

**PRESERVATION ASSESSMENT OF THE
OLD SHILOH PRESBYTERIAN CHURCH CEMETERY,
CLEVELAND COUNTY, NC AND
CHEROKEE COUNTY, SC**



Chicora Research Contribution 526

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CLEVELAND COUNTY, NC AND CHEROKEE COUNTY, SC**

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MANAGEMENT SUMMARY

This study examines what is called the Old Shiloh Presbyterian Church Cemetery situated southeast of Grover, North Carolina. The cemetery is partially in South Carolina, although the bulk is found in North Carolina. The assessment was provided for a descendent, Mr. Dennis Dover. During the visit we also met with Ms. Janelle Dixon and Mr. Doyt Phifer. The goal of the work is to provide long-term preservation recommendations to improve care of the cemetery.

The study did not include any detailed historical research. What is offered here consists of very limited research in an effort to present what is readily known, place the cemetery into a broader context, and suggest avenues for future research. Of specific concern for this cemetery is its owner. By custom the church has been assumed to be the owner, but the available deeds do not substantiate this conclusion and additional research is necessary.

Establishing the legal owner of the cemetery is necessary since many of the recommended preservation practices require approval of the owner prior to implementation.

Many of the problems seen at the Old Shiloh Presbyterian Church Cemetery are the result of the cemetery's rural location and failure for the property to be consistently maintained after the turn of the twentieth century. Maintenance efforts for at least the past decade have been conducted entirely by volunteers. They have done an excellent job, but this volunteer effort cannot be sustained over the long-term and more permanent maintenance arrangements are of critical importance.

While the cemetery has been identified as eligible for inclusion on the National Register of Historic Places, without significant maintenance and

preservation activities the historic fabric will be significantly degraded. There has already been a visual impact as a result of transmission line corridor construction at the south edge of the property.

There is significant damage to a broad range of the stones in the cemetery and one of our primary recommendations is for a stone-by-stone conservation assessment. This is necessary in order to determine what stones need critical repairs and the cost of that work.

One of the most significant landscape related issues is the need to eliminate the poison ivy that is overtaking the cemetery, as well as to reduce the strain maintenance is having on volunteer efforts. We recommend a program of chemical control using the herbicide Garlon 4 (triclopyr) followed by mulching. In addition, we recommend the removal of some diseased or weakened trees.

The boundary fence is a very light-weight residential grade and has already been damaged by falling tree limbs. We recommend that this fence be upgraded in order to reduce the long-term maintenance pressure on the cemetery caregivers.

Other maintenance tasks include periodic repair of the gravel road, grading the road to minimize erosion at the south end of the cemetery, and cleaning of the ditch under the road. The cemetery also requires appropriate signage.

Most fundamentally, it is critical that the cemetery have a solid, permanent funding base. We recommend that an organization be created to provide the necessary long-term care of the cemetery. This organization may be a non-profit or it may be more advantageous for it to operate under

the umbrella of a pre-existing non-profit, such as a historical or genealogical organization.

This report evaluates all of the identified needs, classifying them into three broad categories:

- Those issues that are so critical – typically reflecting broad administrative issues, health and safety issues, and issues that if delayed will result in significantly greater costs – that require immediate attention during this fiscal or calendar year.
- 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 stone-by-stone assessment will cost \$3,660 and will provide the information necessary to determine the long-range conservation costs. This work will identify those stones that need repair, assess the damage, and develop treatment proposals outlining what should be done and the associated cost.

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INTRODUCTION

The Project

In early January 2010 Mr. Dennis Dover of Chino Hills, California contacted Chicora Foundation to arrange an assessment of a historic cemetery southeast of Grove, North Carolina. Other local individuals who are also involved in preservation efforts include Ms. Janelle Dixon and Mr. Doyt Phifer. Arrangements were made to conduct the cemetery assessment on Monday, May 24, 2010.

The Old Shiloh Cemetery straddles the North Carolina-South Carolina state line about mid-

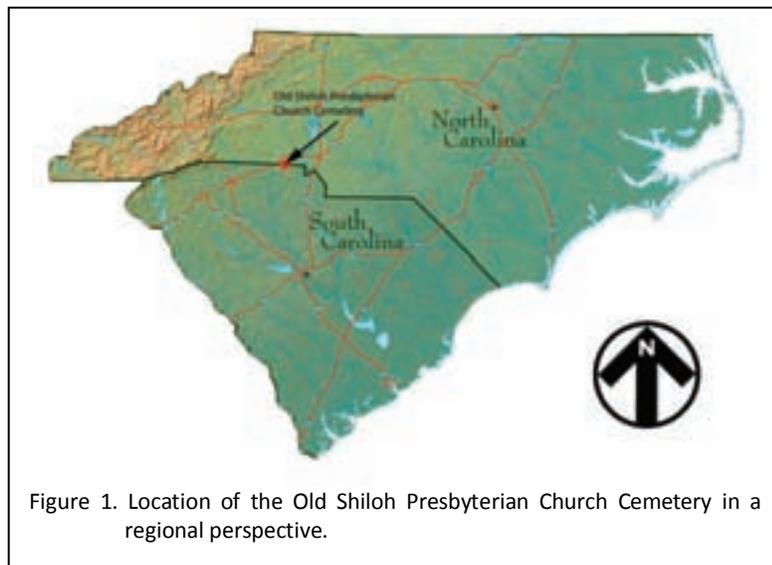


Figure 1. Location of the Old Shiloh Presbyterian Church Cemetery in a regional perspective.

way on I-85 between Blacksburg, South Carolina and Kings Mountain, North Carolina (Figure 1). The closest community is Grover, North Carolina, with the cemetery divided between Cherokee County, South Carolina and Cleveland County, North Carolina (Figure 2).

Grover is a small town that was originally named Whitaker, South Carolina with the community forming around the Atlanta Charlotte Airline Railway (today the Norfolk Southern). The name change was to honor President Grover

Cleveland, the 22nd and 24th president of the United States.

The cemetery is situated about a mile southeast of the town limits, with about 1.5 acres of the cemetery situated in Cleveland County, North Carolina and the southern 0.3 acre situated in Cherokee County, South Carolina.

Until the 1960s Cleveland County was dominated by agriculture and dairy farming. Much of the agricultural emphasis was on cotton and there were 25 textile plants in Cleveland County. Today, however, only 1% of the population is employed in agriculture, while services and industry are the major employers.

The cemetery, dating from about 1780, has historically been associated with the Shiloh Meeting House or Shiloh Presbyterian Church. By the 20th century the church had moved from its rural location in proximity to the burial ground to Grover and largely severed maintenance ties. For a number of years maintenance has been conducted by family members and individuals in the community with an interest in the preservation of the burial ground.

Recently the South Carolina Department of Archives and History has determined the cemetery eligible for inclusion to the National Register of Historic Places under Criterion C for funerary art and possibly under Criterion A for its association with the exploration and settlement of the community (letter from Mr. Andrew Chandler to Mr. Dennis Dover, dated March 3, 2010). Based on our examination of the cemetery we concur with this assessment. The presence of ground penetrating radar signatures consistent with graves may also indicate that the

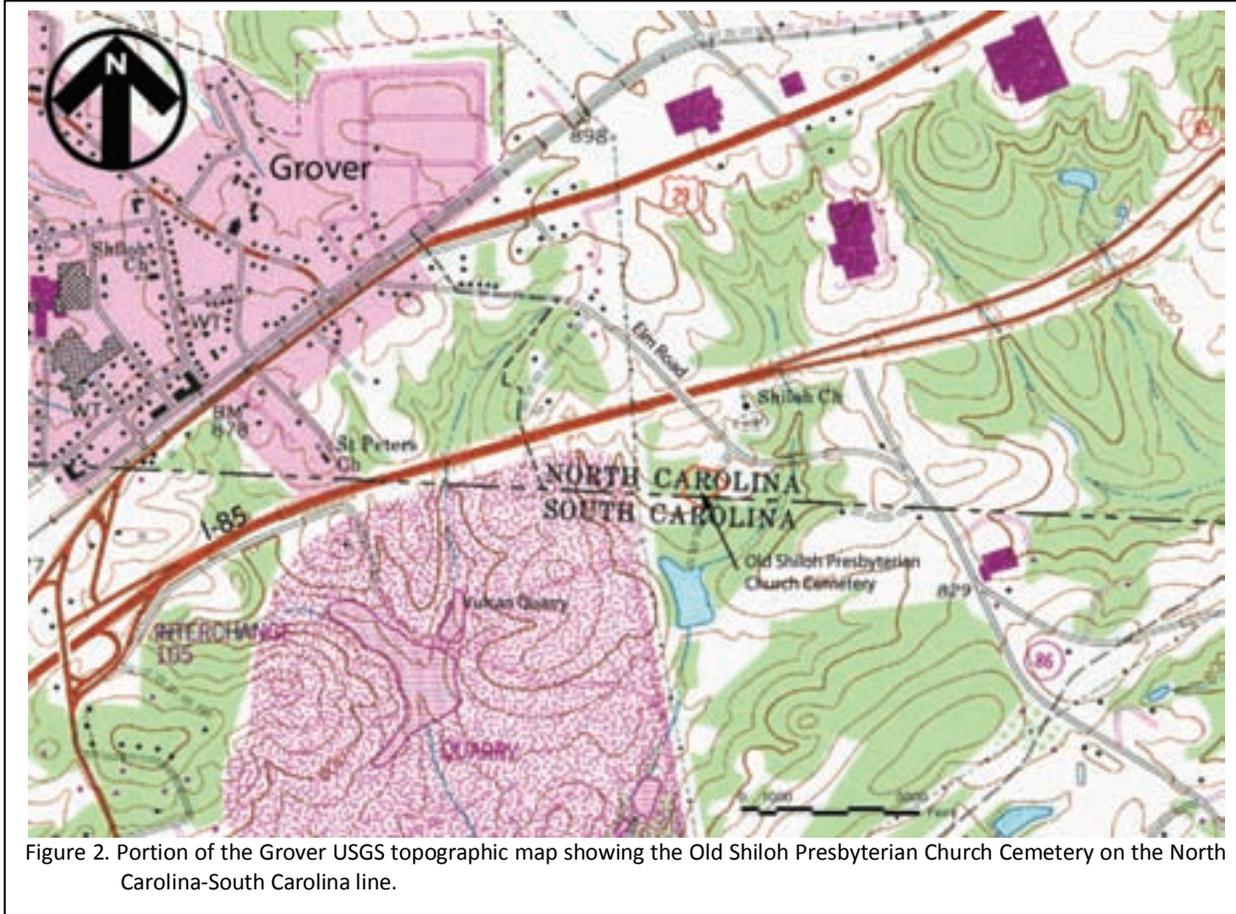


Figure 2. Portion of the Grover USGS topographic map showing the Old Shiloh Presbyterian Church Cemetery on the North Carolina-South Carolina line.

cemetery should be considered for its information potential, Criterion D. Certainly some consideration should be given to the possibility that bioarchaeological remains are present and could be affected by activities at the burial ground.

Preservation Fundamentals

Preservation is not an especially difficult concept to grasp, although the key principles are not always clearly articulated. The fundamental concepts are well presented in the Secretary of the Interior’s Standards for Preservation (see Table 1).

This document reminds us – at least at a general level – of what caregivers need to be thinking about as they begin a cemetery preservation plan. Those responsible for the care of Old Shiloh Presbyterian Church 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 playground, and not as a park. And until the caregivers are able to do what needs to be done, it is their responsibility to make certain that the site is preserved – it must not be allowed to suffer damage under their watch.

Caregivers must work diligently to understand – and retain – the historic character of the cemetery. In other words, they must look at the cemetery with a new vision and ask themselves, “what gives this cemetery its unique, historical character?” Perhaps it is the landscape, the old and stately trees, the large boxwoods, or the magnificent arborvitae. Perhaps it is the very large proportion of complex monuments, or the exceptional slate markers. It may simply be that it is a unique representation of a cemetery type rarely seen in a rapidly developing urban setting. Whatever it is, those undertaking its care and preservation become

the guardians responsible for making certain those elements are protected and enhanced (whether they are particularly appealing to the caregivers or not).

Whatever conservation (i.e., treatment or repair) efforts are necessary must be done to the highest professional standards; these conservation efforts must be physically and visually compatible with the original materials; these conservation efforts must not seek to mislead the public into thinking that repairs are original work; and the conservation efforts must be documented for future generations. If the caregivers aren't conservators, it is their responsibility as the stewards of the property to retain a conservator appropriately trained and subscribing to the Code of Ethics and Standards of Practice of the American Institute for Conservation (AIC).

The Secretary of the Interior reminds those responsible for the resources that each and every cemetery has evolved and represents different styles and forms. It is the responsibility of care-givers to care for all of these modifications and not seek to create a "Disney-land" version of the cemetery, tearing out features that don't fit into their concept of what the cemetery "ought" to look like.

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

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.

Before acting, those responsible for preservation 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, they must do their 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, they would be failing as good stewards if they allowed concrete pathways – especially if the only justification was because concrete was less expensive.

Where conservation treatments are necessary, the Secretary of the Interior tells stewards that they must be the gentlest possible. However phrased – less is more – think smart, not strong – caregivers have an obligation to make certain that no harm comes to the resource while under their care. And again, one of the easiest ways to comply is to make certain that caregivers retain a conservator subscribing to the ethics and standards of the American Institute for Conservation.

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

These are especially critical issues for Old Shiloh Presbyterian Cemetery. Repairs at the cemetery have taken place with no documentation, leaving caregivers guessing as to the nature of the work, the reason it was done, how it was conducted, and even who did the work. Original materials have deteriorated from lack of care. Even the landscape has been compromised by development activities on surrounding parcels and a lack of careful attention to critical management issues.

Our first recommendation, therefore, is that those assuming care for the cemetery become thoroughly familiar with the Secretary of the Interior's Standards for Preservation and reaffirm their responsibility as stewards of this historical resource to ensure that future preservation efforts are consistent with sound preservation principles and practices. These standards must become "talking-points" for all future discussions and decisions made concerning the cemetery.

The Cemetery, Its Setting, and Context

The cemetery is found within Census Block 6042 of Tract 9506 in Cleveland County's Township 4, Kings Mountain. The access road to the cemetery

runs southwest off Elm Road (SR 2278) and dead ends at the cemetery.

To the south of the cemetery, principally in South Carolina, is the Vulcan Materials #243 Blacksburg Quarry. This is a major producer of granite aggregate and three large pits are currently in operation. At the south edge of the cemetery a new transmission line is currently under construction for Southern Power Company.

To the north of the cemetery, following the I-85 and US 29 corridors are a number of industrial properties. In fact, the 2015 Land Use Plan for Cleveland County identifies this as an area of light to heavy industry expansion and development. Intermixed with these industrial parcels are farms and woodlots. To the northwest, toward the corporate limits of Grover, the number of residential properties increases.

The topography slopes upward to the north, with US 29 constructed along a ridge line. The cemetery is situated on the south facing ridge slopes with elevations ranging from about 848 feet above mean sea level (AMSL) in the northwest corner to about 845 feet AMSL across the southern half of the parcel. Elevations continue to fall to the south into the Southern Power Company easement.

The cemetery and much of the surrounding area is classified as Uwharrie soils. This series consists of very deep, well drained, moderately permeable soils that formed in material mostly weathered from local rocks. They are found on gently sloping to steep uplands of the Southern Piedmont. A typical profile reveals an A horizon typically no deeper than 4 inches of reddish brown (5YR 4/4) cobbly silt loam. Below are B horizon soils to about 6 feet that consist of yellowish red (5YR 5/8) silty clay loam grading into red (2.5YR 4/8 and 2.5YR 4/6) clay. The soils are acidic to moderately acidic throughout.

Cleveland County is predominately white (77%). African Americans comprise an additional 21% of the population. Housing is primarily owner occupied (73%) and the rental vacancy rate is about 11%. Over 50% of the county's housing units were

INTRODUCTION



Figure 3. Aerial image of the cemetery showing vegetation differences and topography.

built prior to 1979. There are about 27,000 households in the county and the average family size is about 3 people. Just under three-quarters of the population has attained a high school education; only 9% have a college education. Nearly four out of five individuals in Cleveland County were born in North Carolina.

As previously mentioned, farming is no longer a significant occupation in Cleveland County – less than 1% of the employed workforce is in agriculture. Nearly three-quarters of the workforce is in production, sales, and management. The county's largest employer is manufacturing, accounting for one in three employees. The average farm size is 104 acres. The most common crop is soybeans, followed by wheat with cotton being the third most common crop.

Median household income is \$35,283 and the per capita income is \$17,395. The unemployment rate in the county is currently 14.3% and about 20% of the families with children under 5 years old have earnings below the poverty level.

