PRELIMINARY

SITE EVALUATION

CHARLOTTESVILLE CITY CEMETERIES

CHARLOTTESVILLE, VIRGINIA

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Overview

Introduction

Charlottesville's city cemeteries offer today's visitors a vivid commemoration of the city's past and a reminder of simpler times. In a manner unique to Charlottesville's cemeteries, Oakwood, Daughters of Zion, Maplewood, and Pen Park offer an almanac of the social, cultural, artistic, architectural, and natural resources of Charlottesville. Unlike other documents of the area's history, these cemetery give full, dimensional testimony to the passing years. A small, nearly featureless stone recalls the life of a typical citizen, while a fine slate monument for a slate quarry owner recalls the traditional styles of headstones, footstones, and coffin-shaped ledgers. Larger, multi-stone monuments tell of the achievements of prestigious citizens, and simple enclosures bracket both families and time periods as they stand adjoining each other in a field, which has become a modern golf course. There is a wealth of culture and history in these sites, and the markers, set largely on hills, among canopies of mature trees, offer one more reminder of the rich heritage and natural beauty that is Charlottesville.

General Observations at the Site

While most markers are in good condition, many others only appear so, and still others show serious damage from natural weathering, vandalism, and improper care.

Perhaps the most common problem observed is the many markers that are leaning or loose or fallen from their bases. While some of these markers may appear to be stable, others have already fallen, putting them at further risk for damage by mowers, staining, and even theft. Those that are standing but loose pose considerable risk not only to themselves, but to visitors as well.

At Oakwood, for example, the William Carter monument is leaning badly, its top element not square to the base. It is dangerous, and prior to conservation treatment, it should be dismantled and laid down for safety. Likewise, the Gilbert Brown monument seems similarly off square relative to its base, perhaps suggesting the attempt of vandals to topple the monument.

Maplewood, and Oakwood, too, both have retaining walls that add considerably to the site visually and culturally. They are attractive, functional, and should be maintained as closely to the original as possible.

Copings offer another visual dimension to the site. Many of these are being overtaken by grass, however, and should be reclaimed.

All of the cemeteries have beautiful mature trees and other vegetation, which are both attractive and add to the sites historically. Daughters of Zion has crepe myrtles, pines, and maples, for example, while Oakwood has an abundance of cedars, along with maples, dogwoods and boxwoods. Maplewood, too, has many trees, including oaks, arbor vitae, and holly. Each enclosure at Pen Park has different vegetation, among which are boxwoods, lilacs, century plants, and perennial bulbs. The vegetation is a major feature of Charlottesville's cemeteries, and one that deserves the best of care.

Both Oakwood and Maplewood have brick maintenance buildings that are longstanding enough to be historic. While in need of some maintenance, they are attractive and functional. Like other elements at the sites, they deserve the best care that can be given them.

Identifying the Issues

Basically well-maintained, the sites nevertheless share a number of issues regarding maintenance and care, conservation, use, public education, planning, and policy.

Maintenance



The three cemeteries have some excellent examples of mature vegetation that greatly add to the beauty and cultural experience of each site.

The vegetation appears mostly healthy, but it, too, could be improved with judicious pruning and other vegetative support.

Interloper vegetation has taken hold, for example, in some of the boxwoods, noted particularly at Oakwood. This should be carefully removed without damaging the otherwise beautiful and healthy boxwoods. Other vegetation should be similarly examined for important, but relatively minor, treatment.

Some large trees require pruning of deadwood. This is a common concern at cemeteries everywhere, and one that should be given early

and careful consideration. Removing dead limbs before they fall and damage markers is less expensive in the long run than trying to have broken markers repaired after a storm. At the same time, this is a job for experts, both from a safety consideration, and also from the point of view of prudent intervention and preservation of existing trees.



As with nearly every maintained site, there is evidence of mower damage, some of it severe.

Discussions were directed, in part, towards mowing and day-to-day maintenance. The possibility of the city's adding a maintenance person arose. The difficulty the city may have in supporting such an addition to their staff was also considered. Another option offered was the possibility of a local Cemetery Friends' group becoming involved in grass maintenance.

There is also a need for additional maintenance of perimeter walls, walkways, retaining walls, copings, and ironwork.

Conservation

Chief conservation issues include a fairly large number of leaning stones, others that have fallen but with elements that have not broken, and still others that have broken stone elements. The

conservation need at Oakwood and Maplewood is serious, but not severe. Of these two cemeteries, Daughters of Zion, an African-American section of Oakwood, has particularly pressing conservation needs.

The gravemarkers at Pen Park are in serious jeopardy. The table tombs, important stylistically and because they are apparently the only ones at these three sites, are unstable and in danger of falling. Some legs may also be structurally unsound. Tablets and ledgers there, too, are broken or otherwise failing. Some of these are among the finest markers at these sites.



Table tombs at Pen Park are important structures in serious jeopardy. They require a top priority consideration.

Use

In recent years, historic cemeteries have rightly begun to be recognized as a community resource rather than, as, often in the past, a drain on community funds. The "new role" of historic cemeteries in modern life sees them as city or neighborhood parks, important historic sites, and educational opportunities.

Local citizens in Charlottesville appear to use the cemeteries primarily as parks or places of respite. Some activities noted were birdwatching (or bird counting, as in the case of the bluebird houses) and strolling, ever-popular cemetery visitors' activities.

"The Day of Caring," sponsored by the United Way, is an excellent activity to acquaint townspeople with the sites, while at the same time

providing some cleanup assistance. The county historical society's "Spirit Walk" also helps townspeople to learn to appreciate their cemeteries. Other activities might also be developed, including involvement of educational programs for schoolchildren, development of a walking tour with or without brochures, and a regular tour/activity schedule.

Role of Volunteers

Expanding uses of the cemeteries might be an activity for volunteers. Development of activities and programs for all sites is an activity to which volunteers can devote the necessary time and dedication. Developing student tours and other visitor tours might be another volunteer contribution.

Other volunteer roles may include continuing documentation and fundraising.

On-site work may include cutting back of sod growing over copings to reveal more of this both attractive and culturally important feature. Following workshops, resetting of some of the whole and less complicated markers is also a possible volunteer activity.

Establishment of a "Friends of the Cemeteries" group would give stature and stability to volunteers, allowing them to be most effective.

City Involvement

The City of Charlottesville is lucky to have a concerned and dedicated city staff who are interested both in the well-being of these important historic sites and also in the needs of its citizens as relating to the cemeteries.

City staff are willing to work with the citizenry of Charlottesville to develop plans and policies that represent the best interests and care for the city's cemeteries. However, like most cities, the City does not have current funding available for all the preservation/restoration efforts that would benefit the cemeteries. Here enters the friends' group, which could lead fundraising efforts, perhaps for one project at a time, as well as offer a work

source for many of the activities that would benefit the sites. Working together with volunteers, the city could accomplish much in the preservation of its historic cemeteries.

Achieving Equity

Another issue brought forward at the November meeting of the city and interested citizens was that of equity between white sections of the cemetery and African-American sections established during the time of segregation. The most obvious differences are the wall at Oakwood that ends near the beginning of African-American burials, and the lack of vegetation in the African-American section. Despite the fact that the interest here is in preservation, this is an area where some change may be appropriate to address this issue.

In addition, conservation is sorely needed at the Daughters of Zion section of Oakwood. While this may be the result of vandalism or tree damage, it at least suggests the possibility of neglect.



Markers at Daughters of Zion are in need of early attention.

Another area of achieving equity is the inclusion of newly-identified slave graves outside Pen Park. These should be documented and included within the Pen Park site.



Newly identified slave graves at Pen Park appear as depressions in the grass cover.

Planning

A major need at the sites is the development of a comprehensive plan, which is essential for the protection and preservation of all sites. A plan addresses maintenance, conservation, landscape preservation, public use, public education, working with volunteers, and other areas of concern at all three sites. It is needed to understand the sites as they were, identify what is present now, and determine how to proceed well into the future.

Oakwood Expansion

Another issue at the city's cemeteries is the need for a place for new burials. Most of the burial sites at the city's historic cemeteries are taken. Even if there are a few remaining available spaces, adding new graves to historic sites can be problematic. Sometimes early records failed to record burials, so an apparently open space may contain early graves. In addition, adding new graves in otherwise early sections of a cemetery requires some control of the new marker types, in order that they be compatible with the surrounding area. Introducing new styles of markers in historic sections is both visually jarring and also affects the historic integrity of the site.



Regulations to prevent the introduction of new marker styles into historic areas protect the site historically.

With these considerations in mind, it becomes apparent that additional burial spaces are needed. The city owns property adjacent to Oakwood, but it is infill that may not be appropriate for burials.

Options for this property include adding fill to make it appropriate for burials, creating a scatter garden for cremains, and adding a public mausoleum on the improved property.

Establishing Preservation Status

Discussions included the possibility of placing the historic cemeteries on the city's register of historic sites. At a meeting held with citizens to discuss cemetery issues, there appeared to be two divergent views regarding historic designation. On the one hand, it appeared some people favored historic designation, perhaps in the hope of more easily obtaining city interest and funds. On the other hand, some also wanted the freedom to change the cemetery as they saw fit.

Of course, one of the purposes of historic designation is to protect the historic nature and integrity of the sites designated. Thus, change is considered very carefully and undertaken most prudently, and only within the context of the designation restrictions.

Policy

Existing city ordinance regarding cemeteries appears to date to 1939. The cemeteries would

benefit from its being updated and, in some areas, strengthened. Additional policy concerns might also be addressed, either as ordinance or simply city policy, to govern such areas as visitor activities and plot maintenance by families.

Maintenance Guidelines

Landscape Maintenance

General Maintenance Considerations Day-to-day, periodic, and long-term maintenance are essential components of a long-term plan to ensure the continued preservation of cemetery grounds. While much maintenance can be carried out on a regular basis by groundskeeping personnel, the responsibility for policy, planning, and oversight remains the concern of Charlottesville's Parks and Grounds Division.

Day-to-day considerations include use of nylon filament weed cutters around stones (rather than mowers, which cause serious damage); protection and care of existing perennial vegetation at gravesites; avoidance of herbicides and fertilizers, since both can damage stones and other markers; and removal of vines and other foliage from markers.

Other concerns include filling in of sinkholes, which can be dangerous. However, grave depressions—in some cases the only remaining indication of a grave—should remain. Therefore, as part of an overall plan, a map of sinkholes to be filled should be made to ensure that all parties know which areas to fill.

