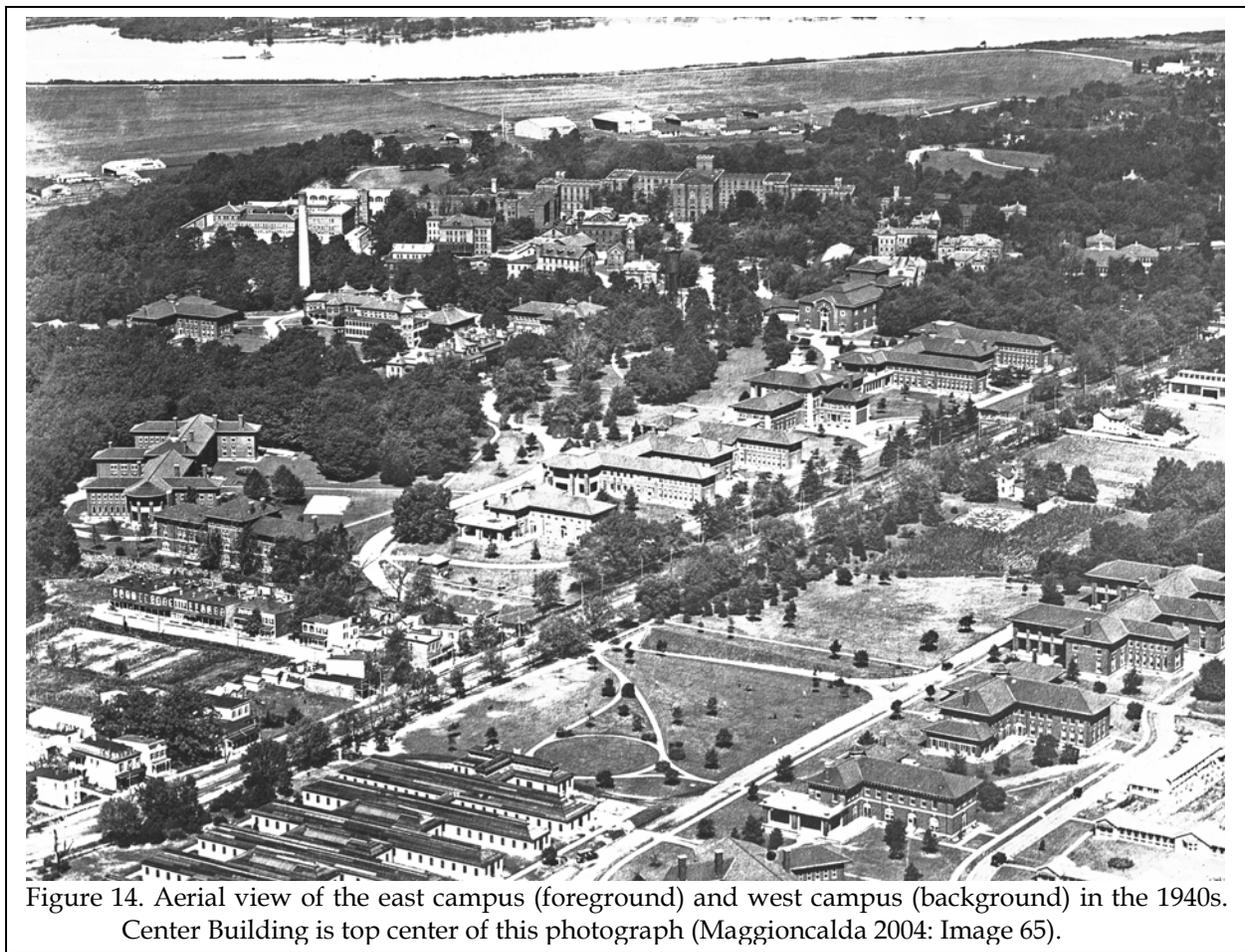


Figure 14. Aerial view of the east campus (foreground) and west campus (background) in the 1940s. Center Building is top center of this photograph (Maggioncalda 2004: Image 65).

great main building [Center Building] with no regard for agreeable or even orderly appearance and what is far more important, without proper regard for the various uses to which the buildings are put and the interference of these uses with each other.” The appearance was one

of the avenue is too distant and barren, suggesting instead the purchase of additional land on the west side of the avenue (Library of Congress, letter reproduced in Maggioncalda 2004).

Although publications such as D'Amore (1976) paint a very complimentary picture of Dr. White, the hospital was investigated a second time in 1906 (*Report of the Special Committee on Investigation of the Government Hospital for the Insane with Hearings May 4 - December 13, 1906 and Digest of the Testimony*, House of Representatives, 59th Congress, 2nd Session). A third investigation took place only a few years later in 1911 when 40 people complained of the cruelty observed in the institution, with 26 of those lodging complaints being attendants. In spite of the vast acreage to supply fresh meat, milk, and produce, Dr. Isaac N. Kelly, who inspected the food provided patients, described it as "the worst I ever saw in my life," noting that the "the beans were so hard you could hardly crush them with your teeth." After each investigation the hospital was warned, promises were made, but there seems to have been little overall improvement.

In 1916 the name of the institution was officially changed to St. Elizabeths and by the middle of the twentieth century there were 7,000 patients and 4,000 employees operating out of 100 buildings spread between what had become the east and west campuses.

Dr. White endured yet a third investigation in 1927. Again there was ample evidence of mistreatment, poor food, and mismanagement (McCarl 1927). By this time the west campus was 190 acres and was separated from the east campus by Nichols Avenue and its street car line. There was already a connecting tunnel under the street, the brick wall on the west side of the street, and an iron fence on the east.

In 1948 the last of the institution's cattle were sold off. This likely marks the end of efforts to supply the hospital using local produce and livestock. There was yet another investigation of conditions at the hospital in the mid-1960s.

In 1987 the federal government transferred St. Elizabeths' 118-acre east campus to the District of Columbia. The west campus remained federal property under the auspices of the Department of Health and Human Services (HHS), although the District was given permission to use the buildings on the west campus in return for being responsible for the protection and maintenance of the entire site and grounds. The DC Department of Mental Health took charge of the site.

This arrangement, however, was far from amiable. The District alleged that the buildings were in substandard condition and the federal funds provided at the time of the transfer for renovation were insufficient. The District sued the federal government to recover additional funds and this case has yet to be decided.

When the property was transferred to the District, Congress required the city to develop a plan for the entire 356-acre site for submission to Congress. This was done several years later by the District, proposing continued institutional use for the entire site. They stipulated, however, that given the cost of bringing the buildings up to current standards, the District would accept the west campus only if funds were provided along with the transfer. Congress took no action and in 2006 the District completed a proposal for more than 2 million square feet of office buildings, commercial development, and high-end apartments - essentially gutting the historic grounds and converting the property into a "ripe development opportunity" ("District Completed Plan for St. Elizabeths," *Washington Post*, November 6, 2006, pg. D3).

Meanwhile, in 1991 the U.S. Department of Interior responded to concerns of local preservationists and designated St. Elizabeths as a National Historic Landmark, the highest historic status available under federal law. The

site had been previously listed on the National Register in 1979.³

In 2001 the Department of Health and Human Services notified the General Services Administration (GSA) that the Department no longer needed any of the 176 acres or 61 buildings on the west campus, formally triggering the federal excess property disposition process (Garrison 2003; General Accounting Office 2001). In 2002 St. Elizabeths was placed on the National Trust's 11 Most Endangered Places list. The Trust has criticized "GSA's \$900 million investment plan for the west campus of the hospital without the benefit of a master plan, as required by Congress" and contends that the construction schedule proposed would not only require demolition of historic buildings, but also focuses on a "maximum build-out" plan rather than what the Trust considers to be a more appropriate preservation and campus planning approach (<http://www.nationaltrust.org/11Most/list.asp?i=49>).

St. Elizabeths, plagued by at least four previous investigations, was again investigated in 2005 by the Civil Rights Division pursuant to the Civil Rights of Institutionalized Persons Act. That investigation found that St. Elizabeths failed "to provide its patients adequate: 1) protection from harm; 2) psychiatric and psychological care and treatment; 3) medical and nursing care and treatment; and 4) discharge planning and placement in the most integrated setting" (May 23, 2006 letter from Wan J. Kim, Esq., Assistant Attorney General, U.S. Department of Justice, Civil Rights Division to The Honorable Anthony A. Williams, Mayor, District of Columbia).

³ This process began in 1972 and focused on the Center building and what was called the "Civil War Cemetery" on the west campus (letter from A.R. Stirni to J.E. Critz, dated May 9, 1973, in Maggioncalda 2004).

The West Campus Cemetery

Although the hospital was opened for patients in 1855 and a number of structures had already been built, it seems that no thought had been given to the inevitability of death. On January 26, 1856 Superintendent Nichols wrote the Secretary of the Interior, under whose direction the Hospital operated:

"Mrs. Sarah Fontain," a white female patient apparently very aged, died in this Institution at an early hour this morning. Her demise was natural. She was one of the fifty-one pauper patients transferred from Baltimore to this Hospital, to which she was admitted on the 12th of March last.

A simple record of her admission to the Maryland Hospital March 10, 1841 and of her transference to the Mount Hope Institution June 30th, 1853 was the only history of her case that came with her. We are not aware that any relation or friend has visited her since her return to the District and are without further knowledge of her case.

This is the fourth death that has taken place in this Institution. In the other three cases the remains were claimed by relatives who attended to their burial, but in this instance I know of no relatives with whom to communicate and therefore do not anticipate reclamation of the body.

Under these circumstances I propose to survey a small secluded plot of ground in that part of our woodland which lies

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west of the hospital edifice, where there is a gentle slope toward the setting sun, and set it apart as a place of interment for friendless patients, and inter therein the body of Sarah Fontain, without ceremony.

The grave will be designated by a numbered head board, which number will be entered in the record of the case, so that the place of burial can be at any time identified.

I will thank you for an expression of your approval of

The course of action was approved by the Secretary of the Interior on the same day. This letter is important for several reasons. Of course it marks the first burial at St. Elizabeths⁴, as well as providing a record of the demise of Sarah Fontain. It also reveals that for many patients there were few, if any, case notes – suggesting that the hospital’s primary goal was simple confinement.

It also reveals something of the early burial practices. There is no mention of a coffin and while one may have been provided, the burial was to be “without ceremony.” Again, this suggests an astonishing lack of human dignity and respect for the patients under the institution’s care. It certainly wasn’t the case that



Figure 15. Portion of the 1855-1859 A. Boschke “Topographical Map of the District of Columbia” showing the vicinity of the cemetery (not yet laid out and thus not on the map).

the course I propose to pursue, or for directions to the contrary (National Archives, RG 418, Letters Received and Other Records, 1851-1902).

a ceremony was precluded by the large number of burials required. In fact, there was no ceremony because Sarah Fontain was

⁴ Sluby (2004) incorrectly reports the first death and burial in the cemetery as Ann M. Mattingly, who died on November 29, 1856.

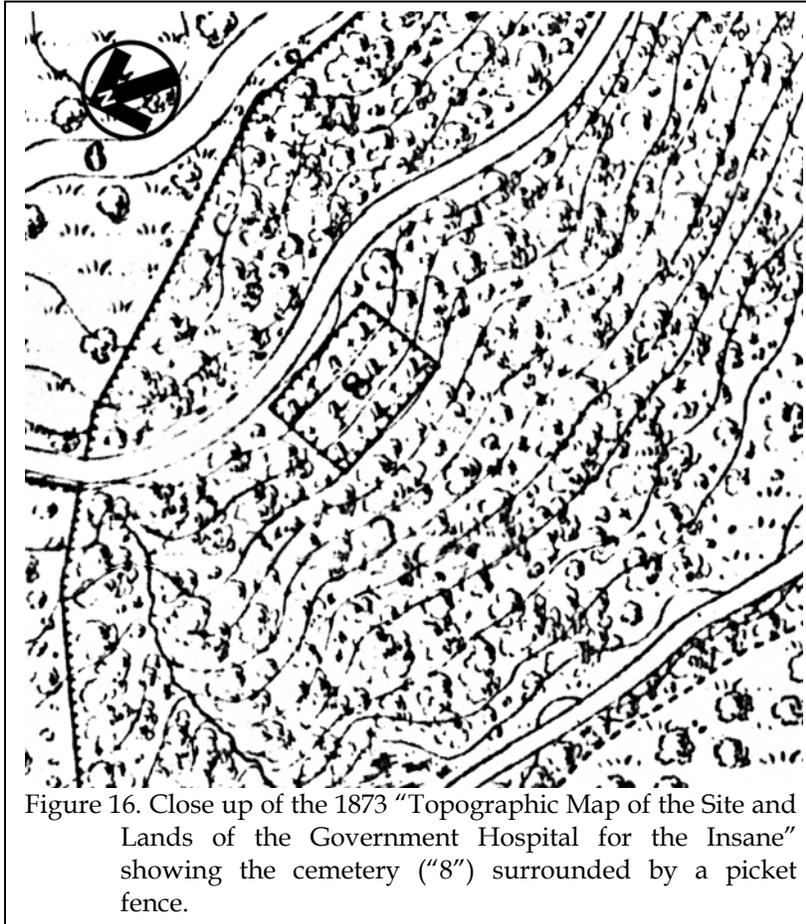


Figure 16. Close up of the 1873 "Topographic Map of the Site and Lands of the Government Hospital for the Insane" showing the cemetery ("8") surrounded by a picket fence.

cemetery, which measured 110 by 65 feet (0.16 acre) was surrounded by a picket fence.

There is, however, an earlier plat of the cemetery, dated May 30, 1868 (Figure 17). This plan reveals a cemetery that is 0.76 acre in extent. This suggests that while a larger cemetery was platted, only a relatively small area was actually fenced, even as late as 1873. What isn't clear is exactly where this fenced area was in the platted cemetery. The east-west dimension of the fenced area is slightly greater than half the platted east-west distance, while the fenced north-south distance very closely corresponds to the depth of the widest portion.

It is tempting to suggest that the original fenced cemetery was situated in the northwest corner of the platted cemetery – although clearly this can't be proven with the available data.

"friendless" in Nichols' own words. The use of a numbered marker, rather than one with a name, is further depersonalization and certainly the claim that "the place of burial can be at any time identified" rings hollow today since there is no evidence of her grave and no way to determine its location.

Looking at the 1855-59 Boschke map there is no evidence of the cemetery on the asylum's grounds. The area is shown in dense woods on a northwest slope down to the Anacostia River (Figure 15). The first cartographic evidence of the cemetery is found on the October 1873 "Topographic Map of the Site and Lands of the Government Hospital for the Insane" (Figure 16). This plan shows the "old cemetery" (the east campus cemetery had begun by this time) 1,010 feet west-northwest of the main entrance of Center Building. The

Sluby (2004:4-9) estimates that by 1873 an area of about 2,160 square feet (0.06 acre) would have been required for burials – considerably less than was fenced. While it is entirely possible that the fenced area was larger than the burials present at that time, Sluby's size estimate is based on two factors: the ground allotted to each burial (he allots about 3.2 by 7.3 feet) and his estimate that there were 92 burials by this time. Unfortunately, both assumptions are tenuous, at best.