The Cleveland County crime rate is 38.1 per 1000 people. This is slightly higher than the average crime rate for rural North Carolina Counties (37.6) or adjacent Rutherford County (31.5).

Access to the cemetery is via a secondary road (Elm Road) that runs between US 29 outside of Grover, crosses over I-85 without access, and then continues across the state line into rural Cherokee County, South Carolina. The North Carolina Department of Transportation does not have traffic counts for Elm Road; however, nearby NC 216 (which does provide access to I-85) has an

annual average daily traffic count of 940 vehicles, while SR 2250, off NC 216, has a count of only 220 vehicles. Thus, it is likely that Elm Road sees relatively little traffic and most of that is probably local.

The turn off the two-lane paved Elm Road onto the gravel access road to the cemetery is unmarked except for a historical marker. There is sufficient apron for one or two cars to pull off Elm Road before access is blocked by a locked cattle fence gate. The road that continues to the cemetery is one lane gravel. The cemetery is about 250 feet southwest of Elm Road.

The cemetery is situated in an area of dense woods. Aerial imagery reveals that the vegetation consists of hardwoods. These hardwoods extend beyond the cemetery, gradually being replaced by mixed hardwoods and pines, as well as a few areas of planted pines. Within the cemetery hickories dominate, although oaks and sweetgums are also present.

Factors Affecting the Landscape Character

Cleveland County and the Old Shiloh Presbyterian Cemetery are situated in the North Carolina Piedmont Province that lies between the Coastal Plain and the Blue Ridge Mountains. Elevations range from about 300 to 600 feet at the border with the Coastal Plain and to the west, at the foot of the Blue Ridge, rise up to about 1,500 feet AMSL. The Piedmont is characterized by gently

cemetery elevations are about 845 feet.

In winter, the average temperature is 41°F and the average daily minimum temperature is 29°F. In summer, the average temperature is 75°F and the average daily maximum temperature is 87°F. Summers are also marked by relatively high humidity levels.

The average yearly precipitation is about 48 inches, with most rainfall occurring in the growing season from April through October. As illustrated by Figure 4, North Carolina has been in a period of drought for the past several years which broke only last year.

The average growing season for Cleveland County is 186 days. Figure 5 shows that the cemetery is situated in Plant Hardiness Zone 7a, where the minimum temperatures are expected to be between 0 and 5°F. This is a transition zone between Zone 2 Hot Season Grasses such as Bermuda, centipede, and zoysia, and Zone 3 Cool Season Grasses such as some Bermuda and zoysia species.

A factor not only affecting the landscape but also stone preservation, is the level of pollutants.

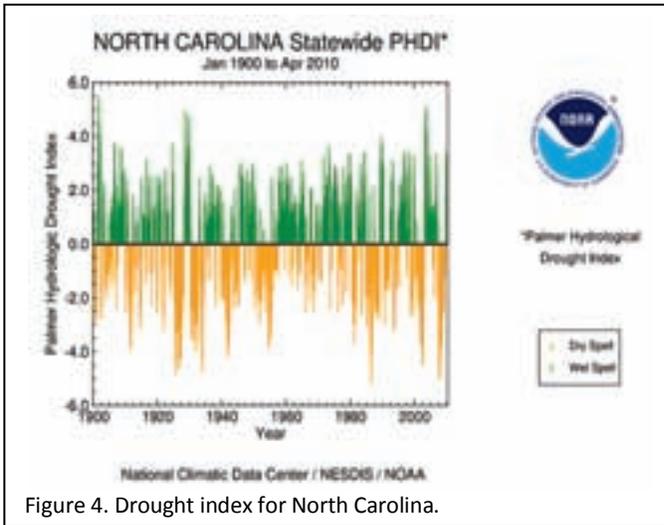


Figure 4. Drought index for North Carolina.

rolling, well rounded hills and long low ridges with a few feet of elevation difference between the hills and valleys. At the extreme northwestern corner of Cleveland County the South Mountains, an eastward-trending extension of the Appalachian Mountains, are found. Elevation ranges from 600 feet along Buffalo Creek at the South Carolina State line to 2,880 feet at the summit of Benn Knob near the northwestern corner of the county. At the

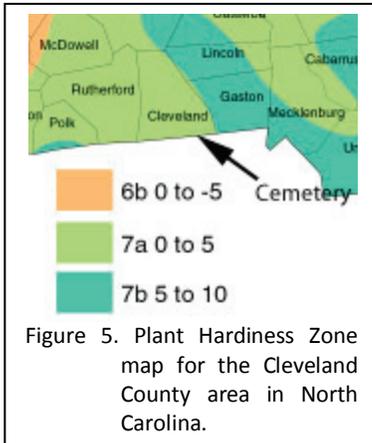


Figure 5. Plant Hardiness Zone map for the Cleveland County area in North Carolina.

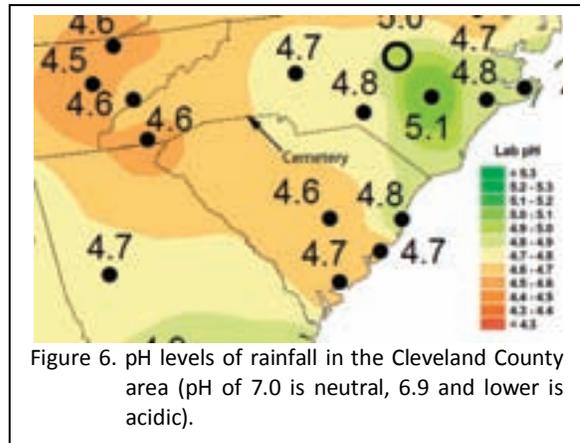


Figure 6. pH levels of rainfall in the Cleveland County area (pH of 7.0 is neutral, 6.9 and lower is acidic).

Based on monitoring in neighboring counties, the annual mean of NO₂ is 0.01 ppm and the annual mean of SO₂ is 0.002 ppm. These levels result in significant levels of acid rain (see Figure 6) and deterioration of marble and many sandstones.

Administrative and Legal Issues

This section is not intended to offer legal advice – only to provide recommendations from the perspective of proactive cemetery preservation.

Property Ownership

As will be made clear in the following section on the cemetery history, there is confusion regarding the ownership of the cemetery, with the most recent deed (1889) showing the property deeded to two individuals, as trustees of the Shiloh Burying Ground and their successors in office. It appears that no trust was formed. By custom it is assumed that the trustees were holding the property for the Shiloh Presbyterian Church.

As a result, we strongly recommend that the caregivers retain an attorney, familiar with North Carolina property law, to research the ownership of the property. It may be necessary to go to court in order to resolve this issue.

While this represents an expense, it is critical that those seeking to care for and preserve the cemetery be in a position to ensure that they are dealing with the legitimate owners of the property.

Once ownership is resolved, a memorandum of agreement between the parties should be developed that articulates the rights and responsibilities, and funding obligations of each party.

It is entirely unreasonable for any organization to claim ownership of a cemetery, yet provide no care or funding to the cemetery. With ownership of a historic property comes significant responsibilities for the property's care and long-term preservation. A policy of benign neglect is not in the best interests of the cemetery and will ultimately result in significant losses. If the Church is unable to provide the funding necessary for the care of the cemetery, then consideration should be given to deeding the cemetery to a duly constituted preservation organization, capable of raising the funds necessary for long-term preservation.

The owner of the property must also take steps that are outlined in this document, such as the removal of trees, negotiating for additional buffer around the cemetery, and funding repair of stones. The long-term care of the burial grounds goes beyond mowing the grass and it is critical that a proactive owner be identified if the cemetery is to be preserved for future generations.

Organization for Preservation

We recommend that those interested in the preservation of the Old Shiloh Presbyterian Church Cemetery form an organization for that purpose. The organization should be incorporated in the State of North Carolina and should have organizational papers outlining its mission. A means of succession should be established, as well as a means of decision making.

Some consideration has been given to the creation of a nonprofit organized for the care and maintenance of the cemetery. One suggestion has been that a 501(c)(13) organization be created. Such an organization is recognized by the IRS as a cemetery company and such organization is intended for nonprofit cemeteries actively operating. We do not recommend this for Old Shiloh.

A better approach would be to organize as a 501(c)(3) public charity. Additional information concerning this is provided in IRS Publication 557, *Tax Exempt Status for Your Organization*, available at <http://www.irs.gov/pub/irs-pdf/p557.pdf>.

Another option that has been used by several organizations seeking to care for cemeteries is to use the umbrella provided by local historical organizations. For example, the Cleveland County Historical Association is a 501(c)(3) organization (James Marler, Director, PO Box 1335, Shelby, NC 28151-1335), as is the Broad River Genealogical Society (W. H. Lutz, President, PO Box 2261, Shelby, NC 28151-2261). There are other possibilities and it may take some searching to find a compatible match. In such a case there should be a Memorandum of Agreement between the two groups clearly outlining responsibilities, obligations, and rights.

The benefits of non-profit status are important since they allow the organization to solicit funds and donors to claim tax deductions under the IRS Code. It also provides some benefits to volunteers. For example, while the IRS does not allow volunteers to deduct the value of their time or service, they are allowed to deduct out of pocket expenses.

We recommend that an attorney be consulted both for organizational issues and also to provide guidance on the issue of either application for non-profit status or use of an umbrella organization.

Recommendations

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

Special care should be taken to protect all remaining historic materials and the context.

The legal owner of the cemetery should be clearly established.

An organization should be created for the preservation of the cemetery and, if different from the owner, this organization should sign a Memorandum of Agreement with the owner specifying duties, responsibilities, and rights of each party. The organization should be duly organized under North Carolina law.

The organization for the long-term care of the cemetery should either be a non-profit or should be under the umbrella of a suitable non-profit historical or genealogical organization. This will allow funds to be raised from individuals and other entities for the maintenance of the cemetery.

HISTORY

Historic Synopsis

This assessment was not tasked with conducting historic research on the Old Shiloh Presbyterian Cemetery, so this very brief account relies on a few secondary sources to assist in placing the cemetery in a broader historical context. Most notable among these resources is the document by Dover (2010). Our synthesis is intended to develop areas where additional historical research is necessary in order to better interpret the cemetery.

The first mention of the cemetery in historic documents appears to be the August 1889 deed in which local property owner William C. Etters deeds “one acre, and one rood + thirty poles” comprising the cemetery to “D.R. Hambright + R.B. Price, Trustees of Shiloh Burying Ground + their successors in office” (Cleveland County Register of Deeds, DB TT, pg. 57).

The rood is generally $\frac{1}{4}$ acre. The pole is a measurement of 16.5 feet; thus a square pole is 0.00625 acre and 30 poles would be 0.1875 acre. Consequently, the cemetery was intended to be 1.4375 acres. This is very close to the calculated acreage of 1.48 acres based on that portion in North Carolina, but fails to include the 0.3 acres in South Carolina.

Etters is thought to have owned the South Carolina land on which the cemetery was situated, so it may be that there is a companion deed in Cherokee County, South Carolina that includes the remaining 0.3 acre. This is an unexplored issue that requires additional attention since the existing deed fails to account for all of the property historically associated with the burial grounds.

The extant deed is also curious since it fails to identify the Church or recognize Hambright and Price as Trustees for the Church. Although

Hambright was an elder and Price was a deacon, this does not automatically mean they were representing the Church. In fact, there is nothing immediately evident to support such a supposition other than custom.

Another factor confusing the title is that several years prior to Etters’ deeding the cemetery, the Church itself sold its property north of the cemetery (and north of Elm Road) to Albert Raney and two other individuals (Cleveland County Register of Deeds DB QQ, pg. 127). Although not specified by the deed, these three individuals apparently represented the Shiloh AME Church (which is the current owner of the property). In contrast to the 1889 cemetery deed, this 1887 deed for the church property indicates that the grantors were “Trustees for + in behalf of Shiloh Church” – a technicality that is not seen applied to the grantees of the cemetery. It seems odd that two years after the church sold its Elm Road property the local property owner would deed the cemetery to that church.

The various church histories further confuse the issue. The earliest history says nothing about the cemetery, noting only that the church moved to Grover in 1882 (Hall 1944:3).

The second history notes that “In 1885 Dr. R.B. Price, E.A. Patterson, and D.R. Hambright were elected Trustees, probably to sign the deed to the property to the Shiloh A.M.E Zion Church. Shiloh retained ownership of the old cemetery, which continued in use until about 1912” (Moore 1955:5). If the trustees were elected to dispose of the property and did so as “trustees for + in behalf of” the church it is difficult to understand why they would not be so listed just two years later. In fact, only Hambright and Price are listed as Trustees for the Burial Grounds – even though Patterson continued as a deacon until 1919 (Moore 1955:10).

Moreover, the church did not retain ownership of the cemetery with the sale of the church north of Elm Road. The church had not yet been granted ownership – the property was owned by the Etters family.

The third history essentially parrots the 1955 account, claiming that while the old church building was sold in 1885, “Shiloh retained ownership of the cemetery which continued in use until 1916” (not 1912 as indicated earlier; Hambricht and Pruette 1980:9). The most recent history, however, did mention that, “Funds were set aside for use in the up-keep of the Old Shiloh Cemetery where Col. Frederick Hambricht of the Revolutionary War Period is buried” (Hambricht and Pruette 1980:11).

These histories reveal the caution that must be exercised when using “custom” as justification for historical assumptions. A critical need for future research is to examine the congregational and Session minutes to determine if there is any specific mention of the church appointing trustees for the acquisition of the cemetery. These minutes may provide additional clues regarding the level of maintenance provided by the church. Of particular concern are those funds that were reported to be set aside for the cemetery’s maintenance – we have otherwise identified no report of any funds.

Another issue of interest is the William C. Etters who sold the property to the two trustees in 1889. He is not listed as a donor to the 1882 construction fund for the new church in Grover (Anonymous 2005:34); nor is he listed as church officer or as being associated with the Sunday School (Anonymous 2005:46-47). There is no Etters listed as a member of the church in 1884 (Anonymous 2005:33). In fact, the only listing for an Etters appears to be Henry Etters, an elder of the church during the late 1820s (Anonymous 2005:27, Hambricht and Pruette 1980:16).

There are a number of Etters buried at Old Shiloh. Surratt et al. (2001:112) lists nine, including Henry Etters who died in 1859. There is no William C. Etters listed and none of the other Etters listed as buried in the cemetery appear in available church

records. This suggests that the Etters may have viewed the burial ground as a community cemetery. Certainly we have found no clear connection between William A. Etters and the Shiloh Presbyterian Church. This is another issue that deserves additional research attention.

It is clear that previous genealogical researchers have not worried about these issues. In fact, one transcription even announces that it was Henry Etters (who died in 1859) that “conveyed the

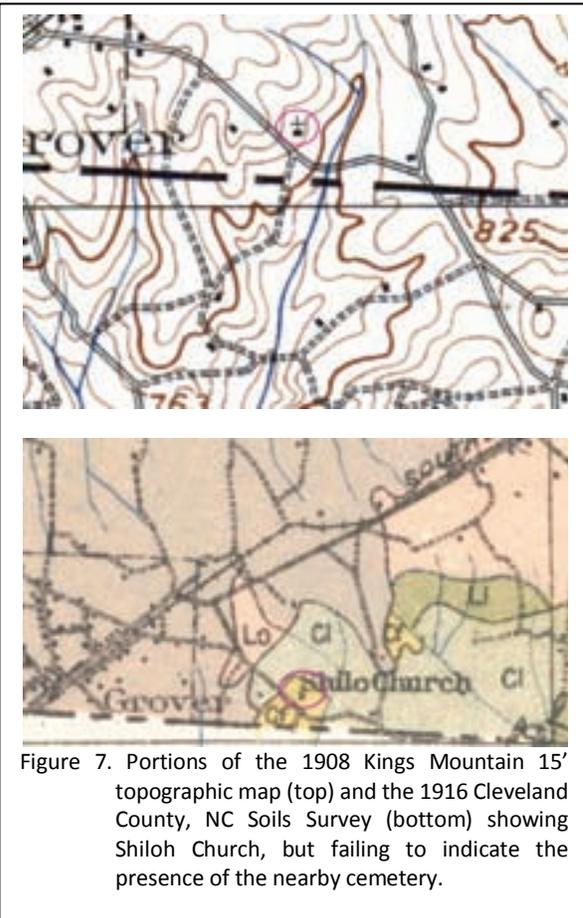


Figure 7. Portions of the 1908 Kings Mountain 15' topographic map (top) and the 1916 Cleveland County, NC Soils Survey (bottom) showing Shiloh Church, but failing to indicate the presence of the nearby cemetery.

land where this cemetery is located to the Elders of Shiloh Presbyterian Church where he was himself a Ruling Elder for 29 years” (Anonymous n.d.:n.p.). There remain, however, critical issues for correctly, and convincingly, ascribing ownership of the burial ground.