Maintenance Schedule A well-planned maintenance schedule will include removal of new scrub growth (notably in some of the boxwoods), and a schedule for removal and pruning of deadwood. It will also include a schedule for treatment of trees and other

plantings in need of special attention. It may include expansion of existing groundcovers beyond where they are found now, both to protect stones and to simplify maintenance. Recommendations, too, to ensure the long life of existing plantings are a part of maintenance care. Such schedules and recommendations can be made within the context of a master preservation plan.

→ → → --→ Daily/weekly grounds maintenance activities can be undertaken by regular maintenance personnel. Recommendations include the following:

1. Use only nylon filament weedcutter around stones, fences, and other markers. Hand clip or weed around particularly vulnerable stones. Do not use mowers except in open areas. Do not use mowers that are too large for the controlled spaces they must mow.

2. Avoid using biocides for control of weeds, as nearly all are damaging to markers, as well as being unsightly when used around stones. (An exception here is for initial control of dangerous plants such as poison ivy, when plants are treated individually rather than through general spraying.)

3. Avoid using fertilizers on a regular basis, since these are damaging to markers.

4. Protect and nurture existing trees, perennial shrubs, bulbs, groundcovers, and other plantings. Most have historic origin. Long-term programs are based on the grounds maintenance and management plan developed as a part of the landscape preservation plan.

Mowing In cemetery care, mowing frequently becomes a goal in itself due to a lack of understanding of the site being addressed. City and parks maintenance crews, trained in turf management and often instructed to work quickly, must change focus when they enter the

graveyard, where priorities include protecting the markers from mower damage, from herbicide and fertilizer damage, and protecting the historic site from unwarranted change.

Standards for care of historic cemeteries are not the same as for simple turf management or the manicured residential lawn care of the 21st century. Historically, cemeteries were occasionally tended by families, or, at very early sites, grazed by sheep or goats. These options still are as valid as contemporary commercial mowing methods.

The primary concern in landscape maintenance of a cemetery is the preservation of the graveyard, the entire physical site. These are sites where the markers and vegetation are more significant than the grass cover. Unlike most city parks, grass is not paramount.

This means great care and additional time must be exercised in mowing. The layout is such that in much of the site only hand mowers are appropriate. Mowers should never touch any stone, and nylon filament weedcutters should be used only around stones in good condition. If stones are unstable--delaminating, flaking, or otherwise delicate--clipping around them should be done by hand. ← ← ←-

Terrain Maintenance An historic burial ground has terrain maintenance requirements not found in usual park or lawn maintenance. It is advisable to fill in sink holes or holes left by the removal of diseased trees. However, those shallow depressions that are actually grave depressions are important to the history and documentation of the yard and should be retained. In some cases they are the only evidence of an otherwise unmarked grave. Since no burial in the cemetery may be considered unimportant, information regarding each must be preserved, and caution must be taken before altering any aspect of the terrain.

Vegetation as Plot Markers Vegetation that serves to mark plots often goes unrecognized. However, plants were commonly used to mark the corners or outlines of graves or plots. ← ←

Historic plantings are an integral part of the yard and should be retained, especially since vegetation may mark graves just as a gravestone does.

Paths, Aisles, and Open Areas Charlottesville's cemeteries have aisles and open areas largely intact. These actively create the character of the cemeteries, and since these are often elements of longstanding, they also represent the cemetery historically.



Open areas define the cemetery layout just as areas with many markers do.

To preserve the sites historically, it is essential to preserve paths, aisles, and open areas. To alter any historic space is to alter the entire cemetery.

Identifying Spring Plantings Mowing can once again be a culprit in reducing historic plantings. Keeping grass mown short from early spring throughout the growing season does not allow early-surfacing spring bulbs and groundcovers to grow and bloom. As part of the larger plan, it is sound to delay mowing early in the year, allowing spring growth to emerge to where it can be easily identified and inventoried. It is quite likely that many spring perennials and wildflowers will emerge that haven't been noticed in recent years.

Part of the current documentation work being done in all the cemeteries should include inventorying of spring bulbs and perennials.

Ideally, this is done using existing maps, with vegetation noted in each plot. Under the direction of a volunteer coordinator and an experienced gardener or landscaper, with the occasional help from a plant historian, this is an effective volunteer activity.

Intrusive Vegetation Gravesites can be disrupted either by vegetation growing out of control or by its spreading root systems. Sometimes it is preferable to move monuments slightly (and document the change) to accommodate significant trees and other plantings. In other cases, recent "volunteer" trees can be identified in a survey for removal in order to protect markers. The determination is made by evaluating the historic significance of both vegetation and markers, the degree of intrusion of one upon the other, the degree of difficulty, and the degree of damage that may be done in altering either.

Of course, any nuisance plants, such as smilax, poison ivy, or fast-growing wild vines should always be removed.

Recent scrub vegetation that threatens stones or historic vegetation should be removed to avoid damage to stones or historic vegetation. Great care should be taken, however, not to remove early varieties that may once have been planted as memorials. Sometimes these illustrate the plant lore of the 1800s, when plantings symbolically represented the bereaved's attitude toward death or the deceased. At one time, for example, roses suggested love, and snowdrops, hope. Sometimes a judgment call is required, such as whether to remove shrubbery that is keeping a stone moist and encouraging lichen growth, or whether to leave it since it is clearly an historic element of the cemetery.

There are cases in which vegetation should be retained, even if it interferes with one or more stones, as long as the condition is closely monitored. Trimming shrubs periodically keeps growth away from markers. Untended, they will obscure markers, keep them damp, and encourage deterioration.

Ivy was noted, particularly at Daughters of Zion. It is a good groundcover, thrives in shade, and is hardy. It is traditional in burial grounds and is appropriate. However, it is important that it be trimmed back from markers and brick walls, where it is also found, as it can keep brick, stone, and iron damp, accelerating their deterioration. In addition, ivy actually feeds on the lime in calcium carbonate stones and in mortar, degrading stones and walls even further.

New Plantings The addition of new plantings to an historic site is acceptable only after careful consideration as to whether such plantings are appropriate to the nineteenth-century character of each site. The addition of new plantings alters the site historically and can eventually uproot markers and other features of the yard. Even newly added plantings should be of species and varieties that are already found in the yard or, at least, were found in the area residentially at the time of nearby burials. New plantings are added only after appropriate plants and locations have been identified in the master preservation plan.

Chemical Landscape Maintenance Avoid chemicals in maintaining cemeteries, since both herbicides and fertilizers contain either acids or salts that are damaging to metals and early stone material. Herbicides can be used to kill poison ivy or other noxious weeds, but not as part of routine maintenance. They are best used when applied directly to each leaf to kill an individual plant rather than sprayed broadly. Similarly, pesticides can be used in extreme cases of infestation but should be used neither indiscriminately nor regularly.

Marker Maintenance

Ongoing marker maintenance is another aspect of general maintenance. Periodic inspections will reveal damage or vandalism. Such incidents should be recorded as they occur. All vandalism should be reported to police and a damage amount determined by combining artistic and historical value and the cost of professional stone conservation and repair.

→ → One of the best forms of marker maintenance and preservation, as noted earlier, is

the use of judicious mowing practices. Since mowing can be so damaging, taking great care in mowing and trimming may be the single most important effort in maintaining sound markers.

Other maintenance efforts include keeping markers free from debris and leaves, since these hold moisture and hasten deterioration.

Trimming shrubs periodically keeps growth away from markers. Untended, they will obscure markers, keep them damp, and encourage deterioration. Few shrubs in Charlottesville's cemeteries were noted as being overgrown and causing damage to markers. Still, this is an area that should be monitored regularly.

When mosses and lichens have been identified as deleterious to particular markers, their removal is another activity that can retard marker deterioration. Lichens can be removed either during a dry period when they will detach easily with a soft, dry brush, or during a damp period when they can be gently sprayed with water and removed with a soft, moistened brush. Generally, this is a sufficient treatment. Harsh scrubbing is to be avoided, as it can cause more harm than good.

Metalwork Maintenance

Maintaining existing ironwork may be limited to keeping debris free from bottom rails, posts, and footings to reduce moisture buildup. Occasional oiling of gates may also be warranted.

Coatings are generally applied to maintain ironwork. There are many good iron coatings currently available, and research and professional consultation will help to choose the most appropriate one for a given site.

One type of coating that preserves existing iron and is relatively easy to apply is a rust converter. These coatings react chemically with iron oxide, allowing minimal preparation time. When sound ironwork is cleaned and primed, iron surfaces are first freed of oils and grease, salts, dirt, and loose rust deposits, and the surface is allowed to dry. These primers may then be applied directly to rusted surfaces without sandblasting or extensive

sanding. Elimination or reduction of the sanding step is cost-effective, since time is saved.

It may also be sound as a preservation policy, since as much as possible of the deteriorating iron is retained and re-adhered to the sound surface.

Nevertheless, new products are coming into the market frequently, and options should be carefully researched.

The question of whether or not to paint the ironwork, and what color, can be answered through careful historical research and onsite examination of early paint layers to determine what colors various structures may have been painted following their construction.

Conservation Guidelines

Stone Marker Conservation

Fragment Storage Loose or fragmented stones are particularly vulnerable to theft, vandalism, and further deterioration. Repairing them as quickly as possible is the most effective way to protect them, but, in many cases, fragments can be provided temporary storage prior to repair to prevent further damage.

Ideally, fragmented stones should be identified, catalogued, and stored in a safe, dry storage facility until they can be repaired. In fact, however, such a facility is not often available. In such cases, most fragments can be stored temporarily on site, preferably by placing them on a wooden pallet to keep them off the ground and erecting a canvas cover over them to keep them relatively dry. Canvas is preferred over plastic, since it allows passage of water vapor, which is essential to the well-being of the stone.



Fragments are at risk for theft, loss, or further damage.

Occasionally, a fragment may be offered some

protection simply by turning it face down at its existing location. This is less satisfactory than other methods, but it does keep water from settling into depressions in the carving, which can cause rapid deterioration. In such cases, however, great care must be taken to assure that the stone rests flat on the ground to prevent further breakage if someone should step on it and also to protect it from mower damage.

Probing Additional fragments or entire stones may be found by probing open areas or areas lacking either headstones or footstones. A tapered iron rod is useful in finding such buried stones. Missing elements of stones and structures are often found in this manner. Once discovered and carefully removed from the soil, they can be catalogued and treated as other fragments or stones in need of resetting.