For example, Sluby's estimate of 3.2 by 7.3 feet per grave allows no room for pathways, entrance areas, or other wastage. It assumes that space was limited – a condition that seems unreasonable on a 356 acre campus.

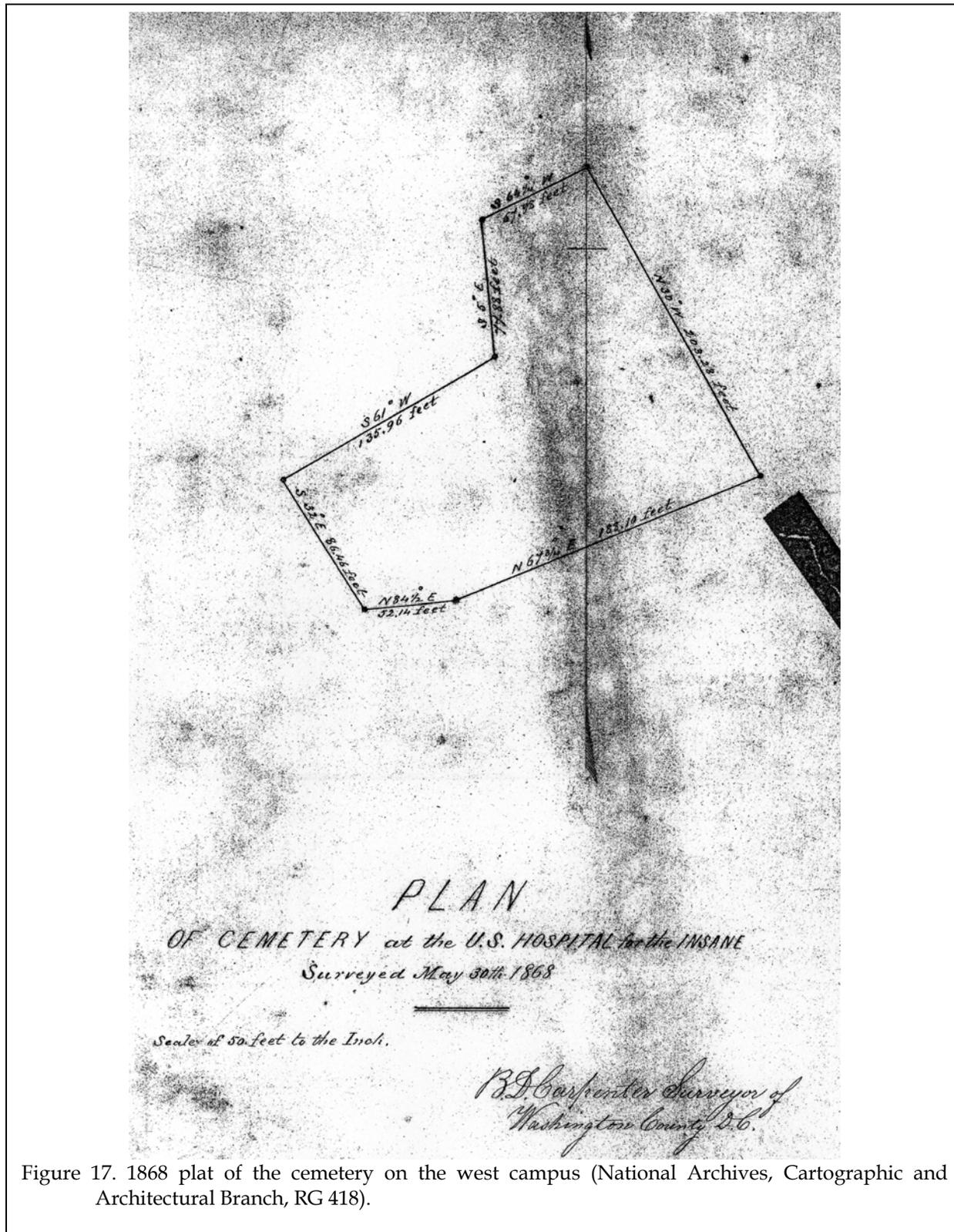


Figure 17. 1868 plat of the cemetery on the west campus (National Archives, Cartographic and Architectural Branch, RG 418).

We believe that a more reasonable estimate is around 48 square feet per grave – a figure that is often used in cemetery planning (Graubart 1983).

While the yearly death rates are obtained from various hospital records, the number of burials has been estimated by Sluby

Nevertheless, if only half of the 110 by 65 feet (0.16 acre) plot were occupied in 1873 and we allow 48 square feet per burial, this would account for approximately 148 burials – a little over 1½ times Sluby’s estimate.

Nevertheless, the cemetery was apparently filled by 1873⁵ – creating the need for



Figure 18. Portion of the 1892-1894 Evans & Bartle “District of Columbia” map showing the cemetery on the west campus.

at 10% of the total deaths (Sluby 2004:Table 2). This is acknowledged as “conservative,” but is justified on the basis of “known interment percentages.” Unfortunately these percentages are not detailed and we are not certain if the St. Elizabeths records are adequate to allow any meaningful estimation of burials during this period. Although Nichols claimed that the burial number would be indicated in the case file, it seems that relatively few of these files have survived.

the “new cemetery” at the edge of the eastern campus. Sluby (2004:4-12) suggests that by 1873 there were about 600 graves in the western cemetery. Assuming again 48 square feet, this would require nearly 0.7 acre – very close to the 0.76 acre cemetery shown in the 1868 plat.

⁵ Sluby (2004:4-38) notes at least two burials past this date – one was a military burial in 1874 and the other was a civilian burial in 1891. There is no explanation for the use of this cemetery after it was considered filled and the east campus cemetery was begun.

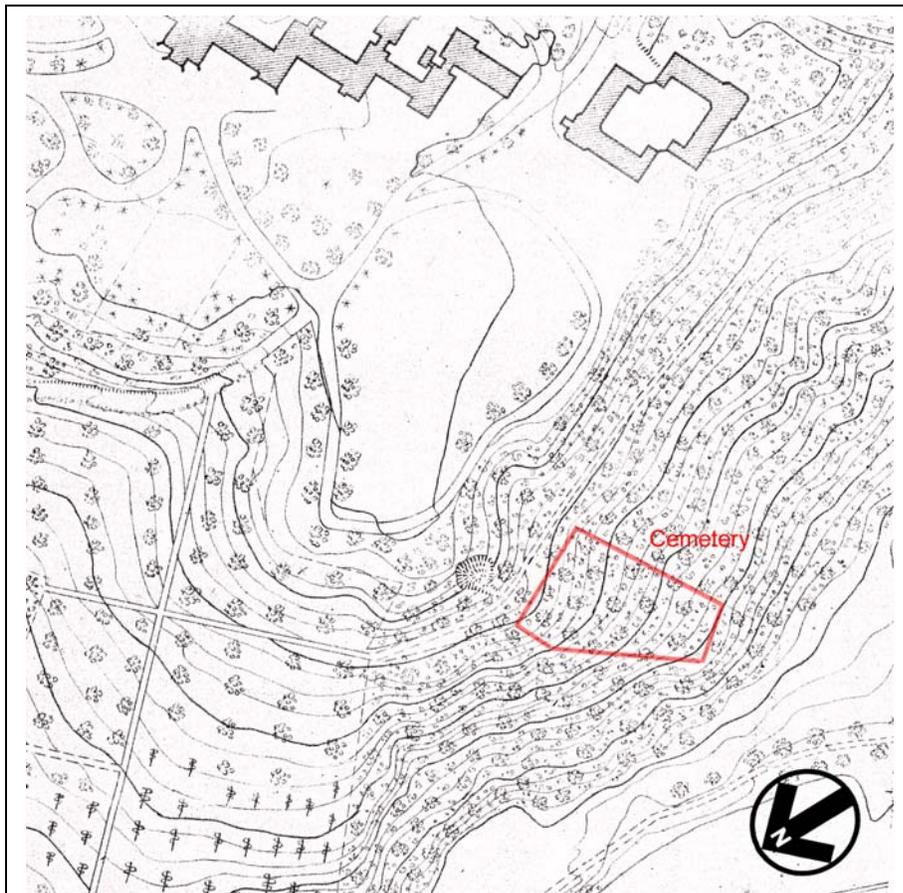


Figure 19. Portion of the 1900 "Plan of the Ground Government Hospital for the Insane" showing the cemetery (National Archives, RG 418).

The 1892-1894 Evans & Bartle "District of Columbia" map (Figure 18), as well as the 1900 "Plan of the Ground Government Hospital for the Insane" (Figure 19) both illustrate the same outline for the cemetery - essentially that found on the 1868 plat (except that the southwest corner is not truncated).

There is regrettably little attention paid to the cemeteries, the burials which took place in them, their care, or any other details (including even the maintenance of records).

All of the letters concerning the St. Elizabeths cemetery identified by Sluby (2004) date from at least 1879 and thus are more likely to reference activities associated with the new

cemetery on the east campus than the original west campus cemetery.

Several of these letters concern submission of lists to the Quartermaster General for the issue of government stones. It is interesting that a December 20, 1881 letter from the Office of National Cemeteries (National Archives, RG 418) to St. Elizabeths enigmatically mentions the old cemetery, suggesting that stones were being requested for graves several years after the cemetery had been closed to burials:

On your list was the name of Harrison Brunner, No. 381, Co. 3rd Pa. Art., died July 19 '64. This grave is in the old

cemetery, but for that grave you also ordered a stone for Henry Bricker, Co. G, 13th N.Y. Cav'y. Is it not possible that one of these also belongs over in your new ground, probably Brunner?

Whether one belonged in the new cemetery is uncertain, but both stones are found today in the west campus cemetery - apparently placed 17 years after their deaths (Sluby 2004:4-19 notes this same situation at the east campus cemetery). It appears that the hospital only occasionally set out to mark graves, providing considerable opportunity for mistakes, lost graves, and misidentified graves.

The numbering system is, to say the least, mysterious. Sluby (2004:4-8) explains that the system was sequential in every cemetery and this does seem to be the case with both the east and west cemeteries having an identical sequence of numbers.

While this was clearly a poor idea when there were multiple cemeteries on the same grounds, what is perhaps more confusing is how the numbers were assigned. As revealed in Table 2 the numbers were not assigned either alphabetically or by death date.

It would have been impossible to inter the graves in the order represented by the numbering, so clearly the numbering was assigned after the burials and does not reflect their order or positioning.

Stone No.	Name	Death Date
1	Not surviving	
2	Lerreux	8/19/1866
3	Buob [Cobb]	1/28/1866
3	Frank	8/12/1866
4	Not surviving	
5	Kesch	Unknown
6	Not surviving	
7	Hill	10/12/1864
8	Augustus	12/8/1865
9	Tobert	Unknown
10	Gum	6/30/1865

Yet the graves, today, are in roughly numerical order. This, and other factors to be discussed, is highly suggestive that either the stones were placed without regard to the body or that at some later time the stones were arranged to represent an orderly appearance. Either way, we do not believe that the stones accurately reflect the individual buried in a particular location.

This is in some sense alluded to by the Hospital's February 2, 1950 letter to Mr. Charles H. Appich in response to his inquiry concerning the presence of military burials on the grounds. The letter states,

In our older cemetery, maintained from about 1855 to 1880, there are approximately 600 graves. Our records are incomplete, however, and definitive information as to military burials is unfortunately lacking. Two hundred and fifteen headstones in the cemetery are still legible and we believe that they mark the graves of military personnel from civil [sic] War days and perhaps some prior to that period (National Archives, RG 418).

The number of stones appears to fluctuate. There were 215 (legible) stones in 1950. In 1982 there were 225 stones. By 1992 there were 209 (Sluby 2004:4-8).

The only accounts - beyond Nichols' 1856 letter remarking that Sarah Fontain would be laid to rest without a ceremony and using only a numbered headboard (implying a wood marker), are the accounts during various investigations of St. Elizabeths and they almost certainly (because of their dates) refer to practices in the east campus cemetery.

In 1906 Dr. White testified that no account of the cost of burials was maintained. He explained that some "old soldiers" were buried in Arlington, "if there are sufficient funds," while the others were buried in the hospital's burying ground and "the quartermaster's department of the army furnishes a headstone" (Anonymous 1907:923).

With specific reference to the new cemetery on the east campus, Dr. Hay testified

that both military and civilian burials were made in “a very plain pine box” that he believed was stained and varnished (Anonymous 1907:1191, 1197-1198). By this time, however, at least the military burials received a service – “the Episcopal service over the dead” read by a staff member (Anonymous 1907:1198).

The next investigation provided additional details, although again these appear to refer only to the newer cemetery on the east campus. The synopsis noted that,

There are three cemeteries in different parts of the hospital grounds where patients are buried when their families do not request burial elsewhere. Two of these are located in the southeastern corner of the reservation and are separated by a road leading from the hospital grounds. The other, which is filled and not used, is located near the railroad tract in the vicinity of the pumping station.

A cemetery sexton, which is commissioned a special officer on the Metropolitan police force, lives⁶ near the cemetery grounds and acts as a watchman. He superintends the burial of all bodies and keeps complete records of same. Necessary laborers are detailed to the cemetery to assist in the work

There are approximately 4,000 bodies buried in the three

cemeteries, of which approximately 2,000 are military. The graves of former soldiers, sailors, and marines are marked with a marble stone furnished by the War and Navy Departments. Other graves are not marked, but a complete record of each grave is kept in the office by means of maps and diagrams which show the number of each grave, location, and the name of the person buried therein (McCarl 1927:113-114).

This last reference to maps and numbered graves applies only to the new cemetery. No historic map has been found that illustrates any of the graves in the west campus cemetery and there is apparently no log of burials. Going back to Nichols’ early commentary on burial practices, it appears that the only record was in the patient’s file. This synopsis, however, confirms that civilian burials were in no way marked by the hospital.

We also learn from the document that while soldiers, by this time, were being buried in metal coffins, others (presumably civilians) were “provid[ed] burial in a pine box” (McCarl 1927:27). The budget analysis also reveals that the hospital was being provided small refunds on the cost of coffins: in 1922, \$9.62; in 1923, \$18.81; in 1924, \$3.38; and in 1926, \$2.75. The costs are modest and it is unclear if these were for the pine boxes.