The 1939 WPA transcription of the cemetery comments that the cemetery was on the farm of “O. M. Mull, No. 4 Township, Cleveland

County” and that the cemetery “has been abandoned by the Presbyterian Church” (www.ncgenweb.us/cleveland/cemeteries/Old_Shiloh_Presbyterian_Church.txt, see also Surratt et al. 2001). The listed owner was Odus M. Mull, an attorney living in nearby Shelby. Mull was also a

caption indicates that the view is looking north, toward the old church, “now owned by a negro congregation” (Dover 2010:96). Unfortunately the available copy is very poor. Given the value of this photograph, an effort should be made to identify and retrieve the original or at least a first generation copy.

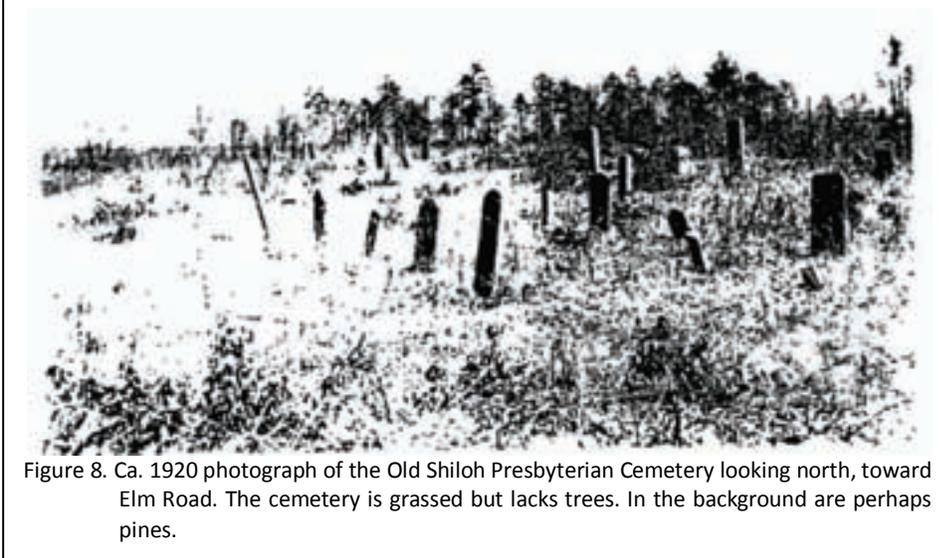


Figure 8. Ca. 1920 photograph of the Old Shiloh Presbyterian Cemetery looking north, toward Elm Road. The cemetery is grassed but lacks trees. In the background are perhaps pines.

We have made inquiries concerning Session and congregational minutes relating to Shiloh Presbyterian Church. No records were identified at the PCA Historical Center in St. Louis, or in the Presbyterian records recently transferred from the Presbyterian Historical Foundation in Montreat, North Carolina to the Columbia Theological Seminary in

member of North Carolina General Assembly and Democratic Party official.

Columbia, South Carolina.

Since the 1930 census indicates that Mull was not living on a farm, it is likely that the property was owned by Mull as an investment and was rented out to some other party. Additional research is necessary to more fully understand Mull’s role in the ownership of the cemetery.

We were able to identify records for the church held at the Presbyterian Historical Society, in Philadelphia. These records (Archives 47019) include Session Minutes from 1828 through 1912 and 1915-1936, as well as Session minutes from 1828 through 1912. Thus the records do include the time period when the cemetery was sold by Etters in 1889, as well as the approximate time when the cemetery was no longer being used by the church (and a fund was possibly set up for its maintenance). It is of critical importance that these minutes be carefully examined to determine if they provide any evidence concerning the purchase or maintenance of the cemetery.

While the “Shiloh M[eeeting] H[ouse] is shown on the 1826 Mills’ Map of York District, there is no indication of the burial ground. In fact the burial ground is not shown on any identified mapping, including the 1908 Kings Mountain 15’ topographic sheet or the 1916 Cleveland County Soils Survey (Figure 7). Both maps do, however, illustrate the Shiloh Church. The maps indicate that the road leading to the cemetery must have continued past it (or through it), continuing into South Carolina.

National Register Eligibility

There is one period photograph of the cemetery identified thus far (Figure 8). While undated, it appears consistent with ca. 1920 and shows the burial grounds devoid of trees. The

The cemetery was recorded as part of the Cleveland County (N.C.) architectural survey by Brian Eades in 2001 and was given the architectural site number CL288. The survey noted that the cemetery “contains many fine examples of early 19th cent. Funerary art” and the survey form suggests possible



Figure 9. Significant stones in the Shiloh cemetery. Upper left is the effigy marker for Elizabeth Dover. Upper right is a crudely shaped stone with only initials, although the carving is quite good. Far left bottom row illustrates a coffin shaped stone similar to those from New England. Middle, bottom row illustrates the willow trees typical of the Crawford shop. Far right, bottom row shows artist's marks to guide the shaping of an effigy marker.

eligibility under Criteria B (important people) and C (distinctive characteristics). The cemetery was placed on the North Carolina Study List as a result.

Placement on the Study List is a prerequisite to the nomination of the site to the National Register of Historical Places and is, essentially, a finding of potential eligibility. In discussions with Ms. Rebecca Johnson with the North Carolina State Historic Preservation Office in Asheville, she recommended that the site could most easily be nominated under Criterion C, focusing on the stones, carvers, and representativeness of the cemetery.

Eades and Pezzoni note that,

Among the earliest dated gravestones in the county is that of Elizabeth Dover in Shiloh Presbyterian Church Cemetery near Grover, with a death date of 1788 (it is possible that the stone is back dated, that is, carved after the death date). The Dover gravestone has a disc-shaped head on a rectangular trunk, a form known as an effigy marker for its stylized resemblance to the human body. Effigy markers were common in rural areas of North Carolina through the mid-

nineteenth century (Eades and Pezzoni 2004:13-14).

They also observe that the quarter sunbursts and eight-pointed star found on a Shiloh stone is consistent with the work of William N. Crawford (1808-1894) and Robert M. Crawford (1803-1865), who had a South Carolina workshop (Eades and Pezzoni 2004:14). Also found at Shiloh are willow trees reminiscent of those also attributed to William Crawford.

In response to a Preliminary Information Form submitted by Mr. Dennis Dover, the SC SHPO determined the cemetery eligible for inclusion on the National Register under Criteria A (association with events) and C (distinctive characteristics) (letter from Mr. Andrew Chandler, SC SHPO to Mr. Dennis Dover, dated March 3, 2010).

Factors Affecting Eligibility

Since the cemetery was placed on the study list by North Carolina, but prior to the determination of eligibility by South Carolina, the cemetery has been affected by the construction of the Cleveland County Generating Facility 230-kV Bus Line for Southern Power. This line is required, "to transmit the electrical power from the plant to the transmission grid" and thus is intimately associated with the Cleveland County Generating Facility.

Although the project and its siting was reviewed by the South Carolina Public Service Commission (Docket 2009-165-E), there was no cultural resources survey, the environmental firm preparing documentation for Southern Power did not contact the SC State Historic Preservation Office, there is no mention in the environmental document of the cemetery's architectural significance or inclusion on the North Carolina State Study List, and there is no indication that anyone involved with the project sought to evaluate the visual effects of the corridor on the cemetery.

While we have been able to identify relatively little about the project in North Carolina, Region 4 of the Environmental Protection Agency was involved in permitting, so it appears that the

generating station itself was federally permitted and therefore falls under the purview of Section 106. Nevertheless, the North Carolina Office of State Archaeology indicates that no cultural resource study for the transmission line was conducted, although one was initially requested (John Mintz, personal communication 2010). As a consequence no effort was made by Southern Power to assess the project's impact on the cemetery.

As shown in Figure 10, the 230-kV transmission line abuts the cemetery and the loss of vegetation dramatically affects the cemetery viewshed. Not only will the new transmission line be clearly visible from all parts of the cemetery, but the loss of screening vegetation will also expose views of an existing transmission line, as well as the nearby Vulcan quarry. Both of these views had, prior to the clear cutting of the new corridor, not been visible from the cemetery.

There is no question that this presents a visual intrusion. Nor is there any doubt that a more sensitive location of the corridor, such as shifting it southward an additional 50 feet, would have allowed a natural buffer. This seems to represent a significant failure on the part of cultural resource protection laws to safeguard the integrity of the cemetery and its viewshed. This does affect the integrity of the cemetery, reducing the tranquility and rural nature of the property.

We recommend that Southern Power be contacted and requested to plant a fast growing tree along the edge of their corridor in order to create a visual screen. One such option, among many, is Leyland cypress (*x Cupressocyparis leylandii*). These trees grow very rapidly, are drought tolerant, and can grow to heights of 50 feet with a spread of 15 to 25 feet. They form good screens and would be ideal for this site.

Recommendations

There remain a very large number of questions surrounding the cemetery. The current historic research has barely scratched the surface and more detail is necessary not only for long-range planning, but also if the cemetery is to be successfully

nominated to the National Register of Historic Places. Questions of critical importance include:

- Identification of any deeds relating to the cemetery's 1889 sale to trustees of the Shiloh Burying Ground in South Carolina (Cherokee County);
- Identification of the role that O.M. Mull may have played in the ca. 1930-1940 ownership of the cemetery;
- Identification of the funds reportedly "set aside" for the care of the cemetery by the Shiloh Presbyterian Church;
- Resolution of legal questions surrounding the trusteeship that was sold the portion of the cemetery in North Carolina; and
- Identification of additional photographs of the cemetery, as well as oral history accounts of cemetery events in the past 60 years.

Additional research is necessary in the Session and congregational minutes associated with Old Shiloh Presbyterian Church. These documents are housed at the Presbyterian Historical Society in Philadelphia (Archives 47019). In particular the time period of the property acquisition, as well as the period when the cemetery was abandoned by the church should be reviewed.

We caution the caregivers that it is critical to take a broad view of this historic research. While individuals important to the history of the Carolinas should not be ignored, the cemetery has much to offer. The research should include the development of the property, its evolutionary changes, the role played by the Church community, as well as the variety of other topics often associated with cemetery research, such as mortuary practices and mourning rituals.

The cemetery has been determined eligible for inclusion on the National Register by the South Carolina State Historic Preservation Office and the cemetery is on the North Carolina State Historic



Figure 10. Visual intrusion caused by the 230-kV line between the Southern Power Cleveland County Generating Facility and a Duke Power substation.

Preservation Office State Study List (meaning that it is likely eligible). It would be appropriate to nominate the cemetery under at least Criterion C.

In spite of the cemetery's significance its visual integrity has been affected by the recent construction of a transmission corridor between Southern Power's Cleveland County Generating Facility in North Carolina and a Duke Power substation in Cherokee County, South Carolina. To mitigate this visual intrusion we recommend that buffering vegetation be placed outside the cemetery fence, in the utility corridor. An appropriate, fast growing tree may be Leyland cypress.

ROADS AND PEDESTRIAN ISSUES

Access and Circulation

Today access into the cemetery is by way of Elm Road (SR 2278), which begins at US 29 and runs southeast, crossing over I-85, before passing the cemetery and then extending into South Carolina where it becomes S-11-86. The road loops around and eventually joins SC 216.

Elm Road is a rather minor secondary road exhibiting little traffic in either North or South Carolina. Traffic is sufficiently limited such that neither state has established counts specific for the road, although nearby roads rarely exceed 300 vehicles. It is likely that the bulk of this traffic is local.

In the vicinity of the cemetery the road consists of two 12-foot traffic lanes (without markings) and earth shoulders. Steep slopes with relatively little recovery area are found, especially on the west side of the road. Driving south from Grover, the cemetery entrance is about 500 feet beyond the I-85 overpass. About 50 feet south of the cemetery entrance Elm Road begins an "S" curve. For those traveling north on Elm this provides only about 300 feet to identify the cemetery entrance, which is poorly marked. This is also a relatively short distance to avoid collision with vehicles exiting the cemetery (see Figures 2 and 3; Figure 11 illustrates the extant road conditions).

There are no residences in the immediate area and the only landmark structure is the Shiloh AME Church, set back off the road, about 270 feet north of the cemetery entrance. The South Carolina

state line is about 1,850 feet south of the cemetery entrance.

The entrance itself is a single lane gravel drive. There is no paved apron off Elm Road and about 50 feet beyond the road there is a locked cattle gate. The distance between the road and the locked gate is adequate for several cars to pull off the travel-way in order to unlock the gate. It likewise



Figure 11. Roadway conditions to the north (top) and south (bottom) of the cemetery access off Elm Road.



Figure 12. View on the cemetery access road looking northeast to the access gate and Elm Road.

allows a car to park safely in order to secure the gate after visitation is complete. While the access drive does have about a 7% slope, this does not seem excessive (Figure 12).

The one-lane gravel access road is adequately maintained, exhibiting no erosion, potholes, or other damaged areas. This road does cross a small depression just beyond the cemetery that is crossed using a 2 foot concrete pipe. The pipe appears to be adequate in size and structurally sound at this time. The ditch associated with the pipe, however, has not been cleaned and the pipe is partially clogged. This ditch requires cleaning and



Figure 13. Pipe under the gravel access road. The associated ditch requires maintenance and the crossing should be marked.

periodic maintenance. In addition, the drop-off at the pipe is not marked and may present a traffic hazard. It should be marked with yellow reflective signage.

The caregivers of the cemetery should also be prepared to provide periodic maintenance to the access road, which is about 250 feet in length.

The cemetery is bounded by a one-lane gravel road identical to the access road, about 800 lineal feet in length. In some areas the gravel is dense and well placed. In others the gravel is largely obscured by grass. At the south end of the cemetery the road

is poorly graded, allowing erosion off the road and into the adjacent property. This erosion will only exacerbate and we recommend immediate remedial action be taken to properly grade and drain the road.

It is also important to note that while these gravel roads are generally serviceable, we would expect them to be difficult to navigate during the winter months or during heavy periods of rain.

There are no additional roads within the cemetery, there are no graveled road shoulders, and there are no graveled or prepared parking areas. Visitors to the cemetery need to park on the road itself and this limits site visitation and events. This, however, does not seem to have been a problem thus far since the cemetery usage is limited to family reunions and occasional memorial events; no more burials are anticipated.

In addition to the locked cattle gate off Elm Road, the cemetery contains three entrances. There is a double vehicle entrance gate on the access road. This is not locked. Just to the left of this gate there is a pedestrian passageway without a gate. At the southern end of the cemetery there is an oversized pedestrian gate that is also not locked.



Figure 14. Gravel road around the cemetery. Top view shows the road in good condition. Middle view shows the road largely overtaken by grass. Bottom view shows erosion at the south end of the road.

We are told that the ungated pedestrian entrance was placed in the fence to allow visitors parking on the outside of the locked cattle gate entrance into the cemetery. This could have been achieved by installing a gate, without a lock, at this entrance. A gate would have helped keep out unwanted animals. We recommend that this entrance be gated.

The fencing installed is very light weight and represents a very poor choice for an isolated, rural cemetery. The fence has already suffered damage from a falling tree. Several tie wires have already come off. Additional damage is certain, as is corrosion since the galvanizing on the fence and posts is very light.

We understand that the fence was “free.” However, given the short lifespan of the fence and the projected high maintenance costs associated with this fence, it was a poor investment and will cause the caregivers many future problems.

A far better choice would have been a commercial grade fence using heavier line posts (typically 2 or 2½ inch O.D. SS40), heavier top rail posts (1 5/8" SS40), heavier gauge wire (6-9 gauge), 1-2 inch mesh size, Class 2 hot-dipped galvanized protection topcoated with plastic, and cast iron fittings rather than aluminum. We recommend that an effort be made to have the existing fence replaced with one that will result in better protection and lower long-term maintenance needs and costs.

In the meantime it is critical that the damage already done to the fence be repaired. Failure to repair such damage will give the impression of abandonment and lack of care. This can lead to vandalism and other problems at the cemetery. This will require the replacement of the top rail (it cannot be

straightened and the bent areas are far more susceptible to corrosion) and reinstallation of a top cap that was dislodged. The fabric will need new ties.

Road Maintenance

This report is not intended to offer a primer on gravel road maintenance. A good, albeit somewhat technical report on gravel road maintenance is available at <http://www.epa.gov/owow/nps/gravelroads/gravelroads.pdf>. More simple material is available on the resources page at <http://www.dirtandgravelroads.org/>.