Resetting Stone resetting is a primary need at all of Charlottesville's historic city cemeteries.



Leaning stones are at significant risk of falling and breaking.

Some markers are of the tab/slot (or mortise/tenon) type in which a tablet with a tabbed end sets into a slotted above-ground base. When the tablet and base elements are intact, the tablets can be replaced directly into the base, using a small amount of a fine, wet mortar mix.

(A 1:4:8 formula [1 part white portland cement, 4 parts hydrated lime, 8 parts fine, white graded

sand] is a soft mix and will not damage stone elements.) The stones can then be checked to be sure they are level and plumb, shimmed and supported as necessary until the mortar sets up, and cleaned up as appropriate, removing any mortar on exterior stone surfaces.

Other stones, which may have sunk to the point of having inscriptions obscured or are leaning at a precarious angle, may require resetting directly into the ground. These stones, described as tilted or sinking in a conditions assessment, are generally among the earliest of stones. No mortar is used in such resetting; rather, once the stone has been carefully removed from the ground and the hole dug to the appropriate depth, a layer of clean pea gravel is put down to facilitate drainage. Once the stone is back in place, it can be secured with brickbats and additional pea gravel, then filled in with sand to facilitate drainage. Finally, topsoil is added, wet tamping as the layers are built up. Throughout this process the stone must be repeatedly checked for level and plumb in order to allow both for stability and aesthetic proportion.

Staff or volunteers can often accomplish resetting, preferably following a hands-on training workshop.

Resetting of monuments is often a more complicated procedure than resetting of tabletstones. However, the same principles apply. The monument should rest on a concrete footing, which is level and ideally extends below the frost line. In practice, however, this footing is often less deep than the frost line. Keep in mind that the existing footing may have lasted over a hundred years. On the other hand, if it is shallow, it might also be the cause of the monument failing.

Bases are then set on the below-grade footing, with the first stone base generally set in mortar on the footing about two inches into the ground. Each of the following stacked elements in a monument are set with a single pin in the middle extending from one stone element into the next. Pins are set in adhesive, while stone elements are joined with mortar. Pins provide a mechanical bond, in addition to the weaker chemical bond

found in the mortar joining the two pieces. Marble elements are joined with a white mortar, generally a 1:2:6 mortar mix (1 part white portland, 2 parts hydrated lime, 6 parts clean, dry sand). Great care is taken to ensure safety, as well as to be certain elements are perfectly centered or aligned.

The larger and higher a monument reaches, the greater the difficulty in moving stone pieces and the greater the risk of injury. Staff or trained volunteers might reset some small monuments with existing pins, but larger monuments should be left to professional care.



Although plumb, this monument is seriously in need of resetting.

Cleaning Cleaning may be one of the most over-used conservation techniques in cemetery care. It is time-consuming and therefore costly, and even careful cleaning will remove some particles of stone material. Repeated, it quickly accelerates deterioration. And, given our polluted environment, it is not a long-lasting treatment. Cleaning simply for the sake of appearances is often ill advised.

While it is appropriate to remove substances that are causing harm to the markers, this is best determined by a conservator. Conservators

generally clean markers they are treating prior to treatment, in order to assure that the adhesive or other treatment will hold and will match the cleaned stone rather than the soiled stone.

Cleaning may also be indicated for sound stones obscured by soiling or being damaged by the soiling agent.

Before any cleaning is attempted, it is important to determine what soiling agents are affecting the stone. Lichens, algae, fungi, vines, and other biological growth all can damage the surface of the stone both by keeping the stone damp and also by creating an acidic surface atmosphere, actually etching the face of the stone.

Such problems are most common to marbles and limestones, which deteriorate quickly under acidic conditions. Least vulnerable are highly polished granites, which are left largely undamaged by atmospheric acids and biological growth.

Removal of additional organic soiling agents may be beneficial as well, particularly if the effect is to clean the surface to facilitate water drainage, thus encouraging rapid runoff of acidic rains.

Cleaning is not a top priority at these sites. Because of the damage that can be done, if cleaning is to take place, conservators experienced in historic gravestone cleaning are the best choice to undertake the work. Alternatively, volunteers under the direction of conservators in a training workshop might also be utilized.

If cleaning is to be attempted, particularly without the benefit of a conservator, the following guidelines are helpful.

“Least is most” may be the rule of thumb most applicable to cleaning. Cleaning with filtered water only may be sufficient.

In some cases, extended application of low pressure water--as, a sprinkler hose placed atop one side of a stone tomb or marker for several hours--may be the most efficient cleaning

method.

In other cases, water from a hand-held hose with a wide-spray nozzle, followed by hand scrubbing with a soft-bristled brush, may be appropriate. High-pressure cleaning methods will damage most stones, which are far too fragile to survive such treatment. Appropriate hose pressure does not exceed 90 p.s.i.

If necessary, these procedures may be followed: while the stone is saturated with clean water, clean with a plain household ammonia and water solution (1 part ammonia to 4 parts water). This must then be followed with a thorough rinsing with clear water. Other cleaning agents may be determined on-site as appropriate for a given stone. Household bleach, or sodium hypochlorite, is not recommended for cleaning marble or limestone.

In all cases, some familiarity with appropriate cleaning methods for a given marker is essential. For example, cleaning a brick structure with a soft lime mortar by running water on it for six hours could easily cause the entire structure to fail. Similarly, scrubbing an unstable stone can cause irreparable damage.

Commercial stone cleaning methods are generally not appropriate for use in historic burial grounds. In no case should sandblasting, stone refinishing, grinding, or polishing, or high-pressure chemical or water washing be used at these sites. Commercial cleaning agents should be used only under the direction of a stone conservator.

Coatings Coatings are not recommended at this time. Many coatings designed for stonework are actually detrimental to stone, causing staining problems, or, worse, efflorescence and/or spalling. Other coatings, particularly those that are water vapor permeable, are being tested and may well be appropriate for gravestone use. Nevertheless, substantial field-testing remains to be completed on such products, and they can be recommended only on an experimental basis in which a stone conservator closely monitors a single, or perhaps a few, stones.

Mechanical Repair Treatment of individual gravestones often falls into the category of rejoining fragmented pieces. Only skilled technicians familiar with the repair of early stonework should undertake such work. The repair of early stones is quite different from new stonework, much in the same way that restoration brickwork has different requirements than new construction. Only appropriate materials, techniques, and experienced artisans will ensure satisfactory treatment. Too often this work is undertaken by those with limited skills or limited knowledge of stone conservation materials and techniques. It is important to remember that no two stones are quite alike, and unforeseen problems may occur at any juncture.



Broken tabletstones are best treated by experienced conservators and trained stonework technicians.

In most cases gravestones are fragile and/or brittle and their repair is delicate work. Even slight jarring or slight contact with other pieces of stone can easily result in additional fragmentation, breaking of edges, and loss of additional stone material.

Fragmented stones are repaired by drilling and pinning, carefully aligning corresponding elements. Threaded nylon rod, stainless steel rod, or fiberglass rod may be appropriate pin materials for a given stone. Epoxies formulated for marble and similar stone types are appropriate for this

type of repair. Diameters and lengths of pins vary with the individual application, depending on the nature of the break and the thickness of the stone.



Monuments consisting of a number of stone elements are repaired in much the same way as tabletstones, using appropriate drilling and pinning methods.

Composite Stone Repair Voids are filled with a natural cementitious composite stone material resembling the original stone as closely as possible in color, texture, and strength. Such a material typically consists of lime, cement, and stone dust from the stone being repaired. Some commercially available patching materials are also available. While some of these are excellent for the work, choices must be carefully examined, as many are inappropriate for this application.

In the cases of larger voids, a nylon or stainless steel armature (depending on application) may be added for structural stability.

Decorative Elements Decorative elements may be replaced either by recarving elements in new similar stone, casting elements in a composite material, or hand sculpting elements in place using a composite material. In many cases it is not feasible to replace decorative elements due to the high cost of such work. "Preservation" work seeks only to preserve what remains. "Restoration" may include reproduction of missing decorative elements. However, decorative elements that are also structural are

replaced in preservation efforts in order to further the longevity of the stonework.

Brickwork Conservation

Brickwork at Charlottesville's city cemeteries largely consists of retaining walls and copings, Maplewood's perimeter wall, and the plot

enclosure at Pen Park. Preservation of historic brickwork by skilled practitioners with previous experience in restoration brickwork and an adequate understanding of the historic materials and structures will duplicate the original structure as closely as possible.

If brickwork is to remain an attractive and historically viable feature of a site, it must be retained as closely as possible to the manner in which it was originally built, including brick size, color, style, texture, and hardness; mortar color and strength; and course, height, bond pattern, and capstone material.

When repairing enclosure or retaining walls around plots (the wall in front of the Fry family plot and the wall near the Payne stone at Maplewood were noted as being in need of attention), taking photographs before work begins documents the site and becomes a part of the historical record. Photos are an invaluable tool in reconstruction. Even more than diagrams, they accurately represent the structure and its condition before the necessary dismantling takes place. Final photographs taken once the restoration work is finished will complete the record.

Restoration artisans note such elements as brick bond, number of brick courses in the structure, type of mortar joint, width of mortar joint, and arch construction details. As the structures are being dismantled, additional interior details are noted as well, particularly if they are unusual for a given type of structure.

Diagrams are another essential tool, and drawing a brick-by-brick sketch of the work may be required in some cases to ensure accuracy. Reproducing small details such as matching brick, matching mortar details, and consistent and appropriate brick bond can preserve the integrity while assuring that the reconstructed structure will also be visually acceptable. Such small details are vital historical clues which help to identify individual structures and give information regarding the history of the graveyard overall.

Cleaning Historic brick structures are considered fragile and should be cleaned accordingly. In most cases a light water wash with a low pressure hose (not more than 90 p.s.i.) is sufficient to clean structures. Sometimes this may be augmented with hand scrubbing with tampico or plastic-bristled brushes.

Cleaning of individual bricks salvaged for reuse in construction is done by hand, first soaking the bricks in water, then carefully removing mortar with nylon or tampico brushes and sharp chisels when necessary. Use of acid is inappropriate to this cleaning process, for while it will dissolve the early mortar, it may also cause serious damage to early brick.

Reconstruction Dismantle each structure until the remaining structure is sound. If foundations are nonexistent, out of plumb, or seriously deteriorated, the reconstruction may have to start with rebuilding the foundation.