Another record of the cemetery appears to be a hospital newsletter article by Josephine McQuillin, apparently a PR person, who wrote,

About the time the Civil War cannons were silenced, Washington residents, driving their buckboards along the river road or walking the decks of steamboats plying the Potomac

⁶ By 1972 this historic structure had been allowed to fall into such ruinous condition (called by preservationists, “demolition by neglect”) that it was condemned and shortly thereafter demolished.

and Anacostia Rivers, noticed a white cross being formed on a hillside in what was known as "the Saint Elizabeth tract." The cross was fashioned gradually during 1864, '65, and '66, for it was then that the little Civil War Cemetery at Saint Elizabeths Hospital was planned so that the headstones seen at a distance would form a white cross. It is not known who planned the cemetery in this way, but Dr. Charles H. Nichols, who was superintendent of the Hospital at that time, must have approved the plan (quoted from Maggioncalda 2004).

This seems to be the first origin of the myth of the white cross and appears to be entirely derived from the imagination. It was subsequently repeated in a 1981 article,

Its markers were intended ultimately to be grouped in the shape of a cross to be seen from the Anacostia and from Washington during the 1860's (Coyle 1981).

While there is a vague cross shape, the stones composing the cross were being ordered into the 1870s - so it certainly would not have been formed by the end of the Civil War. There has also been no evidence found in any of the St. Elizabeths records that such a plan was ever proposed or implemented. Moreover, it is doubtful that the cross would ever have been visible. Nichols himself remarks that in the decade just prior to the Civil War the tract was wooded. Many of the trees on site are of such a size that they likely date from that time period. The ground, while steeply sloping in some areas, is not so steep as to allow the cross shape to be visible except from an elevated position. It is unfortunate that this mythology is repeated

on the 1992 Public Health Service plaque on the stone wall at the cemetery.

Sluby (2004:4-14) warns that, over the years, "volunteer efforts cleared the [cemetery] and repositioned stones." Worse, in 1991 the cemetery was "rehabilitated." These well-meaning but likely poorly thought out efforts may have caused extensive loss of significant information, making the preservation of the cemetery far more complex.

The Stones

All of the stones in the cemetery are approximately 10 inches in width. This dates their placement prior to 1903, when the stone was changed from 10 to 12 inches. It also seems to correlate with the letters identified by Sluby (2004) which date from the 1870s and 1880s.

All of the stones are the conventional "Civil War" type that was first approved for use in 1873. This style has a slightly curved top and a sunken shield in which the inscription appears in bas relief. Typical of the time period only the name and regimental affiliation is included (there is no date of death on any of the stones). Peters (1986:25) notes that the number within the shield and above the name, at least for Arlington, designated a lot number. The National Cemetery Administration refers to the number as simply "the number of the grave." These early markers were intended to be set with 12 inches above grade.

These stones, however, were furnished only to Union veterans and it wasn't until 1906 that Congress approved a subcategory for Confederate dead (P.L. 38, 59th Cong., Chap. 631), having a pointed top, with the shield omitted (the Confederate Cross of Honor was not approved until 1930).

This likely dates the iron markers reportedly used for Confederate burials to the

period prior to 1906⁷ – and helps explain why these distinctly different markers are (or were) present in both the west and east campus cemeteries.⁸

Photo Documentary Evidence

Most of the photographs of the west campus cemetery are rather recent. The one surviving photograph from an early period is shown in Figure 20. This is variously identified as a ca. 1870, 1897, or ca. 1900 photograph. Given the other photographs present in the collection it seems likely to date from the late 1880s through late 1890s and it was taken from the southeast side of the cemetery, looking north.

Sluby (2004:4-13) focuses on what the photograph tells concerning the care given the cemetery, commenting on the graves being “well tended” and the “elaborate surrounding fence” that is described as “sturdy and professionally constructed . . . well-appointed, having finished top rails and the bottom cut of the vertical slates nicely contoured.”

The 1873 plan of the hospital grounds specifically identifies “picket fence” and there are actually miles of it on the property. Such construction was part of the campus landscaping and was undoubtedly built – and maintained – by the St. Elizabeths carpentry shop.

As for the tending of the grounds, none of the stones visible are broken and all appear to be well set. However, the enclosed area has a rather large number of saplings, so clearly the cemetery was not being actively used and

probably had not been cleared of vegetation in at least five or six years (the photograph was taken in the winter – adding to the illusion of care).

The National Archives has a series of captions for photographs, most of which still exist (National Archives, RG 418-P, Staffs, Structures, and Activities, 1920-1955, Photos and Other Graphic Material). One caption, however, cannot be paired with a photograph, but still provides important information. The photograph was of Poplar Spring, a “ravine rear of the Burrough’s Cottage.” It goes on to note that services were held here for the Civil War dead buried in the hospital cemeteries and that “services were in charge of members of the GAR.” The Library of Congress holds a series of publications of the GAR, Department of the Potomac which might contain additional information.

The next photographs are a series from 1981. We have no additional information concerning their purpose. Several are reproduced here showing the original image and a view from a similar angle today. Although some stones are missing and many trees are no longer present, there is little difference.

Critical Research

While a great deal of information has been compiled by Sluby (2004) and we have briefly revisited some of the sources available at the Library of Congress and the National Archives, there remain many questions.

Perhaps the highest priority is an effort to “balance the ledger.” While there has been what might seem like an inordinate effort to document the estimated 450 Civil War soldiers buried in the cemetery, there have been virtually no efforts to document the burial of civilian patients who are due no less respect.

In fact, at present, going through Sluby (2004) and our own notes, we can document

⁷ Sluby (2004:4-11) states that six existed at one time, although a 1981 photograph illustrates only three.

⁸ At least one iron marker is visible in an 8x10 inch glass plate negative from the east campus cemetery (National Archives, RG 418-G-81, “Cemetery 1897”).



Figure 20. Late nineteenth century photograph of the cemetery (Maggioncalda 2004: Image 53) looking north from the southeast edge, showing the picket fence perhaps shown in the 1873 plan of the cemetery, as well as abundant scrub vegetation on the interior of the fence.



Figure 21. At the top is a 1981 photograph (Maggioncalda 2004: Image 158) of the eastern edge of the cemetery where three cast iron crosses are thought to have marked Confederate graves. Below is the same area today.



Figure 22. At the top is a 1981 photograph (Maggioncalda 2004: Image 159) of the northeastern section of the cemetery looking south. Below is the same area today.

HISTORIC CONTEXT



Figure 23. At the top is a 1981 photograph (Maggioncalda 2004: Image 161) of the southwestern corner of the cemetery looking southwest. Below is the same area today.



Figure 24. At the top is a 1981 photograph (Maggioncalda 2004: Images 163 and 160) of the western edge of the cemetery. The old chain link fence is entirely covered with a flowering plant, perhaps a climbing rose.

only three civilian burials (Table 3). This is unsatisfactory and additional research in the St. Elizabeths records, focusing on the case files⁹, must be conducted in order to better ascertain those civilians buried in the cemetery. This is essential in order to give them the dignity they were denied in life and, thus far, in death.

Summary

This historical research documents that the first burial in the cemetery was a “friendless patient,” who died on January 26, 1856. Superintendent Nichols established the cemetery and the burial practices - no ceremony, a numbered headboard, and a notation in the patient’s file.

Name	Death Date	Source
Sarah Fontain	January 26, 1856	NA 418, Letters Received & Other Records, 1851-1902, Box 1
Ann M. Mattingly	November 29, 1856	Sluby 2004:4-8
William Harris	February 1, 1877	NA 418, Letters Received & Other Records, 1851-1902, Box 1

The first plat of the cemetery wasn’t created until May 1868. It shows a 0.76 acre parcel. The odd shape was almost certainly intended to maximize relatively

level ground at the northwest end and avoid steep gullied land immediately adjacent to the southwest. In spite of the platted cemetery, an October 1873 map shows that only the upper or northern corner of the cemetery (measuring 110 by 65 feet, or 0.16 acre) was fenced. It isn’t until the 1890s that plans of St. Elizabeths show the entire 0.76 acre parcel fenced.

A second line of research involves a more complete examination of the Quartermaster’s Records at the National Archives, especially those associated with National Cemeteries that⁴⁷ may contain copies of letters received from St. Elizabeths listing graves requiring stones or transmittal letters associated with the shipment of stones. These are voluminous files in RG 92, Program Files. Identification of additional records would further assist in the identification of the names associated with the many missing stones.

By 1873 - the time of the map showing the small fence - it has been suggested that the 0.76 acre plot was filled and a new cemetery was created. There are estimates of about 450 military burials and 150 patient burials in the cemetery - although the records for St. Elizabeths are so poorly researched (or were so poorly maintained) that there is no reasonable accounting of the actual number of burials.

It also wasn’t until the 1870s - when the government authorized free stones for the marking of Union graves, that St. Elizabeths began taking seriously their responsibility to record graves - and even then only military burials were given this level of respect.

The sparse literature available documents problems in keeping track of graves, and appropriating setting the stones - giving

⁹ While the published index does not show any records being preserved earlier than 1871, we recommend that all records be carefully reviewed to ensure that other materials have not been overlooked. Our review of other St. Elizabeths textual records suggests that the files have received only the most minimal processing. The National Archives review of the St. Elizabeths records in 1938 notes that the clinical folders for patients are numbered, from 1 to 43,455 and were all complete at that time. These are the folders that might contain critical information concerning death and burial.

additional concern as to the accuracy of the graves marked today.

By the late nineteenth century the sole surviving photograph of the cemetery suggests that while it was fenced, sapling were taking over the grounds and relatively little care was being provided. While there may have been GAR ceremonies, it is unclear whether these ceremonies actually took place in the cemetery. The photograph suggests they might not have.

Perhaps the one most consistent impression given throughout this examination concerns the rather careless attitude of the St. Elizabeths Hospital staff concerning the burial of its patients, whether military or civilian.

From the very first death there was no interest in providing any memorial service for civilian patients. Absent family and "friendless," Nichols made it clear that burial was to be expedient and "without ceremony." Even in the late 1920s, an Episcopal service was read, regardless of religion and no minister was employed - additional signs of expediency. The graves for civilians went unmarked and we suspect that military graves would have been similarly unmarked had not the Congress authorized the Quartermaster to provide stones.

Poor, diseased, infirm, and forgotten, those who died at St. Elizabeths were denied the most fundamental respect of a marked grave. This guaranteed perpetual anonymity and relegated these human beings to little more than refuse to be quickly disposed of and forgotten.

This is hardly the reputation that St. Elizabeths sought for itself and thus, through time, considerable effort was spent to craft a mythology focusing on its Civil War dead (and entirely dismissing the civilian dead).¹⁰ The

institution created the myth of the giant cross and the first cemetery, used by military and civilians alike, became known as the "Civil War Cemetery." This further devalued the lives of the institution's patients, working to marginalize their lives and make them further invisible to the public.

One of the most significant goals of all future preservation efforts must be to bring balance to the cemetery and ensure that both civilian and military dead are treated with equal respect, dignity, and honor.

¹⁰ A similar rewriting of history can be seen in such publications as Overholser (1956) and D'Amore (1976). These ignore the periodic investigations of conditions at the institution

and the primitive treatment of mental patients during the nineteenth and early twentieth centuries, instead focusing on glowing accounts of treatment advances and the personal qualities of the physicians involved.

HISTORIC CONTEXT

ACCESS AND PEDESTRIAN ISSUES

Access

Today access to the St. Elizabeths property is controlled by GSA and only authorized contractors and visitors are allowed on the West Campus grounds. Thus, there is no public access at this time – an issue which has drawn comment from at least one group that tended the graves in the past (<http://www.allfortheunion.com/ste/CW.htm>). We recommend steps be implemented to allow public access to the cemetery.

As previously mentioned the cemetery is accessed by way of a graveled dirt road running off a main paved road that winds through poorly maintained woods and dead-ends at the cemetery gate. There is a small graveled parking area. At one point there was a secondary access via a set of landscape timber steps down to the cemetery from an upper terrace.

The cemetery was historically surrounded by a wood picket fence, shown in one photograph (Figure 20) and identified on the 1873 map of the cemetery (Figure 16). At some point that fence was replaced by two generations of chain link (the earliest version still evidenced by corroded post stubs in the ground and a mass of wire along the northwest edge of the modern fence). In 1992 the front (northeast) fence was replaced with a black iron fence and stone wall. Entrance is by way of a double gate which is not locked.

The Road

It may be that the unpaved access road has been adequate in the past since the cemetery received few visitors and only sporadic maintenance. Likely this road, too, received only limited attention. This is evidenced to day by a

lack of an adequate crown, inadequate grading, a lack of ditches, and inadequate gravel. With just limited travel over the course of a few days under light moisture conditions, this road was

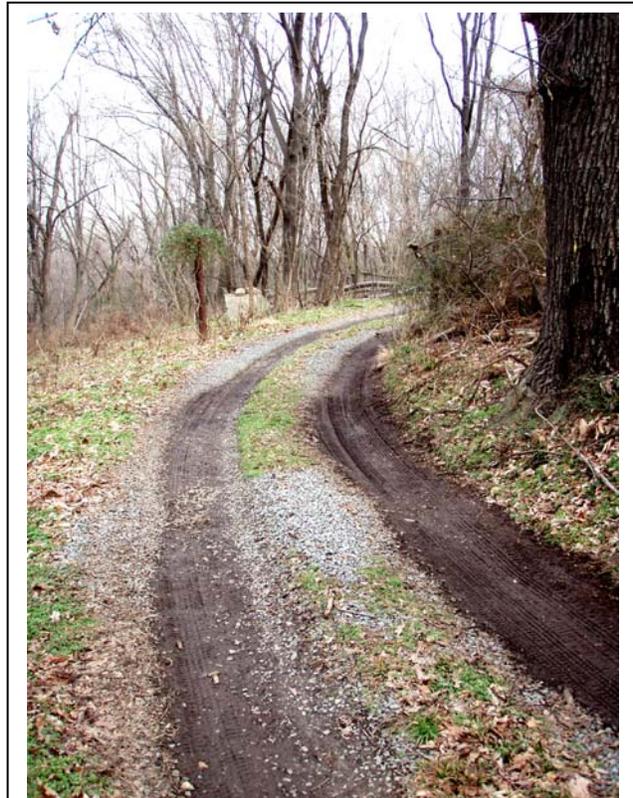


Figure 25. Cemetery access road after just a few days of winter driving. The absence of ditches, lack of a crown, and inadequate gravel all contribute to its poor condition.

already showing distress (Figure 25).

Given the low volume of traffic, we see no need to pave this road. It does, however, require redesign and renewal. An excellent source of information for this is the FHWA *Gravel Roads Maintenance and Design Manual* available on-line at <http://www.epa.gov/owow/nps/gravelroads/gravelroads.pdf>.



Figure 26. Trash along the slope above the cemetery.

