PREFACE
The following case studies were undertaken in two phases as the field component of the Historic Cemeteries Preservation Initiative. Study sites were selected from past applicants to the Historic Landscape Preservation Grant Program that had not received grant funding. The sites included in this program represent a diverse range of the ages, styles, conditions, elements and levels of activity found in the Commonwealth.

The consultant team assembled to undertake this project represented the full spectrum of disciplines required to address the various issues presented by historic burial grounds and cemeteries and included a landscape architect, arborist, archaeologist, preservation technology specialist, structural engineer and landscape historian.

Once communities were selected for inclusion in this undertaking, each site was visited and assessed to determine the appropriate consultant expertise necessary to examine each site in more depth. With a wide range of elements and conditions, it was not necessary for every consultant to visit each site. Submissions were also reviewed to determine what additional information would be necessary or desirable to complete the work. Each community was contacted with a request for supplemental information [typically historic and contemporary plans with boundaries, site features and topography, preferably with dates, assessors maps, etc. illustrating the scale and surroundings of the particular site] to be provided prior to the site visit. Other desired information included written documentation like Massachusetts Historical Commission Form E if available, atlas references, and historic and contemporary photographs.

An overall schedule was developed identifying when specific communities would be visited with dates, times and consultants. Because of the time of year during the first phase [late winter/early spring 1999], it was determined to commence work in the southeastern part of the state, work north and then west to reduce the possibility of schedule interruption resulting from snow cover. Visits to the sites during the second phase were completed over the course of the fall of 2000 and spring of 2001. Communities were advised of the schedule and adjustments were made when necessary and possible.

Representatives from the communities met the consultant group at most of the sites, which gave an opportunity for exchange and discussion of issues of importance to each community.

After the site meetings and field investigations, the consultants prepared draft reports of their findings and recommendations which were forwarded to each community as well as the Department of Environmental Management and Massachusetts Historical Commission for review and comment.

Because of the range of sizes of the properties examined [0.03 to 22.5 acres] and the desire to have all site plan drawings easily fit within the format of this report, three scales of drawings were selected to facilitate comparison of properties.

The summary workshop in May 2000 provided an opportunity for all parties to assemble, discuss and exchange ideas about the challenges and possibilities of the preservation of these important historic sites.

A prioritized cost estimate has been provided for the properties included in the second phase to help communities understand the cost implications of the General Recommendations. In addition, approximate costs of various types of grave marker repairs have been provided in the General Recommendations section.
Located in the Woburn Square Revitalization area on a gentle west facing slope that rises to meet a large ledge outcropping, Magazine Hill, First Burial ground is the oldest public burial ground in town. Dated to c 1642, it is assumed to have opened when the town was founded and served as the town’s principal burial ground until 1794 when a second yard was opened across from the village center as a parish graveyard that was later purchased by the town in 1824.

There is a fine view to the town center from the apex of the hill, once called Mt. Seir. For many years it went by the name of Powder House Hill. On its apex, a little outside the limits of the burying ground, stood one of the community’s old brick powder houses, one of many erected in Massachusetts towns during the War of 1812.

The only encroachment was the 1849 layout of Park Street, which resulted in the stone wall and former town pound along the roadway. Displaced graves were relocated to the burial ground. Based upon the 1849 plan location, the pound was located approximately at the end of the stone retaining wall north of the entrance on Park Street. It appears that the burial ground expanded, either by acquisition or contribution, about 1856 when James Fowle, Esq. died. The 1849 plan indicates that the small parcel then belonged to Fowle. Today the burial ground is approximately 1.4 acres in size.

National Register Status: Not Inventoried
Current Management: Cemetery Commission
Status: Inactive
Condition: Fair
First Burial Ground contains headstones that are apparently randomly placed as is typical of 17th and early 18th century graveyards. It contains a number of important people, some of which are in unmarked graves. Buried here are: Capt. Edward Johnson [1598-1672] founder of the town of Woburn and author of “The Wonder Working Providence of Zion’s Savior in New England”; the first printed history of New England [1653]; 4 of the early ministers; Benjamin Thompson, father of Count Rumford; 15 soldiers of the Revolution including Daniel Thompson and Ashael Porter, casualties of the Battle of Lexington and Concord [1775]; and ancestors of Presidents Franklin Pierce, Grover Cleveland, Benjamin Harrison, Calvin Coolidge and Herbert Hoover like William Symmes, ancestor of President Harrison. The gravestone of Aaron Cleveland, ancestor of President Cleveland, is along the west edge near the street.