In some cases damaged or deteriorated brick may be reused by simply turning the brick around, exposing the face that had been facing the interior. When additional brick must be used, carefully match the original in size, color, texture, and strength. Salvage bricks may work well, or custom-ordered replacement bricks may also provide suitable brick.

Mortars In addition to using appropriate brick, it is equally important to use appropriate mortars for early structures, matching the original in color, texture, and strength. The strength of the mortar is of great importance, since early bricks tend to be particularly soft, and mortar which is harder than the brick can cause considerable damage to the brick, particularly in the course of may freeze/thaw cycles. In such cases, one element may expand more rapidly than another, and it is the softer element, which will give way. Thus, if the brick is softer, the brick will deteriorate while the mortar stays intact. Clearly, if one is to be sacrificed, it should be the mortar. Mortar can be readily replaced in the usual tuckpointing operation that constitutes much of masonry maintenance.

If the original mortar joint cannot be determined, a good rule of thumb is to use a slightly recessed joint, exposing all edges of the exterior brick face. In this way the edges of the early bricks are outlined (which is common in existing early brick structures) and the all-too-common error of mortar left on the face of the brick is avoided. Even if the structure is to be stuccoed, such a recessed joint allows for a good mechanical bond between stucco and brick.

In many cases, early lime mortars are nearly white. Starting with white portland cement generally assures the possibility of matching early mortars. In addition, local sands were generally used, so finding and using a matching local sand is an important step in matching mortar color and texture. Some mortars, however, may appear darker, and may require addition of mortar colors to match existing mortar.

Sometimes components such as ground oyster shell or horsehair are found in early mortars, and since these may alter color and texture as well as the strength of the mortar, they are important components of the mortar when they are present.

Ideally, a mortar analysis is used to reveal the components of the mortar, including aggregate size and type. In the absence of such an analysis, a good rule of thumb to use in rebuilding early brickwork is to use a 1:4:8 mortar mix (1 part white portland, 4 parts masons' lime, and 8 parts aggregate).

Even if an analysis is not done, care must be taken to select an appropriate sand that matches the original as closely as possible in color, texture (some sand grains have rounded edges; other are sharper), and size. A poorly chosen sand can make the difference between a successful and unsuccessful repointing or reconstruction project. In many cases, a fine sand or a lime putty is needed to reproduce the fine, narrow joints often found in early work.

Stone Walls

Repair and reconstruction of the stone enclosure wall of the Craven plot at Pen Park is a high

priority consideration.



This attractive dry-laid stone wall is in serious failure at a number of places.

Rebuilding it requires the very specific skills of a dry-laid stone wall mason. Many considerations are similar to those for brick, such as carefully observing the structure in order to build a reconstructed wall faithful to the original. For the most part, the stones from the original are available on site. If more stones are needed, they should be local fieldstones in sizes and appearance similar to the existing wall.

An experienced dry-laid stone wall mason can reconstruct a wall without using mortars. In some cases, addition of mortar can actually destabilize the wall. However, this skill is a nearly lost art, and selection of this artisan must be a carefully researched choice.

Oakwood's perimeter wall, a native stone construction, appeared to be largely in good condition, with evidence of previous maintenance. Following an assessment, any additional work should be completed within the context of a comprehensive plan, and undertaken by skilled practitioners, like other cemetery wall work.

Metalwork Conservation

Ironwork Every effort should be made to retain all existing ironwork with sound, established preservation principles forming the basis of all ironwork repair or replacement. Only ironworkers experienced in restoration of historic wrought and cast iron are recommended for this work. The ironwork generally requires surface cleaning, rust removal, and repainting or coating.

While the ironwork is in generally good condition overall, several fences are seriously deteriorated, in need of straightening of elements, realignment, rejoining of segments, coping repair, and possible reconstruction of missing elements. Some fencing is loose and unsupported where adjacent posts or sections are missing.



Treatment of this iron fence is part of a metalwork conservation project.

When joints requiring mechanical fasteners to reconnect separate pieces have become disconnected, the work may be relatively straightforward. If sections have rusted apart away from the joints, they may need welding. Posts that have rusted away at ground level may have problems with footings. Some could need recasting. When iron fences are repaired or reset, care should be taken to make sure that foundations or copings are historically and structurally appropriate.

However, like stonework, previous inappropriate repairs, such as welding together joints that originally were mechanically fastened, seriously complicate the work. Only a skilled ironworker familiar with early techniques and materials and experienced in the repair of historic ironwork

should undertake the removal of old repairs and application of correct ones.

When existing ironwork in structures such as fences is incomplete, an acceptable preservation solution is to repair and maintain the remaining work rather than add historically incorrect substitutes. If replacement is desired, salvaging matching segments is preferred over recasting. Replication remains an option in those cases where it is warranted, but it is often not

recommended due to its high cost.

Neither is it recommended as an attempt to recreate a fence that has been entirely lost. Often, the information available regarding the design of the original fence is sketchy, unreliable, and insufficient to create a true replication.

The cast iron enclosure fence next to the John Neilson marker in Maplewood is being threatened by a large tree. When an ironwork conservation project is undertaken, a section of this fence could be removed, catalogued, and stored in order to allow the tree to grow undisturbed. In this manner, the mature tree, an historic feature of the site as much as is the fence, is unaffected by the fence. The plot is enclosed, at least visually, even with the missing fence segment. Then, when the tree eventually dies, the fence can be restored.

A complete ironwork assessment of the fence in the Daughters of Zion section of Oakwood should be undertaken. It will determine how much of the original fence remains and how much may be missing. It will determine what the condition of the remaining fence is; what type of joinery was originally used; what repairs have taken place; how true they were to the original construction; what the condition of the footings is; and what the recommended repair techniques are. It will also determine what an estimated cost of repair may be.

This is a typical approach to an ironwork conservation project and is recommended as part of an overall ironwork project.



The large fence at Daughters of Zion is in severe disrepair.

Ideally, a detailed assessment should be made for all ironwork elements, prioritizing ironwork concerns as to urgency, extent of work needed, complexity of work, historical and artistic significance, safety, and cost. Only ironworkers

experienced in historic ironwork conservation should be considered for the work. Many ironwork repair people repair without an assessment and work primarily by welding, which may or may not be an appropriate technique for the repairs needed to these fences.

White Bronze There are a few white bronze markers at Maplewood and Oakwood Cemeteries. The Sarah and Maggie Norris markers at Maplewood are good examples. White bronze is the trade name for a material, almost pure zinc, which was popular around the turn of the twentieth century. It is a stable material generally, but when it needs repair, it requires the services of an expert. It is a material with very specific repair characteristics, which should be repaired only by specifically skilled workers. An appropriate metalwork expert is listed in the Appendices. The white bronze markers at the Charlottesville city cemeteries are in overall good condition. Any white bronze treatment should be in accordance with the comprehensive plan, undertaken by a qualified white bronze technician or conservator.

Preliminary Recommendations

Guidelines for Comprehensive Plan Development

A master plan designed to preserve the historic integrity of the site, to protect it from unwarranted change, and to ensure knowledgeable stewardship is essential for the continued care of Maplewood, Oakwood, Daughters of Zion, and Pen Park Cemeteries. Such a plan should emphasize the need for continued research, appropriate and thoroughly documented conservation, guidelines for routine maintenance, landscape preservation planning, and regulations governing site management.

A complete plan will also address funding, security, visitation, educational concerns, vandalism, and theft. A good plan addresses both immediate, short-term considerations, such as pruning of shrubs and emergency stabilization, and long-term goals, such as continuing research and stone conservation. It is a tool that enables current stewards of the site to develop an ongoing plan of action rather than to react to short-term needs. In addition, it will enable future caretakers the opportunity to provide continuity of care.

Careful consideration of all the needs of the cemetery before beginning any work will ensure that hastily made or poorly informed decisions do not result in work that damages the cemetery. It will also save money and time and prevent the unnecessary delays caused by work done out of

sequence which must then be repeated.

Research and Documentation These are essential first steps in planning for preservation of any historic site. They are required for site preservation, for the historical record, for future maintenance and management considerations, and for planning conservation work. Without knowing what has gone before, it is difficult, if not impossible, to determine what is to follow. That is, landscape patterns, paths and walkways, location of unmarked burials, determination of what vegetation is significant and what may appropriately be added or removed, as well as determining proper placement and accurate reconstruction of markers all may be dependent upon thorough researching and documentation of the site.

All aspects of the cemetery, no matter how seemingly insignificant, are of crucial importance to a research effort. For example, grave depressions or vegetation planted as memorials may be the only surviving evidence of a burial. Research may identify the burial and indicate an approximate location, while a grave depression or mature planting may be the only surviving physical evidence at the site. Similarly, a surviving footstone, for which the headstone has been lost, may prove to be the only physical proof of a burial discovered through research.

Essential components in the preparation of the plan include maps, surveys, and evaluations.

Mapping Ideally, a useful map consists of the map itself, a numbering system to locate individual markers, and a corresponding alphabetical listing of deceased by last name and death date. Maps of each section, indicating markers by style and outlining various enclosure types, are desirable. Computerization is also strongly desired, to keep the cemetery current with modern technology and to allow easy access and additional entries when necessary.

Since mapping of all features may well result in a map too cluttered to be useful, another way of designating features and landscaping is the use of overlays. Overlays can effectively indicate

unmarked but known burials, grave depressions, and location of known markers that have since disappeared, as well as other features of the yard such as ironwork, copings, trees, and shrubs. Various features available on separate overlays give easiest access to the type of feature under consideration, while also allowing the possibility of identifying that feature in relation to the other elements of the cemetery.



A good map can identify tablets, monuments, retaining walls, and vegetation.

Comprehensive Cemetery Marker Survey and Accompanying Conditions Assessment These important planning elements identify and catalog each individual marker in the cemetery and describe the condition of each. They provide the basis for much of the work that is to follow. This work has been begun by volunteers in Maplewood cemetery and should be completed for all three cemeteries within the context of the comprehensive plan. (A sample inventory sheet is found in the appendices.)

Photographic Marker Survey Photos of each marker and other feature are part of the comprehensive marker survey. (Polaroids attached to survey sheets fade quickly, making them a poor choice for archival storage. A better choice is black-and white photography.) Generally, one black-and white photo is sufficient. In cases of markers with multiple carved surfaces, extensive detail, or extensive

deterioration problems, several photos may be required. These surveys are necessary for the historical record, for future maintenance and management, and for planning conservation work. They are invaluable in case of theft or loss, and can greatly assist the conservation process as well. Sometimes a local college or university, freelance photographer, or capable volunteer will assist with this effort.