The Access Scenery

The woods through which visitors travel to the cemetery could be pleasant and informative. However, little attention has been paid to cleaning the woods – removing debris, trash, and downed timber. Nor has any attention been paid to routine maintenance, so that visitors drive past one sanitary sewer manhole that has been damaged and is now open (presenting a considerable liability to the government).

At a minimum it is critical that the area in the immediate vicinity of the cemetery be cleaned up. Debris on the slope above the cemetery should be removed.

The Parking Area

Parking at the cemetery is limited. This has apparently been satisfactory in the past and may continue to be satisfactory, given the anticipated low visitation rates. It, however, requires the same maintenance as the access road, such as grading and additional gravel.

In addition, it is clear that the slope above the parking area is being used as a turn-around for vehicles. This is not only hazardous, but it is promoting erosion and causing compaction at the base of the beech tree, which is worth preserving. Steps should be immediately taken to prevent this activity.

Pedestrian Access

There is no indication that the landscape timber access to the cemetery from the terrace above is being used. It is poorly maintained and poses a hazard. If it is to be integrated into some overall plan for the cemetery, considerable efforts are necessary to improve this access.

Once at the cemetery the ground is very steep and walking in the cemetery can be difficult. Nevertheless, it is important to realize



Figure 27. Parking at the cemetery is limited and poorly defined.

that this was designed as a burial ground or grave yard – not as a formal cemetery. There is no indication that any consideration was ever

given to the cemetery being visited and the burials took place “without ceremony.”

Therefore, it would be inappropriate for undertake any modifications of the natural



Figure 28. Erosion and compaction around the beech tree is being caused by inappropriate driving – circling around the tree on the slope to exit the cemetery.

topography, including efforts to install pathways. This does not appear to be a significant issue since we see little indication that there has been – or will be – a great deal of pedestrian activity in the cemetery.

While the ADA or the Rehabilitation Act of 1973 is generally not interpreted to apply to cemeteries by the Department of Justice, there should be an independent evaluation of the need for universal access. Because of the very steep grade, the cemetery topography presents a significant obstacle to most disabilities. It would also be difficult to provide assistance arrangements for handicapped visitors.

Recommendations

The access road requires redesign and renewal. Specific concerns include the lack of ditches to

promote drainage, an inadequate crown, poor base material, and inadequate gravel.

The access route also requires maintenance. Trash and debris should be collected and

removed. At the cemetery site, in particular, there is a great deal of trash on the slope above which should be removed.

The parking area requires additional gravel. The use of bollards may be required to prevent traffic from turning around on the slope and causing compaction and erosion.

Arrangements should be made to allow public access to the cemetery.

There should be information signage at the entrance to the cemetery.

LIGHTING AND SECURITY ISSUES

Cemetery Lighting

We identified no nearby lighting, except for that possibly associated with the abandoned warehouse – which is to be removed. There may, however, be some light contributed by the nearby Naval Base, but its impact is likely to be minimal. An effort should be made to minimize light intrusion from any planned construction by GSA.

The cemetery would not have been lighted historically and so the absence of lighting today is entirely appropriate.

Vandalism

Vandalism has been reported in the past, largely associated with the presumed theft of markers (especially the iron Confederate markers). We, however, saw no conclusive evidence of vandalism. The damage observed can be readily accounted for through inappropriate maintenance, overly aggressive clean-up efforts, and institutionalized efforts to re-create the history of the cemetery. We imagine that intentional mischief and theft are even less common now that the West Campus is closed and routinely patrolled.

Nevertheless, cemeteries do seem to attract vandalism, mischief, and drunken behavior. The cemetery should be routinely patrolled by the private security retained by GSA at present. As plans are developed for the government's reuse of the facility, it is important that these patrols continue. The plans themselves should balance the need to isolate the cemetery from intrusive elements, with the need to ensure that it can be effectively monitored. For example, the cemetery should not be so thoroughly screened that it is difficult

to either access by security or that the view over the cemetery is limited.

It is also critical that the maintenance staff become familiar with the stones and make periodic visits through the cemetery, looking for any new damage. Without some means of identifying damage close to the time when it has occurred, it will never be possible to accurately determine the level of threat that the cemetery truly faces.

Maintenance should also develop a set mechanism for reporting, documenting, and responding to any damage or theft within the cemetery. Working these issues out ahead of time will make certain that problems are reported and that there is an appropriate response.

Hardening Targets

Thefts in cemeteries have dramatically increased. The reasons for this are two-fold. First, there is an increasing market for gates, urns, ironwork, and statuary – created by an increase in upscale garden design and individuals willing to pay large sums for original artwork. Second, there is less attention being paid to cemetery fixtures, largely the result of decreased maintenance budgets and fewer security patrols.

The West Campus has relatively few objects that would be attractive to thieves, access to the campus is difficult, and thieves would probably be unlikely to expose themselves to federal prosecution.

Nevertheless, some objects – such as the iron Confederate markers – would be attractive to thieves. The one intact original identified during this study should not be reset, but

should be cast and reproductions should be set in the cemetery.

Recommendations

No lighting should be introduced into the cemetery. Such lighting is out of character, damages the historic setting, and creates a visual intrusion.

Security patrols should routinely direct their attention to the cemetery. The simple act of using a spotlight may be sufficient to deter criminal activities. Special attention should be paid to weekends and holidays. The maintenance staff should walk through the cemetery on a daily basis, noting any damage or problems.

There should develop a policy for identifying, reporting, and responding to damage, vandalism, and theft within the cemetery.

Items of particular value, such as the metal Confederate markers, should be recast and reproductions should be placed in the cemetery.

CEMETERY FIXTURES AND FURNISHINGS

Cemetery Fence

A modern (ca. 1992) fence today surrounds the front (northeast boundary) of the

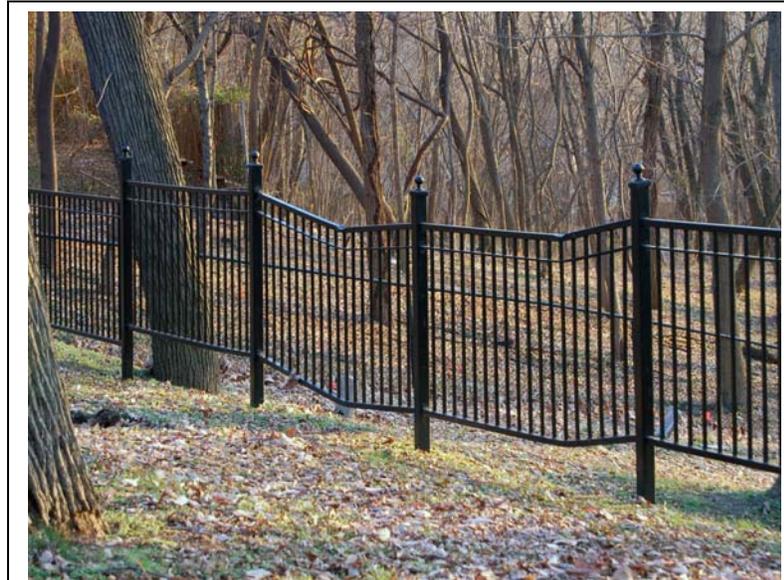


Figure 29. Damage to the modern iron fence along the front cemetery boundary.

cemetary. It appears to be mild steel with a powder coat finish. This fence design (Figure 4), is not typical of historic cemetery fencing. The height, scale, and style are different from fencing in historic cemeteries.

On the remaining sides there is a 4-foot high chain link fence with a black vinyl coating. The date of its erection is not known, but it apparently replaced an earlier chain link fence, evidenced today by remains of posts and remnant fabric found in the woods. Obviously, this fence is also not historically appropriate, although it is less visible, and thus less intrusive, than the metal fencing.

We know that a wood picket fence was used historically. At the point in time that

replacement is necessary, we recommend that this historic fabric be re-introduced to the property. The design of one such fence that surrounded the cemetery is clearly shown in a historic photograph (Figure 20), providing good design specifications. Maintenance costs can be minimized by using pressure treated wood and stainless steel attachments.

At present, maintenance is required for both fences. The iron fence has two sections impacted by falling trees. These sections will require their removal, straightening, and resetting. The chain link fence has several sections with tree damage. In most cases the repair of these is easier, requiring replacement or resetting of the top rail (in general the fabric is in satisfactory condition).

These repairs should receive



Figure 30. Damage to the chain link fence at the cemetery.

a high priority since the repair costs are relatively low and the damaged fencing detracts from the overall appearance of the cemetery.

Historic Ironwork

The only historic ironwork present at the cemetery were the metal crosses used to mark the Confederate graves. These likely pre-dated 1906 (at which time Congress authorized stones for Confederate dead). All have been lost from the cemetery, although one nearly intact cross (and another small fragment) was identified outside the boundaries of the

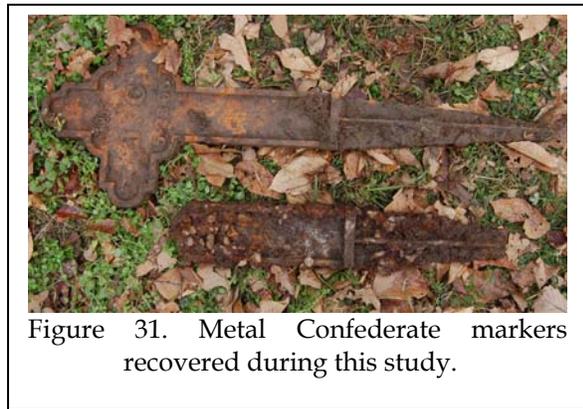


Figure 31. Metal Confederate markers recovered during this study.

cemetery during this study.

These crosses were cast, with each casting slightly different since the cross includes the initials of the deceased and the death date. While perhaps originally painted, the two fragments identified during this study both lack any evidence of paint.

Painting

These comments are offered for the maintenance of reproductions once introduced back into the cemetery. Absent historic documentation that suggests otherwise, flat or semi-gloss black is an appropriate color (gloss paint should not be used).

We recommend the use of a rust converter as a primer. Of the three that were successfully tested by the Canadian

Conservation Center, Rust-Oleum's Rust Reformer is the least expensive and most readily available. We recommend two coats of the Rust Reformer. These can be applied over stable corrosion and the product does an excellent job of converting the corrosion into a stable base for a top coat of alkyd paint. A single coat is adequate and it should not be applied thickly, as thick coats hide detail, cure poorly, and will often prematurely fail.

All painting should be by brush - no sprayers should be used since they allow drift onto nearby stones. Tarps should be used to protect vegetation and adjacent stones from splatter.

This maintenance program will significantly improve the appearance of the ironwork in the cemetery and will help prevent additional corrosion and deterioration of the various fence components.

Other Amenities

At the present time there are no amenities (such as benches or trash cans) in the cemetery. Given the low use of the cemetery and its isolated location we do not believe that amenities are necessary. Moreover, they would not be historically appropriate given the nature of the cemetery.

Recommendations

The cemetery boundary fence is in need of maintenance and this work should be performed by GSA in the near term.

If the missing iron Confederate markers are recast and replaced in the cemetery, a maintenance program should be implemented using a rust converter and appropriate top coats of flat or semi-gloss alkyd paint.

Introduction of other amenities into the cemetery is not appropriate and should be avoided.

LANDSCAPE MAINTENANCE

The cemetery, much like the remainder of the West Campus, is “moth-balled,” receiving only minimal care while the GSA conducts studies and plans for the re-use of the facility. Thus, many of these observations and comments are intended to apply to the long-term maintenance of the cemetery and not necessarily the care being given at the present time.

Staffing

Ideally in-house staff will be assigned for the care of the cemetery. This promotes continuity, familiarity with the resource, and consistency of treatment that is difficult to achieve if the work is contracted out.

For this to work, however, it is important that the caregiver understand the level of attention needed by a cemetery and that staffing needs and other issues are not calculated based simply on the acreage.

Level of Staffing

Cemetery maintenance generally requires a minimum of two trained staff and a supervisor for every 10 acres. This level of attention is the minimum required under normal circumstances. The West Campus cemetery is only 0.7 acre – and thus will *at the very least require a crew worker one-fifth time (or the equivalent of 1-day a week); supervisory staff should anticipate spending approximately one day every two-weeks dealing with cemetery issues.* Any less than this and it is likely that cemetery care will suffer and GSA (or the eventual caregiver) may expect complaints and dissatisfaction.

It does not appear that this level of attention has been routinely given the cemetery, even when the West Campus was fully operational. This accounts for the deteriorated

conditions and will require that additional time be spent to improve the current conditions and make various necessary improvements.

Staff Training

Sadly, professional training in the landscape industry, at least among the public, is undervalued. This contributes to rapid turn-over and inappropriate maintenance activities – especially damaging when work is periodically contracted out, with minimal specifications and little supervision to the firm with the lowest bid.

In 2005 the Associated Landscape Contractors of America (ALCA) and the Professional Lawn Care Association of America (PLCAA) merged to form the Professional Landcare Network (PLANET). This organization offers several certification programs, but the most important for this particular cemetery is the Certified Landscape Technician – Exterior. The exam for this certification is a hands-on field test and candidates can be tested in Installation, Maintenance, or Irrigation. Technicians at the West Campus cemetery should be certified in Maintenance. This would establish credentials by meeting international standards for safe and effective operation of machinery and demonstrating a thorough understanding of all facets of the position.

A similar certification program is also offered by the Virginia Nursery and Landscape Association (Virginia Certified Horticulturist) at both a basic and advanced level. The Maryland Nursery and Landscape Association has a certification program for Professional Horticulturist (as well as several advanced certifications).

There are training opportunities in the immediate area. For example, the Community College

of Baltimore County offers a degree program in Horticulture which includes courses in soils and fertilizers, integrated pest management, turf management, and woody ornamentals. Review classes for the Virginia Certified Horticulturist exam are also offered by the Hampton Roads Nursery and Landscape Association.

The Quality of Supervision

Regardless of the credentials or certification, the complexity and fragility of cemetery landscapes requires that the technicians are well supervised and are held accountable for their performance. It is especially important, therefore, that the supervisory positions be carefully defined. The selected individuals must not only be well trained and knowledgeable, but also possess demonstrated supervisory experience. The supervisors must be expected to manage activities in the cemetery.

Continuity of the Staff

Maintaining the continuity of a maintenance staff with a commitment to the preservation of a historic cemetery is critical. It not only serves to help ensure the highest possible quality of care, but also allows the specialized knowledge that accrues to be transferred to new staff members over time.

Cemetery Vegetation

Historic and Current Conditions

The only historic photograph of the cemetery (Figure 20) reveals considerably thicker woods than are present today. Much of this vegetation, however, appears to be second growth – young trees that self-seeded and, with minimal maintenance, were allowed to grow. Even the more mature trees appear to be natural species, suggesting little or no modification of the original vegetation by caregivers.