Of particular interest are the information sheets on crowns and cross slopes and surface maintenance. For those who are more visually oriented, there are a series of excellent videos on gravel road maintenance available at <http://www.mnltap.umn.edu/Publications/Videos/GravelRoadMaintenance/>.

At the concrete pipe or culvert, we have already mentioned that the ditch itself should be cleaned. The ditch should have a flat bottom, not a "V"-shape. In addition, at the outflow it may be useful to install rock to break the flow of water and prevent eddies. At the upstream side it is useful to install debris barriers to prevent larger objects from obstructing the pipe. This barrier can be as simple as lengths of steel pipes or fence posts set into the ditch base at regular intervals across its width about 6-10 feet before the pipe, the goal being to block large pieces of debris from entering the pipe.

Although many of the available resources are intended for country road departments using graders, simple maintenance can be achieved using a small tractor and a 6-foot, rear-mounted blade that's reversible and adjustable for angle and slope. Work should always take place toward the uphill, in order to fill in erosional areas. The tractor's rear blade should be set to cut and adjusted so it is perpendicular to your line of travel. The blade should also be sloped slightly, using the adjustment



Figure 15. Damaged fence section showing dislodged top cap and severely bent top rail. This requires immediate replacement.

on your tractor's hitch arm, so that it cuts a little deeper at the edge of the road than it does in the middle.

Each half of the road will need to be worked, always being graded uphill. Once the bumps have been cut down, the blade should be turned so that it will drag, rather than cut, and angled to pull material into the center of the roadway (turning the blade 180° from its original position, plus one adjustment stop). The blade will also need to be sloped slightly so that it will touch the outermost edge of the drive just before it contacts the middle.

Each side of the road will need to be dragged several times, working toward the uphill. This will catch the piles on the side of the road and move them into the center. We recommend this maintenance take place at least yearly; waiting for the road to evidence problems will result in more work and higher costs since gravel will need to be hauled in as replacement for lost road bed.

An area of special concern is the southern portion of the road where there is clear evidence of erosion and loss of gravel. This is the result of two primary factors. The first is that the road bed essentially consists of graded clay on which gravel has been added. There has been relatively little road bed preparation. While this may suffice in many areas, the slope in this area requires more

sophisticated construction. The second problem is that the road is out-sloping, directing water movement to the down slope area. An in-sloping road with appropriate ditches would better control water movement, although the ditch would require drainage under the road (and is probably why the more simple out-slope was used). Correcting either problem may be adequate, although both may need attention for a long-term solution.

Pedestrian Access and Pathways

As mentioned above, there is pedestrian access at the access road, even if the cattle gate is locked. Given the isolated location of the cemetery all pedestrians likely arrive by vehicle. Pedestrian use of the cemetery is limited at present. There are likely a variety of reasons, but the cemetery is poorly marked, not well advertised, lacks convenient parking, and is not conducive to pedestrian activities because of the dense poison ivy.

There are no pathways in the cemetery. None would have existed historically and cemetery use is light, so their absence today is not considered a significant issue.

Future Access

The caregivers of the cemetery should be aware of the Carolina Thread Trail. This is a regional network of greenways, trails and conserved lands that may eventually reach over 2 million citizens (<http://www.carolinathreadtrail.org/>). The goal of the project is to link and preserve natural areas and cultural sites. While funding is not assured, some communities, such as Cleveland County, have developed master plans that begin to identify specific sites and routes. Figure 16 shows the vicinity of the Old Shiloh Presbyterian Cemetery. It has been bypassed by proposed connections (in pink), although it could be reached by extending the DD route (these green routes are identified as “other connection opportunities”).

Incorporating the cemetery in the trail system would certainly bring the cemetery additional publicity and, with funding, perhaps additional visitors.

Additional visitation, however, does present challenges. The most notable is that people do put pressures on historic sites such as cemeteries. Additional visitation can cause damage to stones, wear pathways in vegetation, cause additional littering, and require increased vigilance regarding overall property maintenance and security. Nevertheless, the Carolina Thread Trail is worth additional scrutiny.

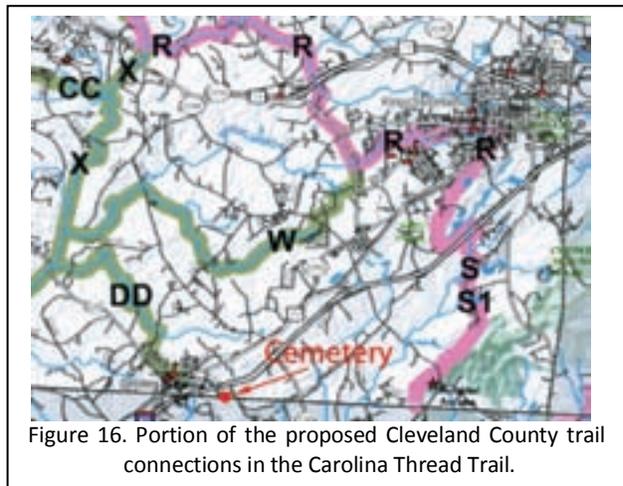


Figure 16. Portion of the proposed Cleveland County trail connections in the Carolina Thread Trail.

Because of the nature of the Carolina Tread Trail it is largely based on concrete or asphalt pathways, typically 8-12 feet in width and ADA accessible. These pathways have a base cost of about \$65-\$85 per lineal foot. They tend to be rather harsh in a historic cemetery setting, where a mulch pathway would not only be less expensive (about \$25/lineal foot), but would also result in a reduced visual impact to the cemetery and its setting. Mulch pathways do require maintenance, as well as limit ADA access. These may be reasonable compromises given the importance of maintaining the cemetery landscape.

Universal Access

There are some limiting factors for ADA compliance or universal access at the cemetery. Ramping would be necessary to allow access from the main road to the cemetery access road since the slope is currently too steep for wheelchairs (the maximum recommended is 1:12 with the maximum rise in any run being no greater than 30 inches).

The modifications necessary to achieve this would be outside the limits of the cemetery, so would present little visual intrusion. However, the cemetery itself presents slopes of at least 1:6, posing additional problems in any effort to achieve ADA compliance. At the present level of use we are not convinced that there is a demand adequate to justify either the expense or the damage to the historic fabric.

result in a fence that will provide greater site protection for a longer period of time.

In addition, the ADA or the Rehabilitation Act of 1973 is generally not interpreted to apply to cemeteries by the Department of Justice. Nevertheless, we are an aging population and it would be appropriate for the caregivers to in some manner help make the cemetery accessible. A low impact approach suitable for tourism is to ensure that there are interpretative plaques and exhibits at the entrance – allowing disabled visitors to experience and learn about the cemetery.

Recommendations

The caregivers should plan on yearly maintenance of the approximately 1,000 linear feet of gravel road. This may include grading and the periodic addition of appropriate gravel.

The road at the south end of the cemetery requires regrading to eliminate the erosion that is occurring. This may involve establishing an in-sloping road with ditches and drainage under the road.

The existing concrete drainage pipe should be clearly marked. The associated ditch should be cleaned of debris. The outflow should be protected with rock to prevent erosion and the upstream side should be protected from large debris.

Damage to the fence should be repaired immediately.

The pedestrian entrance to the cemetery should be gated.

An effort should be made to have the quality of the fence upgraded. This will help reduce the maintenance required of the caregivers and would

SECURITY ISSUES

Vandalism

There has been no effort to track vandalism in the cemetery, although evidence of damage that is likely vandalism related is present in the cemetery. The vandalism, however, does not appear recent and it does not seem that the cemetery has been especially targeted. It is likely the efforts put into maintenance by the caregivers, combined with the locked gate at the road entrance, are reducing the threat posed by vandalism.



Figure 17. Probable vandalism. Stones such as this are generally too large and heavy to topple without outside intervention.

The cemetery is fenced, but the contribution this makes to the security of the property is minimal. The fence is designed only to mark the property boundaries. Until the pedestrian entrance is gated it does not even satisfactorily exclude wild animals.

At the present time there is no systematic inspection process. Although caregivers are present quarterly for maintenance activities, there is no procedure in place to inspect the monuments,

recognize damage, and report any identified problems.

The locked gate makes it impossible for local law enforcement (the Cleveland County Sheriff's Department) to patrol the cemetery. Even if law enforcement had access it is unlikely that they would patrol on any regular basis.

There are no adjacent neighbors to the cemetery who can be enlisted to help oversee activities on the property. The county's plan for the area to be commercial or industrial also fails to offer any meaningful protection and may, in fact, work against the cemetery's long-term preservation.

As will be discussed more fully in a following section, we recommend a stone-by-stone assessment for the cemetery, documenting all stones requiring conservation treatments. With this photo documentation in hand it will be possible for the caregivers to not only begin budgeting for the necessary repairs, but also recognize new damages when they occur.

We recommend that the caregivers visit the cemetery on a more regular basis. The periodic presence of individuals will help serve to identify damage and have issues resolved in a timely manner.

Individuals driving Elm Road should be alert to vehicles parked on the road or at the locked gate, especially at night. While the Sheriff cannot gain access to the cemetery, we recommend that caregivers schedule a face-to-face meeting with the

Sheriff and ask that he notify deputies to at least be aware of the cemetery, looking for evidence that the gate has been tampered with or for cars parked at the cemetery at unusual times. The Sheriff's Department should have phone numbers for nearby individuals with keys to the gate that they can contact in the event of an emergency.

These steps will help maximize the attention that the cemetery receives. Coupled with other recommendations offered by this study, it will further reduce the risk of significant vandalism.

We recommend that the caregivers develop a form designed for the reporting of cemetery-specific vandalism. This form should include several items:

- What was damaged, with specific information concerning each stone, including the name and lot/plot?
- How was the stone damaged (toppled, broken into how many fragments, scratched, etc.)?
- Where is the stone now (was the broken stone gathered up for storage, if so, where is it stored)?
- An estimate of when the damage occurred. This should routinely include the last time the stone was known to be undamaged.
- An estimate – from a conservator – of the extent of the damage and cost for repair.
- A photograph of the damaged stone.
- When law enforcement was notified.
- When law enforcement responded and took a report, with a copy of the report attached.
- The outcome of the law enforcement investigation.

It is critical that the caregivers report each and every case of vandalism, regardless of extent, to law enforcement. Law enforcement must be educated concerning the historical value of these stones and the financial cost of the damage to ensure that damage and vandalism are taken seriously. If the damage is recent, law enforcement should be expected to assign crime scene investigators to collect evidence. This evidence may include shoe prints in soil or on stones, discarded beverage containers with finger prints, collection of evidence such as cigarettes, and collection of any eye witness accounts. Law enforcement should be expected to assign an investigator and this individual should be expected to treat this as a real crime deserving of real investigatory efforts.

It is also essential that vandalized stones be repaired. Simply allowing broken stones to remain were they fell is not only disrespectful, but it gives the entire cemetery a run-down and uncared for appearance.

Cemetery Lighting

Being in a rural location there are no street lamps or even nearby residences that may have yard lights. This is typical of rural settings and of course burial grounds were never, historically, lighted.

Lighting is sometimes seen as reducing vandalism. There is, however, no good evidence that this is the case. Lighting is only useful if there is someone guarding the property, using the lighting to identify problems. This is not the case in most cemeteries, especially those in rural locations with no nearby neighbors.

At this time we do not recommend that any lighting be installed.

Hunting as a Threat

The vast majority of hunters is responsible and law abiding. A very small minority are regrettably rogues. There is at least one stone in the cemetery that evidences a bullet hole. Whether this was a miss or intentional can't be determined, but caregivers should be alert to this issue.



Figure 18. Bullet-damaged stone.

The adjacent landowner(s) should be contacted to determine if their lands are rented to hunt clubs. If they are, the caregivers should request that the cemetery – and a suitable buffer – be removed from hunting access. This serves to reduce the possibility of a hunting accident involving visitors to the cemetery and serves to protect the stones.

However, since most hunters are responsible, the caregivers should also enlist the aid of hunters in checking on the cemetery and ensuring that it is not damaged.

Caregivers should also contact the local game warden (Major Keith Templeton with the North Carolina Wildlife Resources Commission is in charge of Field Operations, 919-707-0030) and he, too, should be alerted to the cemetery. This individual can be an additional line of protection, not only ensuring that hunters are not trespassing, but being on the alert to any suspicious activities in the vicinity.

Fire as a Threat

In rural, forested areas, there is always a danger of forest fires. These can cause damage to cemeteries in a number of different ways. Fire can damage stones, causing spalling and cracking, as well as smudging the stones. Trees that fall – whether the result of fire or not – can certainly cause damage. In

addition, efforts to control the fire, such as use of bulldozers and plowing fire lines can inadvertently cause damage.

Caregivers should contact the North Carolina Division of Forest Resources, which has the responsibility of protecting state and privately owned forest land from wildfires. District 12, headed by District Forester Dan Brandon, includes Cleveland County and the headquarters are at Mount Holly, North Carolina (704-827-7576). They should alert the District to the cemetery and its location and learn what additional steps may be taken to

minimize the risk of fire to the cemetery.

One step we recommend, in coordination with the surrounding property owners, is to establish a firebreak around the cemetery. This may be a plowed or disked strip 20 feet in width around the cemetery. All fuel, including standing trees should be removed. The firebreak can be planted in grasses and clovers so it can provide key food and cover to wildlife.

Recommendations

Caregivers should be more proactive, visiting the cemetery on a regular basis in order to verify the condition and make note of any problems or damage.

Caregivers should note any evidence of vandalism and immediately file a report with the Sheriff's Department. A conservator should be consulted to determine the extent of damage and this should be included in the report.

A form should be developed that documents the damage so there can be a permanent record of problems.

The Cleveland County Sheriff should be asked to ensure that his deputies routinely check the gate and be alert to any vehicles that may be parked at the cemetery entrance during unusual times.

The caregivers should determine if hunting is allowed on the adjacent properties. If so, a buffer should be established around the cemetery. The local game warden should be alerted to the cemetery.

The North Carolina Division of Forest Resources should be contacted to ensure that the cemetery is protected from any wildfire response efforts. Additional assistance can be obtained in establishing a fire break around the cemetery.

LANDSCAPE MAINTENANCE

Staffing

Although the Shiloh Presbyterian Church in nearby Grover, North Carolina claims ownership by custom (in spite of the legal uncertainty previously discussed), the church does not participate in the care or maintenance of the cemetery. All maintenance is conducted by a small group of volunteers. This is the way the cemetery has been maintained for at least the past several decades – and it presents one of the greatest challenges to future preservation efforts.

Volunteers are an exceptional resource and the dedication of those who have done and who are currently performing the maintenance is exceptional. Nevertheless, this places the cemetery in a precarious long-term position. Volunteers age or find new interests. The financial costs are high and in the current economy not everyone can take the time to perform such work or can afford the wear and tear on equipment. Volunteers, by their nature, are an uncertain resource.

A number of factors must be considered when attempting to determine the number of individuals necessary to perform cemetery maintenance. We typically recommend two workers and one supervisor per 10 acres. This is based on the Boston Historic Burying Grounds Initiative (Atwood et al. 1989), but it is not especially useful for small, rural cemeteries that will not have a permanent staff. Research does, however, reveal that mowing old cemeteries with 3-dimensional monuments *requires six-times the labor than modern lawn park cemeteries* (Klupar 1962:239; Llewellyn 1998:100).

We can use the R.S. Means *Site Work and Landscape Cost Data* to provide some estimates of the time required for basic maintenance. For example, using a small deck (36-44 inch) riding mower it should take 2.3 hours to mow 2 acres.

Recognizing the additional difficulty of a cemetery setting increases anticipated mowing time by one individual to 13.8 person hours.

Since a riding mower cannot (and should not) be used immediately adjacent to stones, a cemetery also requires extensive work with a nylon string trimmer. Means estimates that about 12 linear feet can be trimmed in a minute. We estimate that about 6 person hours will be required to do trimmer work in the cemetery.

This equates to approximately one day of work by a crew of three individuals and is likely a minimum amount of time required for an acceptable job. It does not include collecting downed limbs, pruning, or other activities that are periodically required.

The number of visits during growing season is entirely dependent on what is viewed as an acceptable level of care by those associated with the cemetery. As discussed below, it is tempting to reduce the level of care so as not to over-extend volunteer labor. The problem is that as the interval between maintenance increases, the level of effort necessary to mow and trim the cemetery will likewise increase. As the vegetation obscures stones, it becomes more difficult to mow and a greater effort is required to trim around stones. Thus, a compromise must be achieved between the frequency of mowing and the appearance of the cemetery.