Photographic Survey of Plantings A photographic survey of existing plantings, separate from the photographic survey of markers, is an important part of the historical record. It identifies plantings at individual plots and also gives an overview of vegetation at the site through a series of panoramic shots. Just as historical photographs from the 1800s or 1900s are invaluable today in understanding the site and its conditions at that time, so careful photo documentation of current vegetative conditions will be invaluable to researchers of the site in another hundred years.

Preliminary Conditions Assessment This, or the preliminary site evaluation, addresses in a general manner existing documentation, maintenance and conservation problems found at the site, as well as additional problems or concerns at the site. While its findings are general and preliminary, they nevertheless provide an accurate reflection of the types of work most seriously needed at the sites.

Metalwork Survey Both ironwork and white bronze characterize the metalwork in Charlottesville's city cemeteries. They should be catalogued in a separate survey in which each enclosure or marker is identified by location, plot name, number, death dates of family members, description of motifs, and detailed itemization of conditions. The conditions aspect of the survey should include information regarding original joinery methods. This survey is of particular importance in developing a metalwork conservation plan. A surveyor experienced in historic metalwork or architectural conservation may be the best choice for this task. A sample ironwork survey form can be found in the appendices.

Historical and Cultural Resources Evaluation
This document is a necessary part of the comprehensive plan. It reflects not only the social history of the community as it is revealed through the cemetery, but also identifies significant forms, materials, and features and their relationship to the whole of the cemetery and the region. Established trade patterns, cultural concerns of immigrants and settlers, and ethnic burial traditions may be among the findings of this evaluation. It augments the historical record and is used for determining priorities and establishing historical authenticity for all conservation work. Often, apparently insignificant small elements in a yard are given new meaning and significance after a thorough cultural analysis has been completed. The entire site is enhanced by such evaluation, which gives shading and nuance to sometimes flat historical data.



An historical and cultural evaluation may identify this marker as a local stone cut by a local carver.

Historical information found in the local historical designation nomination is useful. The Resource Guide developed by the intern, Jeanne Nicholson Siler, is also well done and has some excellent information. However, since the

historical and cultural resources evaluation is largely a history of physical elements and physical change at each site since its inception, additional material may be necessary. An individual experienced in providing such evaluations for burial grounds is usually the best researcher for this report.

Archaeology Archaeology can be an invaluable research tool for historic sites. Typically invasive archaeological techniques, however, which can be insensitive and destructive, should be avoided within the site. The likeliest use of traditional archaeological techniques in Charlottesville's city cemeteries would be a surface sampling of apparently vacant areas, such as the Potter's Field at Oakwood or presumed slave graves outside Pen Park, to determine how many unmarked graves they might contain.

Less invasive, and therefore more desirable, are other technologies such ground-penetrating radar (GPR), color infrared aerial photography, thermal infrared-multispectral scanning, and thermal resistivity. Commercial firms, universities, and the National Park Service are actively pursuing alternative archaeology and may be able to offer advice and assistance.

GPR has been used with success at many early cemeteries and other historic sites. Local utility companies or universities often have the necessary equipment and technicians and may be willing to take part in a community research effort at little or no cost to the sponsoring organization. The National Aerial Photography Program (NAPP), a division of the U.S. Department of Agriculture, photographs the entire country in five-year cycles. Although these infrared photographs are fairly small scale, they are often detailed enough to show individual gravestones, are readily available, inexpensive, and can be helpful for mapping purposes.
In addition, dowsing can be a useful low-tech tool to do at least a preliminary analysis of burials at unmarked sites. Oakwood's Potter's Field, as well as most areas at Daughters of Zion, and the area outside Pen Park might be good candidates for this type of investigation. An experienced dowser can have remarkably accurate results in

locating graves. However, for a more definitive determination that would also stand up to scientific scrutiny, it might be a good idea to follow this investigation with a higher-tech method to confirm earlier findings. When funding is a problem, though, dowsing to locate unmarked graves can be a true asset to a preservation project.

Landscape Preservation Plan One of the most important elements of a preservation master plan is the landscape preservation plan. It consists of a tree and vegetation survey; mapping of landscape features; a plan (location, species and variety, timing) for any additional plantings; and recommendations regarding plant care and grounds maintenance.

The landscape preservation plan will identify emergency landscaping stabilization measures, such as filling sinkholes or stabilizing plots that have lost curbings or retaining walls. It will identify necessary remedial action regarding damaged and diseased trees and other plants, such as removing dead limbs that threaten markers or removing poison ivy that may harm visitors. It will develop schedules for both long-and short-term grounds maintenance and set up appropriate inspection schedules. It will identify species and plot locations for groundcovers. It will also make recommendations for plant care to ensure long life of existing plantings, especially those that represent early varieties typical to nineteenth-century cemeteries. Guidelines for mowers are part of this plan as well, to ensure that mowing takes place in a judicious manner.

If the plot enclosures, retaining walls, roads, and paths are not addressed in separate surveys, they may be surveyed and addressed here. Like other inventories, these surveys should include location, material, style, condition, and historical information on each. Charlottesville's cemeteries have attractive perimeter walls, some enclosure walls, copings, and an attractive glazed brick walkway outside Oakwood. Roadways or aisles are also evident at both Oakwood and Maplewood, as are meandering visitor paths. These should all be recorded in surveys for maintenance, to preserve the existing sites, and

for the historical record.



Preservation of the glazed brick walk and the perimeter wall may be addressed as part of the landscape preservation plan.

Preservation of all these apparently minor features are important to maintaining the integrity of the cemeteries.

Preservation of historic landscaping patterns and plantings is an essential part of the preservation of early cemeteries and key to retaining the historic integrity of the site. At one time, for example, it was common to plant perennials or shrubs at the four corners of a family plot. In many cases, one or more of these plants has since died or been removed, but identifying this planting pattern can help to determine how to treat remaining plantings. Even minor changes should follow a sound preservation philosophy.

A good preservation plan will consider foremost that its goal is not to "enhance" the site, subjecting it to twenty-first-century landscaping concepts, but to stay as true to the original appearance of the cemetery as possible. Further research, ideally locating early photographs or engravings of a site, would be particularly useful.

Tree and Vegetation Survey The tree and vegetation survey locates, identifies, and records the condition of all vegetation in the cemetery. It is part of the historical record and is used for maintenance and management.

Like other documentation at these sites, first priority attention and early plan development should be directed to the earliest, most historic areas, with only emergency and routine maintenance measures undertaken until the entire plan is completed. Prior to the recommendations made by a vegetation survey, efforts to enhance the beauty of the yard are best confined to maintaining healthy mature trees and other existing early plantings. Pruning or removal of vegetation prior to such a study is premature and potentially damaging, as significant vegetation could be inadvertently removed or irreversibly altered. At these sites, for example, periwinkle, century plant, ivy, cedars, crepe myrtles, and holly all have traditional significance in burial grounds.

The survey maps location; documents species and variety, size, age, and condition; outlines general maintenance; and recommends treatment for the various foliage features of the yard. It may also contain notes as to the historic character of various plantings.

Horticulturists, consulting arborists, or landscape historians familiar with the preservation of landscaping in historic cemeteries are among the best trained to undertake this task. Any of these may be able to conduct a good survey. The landscape historian, however, is most likely to know historically appropriate plantings for the sites and to offer information regarding local uses for plants in different eras.

Careful selection of the right professional for this survey is important. The national headquarters of the American Society of Landscape Architects can provide information regarding a local chapter. However, it is essential that a landscape architect with experience in preserving an historic landscape, rather than in creating a new one or even recreating one “of the period” is selected.

Arborists are available through the American Society of Consulting Arborists. They will identify trees and other plants, assess their condition, diagnose problems, and offer recommendations to preserve each specimen.

However, many may not be versed in historic preservation, so their recommendations must be understood in the context of preserving the entire landscape.

The Alliance for Historic Landscape Preservation, a national organization, is a coalition of disciplines involved in the preservation of historic landscapes. They also may be able to recommend someone with additional expertise regarding a particular problem.

The Virginia State Historic Preservation Officer, the university, or a county extension office may also offer assistance. Addresses are listed in the appendices.

The vegetation survey will direct that any new trees be spaced to replace mature trees as they fail and die. They should be of the same varieties as are found in the cemetery today. A number of large trees have been lost at Charlottesville's cemeteries, notably at Pen Park. Ideally, at least some of these should be replaced in kind. Any additional plantings in the form of shrubs and flowers should be historically appropriate to *this site*. Knowledge of growth patterns assures that their placement does not interfere with any marker. Planning should either identify failing plants for replacement in the same variety or correspond to plantings of an earlier day as indicated by thorough research of the site.

In many cases, *escapes*, or surviving plant specimens, linger on at a site and may be successfully reintroduced. They are historically appropriate and have proven to grow well at the site. Of course, like any planting, they are subject to changing conditions over time. Maturation of trees, for example, may provide a shade cover under which a given sun-loving historical plant will not grow successfully.

Conservation Planning An essential component of any preservation project, conservation planning may be developed within the plan or designated as an initial aspect of a conservation

project that is derived from the plan. It includes emergency stabilization as a first priority.



Prioritizing treatment of broken markers is a function of conservation planning.

Beyond that, each element should be examined separately and a plan should be derived for each. Items in need of conservation should be prioritized according to safety and treatment urgency, as well as historical, cultural, and stylistic importance. Another consideration in prioritizing elements for conservation is whether early intervention will preclude a much larger and costlier effort later. A sample treatment sheet is included in the appendices.

Volunteers Volunteers are an important asset to all of Charlottesville's cemeteries. They currently are providing surveying capabilities, take part in the Spirit Walk and the Day of Caring, are concerned about the well-being of the several sites, and offer much interest and enthusiasm for projects.

At many cemeteries, volunteers provide the backbone of the workforce and the enthusiasm for many of the projects undertaken. Volunteers

under the auspices of a friends' group may provide fundraising capabilities. They might work under the city's volunteer program to continue to provide surveying and mapping, and possibly dowsing in areas of unmarked graves. They may uncover copings and may help in resetting markers, following a workshop. They may assist in landscaping efforts, perhaps in identifying bulbs and perennials as they come up in the spring.

Sometimes volunteers are recruited in their professional capacities. One possibility for this might be the utility companies' providing a GPR operator and interpreter. Working with universities might also produce volunteer labor that is very useful to the site.