It seems likely that the cemetery's vegetation was managed only to the degree that

was required to open and close graves. Most trees would simply have been "worked around," perhaps accounting for some of the various gaps in burials observed today.

More recent photographs show that the vegetation stabilized by the last quarter of the twentieth century (see, for examples Figures 22-24). Today the vegetation is dominated by post oak and green ash, with smaller numbers of black cherry, pignut hickory, yellow poplar, white oak, eastern red cedar, and American beech.

The diameters of the green ash range from about 13 to 21 inches. Using a rough conversion from diameter to age, these trees are 65 to 105 years in age – dating from the early twentieth century. The 30-inch diameter white oak may be about 150 years old, dating from the mid-nineteenth century. These figures reveal that relatively little has changed on this tract since it was first established in the mid-nineteenth century.

The characteristics of the primary trees found in the West Campus cemetery are briefly listed in Table 4. A perfect tree would be one that is strong, has no surface roots, produces little or no litter, and is both fast growing and long-lived. Such a tree does not exist. As Table 4 reveals, even those trees with many good attributes have some undesirable aspects. Nevertheless, these represent the historic vegetation in the cemetery and they should be maintained as historic fabric.

Maintenance Issues

Maintenance involves at least four basic issues: watering, fertilization, pruning, and pest control. These issues have recently been addressed by Bartlett Tree Experts in their 2007 report. Each of the mature trees was evaluated, mapped, and tagged during their work. They developed a five year maintenance plan for the West Campus, although we will only consider the recommendations for the cemetery and its

Table 4.
Characteristics of trees identified in the West Campus cemetery

Common Name	Scientific Name	Sizes (dia in inches)	Height (in feet)	Spread (in feet)	Growth Rate	Litter	Breakage	Surface Roots
Green Ash	<i>Fraxinus pennsylvanica</i>	17-23	60-70	40-45	fast	significant	weak	significant
Post Oak	<i>Quercus stellata</i>	22-31	40-50	35-50	medium	significant	resistant	insignificant
Black Cherry	<i>Prunus serotina</i>	13	60-90	35-50	fast	significant	resistant	insignificant
Yellow Poplar	<i>Liriodendron tulipi</i>	27-36	80-100	30-50	medium	significant	resistant	insignificant
Pignut Hickory	<i>Carya glabra</i>	22	50-65	30-40	medium	significant	resistant	insignificant
Eastern Red Cedar	<i>Juniperus virginiana</i>	11	40-50	10-20	fast	insignificant	weak	insignificant
White Oak	<i>Quercus alba</i>	30	60-100	60-80	slow	significant	resistant	insignificant
American Beech	<i>Fagus grandiflora</i>	44	50-75	40-60	medium	insignificant	resistant	significant
Chesnut oak	<i>Quercus prinus</i>	39	50-60	40-60	medium	significant	resistant	insignificant

Tree size is based on the Bartlett study; height and spread are typical of the species

immediately surrounding area. Our recommendations vary little from their very detailed study.

It seems unlikely that any of these trees have ever received water on a routine basis and have, instead, relied on rainfall. Fortunately, all of the species are drought tolerant. While this is typically acceptable, the landscape plan should include provisions for deep-root water during periods of drought. Using a root feeder without fertilizer, it is possible to apply water 12-inches below the surface. This approach can not only be used during drought, but also during extended periods of dry weather during the winter (as long as the temperatures are above freezing).

There have also been no provisions to provide fertilization to the trees. We typically recommend deep root fertilization - an approach where the liquid fertilizer is injected into the soil with a probe, typically 6 to 12-inches below the surface at a spacing of about 2 to 3 feet. This process not only provides fertilization, but also some aeration of the soil. An alternative approach used a drill to excavate holes in a similar pattern which are then filled with a granular fertilizer. Either is acceptable. Bartlett has recommended injection, combining

the fertilizer with mycorrhizal spores. The benefit of this approach is questionable.¹

While shoot growth (growth occurring in the present year) and foliage color are often used as indicators of nutrient deficiency, the best indicator of whether fertilization is necessary is a soil test. Samples should be taken every 3 to 5 years to determine whether any macro or micronutrients are lacking.

The Bartlett study sampled several areas in the cemetery area. The soil pH levels were generally low, ranging from 4.3 to 5.2. Typically a range of 6.0 to 6.5 is recommended for most plants. Thus, efforts to raise the pH are appropriate. The soil studies found that other macronutrients, such as potassium, were low.

It is best to fertilize trees when they are actively growing and have available water to help absorb nutrients. In the DC area this is typically from the spring, after new leaves emerge, through mid-season. Fertilizer should not be applied late in the season or during periods of drought.

¹ The ISA *Arborists Certification Study Guide*, for example, states (pg. 52), "Research results on the value of these products have been mixed, and certainly more research is needed."

Bartlett also recommends the use of an air spade in many areas to help reduce ground compaction. The air spade is an excellent device and we, too, recommend this approach. It would be especially useful for the trees in the immediate vicinity of the parking area where ground compaction is noticeable.

In a cemetery setting organic fertilizers should be the primary choice. These materials, such as cottonseed meal and bone meal, have much lower salt indices than inorganic fertilizers – resulting in reduced salt uptake by monuments. This is important since salts cause staining, spalling, and deterioration of marbles, sandstones, brick, and even granites. In addition, organic fertilizers have a slower release rate and are easy on the root systems. This is a special situation which was not identified by Bartlett (they recommended the artificial urea formaldehyde as the nitrogen fertilizer).

The trees should be evaluated for pruning for either thinning or cleaning. Thinning is a technique of pruning that removes selected branches to increase light and air movement through the crown. This also decreases weight on heavy branches. The natural shape of the tree is retained and its overall health is improved. In cleaning, the pruning removes branches that are dead, dying, diseased, crowded, broken, or otherwise defective. This includes narrow crotches.

Trees should be pruned in such a manner as to preserve the natural character of the plant and in accordance with ANSI A300 (Part 1) - 2001 standards.

In pruning, branches should always be cut just beyond the branch collar (an extension of the main stem) and not flush with the trunk. Large branches should be removed with three cuts to prevent tearing of the bark which can weaken the trunk and lead to disease.

Trees should be inspected for potential threats to monuments, as well as general health. Ideally these inspections should be made yearly and after any storm where the winds exceed 55 mph. They should be pruned to remove potentially hazardous dead wood on a yearly basis, but safe pruning every 5 years by a certified arborist is acceptable.

Bartlett has recommended a similar approach. The only modification we recommend is the extra care of using plywood shelters or timber cribbing to protect monuments during the pruning process.

Tree Removals

Bartlett has recommended the removal of four trees in the cemetery – a 31-inch and a 29-inch white oak, a 20-inch ash, and a 39-inch chestnut oak. The report notes that “most are at the end of their normal lives and in decline.” The study goes on to note that, “the removals will create opportunity to replant with the same or similar species.”

Trees do decline with age, especially when, for years, they have received little or no care. This decline is of special concern if the tree is allowed to become hazardous. The damage created by a downed tree can far exceed the cost of removal.

These trees reflect only a very small portion of those in the cemetery. We recommend that they be taken down at the earliest convenience and that new trees be introduced. This early intervention will provide the new trees with an opportunity to begin to fill in and maintain the current cemetery appearance. Significant delay will likely result in the need to remove additional trees – thereby causing a more significant impact to the landscape and making it more difficult for new trees to begin to fill in the open areas. We discuss the process of selecting replacement trees below.

LANDSCAPE MAINTENANCE

**Table 5.
ISA Certified Arborists in the DC Area**

Name	Firm	Phone
Chuko, Michael		(202) 645-6140
Beltowski, Gary	Neighborhood Tree Service Bethesda, MD 20827	(301) 929-8733
Bernstein, Benjamin	Bernstein Group, Inc. Silver Spring, MD 20904	(240) 687-5051
Buscaino, Mark		(202) 251-9515
Caldwell, Amanda	FA Bartlett Tree Experts Alexandria, VA 22311	(703) 338-7489
Campbell, Melissa	The Care of Trees Alexandria, VA 22310	(703) 922-8733
Day, Diana		(301) 438-7755
Eaton, Richard	Sav-A-Tree Alexandria, VA 22310	(914) 244-1700
Glover, Matthew	Wray Brothers Landscapes Bethesda, MD 20816	(301) 613-9689
Godwin, Kelly	Tyson's Tree Svc., Inc. Alexandria, VA 22309	(703)849-9188
Griffin, Justin		(202) 498-0133
Grove, Don		(301) 565-3740
Holtzapfel, John	Northern Virginia Tree Experts Silver Spring, MD 20910	(703) 471-7607
Jevremovic, Zana		(703) 299-1729
Jones, Steven	Audubon/VTM Arborists, Inc Alexandria, VA 22310	(703) 971-6258
Kabia, Santigie		(301) 847-0064
Kaufmann, James		(301) 787-6833
Krywonos, Olexander		(571) 220-4824
Marvil, William	Takoma Tree Experts, Inc. Silver Spring, MD 20903	(301) 681-5800
Mastbrook, Neal		(202) 526-6950
McCully, R.	Conservatory Tree Care Washington, DC 20002	(202) 550-2110
Meekins, DeBraire		(301) 248-6900
Miller, Janet	Davey Resource Group Alexandria, VA 22303	(804) 832-0443
Mitchell, James		(571) 239-5098
Murphy, Brian		(301) 946-4874
Murray, Richard	Shannon Tree & Landscaping Silver Spring, MD 20915	(301) 593-7028
Nedorostek, Todd		(703) 799-0136
Noelle, John		(703)838-4999
O'Neil, William	Bel-Pre Applicators Silver Spring, MD 20906	(301) 598-3687
Page, Rob	Page Stonework & Landscape Silver Spring, MD 20910	(301) 613-6501
Pitchford, Keith	Pitchford and Associates, LLC Washington, DC 20007	(202) 333-3851
Reilly, James		(703) 960-4249
Simcox, Ben	The Brickman Group, Ltd. Silver Spring, MD 20906	(301) 252-8034
Souder, Jay		(703) 971-6258
Thurrott, David	The Care of Trees Alexandria, VA 22311	(703) 931-3949
Wheeler, Lauren	Portico, Inc Washington, DC 20017	(202) 832-9660

Bartlett also recommends stumps be ground to depths of 20-24 inches. We do not recommend the grinding of any stumps within the cemetery. Instead, stumps should be cut as low as practical and left in place. The reason for this is that stump grinding has the potential to disturb the soil and may expose human remains. In addition, the process of stump grinding exposes stones to additional potential for damage.

Tree Replacements

Good practice for landscape conservation is to replace removed trees with the same or similar species. Bartlett has recommended this practice and we concur with one exception. The green ash has a variety of problems in a cemetery context and should not be replanted. A white oak or cedar might be appropriate alternatives.

These replacements should be of at least 2-inch caliper and meet the minimum requirements of the American Nursery and Landscape Association's American Standard for Nursery Stock (ANSI Z60.1-2004).

Pest Control

During this visit we observed no obvious evidence of pests or disease in the cemetery area. We suspect that little, if any, previous pest control procedures have been used. Bartlett recommends a program for several trees treating them for Cambia borers. Their approach seems reasonable and is not likely to impact the stones as a soil injection (any bark spray should be applied as a coarse spray to prevent drift to the stones).



Figure 32. Overview of the cemetery showing trees in need of pruning .

Summary

The plantings at the West Campus cemetery are limited to trees that are likely part of the natural vegetation. There do not appear to be any that are intentionally planted.

Nevertheless, these trees are part of the historic landscape and, in at least some cases, have ages which place them at the turn of the century. Consequently, it is important that steps are taken - particularly including pruning and routine maintenance - to ensure that these trees remain in good health.

It is reasonable to remove those few trees which are in significant decline - allowing replacements to begin to fill in the canopy prior to the need for removing additional old specimens. While in general similar species should be selected, problem trees should be avoided.

The cemetery, using an ISA certified arborist, should begin and maintain a routine program of inspection and pruning. All pruning within the Cemetery should be performed by an International Society of Arboriculture (ISA) Certified Arborist, preferably one who is also an

ISA Certified Tree Worker/Climber Specialist. Table 5 provides a list of Certified Arborists for the immediate area.

Turfgrass Issues

Although Figure 32 illustrates what appears to be thick grass, it appears to consist primarily of weedy species, with no clearly defined turfgrass present (Figure 34).

The Maryland Turfgrass Council provides recommended warm and cool season grasses for Maryland (and the District of Columbia) in their publication, *Recommended Turfgrass Cultivars for Certified Sod and Professional Seed Mixtures*,



Figure 33. American beech with graffiti carved into bark showing a date of 1899.



Figure 34. Example of dense weed mat and absence of turf grass in the cemetery.

University of Maryland Turfgrass Technical Update, TT - 77. This publication notes that the warm season sods Zoysia and Bermuda both suffer from potential winter hardiness problems, resulting in relatively few recommended cultivars. Nevertheless, because of the hot summers in this transition zone they are options. The only low management (i.e., no irrigation, low fertility, limited management practices) shade turf (given the likelihood of a relatively dense canopy) is a tall, or preferably, fine fescue. The fine fescues include chewings fescue, hard fescue, and sheep fescue.

Both tall and fine fescues, however, share similar characteristics - shade tolerance (most other cool season grasses have low shade tolerance), staying green all year, and having very good drought resistance. Tall fescue is the coarser of the lawn fescues, with a dense turf when maintained; it forms a clumping growth at the base of the grass plant which may pose problems over time. The fine fescues, as their name implies, have a fine texture. Chewings fescue is particularly shade tolerant, often being used where are numerous oaks - such as the West Campus cemetery. It is not tolerant to full sun. Fine leaf fescues, such as hard and sheep fescue, require less mowing than tall fescue, are

less prone to dormancy during severe droughts, maintain density under low fertility, and have a better combination of tolerance to shade, sun, and acid soils than most tall fescue cultivars.

The benefit of establishing a turf grass goes beyond simple aesthetics. Having a turf grass would likely reduce the frequency of mowing, since weed mowing is done on a schedule to keep the different growing plants at a uniform height.

Mowing

Mowing for a fescue turf grass depends on the type used. Tall fescue is cut from 2½ to 3½ inches during the spring and summer and 2½ inches in the fall and winter. Fine fescue is allowed to grow ½ inch longer (3 to 4 inches in the spring-summer and 3 inches in the fall-winter).

While we have little data on the current (or past) practices, the stones provide clear evidence of the management practices. A significant number exhibit scraps (many fresh) typically caused by a mower deck scraping the stone. A number of the monuments also exhibit chips being removed by direct, and considerable, impact (Figure 35).

These types of damage are characteristic of inappropriate mowing - using equipment that is too large; allowing the grass (weeds) to grow too high, reducing the visibility of the stones; and aggressive mowing (often the result of a low bid lawn care service attempting to too quickly complete the project and move on).