Cemetery Trees

Rural cemeteries do not often have a planned landscape. In many cases these burial grounds have little vegetation during the period of their use, with trees and herbaceous plants becoming common only as part of the natural succession of plants as the burial ground lapses into

disuse. In such circumstances the trees that are eventually present are those that are found naturally in the area. This seems to be the case with the Old Shiloh Presbyterian Cemetery.

A ca. 1920 photograph (Figure 8), taken toward the end of the cemetery's active use (typically identified as about 1916) shows the property devoid of trees but with a dense stand of broom straw or some similar grass. This photograph refutes accounts that hickory trees were planted in the cemetery since it seems unlikely that once the cemetery ceased being used anyone would have taken the effort to beautify the property. In addition, the trees fail to exhibit any defined pattern.

The cemetery includes a variety of hickory and oaks – trees typical of the Piedmont forest. In general hickories have a slow to moderate growth rate. After 10 to 20 years the rate of sprout height growth declines and hickory will normally lose crown position to the faster growing oaks and associated species.

The hickories in the cemetery property have diameters of about 18 inches, suggestive of an age of about 90 years. This suggests that the hickories may have begun about 1920 – and this corresponds well with the photograph.

Maintenance Issues

We understand that there has been some discussion of removing many of the trees in the cemetery. While this might return the cemetery to a ca. 1920 condition, as the photograph from that time period illustrates the landscape was barren and harsh. The trees that are present soften the landscape, provide shade to the burial ground, and give it a more attractive and welcoming appearance. Therefore, we strongly discourage the removal of trees except for specific needs (discussed below).

Moreover, when trees are removed, they should be replaced in order to maintain the overall cemetery appearance and ambience. Cemeteries, in general, have historically been dominated by large deciduous trees, although evergreens such as cedar

are also very common. They provide a distinctly inviting image for visitors and passersby.

There is no such thing as the perfect tree – all trees have both strengths and weaknesses. Ideally replacement trees should maintain the overall appearance of the cemetery while not adding to maintenance issues and further taxing the available volunteers.

Some suitable trees include the sugar maple, white oak, and cedar.

The sugar maple (*Acer saccharum*) has a variety of good qualities including its resistance to breakage and absence of surface roots. It provides excellent colors through all seasons and is frequently used for ornamental plantings. It is moderately drought resistant and can tolerate partial shade. The tree grows 50 to 80 feet in height and has a spread of 35 to 80 feet.

The white oak (*Quercus alba*) is also resistant to breakage and surface roots are not a problem. It is a northern oak and the Piedmont is at the edge of its region. It is moderately resistant to drought, but it does produce considerable litter. The tree ranges from 60 to 100 feet in height and spreads from 60 to 80 feet, so it does require considerable space.

The Eastern red cedar (*Juniperus virginiana*) is a very common cemetery tree and we are surprised that none were observed at Old Shiloh. Surface roots are not a problem and while the limbs are prone to breakage the tree form reduces the threat to stones. The tree is highly resistant to drought, a major consideration for the cemetery location. The cedar can grow to heights of 40-50 feet and has a spread of 10-20 feet, making it a more compact choice.

It is unlikely that the caregivers for the cemetery will be able to routinely water newly planted trees. While relying on rainfall after initial planting is typically acceptable, the recent summer droughts make it imperative that water is provided over the first year. A good choice is the use of water rings or bladders for the newly planted trees. These

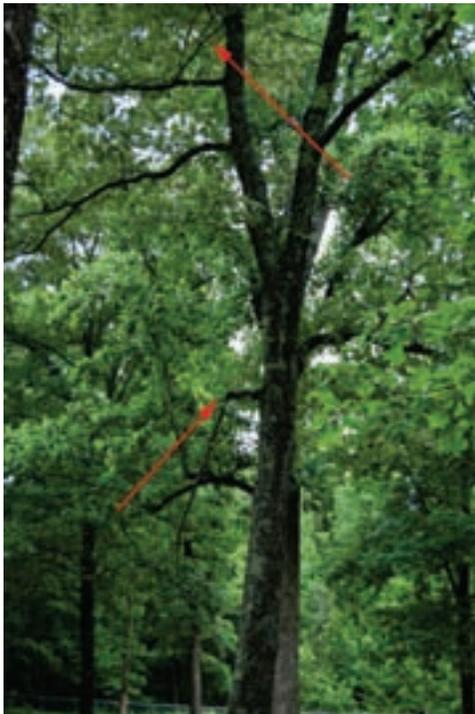


Figure 19. Tree problems. Upper left shows damaged tree with dead wood. This tree should be removed and replaced. Upper right shows a weak double leader with dead and damaged limbs. This tree should be removed, allowing nearby tree more room for growth. Lower left shows tree requiring pruning to remove dead wood and crossed branches. Lower right illustrates another weak double leader.



Figure 20. Cluster of small trees at the east edge of the cemetery should be thinned to allow the healthier trees room to grow.

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 branch and lead to disease. All pruning within the cemetery should be performed by an ISA Certified Arborist, preferably one who is also an ISA Certified Tree Worker/Climber Specialist. The ISA Certified Tree Worker/Climber Specialist has knowledge in the major aspects involved in tree care including pruning, removal, cabling and safety. These are critical skills when working among historic monuments.

typically store about 20 gallons of water, gradually releasing it over 48 hours or longer. These bladders are relatively inexpensive and should be provided to all new trees.

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

During our assessment we observed several damaged or diseased trees, as well as trees that required pruning to remove deadwood.

There are a number of trees that require pruning for either thinning or cleaning.



Figure 21. Example of debris pile that should be put through a chipper to create mulch. Similar piles just beyond the fence should also be chipped and stored for cemetery mulch.



Figure 22. Example of a stump that should be cut closer to the ground.

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. Plywood shelters or timber cribbing should be used as necessary to protect stones and monuments during the pruning process. Rigging must be used to minimize the potential for damage to stones or the landscape. Under no circumstances are tree climbers (hooks, spikes, gaffs) to be worn while ascending, descending, or working in trees to be pruned.

For those trees where removal is deemed necessary, the trunk should be cut as close to the ground as possible, leaving the stump in place to decay naturally. No chemical additives should be used to hasten decay, although it is acceptable to paint an herbicide on the stump if it is a tree that will promote suckers. Stump grinders should never be used in the cemetery since they have the potential to cause damage to stones and graves. We have observed that many of the stumps in the cemetery have been left relatively high and an effort should be made to cut them closer to the ground where possible.

Any tree cut in the cemetery should be mulched or chipped on-site and the mulch stored for use as discussed below. We have observed that

much debris has been deposited beyond the boundaries of the cemetery. This serves to increase the fire load adjacent to the cemetery and also creates a habitat for rodents, which will draw snakes. Debris should not be deposited outside the cemetery fence, but should be mulched and used within the cemetery.

Shrubbery

The cemetery exhibits no shrubbery and this is probably good since shrubs require a great deal of care. In addition, rural churchyard burial grounds were rarely planted until the mid-twentieth century and by this time Old Shiloh was largely abandoned. A period photograph (Figure 8) shows an open landscape.

Ground Cover

The cemetery does not have a turf grass, as perhaps can be seen in Figure 22. Instead the ground cover consists of what most would classify as weeds and low herbaceous vegetation. There are areas under hickories where the very large quantity of nuts has created a mulch and there is very little vegetation of any description. In other areas there are significant stands of poison ivy (Figure 23). This poison ivy is not limited to the fringe areas of the cemetery, but includes large areas throughout the burial grounds. There have been large vines of poison ivy climbing trees, but the caregivers have correctly cut the stem and the poison ivy is no longer a threat to the trees. There are also areas, typically on the outer edges of the cemetery, where the ground cover consists primarily of woods duff with herbaceous vegetation and downed limbs.

The practice has been to mow the cemetery about four times a year. At the time of our visit mowing had taken place just a month earlier, clearly demonstrating how quickly weedy vegetation grows and dominates rural cemeteries.

In addition to mowing, nylon trimmers are used around monuments. This is an acceptable practice, but it is critical that a very light weight line



Figure 23. Poison ivy found in the cemetery.

be used – along with worker attention – to minimize damage to soft stone such as marble. The maximum line diameter for use in the cemetery should be 0.065-inch. Thicker lines will cause unnecessary damage to the stones.

We did not observe any obvious mower or trimmer damage to the stones. This indicates that the volunteers are taking exceptional care not to damage the stones. The work, however, is made more difficult by the number of broken and downed stones, as well as the number of footstones that are only barely above the ground surface.

Mowing, especially mowing of weeds that grow quickly and grow to different heights, giving the cemetery an unkempt appearance, is an especially costly undertaking – both in terms of time and funds. It is even more difficult when volunteer labor is depended on.

Given the current condition of the cemetery, we identify only three options.

The first is to continue the current practice of mowing. This would be acceptable, but will eventually prove unsustainable with volunteer labor. We do not see this as a viable long-term option.

The second is to convert the cemetery into a minimal maintenance turfgrass. One example is Bermuda, another is Buffalo grass. While both have benefits and shortcomings, the real issue is the level of effort – and cost – required to establish a turfgrass of any description on an isolated site. Such an effort would require killing all of the existing grass and poison ivy, tilling the cemetery, laying sod or seeds, and establishing adequate short-term

irrigation. Once established a turf grass would reduce mowing needs, but would not eliminate them. Thus, this approach does not seem to be the most appropriate for this site or the ability of the caregivers.

The third approach – and the one that we recommend – combines an aggressive program to destroy the poison ivy combined with dense mulching of the site. The goal of this program would be to eliminate the need for any mowing or turf maintenance, beyond a yearly refreshing of mulch. Another benefit of this program is that it could be accomplished by volunteers with relatively little expenditure of funds. The two steps – elimination of the poison ivy and placement of mulch – are described below.

Elimination of Poison Ivy

There are three reasons to eliminate the poison ivy in the cemetery. The most obvious of course is related to its hazard to people. About 85% of people are allergic to the urushiol in poison ivy and only 1 billionth of a gram is required to cause a rash in many people. The presence of the poison ivy will dissuade many from visiting the cemetery. Beyond this, the poison ivy creates a continuing maintenance problem, necessitating more mowing than would otherwise be necessary. The third reason is that the poison ivy will eventually begin to vine and grow up the trees, creating additional maintenance problems. Without control the poison ivy will eventually shade out its host tree, killing it. Thus, there are ample reasons to bring this problem under immediate control.

Poison ivy is difficult to control since it is spread both by underground rhizomes and by seeds. The seeds are spread quickly by birds and other animals that eat the fruits.

The plant can be controlled by constantly cutting it back, eventually starving the plant. This, however, is a rather long process. Often herbicides are not recommended since they can damage stones. There are times, however, when the use of an herbicide is worth the risk – and the risk can be

minimized by careful application and avoiding prolonged use.

At the Old Shiloh Presbyterian Cemetery we are recommending the use of an herbicide. The reason for this is that it offers the greatest potential for success given the limited volunteer labor available.

A variety of herbicides can be used, including those containing glyphosate, 2,4-D amine, and triclopyr. Technical fact sheets for each are available at <http://npic.orst.edu/npicfact.htm>. All of these herbicides are translocated from the leaves and cut stems to the rest of the plant, eventually killing shoots and roots, although repeated applications are generally necessary. Many of the herbicides will affect trees, such as oaks and hickories, so it is important to be careful in the use of the herbicides, prevent drift, and limit the amounts used. All require use during active growing seasons.

Recently good results have been reported using triclopyr. This product is widely available to consumers as Bayer Brush Killer Plus (http://www.bayeradvanced.com/system/product_variants/label_pdfs/000/000/071/original_Brush_Killer_Plus_32oz_CON.pdf) or to the agricultural industry as Dow's Garlon 4 (<http://www.cdms.net/ldat/ld0B0013.pdf>). The former contains only 8.8% of the active ingredient, while the later is 61.6% triclopyr. Of course Garlon 4 is far more expensive, but its higher concentration allows more effective use and better control.

Regardless, it is important the caregivers follow the label instructions. In particular it is critical that triclopyr be applied as a coarse spray on windless days. It works best when the poison ivy is actively growing. It is also useful to use an agricultural surfactant (typically non-ionic such as Competitor or silicone based such as Sylgard 309; of the two we recommend the non-ionic surfactant because of its lower toxicity to animals and insects) to improve the wetting of the foliage (poison ivy has waxy leaves that tend to shed water). Garlon 4 also offers the opportunity to mix the herbicide with oils, in which case a surfactant is not necessary. Since oils

will cause considerable staining of monuments, we strongly recommend avoiding this approach and mixing the herbicide with water and an appropriate surfactant. A tracker dye (such as Blazon Blue Dye) can be added to ensure that you achieve good coverage, but it is important to avoid spraying monuments since this tracker dye may also stain the stones.

Since triclopyr can damage both oaks and hickories it is also important that the herbicide not be sprayed on the trunks of these trees. An effort should also be made to avoid spraying any of the stones.

Use of Mulch

Rather than attempt to establish a turfgrass or continue to mow the weedy vegetation, we recommend the use of mulch. We recommend applying about 4-inches across the site and this would require about 960 cubic yards of mulch. This represents a large quantity, however Cleveland County offers mulch from their landfill to the public at the cost of \$12.50 per large pickup truck load or \$25.00 for a trailer load. Additional information can be obtained from the landfill office at 704-480-6932.

Another source of mulch may be from local tree companies that would be required to take their mulch from tree removals to the landfill at the cost

Of course volunteers will still need to spread the mulch – a time consuming undertaking. However, this is time spent “up-front” with the intention of eliminating repetitive mowing and reducing maintenance efforts. The mulch will also reduce the quantity of poison ivy returning each year. There will be new poison ivy sprouting from seed, but these will not be established in the soil and can be easily picked out of the mulch.

It will be important not to mulch over downed stones – these will need to be picked up, mulch laid down, and the stone then reset. Buried footstones should also be reset so they don’t disappear into the mulch.

Other Landscape Issues

The cemetery has avoided the unfortunate issue of lot owners using gravel in plots in an effort to control weeds. Graveled lots almost always present a variety of long-term maintenance problems. In addition, the practice is not historically appropriate. The caregivers should discourage the practice.

Once the recommended landscape modifications are made (removal of diseased trees, elimination of the poison ivy, application of mulch), there will continue to be maintenance needs. They will, however, be significantly less labor intensive

Frequency	Activity	Time Required
Monthly	Check cemetery for maintenance problems (erosion, downed trees, and other issues). Respond as appropriate.	1 hour
Twice-Yearly	Inspect trees for signs of disease, damage. Respond as appropriate	2 hours
Twice-Yearly	Check road condition; check culverts under road. Respond as appropriate	0.5 hour
Monthly	Remove new poison ivy by either spraying or hand picking.	2 hours
	Place additional mulch as necessary	2 hours

of \$12/ton. It may be less expensive for them to deliver them to the cemetery.

The cemetery should also plan on mulching as much material on-site as possible. This would include those trees recommended for removal and the branches and other debris that have accumulated in the cemetery.

than what the cemetery caregivers face now. These maintenance tasks are identified in Table 2

Recommendations

The minimal level of effort for maintenance will be about one day by a crew of three. The frequency of this maintenance will depend on the desired

appearance of the cemetery. It is our view that this level of effort will be difficult to sustain using volunteers.

We do not recommend any large scale removal of trees in the cemetery. The trees provide character and soften what would otherwise be a harsh and unappealing environment.

We recommend that as trees require removal they be replaced with new trees, in order to maintain the current general appearance of the cemetery. Appropriate replacement trees include sugar maple, white oak, and Eastern red cedar.

There are several diseased, damage, or dying trees in the cemetery that should be removed. These include thinning of trees on the eastern edge (without replacement), removal of a damaged tree at the entrance to the cemetery (with replacement), and removal of several trees with weak crotches (with replacement). Additional trees require pruning to remove dead limbs.

There is currently no shrubbery and we do not recommend the addition of additional plants given the level of care that is possible.

The cemetery is overrun with poison ivy. We recommend the use of a triclopyr herbicide with an agricultural surfactant and tracker dye to eliminate the plant. Care must be taken to avoid spraying trees or stones.

We recommend that the triclopyr herbicide also be used to eliminate other vegetation in the cemetery in preparation for the application of about 4 inches of mulch. Downed stones must be reset on top of the mulch and sunken footstones must be raised so they aren't obscured by the mulch. This approach will reduce the long-term maintenance of the cemetery.

With the use of mulch, maintenance tasks can be reduced, although not eliminated. Inspections must be made of the site to continue removal of poison ivy, replace or add mulch as necessary, and inspect for other maintenance needs.