All activities of volunteers must be coordinated with the city and should operate within the framework of a comprehensive plan. Only in this way can a team effort be generated that will result in the well-being of all sites.

Volunteers are often among the best advocates for cemeteries. This is already evident in the interest and care the cemeteries' neighbors take. They might also be the chief advocates within the neighborhood to increase public education about the sites—what is there, why it's important, what more we need to know, and how more citizens can participate in caring for these important city historic sites. They might also work with the city in preparing cemetery brochures, student activities, and additional public cemetery activities.

Neighbors are ambassadors for the cemeteries and can be effective agents in promoting the protection and preservation of their neighborhood's, and of the city's, cemeteries.

Friends' Group

Each neighborhood has a special affinity for "its own" cemetery. This is understandable and can be constructive. On the other hand, it can create a different set of perceived needs by each group. It may even leave Pen Park with a limited "constituency."

Volunteers can be effective in preserving and protecting these important historic sites only when working with the City, in the context of the comprehensive plan.

Formation of a not-for-profit organization gives a structure to all activities, establishes a liaison capability between volunteers and the city, provides continuity, increases the possibility of receiving grants, and provides the organization to accomplish things smoothly.

These are reasons a "Friends of Charlottesville's City Cemeteries" group is essential. One group of citizens, working together, can accomplish far more for all sites, far more efficiently, than can several groups. In addition, it will be easier to work with the City with fewer liaisons appointed by the group. Pooling its many talents and resources, the group can best tackle the many issues of cemetery preservation. And working together, they can best make their voices heard to the City government, while at the same time offering the most to the cemeteries they care about. Working as a unit, no area of concern will be left out or under-represented in efforts to preserve these sites.

A friends' group needs to organize with a not-for-profit status and board of directors in order to undertake many of the activities that would be beneficial to them and the cemeteries. Within this framework, they can more effectively make their needs known to the city and work with the city to the benefit of the cemeteries.

Landscape Preservation Planning Recommendations

Achieving Equity At Daughters of Zion, grave depressions can be seen fairly easily in grass that is greener than the surrounding terrain. Sometimes these areas can be walked, and the depressions can also be felt by foot. This is an area that would benefit from an initial dowsing, using an experienced dowser, to find graves. These, then, should be mapped as unmarked

graves. Note, too, if any vegetation is found either at the head or foot of presumed graves, or, in some cases, outlining the grave. All of this information should be put on an inventory sheet similar to a marker inventory sheet.

It is likely graves will be found all the way down the hill, in that some markers can be seen near the bottom of the hill. Perhaps even the flat area at the bottom of the hill contains graves. This is essential information to this site and is useful in establishing true perimeters of the cemetery.

If dowsing is unsuccessful, perhaps ground-penetrating radar or a similar high-tech technique can be used to locate graves. While in some cases a public utilities company will donate use of a GPR machine and operator to such a civic project, an operator unfamiliar with graves may not interpret the results as closely as someone may with more experience in this area. Another option might be to call upon local colleges and universities, particularly an archaeology or geography department, to design a professionally supervised project for interns that would obtain this information.

Another equity issue is found at Pen Park, where one of the most pressing needs is to identify presumed slave graves outside the enclosure walls. Locating and mapping these graves is essential to understanding, interpreting, and preserving this site.

Similar projects could be designed for other areas of the cemeteries that would also benefit from such an endeavor.

Typical graveyard plantings were seen in the crepe myrtles, pines, and maple trees found at Daughters of Zion. These are fine additions to the site and should be monitored and tended as necessary to promote their continued good health.

In addition, within the context of a comprehensive plan, these trees, and perhaps the existing English ivy, could be expanded to other areas of the site. Once the perimeters of the site have been established by determining the location of graves, it would be possible and appropriate to

add more of these trees and the ivy throughout the site. It is essential, of course, not to place trees in existing graves, and to plant ivy where there are no markers for it to climb.

The addition of these plantings would be historically appropriate (although, unless historical references tell otherwise, it is not historically accurate) and would greatly enhance the appearance of the site.

These considerations, of course, should first be discussed with the African-American community to determine if this is within their interest and tradition.

This observer feels that, in order to achieve equity between the African-American and white sections of Oakwood, plantings are more important than extending the perimeter wall around Oakwood's African-American section. What is most noticeable to an initial observer is the lack of vegetation in the African-American section of the cemetery, setting it off from the rest of the site. Indeed, trees could be placed not only within the cemetery, but also along its borders, to serve as a perimeter marker, much as the wall does. In fact, while vegetation would be a different delineator than is found in the white section, it would be attractive and could be a considerable source of pride for the African-American community.

Vegetation—trees and shrubs—could be introduced, which are similar to other sections of Oakwood of the same historical era. Again, it is important not to introduce new species or varieties, but to keep within the framework already established by the rest of the cemetery. Research should be done to confirm that these are the same plantings that are likely to have been found in African-American cemeteries and houseyards in this period. Research should also be used to determine that numerous plantings are not uncommon or undesirable for African-American cemeteries in this area in the nineteenth-century.

It is also important to know the locations of graves, so no graves are disturbed in the course of

these plantings. It is essential to work with the African-American community in order to reach these goals.

This is another area of exploration that would begin only in the context of a comprehensive plan. It is also best if plantings take place, according to a specific planting plan, over a number of years.

Pen Park At Pen Park a number of trees have been removed. At the Gilmer plot, in particular, it may be a good idea to determine what type of tree the existing stumps represent, and replace at least some of them in an area that has been determined to be free of graves.

At both the Gilmer and the Craven plots, periwinkle, while not thriving, is evident throughout. A good maintenance technique is to encourage the periwinkle, propagate additional plants from what is there already, and use periwinkle as a groundcover. Not only historically appropriate, this groundcover would ultimately save maintenance in that the plots would not need regular mowing, but only occasional trimming if the periwinkle became too profuse.

If periwinkle is also found at the Hotopp plot, it would also be a good choice for a groundcover there.

Of course, periwinkle thrives best in light shade. If there are no longer any trees in a given plot, consideration must be given to returning some trees to the plot, as described above, if the periwinkle is expected to do well.

This is another area where volunteer efforts could be invaluable.

In addition, numerous apparent grave depressions were noted outside the enclosures of Pen Park. Periwinkle and century plant were also found outside, underscoring the likelihood of multiple burials beyond the enclosures. It is essential that these likely slave graves be included as part of the Pen Park cemetery site.

Dowsing and/or GPR are essential here to determine how many graves are here and where they are located. Once located, graves should be mapped. When true perimeters are established, the entire area must be included as part of the cemetery and effectively set aside from the surrounding golf course. A buffer zone around the graves should be included, both to protect the graves from incursion from the recreational site and also to preserve the site as a burial site. A fence or other enclosure would help to protect this important part of Pen Park.

Landscape Maintenance Recommendations

Maintenance is a primary concern in Charlottesville's cemeteries, due to the ongoing nature of landscaping and marker maintenance, as well as neighborhood interest.

These recommendations are made for landscape maintenance:

Friends' Group/Mowing Some volunteer groups have used their organizational status to bid on cemetery mowing contracts. Having gotten the contract, they have gone forward in carefully choosing a mowing staff, closely monitoring their work, and having some additional monies to continue to reclaim nearly lost sites. Possibly a friends' group, working together with the city, might investigate a similar arrangement. Working with interested citizens to see if they are interested in taking over mowing under auspices of a not-for-profit friends group is a constructive avenue to explore.

This is a complex undertaking, however, particularly since three sites are involved, and it will require considerable commitment on the part of the Friends. Nevertheless, it is one effective way to deal with the perceived problem of mowing or weekly maintenance. Perhaps a fledgling friends' group would better wait a year or more, until they have any organizational problems resolved, before attempting this fairly complicated endeavor.

If the Friends are not interested, or if the City chooses not to explore this option, consider hiring a cemeteries-only mowing person who is experienced and committed to the well-being of these historic cemeteries. Ideally, this individual should also report any loss or vandalism as he finds it. Both accountability and a personal sense of pride in work well done are strong reasons to have a single mower at these sites.

This option has the advantage of having one dedicated individual in charge of the sites. Most likely, city crews or experienced outside contractors would still have to come in to do periodic pruning of dead limbs and other periodic maintenance, since one individual would not likely have the tools or resources to complete all this work.

Another option to limit mower damage is that used by Mt. Auburn Cemetery in Boston. Management there used the novel method of limiting mower damage by painting each mower a different color. Mower operators always used the same mower, so it was easy to identify who had hit or otherwise damaged markers. Marker damage decreased markedly following initiation of this practice.

Copings Another appropriate volunteer activity is the reclamation of copings hidden by grass. To cut back the sod will reveal the copings, an important stylistic, historical, and cultural element in Charlottesville's cemeteries. Ideally, some of these should be reset, but even keeping them free of grass reclaims them to view, helps to delineate plots, and identifies this historic feature.

Interloper Vegetation Some shrubs, particularly boxwoods, have interloper vegetation growing within their perimeter. This should be carefully removed without damaging the otherwise healthy boxwoods.

Tree Pruning Some trees need pruning of dead limbs in order to protect markers and to prevent greater damage within a short time.

Marker Maintenance

Recommendations

Workshop Develop a workshop for volunteers and staff for training in resetting of unbroken tablets that are out of the ground or out of their bases. It is important to learn something about the character of stone and to have some basic training in stone resetting. It is also important to know which stones to treat and which to leave for conservators. Working together with a conservator, determine what markers are appropriate for treatment by volunteer workers.



These markers are likely candidates for resetting by volunteers or staff following an introductory workshop.

Daughters of Zion At Oakwood, Daughters of Zion has a number of stones in need of resetting. These should be addressed early in the course of any conservation or restoration project. To first reset the unbroken markers is a sound course of action that would immediately enhance the site. Some of these might be reset following a staff/volunteer-training workshop in resetting. Those that are broken should wait for the services of a conservator.

Pen Park Pen Park has some of the most stylistically interesting and artistically attractive markers in Charlottesville's cemeteries. Some of these also appear to be cut from a local granite. This suggests that a local or regional carver has cut these markers. A beneficial activity for a conscientious volunteer would be to compare local granite markers at Lynchburg, the Patrick Henry burial site, and similar nearby sites to determine if it is likely the same carver cut stones in those cemeteries as well.