In general, large riding mowers are not recommended for cemetery settings - they are more difficult to control and tend to cause considerable damage in tight quarters. With the arrangement of the West Campus cemetery, however, their use may be acceptable, but only with very careful attention and only between the rows. All such equipment must remain 12-18

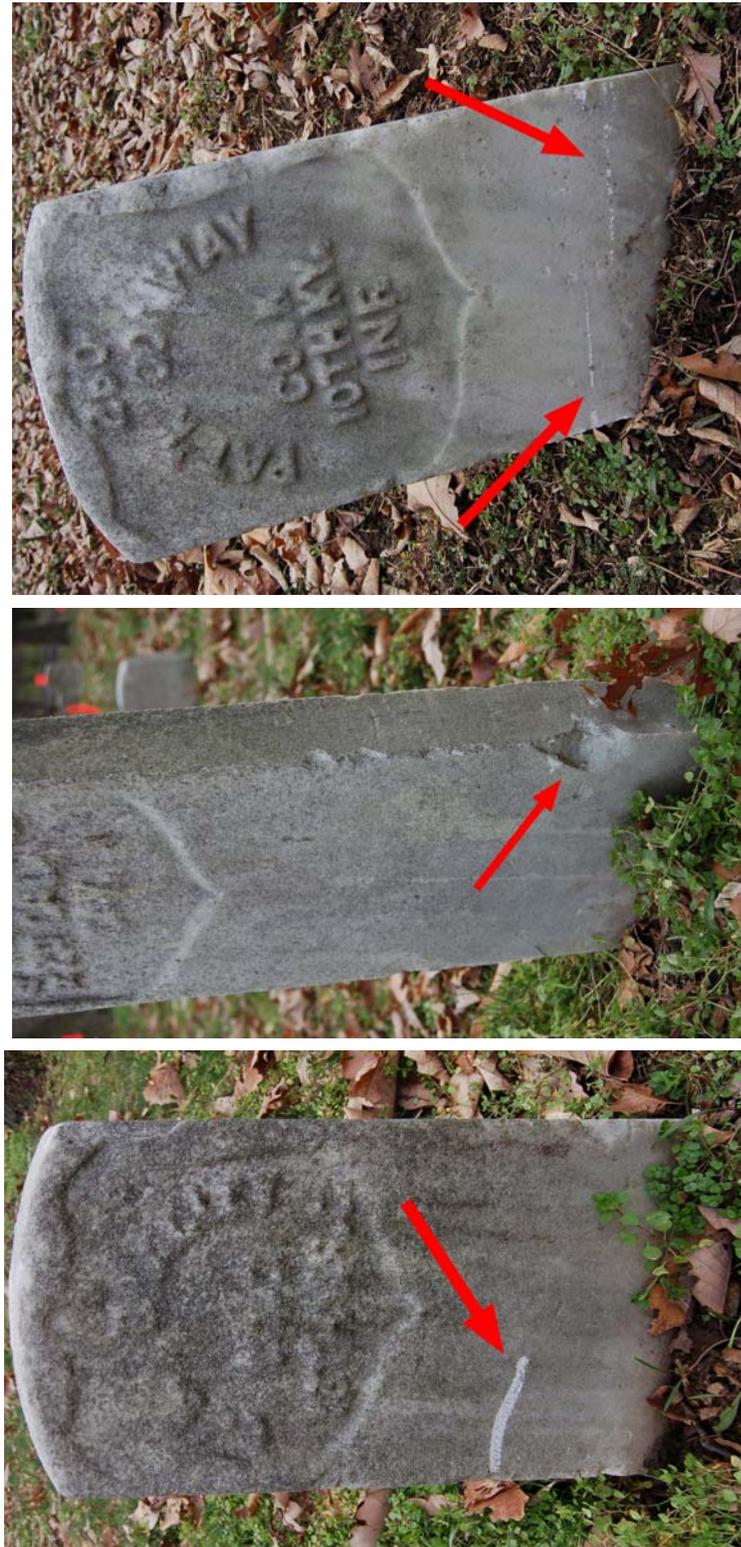


Figure 35. Examples of damage caused by mowers in the cemetery.

inches from the stone; nylon string trimmers may then be used to complete the work up to the stone and between the individual stones in a given row.

We also recommend that all mower decks be padded using closed cell foam attached by drilling the deck or using a non-tacky adhesive. This will help protect stones from occasional and inadvertent damage.

Table 6.
Fertilization Recommended for Fescue

Grass	Sept.	Oct.	Nov.	Mid-May	June	Annual Total
Tall fescue	1.0	1.0	0	1.0*	0	2.0-3.0
Fine leaf fescue	0	1.0	0	1.0*	0	1.0-2.0

pounds of nitrogen fertilizer per 1000ft² by month
* fertilize only if needed for color

The nylon trimmer line must not be over .095 inch in diameter and preferably .065 inch. This light gauge line is less likely to damage the stones. Ensuring that a heavier line is not being used will require careful attention of the supervisory staff since technicians will want to use a heavier line to reduce their work and speed the process.

Fertilization and Weed Control

Given the dense cover of weeds, it is clear that no effort has been made in the past to control unwanted vegetation. Likewise, the soil tests by Bartlett suggest that no effort has been made to fertilize the cemetery.

We strongly recommend that soil tests be conducted every two to three years, with fertilization based on the needs as specified by these tests. Unfortunately the Maryland Cooperative Extension discontinued soil tests several years ago. Commercial laboratories capable of conducting the work are listed at <http://www.agnr.umd.edu/SoilTesting/>.

In general, fescues desire a soil pH above 6.0. All of the Bartlett tests are below this level (in some cases significantly below). Consequently, it is generally recommended that 50 pounds of limestone per 1000 ft² be applied in the fall or winter. Several applications will be necessary to raise the pH.

For top appearance, heavier fertilization will be required, with multiple, light applications of nitrogen and a yearly application of potassium. Table 6 shows a typical fertilizer regimen based on desired maintenance and appearance, as well as the type of fescue used.

Often an inorganic fertilizer is used since they are readily available. As previously discussed, *in order to minimize salt uptake by the stones, slow release organic fertilizers should be used and inorganic fertilizers should be avoided.*

Similarly, many herbicides contain salts and these, too, can migrate into stones (especially the marbles that are common in the cemetery), causing discoloration, spalling, and other damage. Thus the use of herbicides should be held to a minimum.

We recognize, however, some treatments will be necessary - both to eliminate the currently infested cemetery and to maintain the fescue. Weeds are best controlled when they are actively growing, with cool season grasses generally treated in the fall or spring. Preemergent herbicides may be applied for the control of crabgrass, goosegrass, and similar weeds between March and May.

Pest Control Practices

Similarly, there is no evidence that the cemetery caregivers have undertaken any pest control practices. White grubs are generally the



Figure 36. Example of a fescue turf grass (courtesy Seedland, Wellborn, Florida).

most common pests of fescue, although fire ants arrived in Maryland in 1986 and are today confirmed in two counties, as well as the District of Columbia by the USDA Agricultural Research Service.

If fire ants are identified in the cemetery we recommend minimally that individual mounds be treated with a product such as Amdro (hydramethylnon). An even better approach is the use of Amdro as a broadcast fire ant bait while fire ants are foraging. After 10-14 days it should then be used as an individual mound treatment on any mounds that continue to be a problem. This approach should be used twice a year, typically in April or May and again in September or October.

Irrigation

The general moisture requirement for fescue is about 1-inch a week, although studies suggest that fescue can survive rather prolonged periods without irrigation.

We understand that no watering is conducted at the cemetery and no irrigation is in place. Although this is acceptable, there should be a procedure in place to provide spot irrigation under situations of severe stress.

Summary

We recommend that the current dense weeds in the West Campus cemetery be converted to a turf grass. Although Bermuda and Zoysia grasses can be grown in the District of Columbia, a better choice might be a fescue.

It is likely that mowing will be required on a weekly basis, although bi-weekly mowing may be possible. Fertilization will be required once a year. Pre and post emergent herbicide will be required. Irrigation is not anticipated. This represents the lower possible level of maintenance for a turf grass.

It is not possible to reduce maintenance any further and have the cemetery meet even the most minimal level.

At this most minimal level of care, RS Means *Site Work and Landscape Cost Data* suggests that this cemetery will require about 1 hour to mow and 8.4 hours to trim. The mowing estimate – especially given the care needed – is low and we recommend that it be revised upward to approximately 3 hours. The trimmer work, in contrast, is probably slightly high and we anticipate that the trimmer work will require only 8 hours. Consequently, for scheduling purposes, the caregiver should anticipate weekly mowing to take one individual about 1.5 days per week. Other routine maintenance, such as trash pick-up, fertilization, etc. will require the remainder of the time.

We again emphasize that this represents the absolute minimum and it seems likely that, should visitation be re-established, the public will anticipate that a cemetery honoring the Country's military dead will be given an even higher standard of care.

Efforts to reduce the time involved in the care of the cemetery will necessarily result in a decline in the appearance of the cemetery - and a decline in the condition of the stones.

Recommendations

The absolute minimum level of staff required by the cemetery is two-person days per week for a maintenance individual and one-day per week for staff supervision.

Continuity of staffing, appropriate training, and careful supervision are additional critical elements in the long-term care and appearance of the cemetery. All staff should achieve certification through one or more of several landscape programs, with an emphasis on turfgrass, ornamental plants, and maintenance.

Tree selection within the cemetery (for example as eventual replacement for the four trees recommended for removal) should be focused on historically appropriate species, based on period lists and known cemetery use. Species should, however, be evaluated to eliminate those with problems such as suckers, surface roots, inherent weakness, etc.

Trees within the cemetery should be fertilized on a routine basis and should be professionally evaluated and pruned at least once every 5 years by an ISA Certified Arborist. All trees should be inspected yearly and after any storm with winds in excess of 55 mph.

ISA Certified Arborists should be responsible for tree pruning and maintenance.

It would be beneficial to establish a turf grass in the cemetery and we recommend a fescue.

This will require elimination of the existing weeds, fertilization and pH adjustment, seeding or sodding, and temporary watering.

The cemetery must be mowed no less than weekly.

Greater care is necessary to prevent damage of stones during mowing. We recommend that all mowers used in the cemetery be equipped with closed cell foam padding.

The nylon trimmer line should be no thicker than .065-inch (or at the very most .095-inch).

Use of inorganic fertilizer must be halted, with only organic, slow release fertilizers used on the cemetery grounds.

OTHER MAINTENANCE ISSUES

The Entrance

This entrance gate is the focal point for the cemetery, but the massiveness and formality is inappropriate given the historic nature of the cemetery. It is part of a modern effort to “re-create” the cemetery and focus attention on its Civil War burials at the expense of the burying grounds use for civilian patients of the Government Hospital for the Insane. While a wood picket fence may present too much on-going maintenance, the iron fence and massive wall create an air of pomp and formality that the cemetery never possessed historically.

The cemetery presents the visitor with a dichotomy (between the less than impressive drive and the front entrance) and a contradiction (between the historical placement of the cemetery on the edge of the property and minimal maintenance it has received, and the modern myth of the gleaming crosses marking the brave fallen heroes). Together, these issues serve to mislead and misinform the visitor. These problems deserve attention.

We have previously recommended eventual replacement of both the iron fence and the surrounding chain link fence. We recommend the removal of the stone wall.

Signage

The GSA may be considering a unified theme for signage on the West Campus. If so, then obviously the cemetery signage should conform to those requirements. In general, a few of the typical historic

preservation requirements are that signage be used only where essential and that signage should not block, obscure, or detract from character defining features of historic resources.

From a cemetery preservation perspective signage is of four basic types: identification, regulatory, informational, and interpretative. They are generally recommended in this same priority.

Identification signage might include the name of the cemetery and might also include the cemetery’s date of founding and historic significance (i.e., listed on the National Register).

The signage present at the entrance to the cemetery serves to further reinforce the

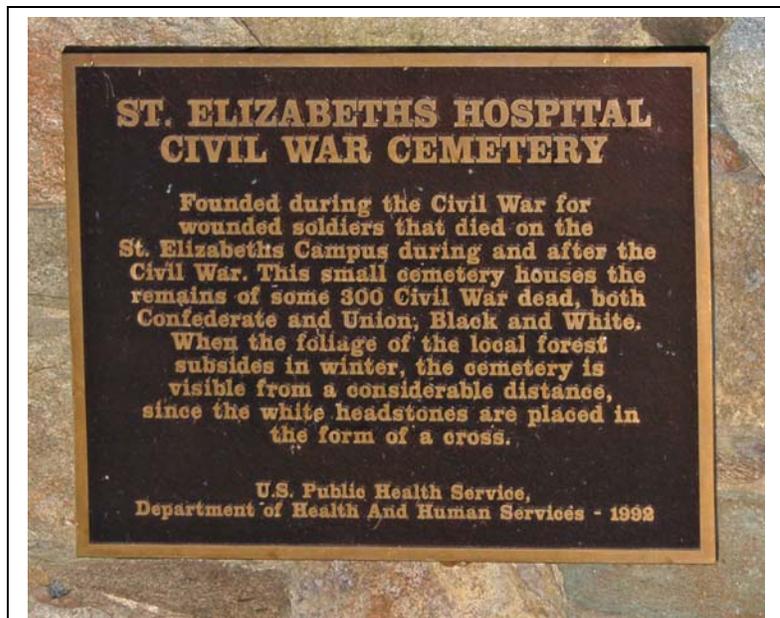


Figure 37. This is the only informational signage at the West Campus Cemetery. It fails to make any mention of the grave yard’s original function or of the civilian patients buried there. It also perpetuates the myth of the “white cross.” It should be immediately replaced.

historical myth of the stones being laid out in the shape of a cross when seen from a distance. As previously discussed, there is absolutely no historical basis for this. No such arrangement was made historically nor is it possible to see the supposed cross from anything other than an airplane. It is our belief based on the available historical evidence that a re-arrangement of the stones occurred in the twentieth century.

Even the name, "Civil War Cemetery," serves to devalue the lives of the patients, who are forgotten in this renaming effort. We recommend that the cemetery be identified as the West Campus Cemetery.

There is much to tell, beginning with the laying out of the cemetery by Superintendent Nichols in January 1856 and his description of it as wooded and having a "gentle slope toward the setting sun." Signage should explain that it was first used for "friendless patients," with burials taking place "without ceremony." The signage should remind us of the treatment received by the insane during the nineteenth century – only 150 years ago. The story can then include the burial grounds use for the unexpected surge of Civil War dead.