OTHER MAINTENANCE ISSUES

Signage

The cemetery lacks effective signage. During our assessment the only signage we observed was a sign at the entrance of the cemetery (Figure 24) providing the cemetery name and dates of operation, but no other details or information. There

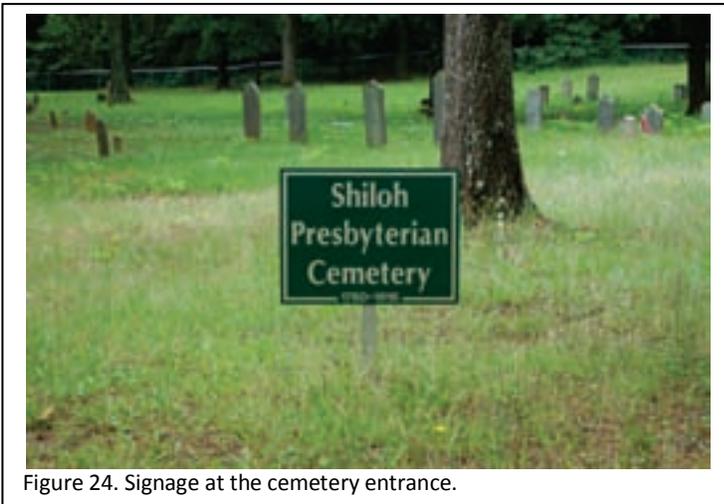


Figure 24. Signage at the cemetery entrance.

is a roadside marker (Figure 9) that provides some additional details, but it is not an official North Carolina Highway Historical Marker and is not included in their database. This marker is largely focused on family names and famous individuals, providing little cemetery history.

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., eligible for listing on the National Register). While the sign at the cemetery entrance provides these details, it offers no other information.

Regulatory signage specifies laws, regulations, or expected standards of behavior. We recommend that the caregivers develop signage dealing with, minimally, these issues (perhaps with some modifications of language as might be needed):

- The cemetery is open from 8am to 5pm. Any individual in the cemetery at other times is subject to arrest for trespass.
- 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 from leaning, sitting, or climbing on any monument. All children must be escorted by an adult.
- Absolutely no alcoholic beverages, fireworks, or fire arms are allowed in the cemetery. Proper conduct is expected at all times.
- No pets are allowed in the cemetery.
- No plantings are allowed within the cemetery.
- For additional information concerning maintenance issues, please contact _____ at _____. In case of emergency contact _____.

This regulatory information could be incorporated with the existing sign at the cemetery entrance.

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 informational signage is not necessary. The isolated location and low visitation suggests that interpretative signage is not needed at this time. The caregivers, however, may wish to pursue a brochure, perhaps in conjunction with a local historical organization.

It is important, however, to understand that seeking additional visitation will increase both short-term and long-term maintenance issues. As visitation increases, so too does wear and tear on the historic fabric – the creation of foot paths, possible additional damage to stones, inappropriate activities at the cemetery, and more litter. These concerns have been previously discussed in association with the Carolina Thread Trail.

In addition, brochures need to avoid the trap of promoting the cemetery only in the context of famous individuals. It is critical that they be developed to appeal to a broad range of interests. It is important to remember that brochures are being written for people who don't have the same background, familiarity, or even interests that the writer does. It may be helpful to have the brochure keyed to numbers placed at the individual graves, helping individuals better find the listed monuments.

In addition, the brochure should include additional history concerning the cemetery, as well as the regulations. It should also be available to visitors – perhaps at local historic sites as well as at the cemetery in a weatherproof container.

Other Public Outreach

A Google search for “Old Shiloh Presbyterian Church Cemetery” with the additional search term “North Carolina” produces a variety of web sites. Most, however, are focused on Col. Frederick Hambricht. In the first three pages only one website provides a transcription of graves (<http://www.ncgenweb.us/cleveland/cemeteries/Old Shiloh Presbyterian Church.txt>).

For someone interested in the cemetery the results would be rather discouraging. There is nothing substantive about the cemetery itself (i.e., no history, no photographs, no discussion of the stones or their carvers, no information on who maintains the cemetery, no information on how to visit the cemetery). Most particularly there is nothing that might inspire those interested in the long-term preservation of the burial ground to contribute either time or money.

While I am sympathetic that the Hambricht descendants are proud of their heritage, the cemetery is more than this one grave. Indeed the Hambricht descendants should realize that the survival of Col. Frederick Hambricht's grave is entirely dependent on the survival of the cemetery as a whole.

Given the interest on the part of the National Society Sons of American Revolution (NSSAR), we recommend that they be contacted and their participation be solicited in the long-term care of the cemetery. Their organization should be playing a role in the financial maintenance of this cemetery.

Trash

During the assessment the cemetery was examined for evidence of trash. The cemetery was found to be very clean. This is almost certainly the result of both low visitation and the efforts of the volunteers maintaining the cemetery.

At the present time we do not recommend any trash containers – they would only represent an additional maintenance demand. The caregivers should be aware, however, that additional visitation will almost certainly increase the level of trash and additional steps may be necessary in the future.

Recommendations

Caregivers should develop better signage at the entrance to the cemetery. This should minimally include regulatory signage that deals with proper care of the monuments, prohibit rubbings and warn visitors of their fragile condition; it should clearly

state the hours the cemetery is open; it should prohibit certain behaviors and actions, such as use of alcoholic beverages; and it should include contact and emergency information.

There is no interpretative signage or widely available brochure. Development of a brochure is relatively cost effective and should represent an immediate action, followed by on-site signage as funding allows. The brochure should include more information on the cemetery landscape, stone carvers, funerary customs, and reasons that a visitor should be interested in the individuals buried in the cemetery, as well as providing the cemetery regulations.

There is no website that provides information concerning the cemetery, its history, landscape, care, or regulations. The caregivers are missing an exceptional opportunity to engage an increasingly web savvy public in the cemetery's care and preservation. The addition of genealogical information could also be of immense interest to historians and family researchers. The caregivers could also better promote the cemetery as a tourism resource.

Trash is not currently a problem, given the involvement of volunteers and the low visitation of the cemetery. It may, however, become a problem in the future and caregivers should be aware that increased visitation may have negative effects.

CONSERVATION ISSUES

What is Conservation?

Conservation is *not* restoration. Restoration means, very simply, making something “like new.” Restoration implies dramatic changes of the historic fabric, including the elimination of fabric that does not “fit” the current “restoration plan.” Restoration is inherently destructive of patina and what makes a property historic in the first place. The “restorer” of a property will know nothing of the Secretary of the Interior’s Standards for Preservation and care even less.

One of the most important early writings was that of nineteenth century art critic and observer John Ruskin. In *The Seven Lamps of Architecture* published in 1849 and in particular, “The Lamp of Memory,” Ruskin introduces us to the issue of trusteeship where he explains,

it is again no question of expediency or feeling whether we shall preserve the buildings of past times or not. We have no right whatever to touch them. They are not ours. They belong partly to those who built them, and partly to all the generations of mankind who are to follow us.

Ruskin also crisply stated the difference between restoration and repair, noting that “restoration” means,

the most total destruction which a building can suffer: a destruction out of which no remnants can be gathered: a destruction accompanied with false description of the thing destroyed.

In contrast, conservation can be defined as preservation from loss, depletion, waste, or harm. Conservation seeks to limit natural deterioration.

Conservation will respect the historic materials, examine the variety of options available, and select those that pose the least potential threat to the property. Conservation will ensure complete documentation, whether it is of cleaning, painting, or repair. Conservation will ensure that the work done today does not affect our ability to treat the object tomorrow.

Standard for Conservation Work

As Ruskin stated, the caregivers of the Old Shiloh Presbyterian Church Cemetery are the stewards of this cemetery, holding what belonged to past generations in trust for future generations. As such they bear a great responsibility for ensuring that no harm comes to the property during their watch.

One way to ensure the long-term preservation of this property is to ensure that all work meets or exceeds the Secretary of the Interior’s Standards for Preservation, discussed on pages 2-4 of this study.

Another critical requirement is that the caregivers ensure that any work performed in the cemetery – whether it involves the cleaning of a stone or the reconstruction of a heavily damaged monument, is conducted by a trained conservator who subscribes to the Standards of Practice and Code of Ethics of the American Institute for Conservation of Historic and Artistic Works (AIC).

These Standards cover such issues as:

- Do no harm.

- Respect the original fabric (material) and retain as much as possible – don't replace it needlessly.
- Choose the gentlest and least invasive methods possible.
- Is the treatment reversible? Is retreatment possible?
- Don't use a chemical without understanding its impact on the object and future treatments.
- Don't falsify the object by using designs or materials that imply the artifact is older than it is.
- Replication and repairs should be identified as modern so that future researchers are not misled.
- Use methods and materials that do not impede future investigation.
- Document all conservation activities – and ensure that documentation is available.
- Use preventative methods whenever possible – be proactive, not reactive.

The AIC Code of Conduct also requires a professional conservator provide clients with a written, detailed treatment proposal prior to undertaking any repairs; once repairs or treatments are completed, the conservator must provide the client with a written, detailed treatment report that specifies precisely what was done and the materials used. The conservator must ensure the suitability of materials and methods – judging and evaluating the multitude of possible treatment options to arrive at the best recommendation for a particular object.

General Types of Stone Damage

Although a stone-by-stone assessment was not included in this assessment, it is possible to provide some general observations concerning the types of problems faced by the cemetery.

Broken Stones

There are numerous examples of broken stones. Many of these stones should receive a high priority for conservation treatments since the stones

are on the ground and subject to additional damage, increasing the eventual cost of appropriate repair.

The identification of these stones and development of treatment proposals by a professional conservator should be a very high priority. It is only with the development of detailed treatment proposals and cost estimates that a reasonable budget for this conservation work can be determined. We recommend a stone-by-stone assessment and development of treatment proposals.

In most cases gravestones are fragile and their repair is delicate work. There are many products on the market, used by commercial stone companies, that are inappropriate for (and often damaging to) historic stone.

Appropriate conservation treatment will usually involve drilling and pinning, carefully aligning the two fragments. Threaded 316 stainless steel rod (or occasionally fiberglass) and epoxy adhesives formulated for the specific stone are used in this type of repair. Diameters and lengths of pins vary with the individual application, depending on the nature of the break, the thickness of the stone, its condition, and its expected post-repair treatment.

The cemetery illustrates a variety of repaired stones. At least one is repaired without pins in a misguided or misinformed effort to save time and money. Instead the pieces are simply joined using a continuous bead of epoxy or some other adhesive. Experience indicates that for a long-lasting repair, particularly in structural applications, the use of pins is necessary. Moreover, most adhesives are far stronger than the stone itself, meaning that failure of the repair is likely to cause additional damage to the stone. In the case of this one stone the repair is poorly executed with epoxy smeared on the face of the stone, resulting in the disfigurement of the monument.

There are additional stones, likely repaired by a commercial monument company. The stones are backed by granite and attached using what appears to be a silicone adhesive. These repairs are also inappropriate. The backing stone, being a



Figure 25. Examples of broken stones at the Old Shiloh Presbyterian Church Cemetery. Top and middle rows illustrate a variety of stone breaks. Bottom left illustrates a broken stone propped up. Should the stone fall it will certainly break again, increasing repair costs. The stone at the bottom right lying on the ground is subject to mower and pedestrian damage.



Figure 26. Examples of inappropriate repairs. Top left illustrates a simple epoxy repair showing poor workmanship. The top right illustrates a stone attached to a granite backing using silicone. Note the wide joints and discoloration of the silicone. The first photo of the bottom row shows this same stone. The bottom appears to have been artificially cut. The middle photo on the bottom row shows a footstone propped up by brick set on top of another marble footstone. The far right photograph shows a stone reset in concrete with concrete blocks on the reverse. This stone is being displaced by a nearby tree and, without intervention, will topple.

different material, has a different thermal expansion coefficient. The use of silicone is discouraged since it is very difficult to remove from stones, making retreatment very difficult. The stones are not well joined, resulting in wide gaps and poor registration. Finally, there are a variety of stones that are backed with concrete blocks or other masonry in an effort to support them. While unattractive, these repairs can be taken apart with minimal or no damage to the stones. However, in several cases the support masonry was built on top of a broken footstone. It is inappropriate to use stones in the cemetery in this manner.

Die on Base Stone Problems

Die on base stones were common during the late nineteenth and early twentieth centuries. They typically consist of multi-part stones set either with ferrous pins or using a setting compound and gravity.

Where ferrous pins were used, the stones often exhibit corrosion attacking the pins and eventually causing sufficient damage that the stone topples. At times the stone itself is affected by a



Figure 27. Other stone problems. Top row illustrates two stones that require repining and resetting. The stone on the left had ferrous pins that have corroded and the stone has fallen (probably by vandalism). The stone on the right lacks a pin and poses a hazard to the public. Lower left photo shows a tilted stone that requires resetting. The lower right photo shows a headstone and footstone that have sunk into the grave (the sunken depression has collected leaves). These stones require resetting.

process known as iron jacking. As the iron corrodes it increases in volume, putting pressure on the stone and causing it to crack. At Old Shiloh we observed several toppled stones with evidence of ferrous pins. These should be given a high treatment priority since, left untreated, the corrosion will cause significant spalling, cracking, and breakage of the stones. In these cases it will be necessary to use diamond core drills to remove the ferrous pins. They will then need to be replaced with stainless steel pins and the stones reset.

We also observed several stones that are no longer secure. These stones pose a significant liability to the owner of the cemetery since they could seriously injure unsuspecting visitors. These stones need to be drilled and pins used to secure the different stone parts. Typically a high lime mortar is also used between the different tiers or parts of the stone. This mortar, while providing cushioning, is not an adhesive and is not suitable for resetting tall monuments without also drilling and pinning.

Tilting and Simple Resets

Throughout the cemetery we observed seriously leaning stones. When this occurs to headstones, the tilt may be sufficient to precipitate a ground break, dramatically increasing the cost of repair. For other monuments the tilt may be sufficient to cause the monument to fail and, in the process, there may be additional damage, or it may fall on a cemetery visitor.

Monuments should never be reset using concrete, since this material is far harder than the stone and any shock to the stone (such as a bump by a mower) will have a tendency to break the stone. A better choice would be to set the stone in pea gravel. This approach allows the stone some movement should it be accidentally impacted by lawn maintenance activities. The pea gravel will also promote drainage away from the stone, helping the stone resist the uptake of soluble salts.

There are additional stones that have sunk into their graves with only a few inches still visible above grade. These stones are very difficult to see in grass (or mulch) and require that they be excavated and reset.

While resetting can be done by a conservator, it is a task that volunteers can readily perform. The exception are larger stones that require drilling and pinning for stability.

Orphan Stones

Throughout the cemetery we identified stones that are no longer clearly associated with a grave. Some consist of footstones that may be leaning against their headstones. These require resetting. Others are lying on the ground or propped against a tree with no clear grave association.

These stones present a puzzle and require the caregivers to begin the process of attempting to re-associate footstones with headstones and determine what is “left over.” Probing may also help identify below grade bases that associate with broken stones – so it is important that the stone fragments not be gathered up or moved until they

are mapped and probing is conducted to determine if some underground remains may be present.

This may sound complex, but is actually something that volunteers – especially those who are “good at puzzles” can excel at. The map need not be more than a simple sketch showing the location of the downed stone in relationship to two or more standing stones. A simple probe can be purchased (for example a fiberglass tile probe, item 77540, can be purchased from Forestry Suppliers for \$40 plus shipping) or can be created by anyone with simple welding skills.

Ideally all stones whose original locations can be identified should be reset or repaired as necessary. Every loss to the cemetery diminishes the integrity and significance of the burial ground. These losses have a cumulative effect and it is critical that the losses be minimized.

Those stones whose locations cannot be identified must not be allowed to remain unsecured in the cemetery. Eventually the stones will be picked up as souvenirs or curios and will be lost.

Finding a suitable repository for these stones, however, can be difficult. They should not be taken to an individual’s home. People move or eventually they die and their descendants are not necessarily as interested in the cemetery as their relative. Stones get discarded or placed in gardens as stepping stones. It is better for the stones to be housed at some institution where they can be inventoried and secured. Each stone should have a tag attached, perhaps using tyvek paper and nylon string, indicating exactly where the stone was found. Eventually it may be possible to reassociate the stone with a correct location.

Memorial Stones

This cemetery contains two “memorial” stones – monuments that were erected by descendants or organizations. These illustrate a variety of long-term preservation problems.

The monuments are out of scale with the rest of the cemetery, being entirely too large and



dominating the landscape. They are made of inappropriate, non-historic material. This cemetery does not contain granite monuments, except for these two examples.