Unfortunately, many of these markers are also broken or in extremely precarious condition. The table tombs in the Craven plot, for example, are perhaps the only ones in Charlottesville's city cemeteries. Yet they are dangerously unstable

and could fall with only slight provocation. These should be, at the least, temporarily stabilized with sandbags under and around them to prevent them from falling. Better, they should also be part of the first round of restoration work as established by a comprehensive master plan for Charlottesville's cemeteries.

Conservation Recommendations

Buildings Both Oakwood and Maplewood have brick maintenance buildings of historic origin. Both are attractive and functional.



Oakwood's maintenance building has been painted white.

While originally Oakwood's building may not have been painted (but only historical records would determine this with certainty), it is now, and can be maintained as a painted building. To remove the paint would require a chemical process by restoration specialists (sandblasting is not an option!) and would likely be quite costly. It is quite acceptable to maintain the building by maintaining its paint coating.

Maplewood's brick building is not painted, and should not be.

Both buildings have at least minor maintenance concerns and should be maintained as essential parts of the cemeteries. Detailed determination of needed treatments can be developed within the master preservation plan.

Pen Park Of the three city sites visited, Pen Park is in the greatest need of conservation. In addition to the table tombs, mentioned above, many markers are failing or already broken. Among

these are some of the most stylistically significant markers in Charlottesville's city cemeteries.



Here are examples of some of Pen Park's noteworthy monuments.

This site should be treated early within the context of a conservation project (which in turn is a part of the comprehensive plan). These markers need professional treatment. Many have complex problems that may be difficult to treat. A treatment sheet should be prepared for each marker prior to beginning work (see appendix for sample). This completed form will give information regarding the type and material of marker, its condition, the current condition of the stone, prior treatments, and recommended treatments. When the treatment is completed, comments are added regarding unforeseen problems and the nature of the completed treatment. This information is helpful for the historical record as well as for future conservators who will want to know what treatment took place. All work should be in accordance with currently accepted conservation practices, standards and principles (see AIC address in appendices).

The stone wall at the Craven plot is also in serious need of repair. The enclosures of these three plots are fundamental elements of the sites. The wall is dry-laid and can be rebuilt only by a mason with considerable experience in building dry-laid stone walls. This type of work is almost a lost art, and, while such an individual might be difficult to locate, the search will be worth the effort in reclaiming this important feature. The wall should be dismantled only to the point where it becomes stable, and should be rebuilt from that point on. Virginia may be lucky in having a number of such individuals available, due to the large number of such walls still in existence.

The ironwork at the Hotopp plot appears at first glance to be in fairly good condition. It has recently been painted with a primer coat of paint.



Although this fence appears to be in good condition, it would benefit from an assessment and conservation.

But, as can be seen in the photo of the gate, one of the posts is cracked. Other areas of the wall may be similarly in disrepair. To maintain this fence in good condition long-term, it should be examined by an ironwork conservator and the necessary repairs undertaken. In no case should joints be altered or welded closed, as they are an important element of the fence and should be retained or restored to condition as close to original as possible.

Daughters of Zion Conservation needs at Daughters of Zion are considerable. Many markers are down, many others broken, and some, particularly at the edges of the site, are leaning badly and in need of resetting. This is another area to address early in an overall conservation project. The site has a number of nice markers that would add greatly to the site by their restoration.

Maplewood and Oakwood Both these cemeteries have substantial conservation needs. Markers are leaning or loose on bases, while others are broken and lying on the ground. Retaining walls are in need of repair, and ironwork is sometimes drastically in need of repair The glazed brick walkway outside of Oakwood is only partly restored. This is an historic element of Oakwood Cemetery and its restoration should be completed.

Each element should be examined separately, items in need of conservation should be prioritized, and a plan should be derived for each.

Workshops Workshops to train local personnel or volunteers in such areas as stone resetting and coping stabilization are very useful for keeping maintenance and simple conservation treatments ongoing. Trained, and under the auspices of the city's comprehensive plan, volunteers can be important members of the cemeteries' work force.

The overall cost of conservation could be considerably reduced if one, two, or more individuals could be trained to reset many of the smaller unbroken stones at the site, and perhaps if they could even serve as helpers to conservators in the context of stone conservation. Appropriate training could take place prior to initiating a large-scale restoration project. It could also take place as an initial aspect of conservation work, thus allowing the newly trained individuals to work alongside conservators. Then the conservators could be involved in any problems that occurred. Familiarity with the correct procedures and materials is essential before work begins.

Oakwood Expansion

An area adjacent to Oakwood has been reclaimed for use. However, as it is now, it is not suitable for burials. Several options follow to allow this area to be used for a cemetery expansion.

The most desirable option appears to be to upgrade the site from a landscape perspective and use the area as a scatter garden for cremains. Landscaping could be in keeping with the 19th-century character of Oakwood. While technically not a 19th-century feature, a scatter garden could be visually compatible (or even enhancing) with the historic site and accommodate a considerable number of remains at a moderate cost. This option has been used at historic sites as august as Mt. Auburn Cemetery in Boston. There is also a scatter garden at Lynchburg's Old City Cemetery. Such a landscaping choice provides space for additional remains, beautifies the adjacent property, does not interfere with the historic section of the cemetery, and is probably the most cost-effective choice available.

A second choice to allow for additional burials is

to add six feet of good soil to the existing site and landscape it to allow for burials. This is an option compatible with the historic aspect of Oakwood. Its drawback may be its cost and the possibility of a difference in soil levels being problematic. While a retaining wall could solve that problem, it would add again to the cost.

A third option that has been considered is the addition of a mausoleum in the expansion space. A large public mausoleum at this site is problematic in that it would interfere visually with the historic nature of Oakwood more than the other options. It would also be costly and may require significant infill to assure a strong base for the building. And finally, there is a resistance by some individuals to being placed in a mausoleum. This option is considered the least attractive of the three.

Policy Development

Sound policy development provides for an annual budget as part of the larger municipal budget to allow for projected marker repair and maintenance needs on a yearly basis. While Charlottesville's city cemeteries also require a large-scale marker restoration project, it is important to repair individual markers as they require it, since delay can result in further deterioration, damage, and loss.

Updating Regulations Charlottesville's Code of Ordinances, Chapter 7, deals with city ordinances for cemeteries. However, they predate historic preservation concerns in cemeteries and need revision in keeping with current theory and practice.



Trash cans and water spigots, necessary appurtenances of a working cemetery, are naturally governed by city regulations.

Regulations as they now stand govern the sale and mapping of grave spaces, deeds, notice of burials, and charges for opening graves. They also record burials, burial of paupers, and perpetual care of lots. These are largely administrative matters properly assigned to the city.

However, the city's ordinances do not cover concerns of historic cemeteries that protect its well-being and its historic character. Ordinances (or perhaps regulations formulated by the City's preservation board, if the cemeteries should be listed on the local register of historic places) might include the need to retain current aisles and roadways in the cemeteries. It may also include the need to retain historic landscaping, including terrain of currently developed areas (this would include retaining grave depressions but not sinkholes, for example). Other landscaping to be protected would include perennial flowers and bulbs, shrubs, and trees.

Additional landscaping considerations should include the preservation and maintenance of plot curbings and enclosure fences, as well as retaining and perimeter walls. These are all important elements of each site and should be retained. The City is responsible for the perimeter wall and any retaining walls that are not directly linked to a particular grave plot, but plot owners are responsible for enclosure fences or walls. Of

course, in the course of a large restoration project, retaining walls and fences can become part of the larger project after proper notification of plot owners (in most states a public notice placed in the newspaper 30 days prior to beginning work is sufficient).

Monument erection and placement rules and regulations should treat placement of new markers, particularly in historic sections of the cemetery, as another design feature of the site that needs some control. In older sections of each cemetery, new marker styles should be restricted to one of several historically appropriate styles. These might be determined by designating a few styles that are common to the majority of the burials in an older section, or by allowing markers that are similar in style to surrounding early markers. Placing new style (and material) markers in older areas seriously compromises the historic integrity of the area. Stylistic control appropriate to preservation of historic cemeteries relates to size, material, and marker style.

Additional regulations might be developed to prohibit the use of replacement stones for existing ones and to prevent the adding of new stones to mark unmarked graves. Existing stones represent much of the history of the cemeteries. In many cases, what is most important is the eighteenth- or nineteenth-century origin of the markers. Placing twenty-first-century markers in historic sections, particularly if they are twenty-first century styles and materials, compromises the historical integrity of these sites.

It is the responsibility of the City's Parks and Grounds Division, with input from local citizens and historic preservation groups, to draft ordinances which will protect the oldest sections of the cemetery, including layout, vegetation, and markers, and limit new burials and markers.

Guidelines are needed both to ensure appropriate landscaping inside the burial ground and to protect adjacent areas from inappropriate development. Guidelines developed to direct future landscaping will ensure proper location, variety, and species of plantings. Existing plantings, which may be memorials to deceased,

are retained to preserve the integrity of the site.

Tightly-drawn guidelines for mowing practices are needed to ensure future control and prevent damage to markers and copings.

Use of the proper equipment, the proper techniques, and trained and conscientious personnel should be stressed.

Cemetery Use Recent studies indicate that additional uses of cemeteries by the public decrease vandalism, promote public good will, and encourage healthy attitudes toward death. Rules to control public behavior might allow bicycling, picnicking, and dogwalking, while requiring bicyclists to stay on main roads and requiring picnickers and dog owners to pick up their refuse. Such a policy also encourages cemeteries to be used for such pleasurable and educational purposes as arboretums, birdwatching, and as open spaces in an urban area.

The suggestion to have a public restroom at Oakwood was made as part of the community meeting in November. While there appears to be a building that may have served as a restroom, cemeteries of this size rarely have such appurtenances. A common nineteenth-century cemetery feature, public restrooms generally were found in large rural cemeteries with maintenance staff on site all day every day. To have less of a monitoring presence invites street people and vandals to cause harm to the buildings. They would require additional maintenance and funding for that maintenance, and in the long run, might actually detract from care that would otherwise be given to markers and landscaping. Public restrooms may be a welcome amenity to both Oakwood and Maplewood. However, their cost and maintenance requirements may preclude them from being built at either site.



Placement of bluebird houses and monitoring the birds is one of the activities at Oakwood.

Other constructive use of cemeteries includes jogging, guided tours, and special events and observations. These types of community use tend to increase public appreciation for the burial grounds whose maintenance is being paid for by public taxes. Such practices are also historically valid since they are directly in keeping with Victorian-era practices.

Some cities have had a Victorian picnic with visitors dressed in Victorian garb held each spring at their city cemetery. In Charlottesville, perhaps such an activity (or another) could alternate among the sites over several years.