Regulatory signage specifies laws, regulations, or expected standards of behavior. The GSA should not assume that behind government gates there is no need for signage. We recommend that the GSA develop signage dealing with, minimally, these issues (perhaps with some modifications of language as might be needed):

- ❖ Many of the stones in this cemetery are very old and may be easily damaged. Consequently, absolutely no gravestone rubbings will be allowed.
- ❖ The stones and monuments in this cemetery are fragile. Please refrain for leaning, sitting, or climbing on any monument or mausoleum. All children must be escorted by an adult.

- ❖ Absolutely no alcoholic beverages or fireworks are allowed in the cemetery. Proper conduct is expected at all times.
- ❖ No pets are allowed in the cemetery.
- ❖ Flowers will be removed by the staff 10 days after holidays or when the arrangements become wilted and unsightly.
- ❖ No plantings are allowed within the cemetery and the GSA [or other caregiver] will enforce its right to remove any plantings deemed inappropriate, diseased, or damaging the cemetery.
- ❖ For additional information concerning maintenance issues, please contact [individual and agency] at [phone number]. In case of emergency contact [phone number, likely 911].

Both identification and regulatory signage should be located at the entrance to the cemetery, immediately outside its boundaries.

The last two types of signage are informational (for example, directional signs) and interpretative (information on historic people buried in the cemetery). The cemetery is so small that no informational signage should be required on-site. Additional interpretative signage should be discreet and not allowed to overwhelm the historic character of the cemetery.

Military Stones

It may be useful to briefly recount the history of government or military stones. The earliest markers were a wooden board with a rounded top and bearing a registration number and/or inscription. There was, however, no centralized system for recording burials. This system was formalized as a result of the Civil War with War Department General Orders 75

creating the first organized system of marking graves. It wasn't, however, until 1865 - when the number of burials in national cemeteries approached 100,000 - that the military began to realize that wooden headboards presented significant maintenance issues. The movement away from wood was not immediate and it engendered considerable controversy between those who favored marble and those who favored galvanized iron.

Finally, in 1873 Secretary of War William W. Belknap adopted the first design for

on the back). For unknown dead a 6-inch square block of marble was used intended to be set 4-inches above grade. On the top of the stone would be a number. In 1879 Congress authorized known graves to be marked using the government stone in private cemeteries. The "Civil War" type was used not only for Civil War (Union forces only) dead, but also the deceased of the American Revolution, the War of 1812, the Mexican War, the Indian Campaigns, and eventually the Spanish-American War.

A 1902 study of long-term durability resulted, in 1903, of the stones changing from 10-inches to 12-inches in width and the overall height of the stones was increased to 39 inches. The thickness remained at 4-inches. The use of the stone blocks for marking unknown dead was terminated in 1903, with the graves from that point on marked with the same type of stone used for known dead (with an inscription such as "Unknown Union Soldier"). By 1904 Congress also authorized the use of these stones on civilian graves in post cemeteries.

In 1906, Congress authorized the permanent marking of Confederate graves. These stones would be the same size as the other markers, but would be pointed rather than rounded, with the shield omitted. By 1929 these stones were also authorized by Congress for use in private cemeteries. In 1930, the War Department modified regulations, allowing for the inscription of the Confederate Cross of Honor in a small circle on the front face of the stone above the standard inscription.

A new design was implemented after WWI. Known as the "General" type, the top remained slightly rounded, but was 13-inches in width and 4-inches thick. These stones were 42-inches in length. The inscription would include the name, rank, regiment, division, date of death, and state from which he came. In addition, for the first time a religious emblem (limited to the Late Cross for Christians and the



Figure 38. Example of the "Civil War" type marker used at St. Elizabeths West Campus cemetery. The erosion and loss of inscription clarity is typical of weathered marble.

government cemetery stones. For the known dead a slab 4-inches thick, 10-inches wide, and 12-inches in height above ground with a slightly curved top was standard. Known today as the "Civil War" type, it featured a sunken shield in which the inscription appeared in bas relief. This inscription was limited to the rank, name, and name of the state. At national cemeteries there was a control number carved on the stone (often

Star of David for Jews) was adopted for use on the government headstones.

Granite was approved in 1941, but discontinued in 1947 because of their cost (upright granite markers were re-introduced in 1994). Flat markers were approved in marble in 1936, granite in 1939, and flat bronze in 1940. These flat markers are 24-inches in length, 12-inches in width, and 4-inches in depth (with the exception of the bronze markers that are only 3/16-inch in thickness) with engraved inscriptions (cast for bronze markers). The date of birth was authorized in 1944 and after the war ended, WWI or WWII was authorized as part of the inscription. Korea was added in 1951 (and revised in 1954), Vietnam was added in 1964, Lebanon and Grenada were added in 1983, Panama and Persian Gulf were added in 1989, and Somalia was added in 1992.

The historical sunken shield or "Civil War" style was only recently re-introduced (having been replaced by a far more modern inscribed shield style that was historically inappropriate and detracting from historic cemeteries). Style "XA" is 12-inches wide, while style "XB" is 13-inches wide. Both are 3-inches thick and 42-inches in height.

The West Campus Cemetery

Assessment of the graves in the West Campus cemetery reveals that in spite of the formal history of government supplied stones there was apparently some variation.

For example, the nominal width of 1873-1902 "Civil War" type stones was 10-inches. However, at the West Campus cemetery we find stones that vary from 8 to 10¾ inches. Likewise, while the nominal thickness is described as 4-inches, this cemetery reveals stones ranging from 1½ to 2¼ inches. The typical size of the West Campus marker is about 2-inches in thickness and 10-inches in width. Curiously, none of the stones come close to the government's contracted 4-inch thickness.

While the VA (National Cemetery Administration) provides replacement markers with a sunken shield and a bas relief inscription, these stones are 12-inches in width and 4-inches thick (the "XA" replacement). Thus, while similar, they are not good matches to the historic fabric.

Consequently, every reasonable effort should be made to maintain and preserve the original stones in the cemetery and replacement should be ordered only when conservation treatments will not satisfactorily maintain the stone.

Monument Maintenance

With the need to ensure that the existing historic fabric survives as long as possible, several issues are worth noting:

- ❖ Appropriate landscape maintenance,
- ❖ Cleaning of monuments, and
- ❖ Repair of marble.

Landscape Maintenance

The previous section dealt with this issue at depth. It is nevertheless important to mention again that maintenance activities will have a tremendous impact on the markers. Damage often occurs through mower impacts and inappropriate use of string trimmers. Greater care on the part of landscape crews will have a significant effect on the longevity of these markers.

Cleaning of Markers

It is likely that the GSA or subsequent caregivers will occasionally confront groups that wish to clean the markers at the West Campus cemetery. Cleaning is largely an aesthetic issue at this cemetery. The biologicals present are causing relatively little damage. There is, however, significant atmospheric damage

OTHER MAINTENANCE ISSUES

Table 6.
Comparison of Different Cleaning Techniques

Cleaning Technique	Potential Harm to Stone	Health/Safety Issues
Sand Blasting	Erodes stone; highly abrasive; will destroy detail and lettering over time	Exposure to marble dust is a source of the fatal lung disease silicosis
Pressure Washers	High pressure abrades stone. This can be exacerbated by inexperienced users. Pressures should not exceed 90 psi.	None, unless chemicals are added or high temperature water is used.
Acid Cleaning	Creates an unnatural surface on the stone; deposits iron compounds that will stain the stone; deposits soluble salts that damage the stone	Acids are highly corrosive, requiring personal protective equipment under mandatory OSHA laws; may kill grass and surrounding vegetation
Sodium Hypochlorite & Calcium Hypochlorite	Will form soluble salts, which will reappear as whitish efflorescence; can cause yellowing; some salts are acidic	Respiratory irritant; can cause eye injury; strong oxidizer; can decompose to hazardous gasses
Hydrogen Peroxide	Often causes distinctive reddish discolorations; will etch polished marble and limestone	Severe skin and eye irritant
Ammonium Hydroxide	Repeated use may lead to discoloration through precipitation of hydroxides	Respiratory, skin, and eye irritant
D/2 Architectural Antimicrobial	No known adverse effects, has been in use for nearly 10 years	No special precautions required for use, handling, or storage

damage, it should be conducted no more frequently than perhaps once every 5 years. The safest commercial product for cleaning is D/2 Architectural Antimicrobial distributed by Cathedral Stone.

Conservation Issues

Appendix 2 provides conservation recommendations developed during our assessment of the stones at the West Campus cemetery.

There is no single specification for the repair of marble, but in general we can caution that modern monument dealers, the general public, and most masons are unfamiliar with historic stone and

resulting in sugaring of the marble (this is the loss of natural binders between the calcium carbonate grains, resulting in the deterioration of the marble). Cleaning - especially using inappropriate techniques - may do these monuments far more harm than good.

Many cleaning techniques - especially those used by commercial contractors involving high pressure, abrasives, and bleach products - are entirely inappropriate for historic markers. Table 6 discusses problems with a variety of "common" stone cleaning processes used by commercial firms.

Since cleaning - even when done correctly - will gradually erode monuments, making them susceptible to more soiling and

have little or no appropriate experience in its care and repair. When repairs of old stones are needed, only a stone conservator who subscribes to the Standards of Practice and Code of Ethics of the American Institute for Conservation of Historic and Artistic Works (AIC) should be retained.

Several recurring issues were observed. Many of the stones are "sugaring." This is severe surface softening and disaggregation of the calcite particles. It occurs as the binding holding the particles together is removed by environmental factors such as acid rain and pollutants.

Typical treatment for this problem involves a process conservators term



Figure 39. Example of a West Campus marker that is sugaring. Cleaning will require special care to prevent additional loss.

consolidation. There is much controversy concerning consolidation with those questioning the appropriateness of the procedure noting that the process has a relatively short history and questioning whether the materials are reversible. Those favoring consolidation note that there are a variety of studies showing efficacy of the treatment. They also point out that many conservation treatments today are not truly reversible.

Studies have shown that consolidants tend to weather out within 10-15 years, perhaps minimizing the concern over reversibility. On the other hand, at least one researcher is suggesting that the by-products left behind during that weathering process may preclude future consolidation treatment. This work, however, is not published and has not been formally peer reviewed.

Our view is that consolidation is an appropriate treatment when the monument is in such an advanced state of deterioration that it has little chance for survival for an additional decade. In such cases, it seems worth both the cost and time to provide some additional protection in the hope that during the next

decade additional research will point to alternative treatments.

The typical treatment consists of using the Prosoco product HCT following by the use of Prosoco's OH100. HCT is a hydroxylating conversion treatment intended for marble and limestone. It forms a stable, well-adhered, hydroxylated, conversion layer on carbonate mineral grains. This conversion layer dramatically increases the resistance of marble and limestone surfaces to acid attack, and improves the ability of a variety of chemical compositions to react with or bond to such surfaces. It prepares the stone for effective consolidation, improves resistance to acid-rain, and strengthens sugaring stone. It is applied as three sprays to the point of rejection, followed by a finishing rinse also applied to the point of rejection following the manufacturer's recommendations.

In contrast, OH100 is a silicic ethyl ester



Figure 40. Example of spalling marble.

that replaces natural binding material lost to weathering. It can be used on sandstone, marble, slate, and granite, although it is most commonly used on the first two. Typical treatments involve two or three cycles (6-9 separate applications) per the manufacturer's recommendations.

Unfortunately, OH100 does not conform with the limitations on VOC content for



Figure 41. Example of a marker that can be repaired using standard conservation practices. Its repair will allow the original fabric to remain in the cemetery.

architectural coatings implemented the District of Columbia. Thus only HCT may be used on the stones at the West Campus cemetery

Spalling is another problem observed on several stones in the cemetery. Spalling is often associated with build-up of salts, often originating in fertilizer, herbicide, or deicing products that are in the soil and are transported into the stone via its uptake of soil moisture. As the moisture evaporates the salts are left behind. Since the salt crystals are much larger than the stone pores, spalling occurs.

Typical treatment of spalling involves removal of salts and efforts to minimize or reduce moisture uptake. This, however, does not appear to be a major problem at the West Campus cemetery.

The last significant problem at the West Campus cemetery

involves broken or cracked stones. When a stone is broken a blind pin repair is often recommended. This involves drilling the two broken stone fragments for the insertion of a stainless steel pin, set with a hi-mod, moisture insensitive epoxy to draw together and retain the two stone fragments. Afterwards it is often necessary to replace lost fabric. Suitable materials include a variety of Jahn products (for example, M120 for marble). Infill should be compatible with the substrate, be vapor permeable, and contain no latex or acrylic bonding agents or additives.

Marble (as well as other stones) may evidence cracks (sometimes along bedding planes). The use of injection grout can infill these fine cracks, preventing water penetration. Many grouts also have a cementitious quality, helping to prevent additional spalling or delamination. Grouts may include Jahn M30 for cracks up to 3/16-inch or Jahn M40 for cracks from 3/16 to 9/16-inch.



Figure 42. Example of a significant crack in a West Campus marker, as well as impact loss on the left side and abrasion at the top.

Recommendations

We recommend that the fencing be converted to a historically appropriate picket fence in keeping with the known photograph of the cemetery.

The existing sign on the stone wall should be removed as soon as practical and replaced with more accurate signage.

There is only minimal signage at the West Campus cemetery. We recommend appropriate informational and regulatory signage. In particular, it is important to balance the story of the Civil War use of the cemetery with its original intended use for the burial of "friendless" mental health patients.

An effort should be made to maintain the existing stones since Veteran Administration XA replacement stones will have a noticeably different size and introduce new elements into the cemetery.

All required repair work of the monuments should be performed by a stone conservator subscribing to the Code of Ethics and Standards of Practice of the American Institute for Conservation (AIC).

Cleaning, if necessary, should be performed only under the direction of a stone conservator. Cleaning should be limited to low pressure water and the use of D/2 Architectural Antimicrobial or equivalent.

CEMETERY BOUNDARY ASSESSMENT

ERT Geophysical Study

Previously, the GSA had retained Earth Resources Technology (ERT) to conduct a conductivity and ground penetrating radar (GPR) study of the site (Stuby 2006). Both studies were conducted within the fenced area and about 90 feet outside on the northeast, east, southeast, and northwestern edges. Presumably the remainder of the area around the cemetery was not investigated given the steep topography.

The conductivity study was unrevealing, failing to provide any clear documentation concerning burials. Two anomalous readings were found, both outside the cemetery boundaries and likely associated with debris used to fill an erosional gully that ran alongside the cemetery.

The GPR study was more revealing. ERT provided a series of time slices of the data showing amplitude, useful for broad pattern analysis. They note the clearly defined drop in amplitude in the southwestern portion of the cemetery, which they associate with the graves in that area. Curiously, a similar drop in amplitude is not found to the north, where graves are as numerous. In addition, they observed strong, but irregular amplitudes along the southwest edge of the cemetery. While similar findings have been associated with landfill sites, the presence of these findings in a cemetery context is unusual according to their study.