The money spent on these memorials could have made an important contribution to the preservation of the cemetery or the appropriate repair of the original, historic stones. If some additional monument is needed to improve legibility, then it should be a flat, at-grade stone that would not dominate the cemetery landscape or detract from the historic integrity.

The presence of these two stones also illustrates the problem of not having an informed and preservation minded cemetery owner. It is critical that better control be exercised over the activities that take place at and in the cemetery.

Individuals or organizations that may wish to commemorate specific individuals should be guided toward a more inclusive approach. Clearly it does not matter if a particular grave is grandiose if the cemetery as a whole is allowed to fall into ruin. A more holistic approach would help ensure the long-term preservation of the historic property.

Cleaning of Monuments

A significant amount of damage may result from inappropriate cleaning techniques. The most common cleaning technique is the use of a bleach product – probably because bleach (either sodium hypochlorite or calcium hypochlorite) is widely available and inexpensive. It is, nevertheless, unacceptable for historic monuments since it creates an artificially clean surface, especially noticeable in marble.



Figure 29. Two examples of inappropriate memorial stones. The stones are out of scale and consist of non-historic material that detract from the cemetery landscape and setting.

situations where soil or biologicals are actually causing damage to the monuments. At Old Shiloh there are numerous stones with extensive lichen deposits. Many of these are thick enough that they obscure the stones. This is not only a visual – or aesthetic – issue, but the lichen are known to cause damage to the stones.

Thus, we do recommend that some of the stones in the cemetery be cleaned, preferably with D/2 Biological Solution, a quaternary ammonia product distributed by Cathedral Stone (<http://www.cathedralstone.com/products/solution.aspx>).

The stone should be prewetted prior to the application of D/2 and after a light scrubbing with a soft bristle brush, the cleaning material should be thoroughly rinsed off the stone.

Recommendations

Table 3 discusses problems with a variety of “common” stone cleaning processes widely used by commercial firms and the public. Providing this sort of information to families who have loved ones buried at the cemetery may help deter abusive cleaning.

Cleaning is often an aesthetic issue with few

We recommend that a stone-by-stone assessment be conducted at Old Shiloh Presbyterian Church Cemetery. This will identify all monuments in need of treatment, determine their priority for treatment, and provide costs for that work to be accomplished. This is a critical planning function.

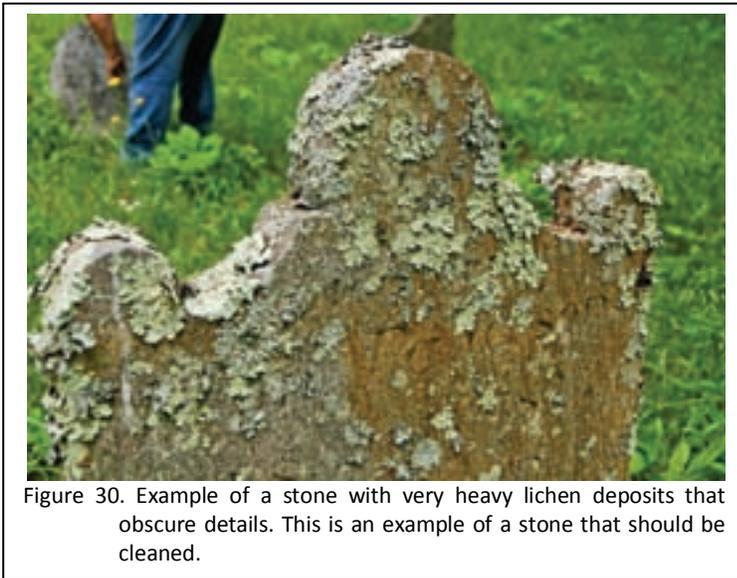


Figure 30. Example of a stone with very heavy lichen deposits that obscure details. This is an example of a stone that should be cleaned.

All work in the cemetery should be conducted by trained conservators who subscribe to the Code of Ethics and Standards of Practice of the American Institute for Conservation of Historic and Artistic Works (AIC). This should be the minimum level of competency required by the caregivers on all projects.

There are some treatments, such as

CONSERVATION ISSUES

Table 3.
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 (household and swimming pool bleach)	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 Biological Solution	No known adverse effects, has been in use over 10 years.	No special precautions required for use, handling, or storage.

resetting, that can be undertaken by volunteers with minimal training and oversight. Volunteers can also begin the important process of inventorying “orphan stones” and attempting to discover where they should be reset.

Plans should be developed to deal with those “orphan stones” whose original location in the cemetery cannot be discovered.

Caregivers should limit the addition of memorial stones in the cemetery since these stones affect the cemetery landscape and affect the cemetery’s historic and visual integrity. Memorial stones should be limited to horizontal or flat markers and should be used only where necessary. Groups wishing to commemorate different individuals or events should be urged to assist in the funding the long-term preservation of the cemetery, rather than focusing on an individual marker.

While cleaning is often low priority, there are stones in the cemetery that are adversely affected by heavy lichen deposits. These should be cleaned in a manner that does not endanger the stone or eliminate the stone’s patina.

PRIORITIES AND FUNDING LEVELS

Recommended Priorities

Table 4 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. Some are issues that have the potential to affect the public health and safety and consequently require immediate attention. Most, however, are planning issues that require immediate attention to “set the stage” for future actions. We strongly believe that most cemetery projects fail through inadequate or inappropriate planning – thus, we recommend in the strongest possible terms that the caregivers engage in the necessary planning to help ensure success. Some of these high priority items will necessarily extend over several years; however, it is critical that progress be consistent and continual.

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 Old Shiloh Presbyterian Church Cemetery as a historic resource.

Third priorities are those that may be postponed for 3 to 5 years. They are issues that can wait for appropriations to build up to allow action. Some are also less significant undertakings or actions that require other stages to be in place in order to make them feasible or likely to be successful. Because they are given this lower priority, however, they should not be dismissed as trivial or unimportant.

Budget estimates are offered only for direct conservation issues and reflect 2010FY costs. The estimate is stand alone, including all necessary travel. Some savings will accrue by combining projects.

Condition Assessment, Cemetery Stones –

A stone-by-stone assessment of Old Shiloh Presbyterian Church Cemetery monuments will require one day by two conservators. The cost will be \$3,660. This assessment will involve photography of all damaged stones and the preparation of a treatment plan that includes what needs to be done and the cost associated with the treatment. The final report will be these treatment proposals.

There are other costs associated with different activities. For example, a consultant may be expected to charge about \$5,000 for the nomination of the cemetery to the National Register. The additional historical research, if conducted by a consultant, may be expected to have a cost of about \$2,000 to \$3,000. There are, however, many activities that can be undertaken by volunteers with only the cost of materials. For example, the treatment of the property to eliminate the poison ivy has supply costs of about \$500; a landscape contractor would likely charge \$2,000 for the work.

Nevertheless, there are real costs associated with preservation. We recommend that those organizations that have used and continue to use the cemetery, such as the NS,SAR and the Hambright Family Reunion be asked to make significant financial contributions to the preservation of this cemetery. It makes no sense to erect memorial stones without an equal or greater budget for the maintenance of the property.

The North and South Carolina State Historic Preservation Offices may have matching funds to assist with the preparation of the National Register nomination (for South Carolina see <http://shpo.sc.gov/grants/preservationgrants/>; for North Carolina see <http://www.hpo.ncdcr.gov/grants/grants2010.html>). The Southern Regional Office of the National Trust

for Historic Preservation has a seed grant program that might be appropriate for small projects, such as conducting the stone-by-stone assessment (<http://www.preservationnation.org/resources/find-funding/>).

We also recommend identifying private foundations that provide funding for cultural resource projects in the Cleveland County area. Some assistance may be available from local businesses. For example, a local agricultural co-op may be willing to either donate the herbicide or provide it at cost.

It is also appropriate to contact the local historical organizations and discuss what level of funding or support they are able to provide.

PRIORITIES AND FUNDING LEVELS

**Table 4.
Prioritization of Recommendations**

Priority	Recommendation
First – this fiscal or calendar year	<p>1.1 All decisions regarding modifications, alterations, additions, or other actions affecting Old Shiloh Presbyterian Cemetery should be carefully evaluated against the Secretary of the Interior’s Standards for Preservation.</p> <p>1.2 Special care should be taken to protect all remaining historic fabric (material) and the context.</p> <p>1.3 The legal owner of the cemetery should be clearly established (see item 1.6 for research necessary to assist with this goal).</p> <p>1.4 An organization should be created for the preservation of the cemetery and, if different from the owner, this organization should sign a Memorandum of Agreement with the owner specifying duties, responsibilities, and rights of each party. The organization should be duly organized under North Carolina law.</p> <p>1.5 The organization for the long-term care of the cemetery should either be a non-profit or should be under the umbrella of a suitable non-profit historical or genealogical organization. This will allow funds to be raised from individuals and other entities for the maintenance of the cemetery.</p> <p>1.6 There remain a very large number of questions surrounding the cemetery. The current historic research has barely scratched the surface and more detail is necessary not only for long-range planning, but also if the cemetery is to be successfully nominated to the National Register of Historic Places. Questions of critical importance include:</p> <ul style="list-style-type: none"> • Identification of any deeds relating to the cemetery’s 1889 sale to trustees of the Shiloh Burying Ground in South Carolina (Cherokee County); • Identification of the role that O.M. Mull may have played in the ca. 1930-1940 ownership of the cemetery; • Resolution of legal questions surrounding the trusteeship that was sold the portion of the cemetery in North Carolina; • Identification of additional photographs of the cemetery, as well as oral history accounts of cemetery events in the past 60 years; and • Examination of Session and congregational minutes associated with Old Shiloh Presbyterian Church. These documents are housed at the Presbyterian Historical Society in Philadelphia (Archives 47019). In particular the time period of the property acquisition, as well as the period when the cemetery was abandoned by the church should be reviewed. <p>1.7 We caution the caregivers that it is critical to take a broad view of this historic research. While individuals important to the history of the Carolinas should not be ignored, the cemetery has much to offer. The research should include the development of the property, its evolutionary changes, the role played by the Church community, as well as the variety of other topics often associated with cemetery research, such as mortuary practices and mourning rituals.</p> <p>1.8 In spite of the cemetery’s significance its visual integrity has been affected by the recent construction of a transmission corridor between Southern Power’s Cleveland County Generating Facility in North Carolina and a Duke Power substation in Cherokee County, South Carolina. To mitigate this visual intrusion we recommend that buffering vegetation be placed outside the cemetery fence, in the utility corridor. An appropriate, fast growing tree may be Leyland cypress.</p> <p>1.9 Damage to the fence should be repaired immediately.</p> <p>1.10 An effort should be made to have the quality of the fence upgraded. This will help reduce the maintenance required of the caregivers and would result in a fence that will provide greater site protection for a longer period of time.</p>

Table 4, cont.
 Prioritization of Recommendations

Priority	Recommendation
First – this fiscal or calendar year, cont.	1.11 Caregivers should be more proactive, visiting the cemetery on a regular basis in order to verify the condition and make note of any problems or damage.
	1.12 Caregivers should note any evidence of vandalism and immediately file a report with the Sheriff’s Department. A conservator should be consulted to determine the extent of damage and this should be included in the report.
	1.13 A form should be developed that documents the damage so there can be a permanent record of problems.
	1.14 The Cleveland County Sheriff should be asked to ensure that his deputies routinely check the gate and be alert to any vehicles that may be parked at the cemetery entrance during unusual times.
	1.15 The caregivers should determine if hunting is allowed on the adjacent properties. If so, a buffer should be established around the cemetery. The local game warden should be alerted to the cemetery.
	1.16 The North Carolina Division of Forest Resources should be contacted to ensure that the cemetery is protected from any wildfire response efforts. Additional assistance can be obtained in establishing a fire break around the cemetery.
	1.17 We do not recommend any large scale removal of trees in the cemetery. The trees provide character and soften what would otherwise be a harsh and unappealing environment.
	1.18 There is currently no shrubbery and we do not recommend the addition of additional plants given the level of care that is possible.
	1.19 There are some treatments, such as resetting, that can be undertaken by volunteers with minimal training and oversight. Volunteers can also begin the important process of inventorying “orphan stones” and attempting to discover where they should be reset.
	1.20 Plans should be developed to deal with those “orphan stones” whose original location in the cemetery cannot be discovered.
	1.24 All repair work in the cemetery should be conducted by trained conservators who subscribe to the Code of Ethics and Standards of Practice of the American Institute for Conservation of Historic and Artistic Works (AIC). This should be the minimum level of competency required by the caregivers on all projects.

PRIORITIES AND FUNDING LEVELS

Table 4, cont.
 Prioritization of Recommendations

Priority	Recommendation
Second – over next 2 to 3 years	<p>2.1 The cemetery has been determined eligible for inclusion on the National Register by the South Carolina State Historic Preservation Office and the cemetery is on the North Carolina State Historic Preservation Office State Study List (meaning that it is likely eligible). It would be appropriate to nominate the cemetery under at least Criterion C.</p> <p>2.2 The caregivers should plan on yearly maintenance of the approximately 1,000 linear feet of gravel road. This may include grading and the periodic addition of appropriate gravel.</p> <p>2.3 The road at the south end of the cemetery requires regrading to eliminate the erosion that is occurring. This may involve establishing an in-sloping road with ditches and drainage under the road.</p> <p>2.4 The pedestrian entrance to the cemetery should be gated.</p> <p>2.5 There are several diseased, damage, or dying trees in the cemetery that should be removed. These include thinning of trees on the eastern edge (without replacement), removal of a damage tree at the entrance to the cemetery (with replacement), and removal of several trees with weak crouches (with replacement). Additional trees require pruning to remove dead limbs.</p> <p>2.6 We recommend that as trees require removal they be replaced with new trees, in order to maintain the current general appearance of the cemetery. Appropriate replacement trees include sugar maple, white oak, and Eastern red cedar.</p> <p>2.7 The cemetery is overrun with poison ivy. We recommend the use of a triclopyr herbicide with an agricultural surfactant and tracker dye to eliminate the plant. Care must be taken to avoid spraying trees or stones.</p> <p>2.8 We recommend that the triclopyr herbicide also be used to eliminate other vegetation in the cemetery in preparation for the application of about 4 inches of mulch. Downed stones must be reset on top of the much and sunken footstones must be raised so they aren't obscured by the mulch. This approach will reduce the long-term maintenance of the cemetery.</p> <p>2.9 Caregivers should develop better signage at the entrance to the cemetery. This should minimally include regulatory signage that deals with proper care of the monuments, prohibit rubbings and warn visitors of their fragile condition; it should clearly state the hours the cemetery is open; it should prohibit certain behaviors and actions, such as use of alcoholic beverages; and it should include contact and emergency information.</p> <p>2.10 We recommend that a stone-by-stone assessment be conducted at Old Shiloh Presbyterian Church Cemetery. This will identify all monuments in need of treatment, determine their priority for treatment, and provide costs for that work to be accomplished. This is a critical planning function.</p> <p>2.11 Caregivers should limit the addition of memorial stones in the cemetery since these stones affect the cemetery landscape and affect the cemetery's historic and visual integrity. Memorial stones should be limited to horizontal or flat markers and should be used only where necessary. Groups wishing to commemorate different individuals or events should be urged to assist in the funding the long-term preservation of the cemetery, rather than focusing on an individual marker.</p> <p>2.12 While cleaning is often low priority, there are stones in the cemetery that are adversely affected by heavy lichen deposits. These should be cleaned in a manner that does not endanger the stone or eliminate the stone's patina.</p>

Table 4, cont.
 Prioritization of Recommendations

Priority	Recommendation
Third – over next 3 to 5 years	<p>3.1 The existing concrete drainage pipe should be clearly marked. The associated ditch should be cleaned of debris. The outflow should be protected with rock to prevent erosion and the upstream side should be protected from large debris.</p> <p>3.2 With the use of mulch, maintenance tasks can be reduced, although not eliminated. Inspections must be made of the site to continue removal of poison ivy, replace or add mulch as necessary, and inspect for other maintenance needs.</p> <p>3.3 There is no interpretative signage or widely available brochure. Development of a brochure is relatively cost effective and should represent an immediate action, followed by on-site signage as funding allows. The brochure should include more information on the cemetery landscape, stone carvers, funerary customs, and reasons that a visitor should be interested in the individuals buried in the cemetery, as well as providing the cemetery regulations.</p> <p>3.4 There is no website that provides information concerning the cemetery, its history, landscape, care, or regulations. The caregivers are missing an exceptional opportunity to engage an increasingly web savvy public in the cemetery’s care and preservation. The addition of genealogical information could also be of immense interest to historians and family researchers. The caregivers could also better promote the cemetery as a tourism resource.</p> <p>3.5 Trash is not currently a problem, given the involvement of volunteers and the low visitation of the cemetery. It may, however, become a problem in the future and caregivers should be aware that increased visitation may have negative effects.</p>

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APPENDIX 1.