Establishing Preservation Status All of the city's historic cemeteries should be nominated for historic status designation. If the nominations are accepted, these sites will be afforded the same considerations as the city's other historic sites. Such designation will help to ensure the preservation of the historic integrity of the city's cemeteries for years to come.

Attaining such designation would afford the cemeteries the prestige of historic status, may offer some help in raising funds, and most important, would offer protection to the sites in

maintaining their historic integrity.

Plantings Plantings should be protected through regulation, both within the framework of city maintenance and that of visitor activity. Most plantings, whether trees, shrubs, perennials, or bulbs, are historic and should be retained. They should not be removed in "clean-ups" or other efforts to beautify the cemetery.

Likewise, addition of new plantings should take place only within the framework of the comprehensive plan and should be limited to those already found in a given cemetery and, generally, similar to those nearby. For the benefit of family members, a plant list by era should be created and made available, along with sources for the plantings, since most will not be available at the local garden center.

A good rule-of-thumb to use is to allow plantings only that were found in the cemetery, or at least in Charlottesville, at the time of the burials in a given plot.

In the case of a new burial, an exception may be made, but even here, it might be a good idea to create a plant list from which family members may choose.

New Burials Do not allow any new burials in aisles or other open spaces that represent the site historically. These might include the potters' field or other areas. It is important to the integrity of an historic cemetery to preserve its open areas and its original, or early, design elements.

Owner and Visitor Maintenance and Care of Plots While plot owners are expected to care for their plots, they are nevertheless subject to the rules of the cemetery. No marker, wall, or fence repair should be allowed without first receiving written permission from the city. Only qualified restoration masons, ironworkers, or conservators should be allowed to undertake the work. No changes to structures should be allowed. A written plan of work submitted to and accepted by the city prior to beginning work should be required.

Ideally, the City would have a list of qualified contractors who have demonstrated their ability to work effectively with historic materials. Additional contractors could become listed by filing a form that would include a list of similar projects they have undertaken. The City then could view these projects to see the caliber of work done.

Regarding plantings, a written plan of work should also be submitted, because inappropriate pruning or removal of plantings can be detrimental to the site overall.

Likewise, the addition of new enclosures might be inappropriate and that, too, must go through the city before it is begun.

If new enclosures are allowed, they should be in keeping with the material, style, and construction technique appropriate to the plot at the time of the most significant historic burial.

Sometimes plot owners initially find such regulations to be oppressive, until they consider that every city, every subdivision has quite similar regulations designed to protect the appearance and well-being of neighborhoods. A new subdivision, for example, might not allow tv antennas, clothes lines, RVs, or more than 3 vehicles. They might even restrict plantings or house colors to conform to a particular scheme. Cemeteries, as an historic element of an historic city, should be no less subject to such scrutiny and regulation, in order to preserve the historic components of each site.

Further concerns of the City regard maintenance by plot owners. Regulations should delineate that plot owners must have a plan of work approved in writing by the Parks and Grounds Division prior to undertaking any physical work on their site. This would include adding or removing plantings, repairing or restoring markers, and repairing, restoring, or altering enclosures of any type.

The purpose of this regulation is the necessary control of the content and quality of work undertaken at the sites. The need is to assure

preservation of the historic integrity of the sites and their various elements.

Recommendations Summary

Develop Comprehensive Preservation Master Plan

Before beginning any work other than emergency stabilization, develop a comprehensive preservation master plan to govern all aspects of cemetery care and work, including complete documentation of site; historical and cultural evaluation; landscape, structure, and marker maintenance; conservation; policy development; volunteer involvement; and public education. This plan is the governing document for the cemeteries, giving direction to current caretakers and guidance to future caretakers of these important historic sites.

Documentation

Continue documentation, including completion of marker surveys, vegetation surveys (including spring perennials), coping and retaining wall surveys, and metalwork surveys.

Maintenance

Explore new maintenance possibilities that take into consideration such areas as hiring dedicated mowing personnel; friends' group involvement; landscape maintenance and protection; damage and vandalism inventory; and others in accordance with comprehensive plan.

Conservation

Undertake conservation of markers in accordance with comprehensive plan; utilizing emergency stabilization; prioritizing markers for conservation and developing phases for work; establishing guidelines and workshops for

working with volunteers; and developing work plan in conjunction with conservation professionals.

Friends' Group

Encourage creation of friends' group to work with city in developing volunteer programs and activities to enhance cemeteries' care.

Cemetery Activities

Encourage constructive visitor activities at various cemetery sites. Work with volunteers to develop additional appropriate activities.

Plantings

Preserve and protect existing plantings. Add only historically appropriate plantings in conjunction with established comprehensive preservation plan.

New Burials

Preserve existing aisles, roads, and open spaces. Burials to be in accordance with established comprehensive preservation plan.

New Markers

Allow only those new markers that are historically appropriate for the area in which a new burial has taken place. Markers are to be in accordance with established comprehensive preservation plan.

Oakwood Expansion

Develop expansion area to accommodate scatter garden for cremains. Landscape appropriately for this 19th-century site.

Owner and Visitor Maintenance and Care of Plots

In accordance with comprehensive preservation plan, develop owner and visitor guidelines for plot care. All work is to be done by permit obtained from Parks and Grounds Division. Work is to be done by known and approved workers within parameters set for landscaping and monument repair in comprehensive plan.

High Priority Considerations

Some high priority considerations include

1. Create comprehensive preservation plan
2. Investigate and include slave graves outside Pen Park as part of that site;
3. Provide emergency stabilization for table tombs and treat them and other broken markers at Pen Park early in conservation project;
4. Investigate Daughters of Zion unmarked graves ; treat broken markers early in conservation project
5. Explore addition of appropriate landscaping to Oakwood in African-American section
6. Inventory broken markers at all sites; prioritize for treatment

SAMPLE REGULATIONS

Regulations are adopted for the care and preservation of the city's cemeteries. They also help to illustrate to the community that a cemetery is an historic resource of great value, and that any alteration, no matter how seemingly insignificant, can lessen its value.

The following regulations have been extracted from regulations at other sites. Some of these, or variations of them, may be appropriate at Charlottesville's city cemeteries.

Parameters within the following areas can be established as part of development of the master plan.

Visitors
Visitors are welcome during visitation hours. Hours of visitation are from 8 a.m. until dusk each day. Other visitation may be subject to laws regarding unlawful trespass unless specifically exempted by the Parks and Grounds Department.

Walking, jogging, picknicking, and dogwalking are all allowed as appropriate cemetery activities. However, visitors are not to sit on markers or use them as tables. Visitors are expected to remove or to deposit in trash containers all trash and refuse generated by their visit.

No running, climbing, or playing on gravestones or monuments is allowed in order to assure personal safety of visitors and the safety of historic markers.

No rubbings shall be made of any funerary markers in the cemetery.

Maintenance
(For maintenance staff: a workshop should be held to educate and clarify acceptable procedures regarding mowing, trimming, cleaning, etc.)

No cleaning of markers is to take place by plot owners except for extremely sound stones. Washing with filtered water at pressure not to exceed 90 p.s.i.is acceptable. Clorox, household cleaners (such as Ivory liquid or others) are not to be used on markers. Under no circumstances is muriatic acid to be used on markers. Other cleaning methods are to be approved in writing by the Parks and Grounds Department prior to beginning work.

Additional maintenance of markers and plots by families and friends is encourage within the guidelines established in the master plan.

See also Landscaping.

Markers
No grave marker, burial vault, curbing, fencing, or retaining wall shall be removed or replaced without prior written approval of the Parks and Grounds Department.

No materials, markers, fencing, curbing, or permanent ornamentation shall be added to plots or lots without review and approval by the Parks and Grounds Department.

Plot and Marker Restoration Maintenance
Any maintenance or "restoration" work authorized or executed by plot holders shall be done in accordance with approved restoration methods and standards by artisans recognized as having the skills required for such work. No work is to be done without prior written approval of the Parks and Grounds Department. An outline of acceptable procedures, techniques, materials, and technicians is available at the Parks and Grounds Department (to be developed as part of master plan).

Work contracted by individuals should reflect the following restrictions: prior to commencement of work a written application for the proposed work is to be submitted to the Parks and Grounds Department. The application will include a description of the proposed repair, including materials to be used and the proposed practitioner or monument company. Only those proposals consistent with the recommendations in the master plan shall be considered acceptable. Written approval from Parks and Grounds is required prior to commencement of work. Any work begun without such approval is subject to immediate termination upon discovery.

No lot, plot, or individual marker shall be covered over with or filled with cement or other cementitious material.

Landscape
Flowers, both live and artificial, may be placed and maintained by families and friends. However, if they are left at the gravesite, they may be removed by maintenance personnel. Live flowers may be removed when wilted or after 7 days; artificial flowers may be removed seasonally or when they become discolored or deteriorated.

No perennials, bulbs, groundcovers, trees, or shrubs shall be removed or trimmed without prior written permission of the Parks and Grounds Department. Most of these are historic elements of the landscape and a part of the cemetery overall. Their part of the whole surpasses their place within a given family plot. Likewise, no such planting shall be added without written permission of the Parks and Grounds Department, since additions similarly alter the site. All additions shall be in accordance with the landscape plan designated with the master preservation plan.

New Burials
Funeral homes shall obtain written permission for burial from the Parks and Grounds Department prior to burial. Permission is based on confirmation of plot ownership and available burial space within the plot.

Because of the many significant tombs and monuments, the large number of unmarked graves, and the absence of clear corridors in some areas within the graveyard, all graves must be hand dug. No backhoes or other earth-moving equipment shall be used to dig graves in the historic city cemeteries. No trucks or other vehicles shall be allowed off designated roadways

New monuments
New monuments shall be compatible with the historic character of the cemetery. Design, style, and material shall be approved by Parks and Grounds Department, and must be consistent with recommendations in the master plan. Markers in historic areas are to be compatible with adjacent and nearby stones in size, design, style, and material. Approval must be received in writing before the monument is cut.

Permission to set a monument must be obtained by the monument company prior to the physical setting date. All vehicles shall remain on designated roadways and setting shall be by hand whenever possible. Exceptions to this rule may be granted only with written permission by the Parks and Grounds Department

and with on-site supervision by same. Exceptions will be granted infrequently, with particular consideration given to large existing monuments.

RESOURCES

AMERICAN INSTITUTE FOR CONSERVATION OF HISTORIC AND ARTISTIC WORKS

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