The conventional GPR profiles are equally difficult to interpret. The study notes that *"no anomalies can be definitely identified as graves"* (italics in original), largely because of the poor correlation of reflections with marked graves. In addition, there are areas of "chaotic

reflections" thought to represent either buried debris or some type of disturbed soil.

Penetrometer Study

A final task of this study was to evaluate the cemetery boundaries. We supplemented the ERT work through the use of a penetrometer – a simple device used to measure ground compaction in pounds per square inch (psi).

Soil compaction is well understood in construction, where its primary objective is to achieve a soil density that will carry specified loads without undue settlement, and in agronomy, where it is recognized as an unfavorable by-product of tillage. Compaction is less well understood in archaeology, although some work has been conducted in exploring the effects of compaction on archaeological materials (see, for example, Ebeid 1992).

In the most general sense, the compaction of soil requires movement and rearrangement of individual soil particles. This fits them together and fills the voids which may be present, especially in fill materials. For the necessary movement to occur, friction must be reduced, typically by ensuring that the soil has the proper amount of moisture. If too much moisture is present, some will be expelled and in the extreme the soils become soupy or like quicksand and compaction is not possible. If too little moisture is present, there will not be adequate lubrication of the soil particles and, again, compaction is impossible. For each soil type and condition there is an optimum moisture level to allow compaction.

When natural soil strata are disturbed – whether by large scale construction or by the excavation of a small hole in the ground such as a burial – the resulting spoil contains a large

volume of voids and the compaction of the soil is very low. When this spoil is used as fill, either in the original hole or at another location, it likewise has a large volume of voids and a very low compaction.

In consequence, such fill is artificially compacted, settling under a load as air and water are expelled. For example, compaction by heavy rubber-tired vehicles will produce a change in density or compaction as deep as 4 feet. In agriculture, tillage is normally confined to dry weather or the end of the growing season – when the lubricating effects of water are minimized.

In the case of a pit, or a burial, the excavated fill is typically thrown back in the hole not as thin layers that are then compacted before the next layer is added, but in one, relatively quick, episode. This prevents the fill from being compacted, or at least as compacted as the surrounding soil.

Penetrometers come in a variety of styles, but all measure compaction as a numerical reading, typically as pounds per square inch (psi). The dickey-John penetrometer consists of a stainless steel rod about 3-feet in length, connected to a T-handle. As the rod is inserted in the soil, the compaction needle rotates within an oil filled (for dampening) stainless steel housing, indicating the compaction levels. The rod is also engraved at 3-inch intervals, allowing more precise collection of compaction measurements through various soil horizons. Two tips ($\frac{1}{2}$ -inch and $\frac{3}{4}$ -inch) are provided for different soil types.

Of course, a penetrometer is simply a measuring device. It cannot distinguish soil compacted by natural events from soil artificially compacted. Nor can it distinguish an artificially excavated pit from a tree throw which has been filled in. Nor can it, per se, distinguish between a hole dug as a trash pit and a hole dug as a burial pit. What it does is convert each of these events to psi readings. It is

then up to the operator to determine through various techniques the cause of the increased or lowered soil compaction.

Curiously, penetrometers are rarely used by archaeologists in routine studies, although they are used by forensic anthropologists and by the Federal Bureau of Investigation (FBI) in searches for clandestine graves. While a penetrometer may be only marginally better than a probe in the hands of an exceedingly skilled individual with years of experience, such ideal circumstances are rare. In addition, a penetrometer provides quantitative readings which are replicable and which allow much more accurate documentation of cemeteries.

Like probing, the penetrometer is used at set intervals along grid lines established perpendicular to the suspected grave orientations. The readings may be recorded and used to develop a map of probable grave locations, or the locations may be immediately marked in the field.

In addition, it is important to “calibrate” the penetrometer to the specific site where it is being used. Since readings are affected by soil moisture and even to some degree by soil texture, it is important to compare readings taken during a single investigation and ensure that soils are generally similar in composition.

It is also important to compare suspect readings to those from known areas. For example, when searching for graves in a cemetery where both marked and unmarked graves are present, it is usually appropriate to begin by examining known graves to identify the range of compaction present. From work at several graveyards, including the Scanlonville Cemetery (Charleston County, SC) where 28 graves were identified in three distinct study areas, Kings Cemetery (Charleston County, SC) where 28 additional graves were identified, Maple Grove Cemetery (Heyward County, NC) where 319 unmarked graves were identified, the

Walker Family Cemetery (Greenville County, SC) where 78 unmarked graves were identified, Colonial Park Cemetery (Chatham County, GA) where 8,678 probable graves were identified, Peoples Cemetery (Petersburg, VA) where 36 additional graves were found in several small sample areas, Settlers' Cemetery (Mecklenburg County, NC) where 608 unmarked burials were identified, and Factory Cemetery (Lexington County, SC) where 525 unmarked graves were identified, we have found that the compaction of graves is typically under 150 psi, usually in the range of 50 to 100 psi, while non-grave areas exhibit compaction that is almost always over 150 psi, typically 160 to 200 psi (Trinkley and Hacker 1997a, 1997b, 1998, 1999; Trinkley et al. 1999; Trinkley 1999, 2001a, 2001b).

The penetrometer study was conducted in several site areas, specifically at the northwestern end of Row 1, both within and outside the fence, along Row 19 at the southwest end of the cemetery, and intermittently within

compaction levels of about 200 (although readings as high as 300 were encountered).

Our work suggests that graves extend northwest from Row 1, to the fence or possibly just beyond. Examination of Row 19 found very compact soil throughout the line with no clear indications of any graves. This correlates with the ERT study, which failed to identify any clear anomalies in this area. Elsewhere in the cemetery we found varying results. Some graves were clearly identifiable; others were difficult or impossible to identify – again, very much in agreement with the previous ERT work.

The Fence and Property Boundary

We did not identify any of the original survey pins for the cemetery, although they may still be present. What we did find, along all sides of the existing fence, are remnants of the previous fence. Curiously, in all areas except the rear (southwestern) boundary, the earlier fence was between 2 and 4 feet beyond the existing fence – suggesting that the size of the cemetery has decreased with the most recent boundary. Although this appears minor, with the total linear boundary is added up, the cemetery has been reduced in size by 0.02 acre. Of course, we have no idea how this compares to the original platted boundaries or, more to the point, the area actually used for burials. Nevertheless, it is troubling that the boundaries have been decreased.

Trash Outside the Fence

Our pedestrian examination of the area outside the fence found much debris – most of which had been previously identified and flagged by ERT. Included in this debris are a number of hardware-related items – a horseshoe, several files, miscellaneous metal fragments, and nails. These likely represent



Figure 43. Old fence post several feet beyond the existing fence and representing a decrease in the cemetery boundaries.

the cemetery.

We found that marked graves in Rows 1 and 2 exhibited compaction of about 100 psi; areas outside the cemetery, presumed to be similar soil, but without disturbances, revealed

trash discarded in the gullies formed on the hillside in the remote area of the hospital grounds. In fact, there is still a noticeable gully along the northwest side of the fence and many metal items are found in this area.

In addition to these non-cemetery related items, however, we also found two broken stones, a fragment of a iron Confederate cross, and an intact iron Confederate cross outside the fence. None of these items were more than 14 feet from the existing fence – suggesting disposal over the side of the fence during a cleaning episode.

Conclusions

Our work, combined with that by ERT, leads to several conclusions that help to better understand the history and activities at the West Campus cemetery.

The first conclusion is that the cemetery may have gradually declined in size – as evidenced by the location of old fence posts. Clearly the original boundary should be defined and the maximum size (comparing the platted cemetery to the various fences) should be used to define the graveyard.

Second, it appears that at least some loss of markers was the result of clean-up efforts. Rather than making an effort to repair or even document damage, previous caregivers simply tossed broken items over the fence to dispose of them. The intact Confederate cross may have been gathered up with weeds, leaves, or other debris and accidentally disposed of over the fence.

Third, the large area of irregular findings along the southwest edge of the cemetery may represent an area of dense burials – perhaps reflecting the unmarked graves of “friendless” patients from the mental hospital. The absence of clearly defined burials may be the result of intrusive graves caused by a lack of records. Intrusive burials would certainly

present a “landfill”-like appearance. Of course, an alternative explanation is that this is an area of extensive erosion. Only additional research will resolve this issue – until then the civilian burials remain lost.

Fourth, the irregularity of even the military burials suggests that the hospital was taking little care and failing to keep even the most rudimentary records. Certainly this accounts for the confusion surrounding the number of burials and even their location. This irregularity, we believe, was further exacerbated by the twentieth century desire to “remake” the cemetery and create the myth of a white cross seen from afar.

Further possible documentation of the rearrangement of the markers is provided by their irregular numbering. The numbers on the stone were assigned by the government to track burials. In other military cemeteries these numbers, with rare exceptions, are consecutive. Certainly some rows show consecutive numbers at the West Campus cemetery – but there is much confusion of the numbering and there are many gaps.

The fifth conclusion of this work is that the bulk of the dead – both civilian and military – in the West Campus cemetery are lost. The civilians, unimportant in life, were equally insignificant in death. The hospital treated their burial as little more than disposal. The military dead, while perhaps given more respect, were clearly of little significance to the operation of the hospital. Burial records were poorly maintained and graves were left unmarked.

Today we believe the location of stones likely provides limited information on actual burial locations. This was clearly revealed by both the GPR and penetrometer studies.

Recommendations

GSA should attempt to reconstruct the original cemetery boundaries using the 1868 plat and

comparing it to the two identified chain link fences. The largest identified boundary should be accepted for the cemetery.

Archaeological studies should be conducted within the cemetery in an effort to identify the nature of the southwest area within the fence which may represent either graves or erosional fill.

It should be understood that the markers in the cemetery have uncertain relationship to graves because of poor records, a failure to adequately maintain the cemetery, and twentieth century efforts to "beautify" the property. If a grave is present below a marker, it is uncertain that the individual buried at that location is the individual named on the stone.

PRIORITIES AND FUNDING LEVELS

Recommended Priorities

Table 8 lists the recommendations offered throughout this assessment, classifying them by priority.

Priorities are identified here as First, Second, or Third:

First priorities are those we recommend undertaking during the current fiscal or calendar year. These are largely planning issues that should be resolved and incorporated into designs now in order to prevent problems ahead.

Second priorities are those which should be budgeted for over the next 2 to 3 years. They represent urgent issues that, if ignored, will result in both significant and noticeable deterioration of the West Campus cemetery as a historic resource.

Third priorities are those that may be postponed for 3 to 5 years. Because they are given this lower priority, however, they should not be dismissed as trivial or unimportant.

The proposed budget for immediate actions this fiscal or calendar year, therefore, is approximately \$51,200. Planning costs are not included since GSA is tasked with this planning already. The bulk of this budget -- \$41,000 -- is allocated to the implementation of the Barlett study in the cemetery area. Priority 1

conservation treatments are estimated to be \$10,000.

The Second Priority issues require more extensive funding, \$115,000 (excluding in-house staff costs) that can be spread over three years -- reflecting a per year budget of just over \$38,000. Again, this represents such a modest amount given the extraordinary significance of the West Campus cemetery and the government commitment to both its deceased military family and the patients entrusted to it -- that the cost should raise no concerns. Included in these Second Priority costs are four major tasks -- additional historical research (\$15,000), repair of the gravel road (\$15,000), establishment of turfgrass (\$52,000), and conservation activities (\$20,000).

The Third Priority issues represent only \$66,700 for the remaining tree maintenance needs, replacement of the existing fence, and 5-year conservation assessment. Of course, there are on-going costs -- just as there are for any resource of value to the nation and community. Just as parks or water service or police protection have yearly costs, so too do historic resources. It is clear that maintenance at the West Campus cemetery was deferred for years. Little maintenance was provided for the landscape and the stones themselves received no care. These previous decisions created cumulative problems that now must be addressed or else the resource will be so degraded that its continued significance to the community will be doubtful.

PRESERVATION PLANNING FOR ST. ELIZABETHS WEST CAMPUS CEMETERY

Table 8.
Prioritization of Recommendations

Priority	Recommendation	Budget
First - this fiscal or calendar year	Formalize policy that all decisions at the West Campus cemetery will be made in the context of the Secretary of the Interior's Standards for Preservation.	n/c
	Formalize policies that existing stones will be preserved; that only conservators subscribing to the AIC Standards of Practice and Code of Ethics will be retained for work; and that only minimal cleaning will be allowed.	n/c
	Remove existing signage.	\$200
	Ensure that planning of the larger West Campus re-use incorporates protection of the cemetery topography, forest vegetation, and vista. This should include removal of the existing warehouse facility. Any new structures should be evaluated for their visual intrusion.	n/c
	Ensure that security patrols routinely visit the cemetery, especially on weekends and over holidays.	n/c
	Establish policy and procedures to identify, report, and respond to damage, vandalism, and theft within the cemetery.	n/c
	Ensure that future staffing at the cemetery is adequate to provide appropriate maintenance (weekly mowing, appropriate turfgrass fertilization and broadleaf control, and other tasks as needed). It is particularly important to improve overall mowing care to prevent damage to stones.	n/c
	Establish a policy that allows public access to the cemetery and ensure this access is not curtailed by the future residents of the property.	n/c
	Change all trimmer line used in the cemetery to a thickness of no greater than .065-inch.	n/c
	Implement recommendations of the Barlett study dealing with tree removal (without stump grinding), pruning, and fertilization for the cemetery area immediately. Replant the four trees removed using oaks.	\$41,000
Conduct Priority 1 conservation treatments	\$10,000	

PRIORITIES AND FUNDING LEVELS

Table 8, cont.
Prioritization of Recommendations

Priority	Recommendation	Budget
Second - over next 2 to 3 years	Conduct additional historical research in order to identify other civilian burials in the West Campus cemetery.	\$15,000
	Erect regulatory and informational signage.	\$5,000
	Redesign and renew the access road and parking area (provide better drainage, crown the road, install gravel, etc.)	\$8,000
	Clean access route shoulders and vista to remove trash and downed timber, and thin vegetation.	\$15,000
	Recast and replace iron crosses for Confederate graves.	\$5,000
	Establish fescue turfgrass throughout cemetery	\$52,000
	Conduct Priority 2 conservation treatments	\$15,000
Third - over next 3 to 5 years	Convert chain link and iron fence to historically appropriate picket fence.	\$21,300
	Phased implementation of other Barlett recommendations for the cemetery, including borer prevention, resolving soil compaction, cabling and bracing, and lightning protection.	\$40,400
	Conduct 5-year conservation assessment of the cemetery	\$5,000

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Chicora Foundation, Inc.
PO Box 8664 • 861 Arbutus Drive
Columbia, SC 29202-8664
Tel: 803-787-6910
Fax: 803-787-6910
www.chicora.org