MICHAEL TRINKLEY

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Education/Training

1974	B.A., Anthropology, University of South Carolina, Columbia
1976	M.A., Anthropology, University of North Carolina, Chapel Hill
1980	Ph.D., Anthropology, University of North Carolina, Chapel Hill
1997	Non-Destructive Investigative Techniques for Cultural Resource Management, NPS Workshop, Fort Scott National Historic Site, Fort Scott, Kansas (geophysical techniques)
1999	Jahn Installer Workshop, Cathedral Stone Products, Inc., Jessup, Maryland (3 days) (certified installer 9906811-SC)
2001	Preservation & Care of Brownstone Buildings, Technology & Conservation Conference, Boston, Massachusetts
2003	Lime Mortar Workshop, U.S. Heritage, Chicago, Illinois
2004	Preservation Masonry Workshop, School for the Building Arts, Charleston, SC (2 days)
2005	International Lime Conference, Orlando, Florida
2005	Edison Coatings Workshop, Richmond, Virginia (1 day)
2005	Historic Masonry Preservation Workshop, John Lambert, Campbell Center for Historic Preservation Studies, Mt. Carroll, Illinois (1 week)
2005	Preservation Masonry Workshop, College for the Building Arts, Charleston, SC (2 days)
2005	Masonry Analysis & Testing Workshop, Berkowitz and Jablonski, Campbell Center for Historic Preservation Studies, Mt. Carroll, Illinois (1 week)
2005	Jahn 4-Hour Workshop, Cathedral Stone Products, Columbia, SC

- 2006 Stone Carving and Restoration Workshop, Traditional Building Skills Institute, Snow College, Ephraim, Utah (3 days)
- 2007 Integrally Colored Concrete Workshop, Ron Blank & Associates, AIA Continuing Education, Columbia, SC
- 2008 IACET Aerial Work Platforms Training; Supported Scaffold Safety Training; Cranes, Chains, Slings and Hoist Safety Training, Columbia, SC
- 2008 Georgia Urban Agriculture Council & UGA Cooperative Extension Outdoor Water Use Registration Program Certificate #P86X9G4467

Memberships

American Institute for Conservation of Historic and Artistic Works
US/ICOMOS – Brick, Masonry & Ceramics Committee
Association of Preservation Technology
Preservation Trades Network
National Trust for Historic Preservation
Association of Gravestone Studies

Abstract of Cemetery Conservation/Preservation Experience (not inclusive of legal/archaeological experience):

- 1992 Reviewer of National Trust for Historic Preservation publication on historic cemeteries publication by Lynette Strangstad.
- 1998-99 Principal Investigator, Survey and Documentation of African-American cemeteries in Petersburg, Virginia. Including mapping, grave location, and development of historic context. (with Preservation Consultants, Charleston, SC).
- 1998-99 Conservation activities, Maple Grove Cemetery, Maple Grove United Methodist Church, Waynesville, North Carolina.
- 1999 Instructor, Cemetery Preservation: Making Good Choices Workshop, Virginia Association of Museums, Petersburg, Virginia.
- 1999 Instructor, Cemetery Preservation: Making Good Choices Workshop, Georgia Local History Conference, Augusta, Georgia.
- 2000 Consultation regarding maintenance and clearing of Ricefield's Woodville Cemetery, Georgetown County, South Carolina.
- 2000 Invited Speaker, Cemetery Conservation Techniques, Historic Cemetery Preservation Workshop, Maryland Historical Trust, Annapolis, Maryland.
- 2000 Preservation assessment, Summerville Cemetery, Augusta, Georgia.
- 2001 Assessment and preservation plan for Glenwood Cemetery, Thomaston, Georgia.

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2001	Reconnaissance survey of cemeteries in Richland County, South Carolina.
2001	Preservation guidelines for St. Paul's Cemetery, Augusta, Georgia.
2001	Instructor, Cemetery Preservation: Making Good Choices Workshop, Restoration International Trade Event, New Orleans, La.
2001	Instructor, Cemetery Preservation: Making Good Choices Workshop, National Preservation Institute, Washington, D.C.
2002-2003	Conservation program, Old Waxhaws Presbyterian Cemetery, Lancaster County, South Carolina.
2003	Treatment of markers at the Vardeman Cemetery, Lincoln County, Kentucky.
2003	Consultation concerning cemetery walls and pathways, Maple Grove Cemetery, Waynesville, North Carolina.
2003	Invited Speaker, Preservation of African American Cemeteries Conference, 2003, Helena, Arkansas.
2003	Instructor, Cemetery Preservation: Making Good Choices Workshop, Washington County, Georgia Historical Society, Sandersville, Georgia.
2003	Preservation assessment, Old City Cemetery, Sandersville, Georgia
2003	Instructor, Cemetery Preservation: Making Good Choices Workshop, National Preservation Institute, Washington, D.C.
2003	Treatment of markers at Oakview and Riverside cemeteries; examination of burial vaults in white and African American sections, City of Albany, Georgia (FEMA funded).
2003	Preservation assessment, Historic Cemeteries at Five Cemeteries, Bannack State Park, Bannack, Montana
2003	Instructor, Cemetery Preservation: Making Good Choices Workshop, Bannack State Park, Bannack, Montana
2003	Consultation concerning cemetery brick wall, Midway Church, Midway, Georgia.
2004	Treatment of markers at Richardson Cemetery, Clarendon County, South Carolina.
2004	Instructor, Cemetery Preservation: Making Good Choices Workshop, National Preservation Institute, Washington, D.C.
2004	Treatment of markers at Maple Grove Cemetery, Waynesville, North Carolina.
2004	Consultation regarding State Historical Marker, Roseville Cemetery, Florence County, South Carolina.

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- 2004 Consultation regarding the Mary Musgrove Monument, Musgrove Mill State Park, Laurens County, South Carolina.
- 2004 Invited Speaker, Cemetery Preservation Workshop, SC Genealogical Society Annual Meeting, Walterboro, South Carolina.
- 2004 Treatment of markers at Wrightsboro Cemetery, Thomson, Georgia.
- 2005 Treatment of markers at Pon Pon Cemetery, Colleton County, South Carolina.
- 2005 Treatment of markers at Walnut Grove Plantation, Spartanburg County, South Carolina.
- 2005 Consultant on cemetery fence theft, Save Austin's Cemeteries, Austin, Texas.
- 2005 Treatment of markers at Richardson Cemetery (Second Phase), Clarendon County, South Carolina.
- 2005 Instructor, Cemetery Preservation: Making Good Choices Workshop, National Preservation Institute, Washington, D.C.
- 2005 Treatment of marker in Oakview Cemetery, Albany, Georgia.
- 2005 Treatment of markers at Trinity Cathedral, Columbia, SC.
- 2005 Preliminary preservation recommendations, Randolph Cemetery, Columbia, SC.
- 2005 Treatment of markers in Presbyterian Cemetery, Union, SC.
- 2005 Instructor, Cemetery Preservation: Making Good Choices Workshop, Save Oklahoma's Cemeteries, Muskogee, Oklahoma.
- 2005 Instructor, Cemetery Preservation: Making Good Choices Workshop, National Preservation Institute, Las Vegas, New Mexico.
- 2005 Treatment of marker, Reynolds Homestead, Critz, Virginia.
- 2005 Assessment and preservation plan for Lewis Cemetery, King and Queen County, Virginia. King and Queen County Historical Society.
- 2006 Treatment of markers in Presbyterian Cemetery, Union, SC (second phase).
- 2006 Assessment and preservation plan for Pine Lawn Memorial Gardens, Aiken, South Carolina. SC Department of Archives and History, Columbia.
- 2006 Assessment of Unadilla Cemetery, Unadilla, Georgia.

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- 2006 Invited Speaker, Planning a Cemetery Preservation Project, People and Places: South Carolina's Seventh Annual Statewide Historic Preservation Conference, SC Department of Archives and History, Columbia, South Carolina.
- 2006 Assessment and Preservation Plan, Memory Hill Cemetery, Milledgeville, Georgia.
- 2006 Assessment and Preservation Plan, Springwood Cemetery, City of Greenville & Friends of Springwood Cemetery, Greenville, South Carolina.
- 2006 Invited Speaker, Cemetery Rehab, South Carolina Landmark Conference, SC Department of Archives and History, Aiken, South Carolina.
- 2006 Assessment, Town of Dedham, MA cemetery, Vollmer Associates, Boston.
- 2006 Assessment and Preservation Plan, Naval Medical Cemetery Portsmouth Cemetery, Portsmouth, Virginia.
- 2006 Instructor, Cemetery Preservation: Making Good Choices Workshop, National Preservation Institute, Washington, D.C.
- 2006 Invited Speaker, Preservation Needs at Greenville's Springwood Cemetery, Greenville Chapter of SC Genealogical Society, Greenville, South Carolina.
- 2006 Preparation of landscape plan, Randolph Cemetery, Columbia, South Carolina.
- 2006 Treatment of markers in the Cason Plot, Long Creek Baptist Church, Warrenton, Georgia.
- 2006 Treatment of markers in the Watson Plot, Thomson City Cemetery, Thomson, Georgia.
- 2006 Treatment of markers at Trinity Cathedral, Columbia, South Carolina (second phase).
- 2006 Assessment and Preservation Plan, Old Athens Cemetery, University of Georgia, Athens, Georgia.
- 2006 Preparation of Treatment Plan, Terrell Tomb, Sparta, Georgia.
- 2006 Emergency conservation treatment, Settler's Cemetery, City of Charlotte, North Carolina.
- 2006-2007 Preservation Assessment and Recordation, St. Elizabeth's Cemetery, Washington, DC (for General Services Administration).
- 2006-2007 Preservation Assessment, three Raleigh Cemeteries, Raleigh, North Carolina.
- 2007 Historic research, Randolph Cemetery, Columbia, South Carolina.
- 2007 Treatment of Monuments at Laurelwood Cemetery, Rock Hill, South Carolina.
- 2007 Assessment of markers, Machpelah Cemetery, Lincoln County, North Carolina.
- 2007 Assessment of Moss Family Cemetery, Stanly County, North Carolina.

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- 2007 Treatment of Monuments at the Old Athens Cemetery, University of Georgia, Athens, Georgia.
- 2007 Treatment of markers at Trinity Cathedral, Columbia, South Carolina (third phase).
- 2007 Invited Speaker, Annual Conference of the South Carolina African American Heritage Commission, Mars Bluff, South Carolina.
- 2007 Instructor, Cemetery Preservation: Making Good Choices Workshop, National Preservation Institute, Greensboro, North Carolina.
- 2007 Treatment of markers at Machpelah Cemetery, Lincoln County, North Carolina.
- 2007 Assessment of markers, St. Johns Cemetery, Richmond, Virginia.
- 2007 Preservation Assessment, Village Cemetery, Newberry, South Carolina.
- 2007 Instructor, Cemetery Preservation: Making Good Choices Workshop, Lincolnton Historical Society, Lincolnton, North Carolina.
- 2007 Treatment of markers, Settler's Cemetery, Charlotte, North Carolina.
- 2007 Assessment of markers, Unitarian Church Cemetery, Charleston, South Carolina.
- 2007 Preparation of Conservation Scope of Work (cemetery stones), Chalmette National Cemetery, Louisiana (for Lord, Aeck & Sargent, Ann Arbor, Michigan).
- 2007 Preservation Assessment and Assessment of markers, Mann Family Cemetery, North Attleboro, Massachusetts.
- 2007 Treatment of the Pringle Vault, City Cemetery, Sandersville, Georgia.
- 2007 Assessment of the Plunk Family Cemetery, Lincolnton, North Carolina.
- 2007 Assessment of City Cemetery, South Bend, Indiana.
- 2007 Assessment of Magnolia Cemetery, Mobile, Alabama.
- 2007 Treatment of the Middleton family vault, Middleton Plantation, Dorchester County, South Carolina.
- 2007 Treatment of ledgers in family cemetery, Augusta, Georgia.
- 2007 Consultant, National Trust for Historic Preservation, Southern Field Office, Tornado damage at Oak View Cemetery, Americus, Georgia.
- 2007-2008 Treatment of markers at Richardson Cemetery, Clarendon County, South Carolina (third phase).
- 2008 Assessment of the Coleman-Leigh-Warren Family Cemetery, Augusta, Georgia.

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2008	Assessment of three city cemeteries, Thomasville, Georgia.
2008	Assessment of Cottage Cemetery, Augusta, Georgia.
2008	Assessment, South View Cemetery, Atlanta, Georgia.
2008	Treatment of Mitchem Family Cemetery stones, Clarendon County, South Carolina.
2008	Preparation of Conservation Scope of Work (brick, iron, stucco), Chalmette National Cemetery, Louisiana (for Lord, Aeck & Sargent, Ann Arbor, Michigan).
2008	Treatment of stones at Unitarian Church Cemetery, Charleston, South Carolina (first phase).
2008	Treatment of vandalized stones at Trinity Cathedral Church Cemetery, Columbia, South Carolina.
2008	Consultant, Dantzler Plantation, regarding brickwork, stucco, and rising damp, Holly Hill, South Carolina.
2008	Assessment, Christ Church Cemetery, Greenville, South Carolina.
2008	Treatment of stones at Magnolia Cemetery, Mobile, Alabama (first phase).
2008	Instructor, Cemetery Preservation: Making Good Choices Workshop, National Preservation Institute, Jacksonville, Florida.
2008	Treatment of Monuments at the Old Athens Cemetery, University of Georgia, Athens, Georgia (second phase).
2008	Treatment of Newman Swamp Methodist Church stones, Florence County, South Carolina.
2008	Treatment of Rehoboth Cemetery stone, Clarendon County, South Carolina.
2008	Penetrometer survey and mapping of Old Brick Church Cemetery, Fairfield County, South Carolina.
2008	Consultant, National Trust for Historic Preservation, Southern Field Office, Tornado damage at Oak View Cemetery, Atlanta, Georgia.
2008-2009	Assessment and preservation plan for three City of Suwanee cemeteries, Suwanee, Georgia (includes GPR and mapping in association with GEL Geophysics, Charleston, South Carolina).
2008-2009	Assessment and preservation plan for city cemetery, Jonesborough, Tennessee.
2008-2009	Conservation assessment of Orleans City Cemetery, Orleans, Massachusetts.
2009	Treatment of monuments at Settler's Cemetery, Charlotte, North Carolina.
2009	Treatment of monuments at Magnolia Cemetery, Mobile, Alabama (second phase).

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- 2009 Treatment of monuments at the Old Athens Cemetery, University of Georgia, Athens, Georgia (third phase).
- 2009 Assessment and preservation plan for St. Elizabeths Hospital, East Camus Cemetery, Washington, DC.
- 2010 Treatment of the National Cemetery Monument, Biloxi National Cemetery, Biloxi, Mississippi.
- 2010 Treatment of the Dade Pyramids and Monument, St. Augustine National Cemetery, St. Augustine, Florida.
- 2010 Treatment of the Potter Memorial, Beaufort National Cemetery, Beaufort, South Carolina.
- 2010 Assessment and preservation plan for the Old Shiloh Presbyterian Church Cemetery, Grover, North Carolina.

National Register Nominations of Cemeteries

- 1999 Preliminary Multi-Property Nomination, African American Cemeteries of Petersburg, Virginia. Submitted to Virginia Department of Historic Resources, Richmond, Virginia (with Sarah Fick, Preservation Consultants).
- 2000 National Register Nomination, King Cemetery, Charleston County, South Carolina. Submitted to South Carolina State Historic Preservation Office, SC Department of Archives and History, Columbia.
- 2002 National Register Nomination, Scanlonville or Remley Point Cemetery, Charleston County, South Carolina. Submitted to South Carolina State Historic Preservation Office, SC Department of Archives and History, Columbia.
- 2005 Preliminary Information Form – Hopkins Family Cemetery, Richland County, South Carolina. Submitted to South Carolina State Historic Preservation Office, SC Department of Archives and History, Columbia.
- 2007 Preliminary Information Form – Harts Bluff African American Cemetery, Wadmalaw Island, Charleston County, South Carolina. Submitted to South Carolina State Historic Preservation Office, SC Department of Archives and History, Columbia.
- 2009 Preliminary Information Form – Lower Cemetery, City of Columbia, Richland County, South Carolina. Submitted to South Carolina State Historic Preservation Office, SC Department of Archives and History, Columbia.

Cemetery Preservation Plans

Historical Research

**Identification of Grave Locations
and Mapping**

Condition Assessments

Treatment of Stone and Ironwork



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