LANDSCAPE CHARACTER, LAWNS AND VEGETATION
Landscape Character
Issues
The landscape appears intact in that there has been little topographic change. There is an overall grade change of about 30’ from the pedestrian entrance at the southwest corner to the high point in the northeast corner.

While it is not known if there were trees in the burial ground during its period of significance [c 1642 to 1794], it is unlikely that there were many, if any. The existing trees were clearly added at some point during the 1900s. The site is relatively open as is appropriate for a burial ground of this vintage, with only 9 trees. This openness does however allow the visual intrusion of the surroundings near the entrance and along the north end. The overall condition of the landscape is deteriorated, including lawn areas.

Recommendations
Provide additional perimeter planting to screen out buildings immediately adjacent to the burial ground, particularly the building that forms a boundary in the southeast corner, and along the north boundary. If the potential future parking lot is built, insure that screen planting is provided along those edges even though the parking will be well below eye level from the burial ground.

Consideration should be given to land acquisition adjacent to the entrance. This would allow filling in the hole now used for parking and a dumpster, which in turn would make the entrance experience much more pleasant.

Planting
Issues
All of the existing trees are relatively mature, large deciduous shade trees. The 9 trees are made up of 5 Sugar Maple [Acer saccharum], 2 Horsechestnut [Aesculus hippocastanum] and 2 White Ash [Fraxinus americana]. While many have decay throughout their main stems, there is no indication of pest problems.

Recommendations
Because decay in the main stems of trees can lead to structural failure and subsequent potential damage to the historic resources of the burial ground, 6 trees are recommended for removal including 2 Sugar Maple, 2 Horsechestnut and 2 White Ash.

Only 3 trees, all Sugar Maple, are recommended to be preserved. One of them needs a support system because it is a codominant tree [a natural defect] that may fail under adverse environmental conditions. Support cables have proven to be of help in preventing large branch loss. These trees are in fairly good condition and should respond to pruning and fertilization.

Volunteer Growth
Issues
While there is no volunteer growth inside the burial ground, there is quite a bit at the perimeter, outside the fenced edge on the north, east, and south sides.

Recommendations
Work with adjacent property owners to keep volunteer growth under control.
Lawns

Issues

Lawns are in fair to poor condition with some bare spots and herbaceous weeds. This may in part be due to the rock outcrops and porous sandy soils. The worst conditions are related to the steep slope near the Baldwin monument and along the steep bank on the east edge.

Recommendations

Lawn areas should be top dressed with the applicable soil amendments added and then reseeded.

ACCESS AND SECURITY

Pedestrian and Universal Access

Issues

Public access is unrestricted with a latched but unlocked chain link gate on Park Street. The opening is 3’ wide. There are also steps immediately inside the gate. Slopes are too steep to provide universal access to the interior of the burial ground from Park Street or the potential adjacent municipal parking facility.

A pedestrian connection between the potential adjacent municipal parking facility and Park Street could be beneficial in that it would provide greater public exposure for this historic burial ground. A new route should be clearly defined and located in such a way as not to place the historic resources in danger. It should not be considered a universally accessible route because implementation of such a path would cause significant harm to the historic fabric of the property.

Recommendations

Maintain the current pedestrian access from Park Street and consider extending it to the municipal parking facility if those plans proceed.

Vehicular Access

Issues

There is no public vehicular access to the site and reputedly no maintenance access. Hand mowers are currently lifted up from street. There is however an apparent maintenance access route through a breach in the fence on the east side.

Recommendations

If vehicular maintenance access is desired, work with the plans for a new municipal parking lot to facilitate this access.

Security

Issues

The burial ground has no security. It is located on a secondary street, hidden from Woburn Common and not easily seen. While the perimeter is mostly fenced, breaches in the fence allow easy escape when viewed from Park Street. The retaining wall along the street is also easily scalable.

Recommendations

Security measures should be improved by keeping gates locked, repairing and/or replacing fences to eliminate access points and providing increased police presence. If plans for the adjacent municipal parking facility proceed, consider keeping the gates open during the day and locked at night.

VANDALISM

Issues

The elements of this historic burial ground have suffered the destructive impacts of vandalism. In addition to a number of broken grave markers, paint graffiti can be found on two slate grave markers and the granite obelisk marking the Baldwin family tomb. Broken glass was found at the Baldwin tomb and at the top of the bank on the east side. A number of bottles were also found in the interior of the site.

Recommendations

Active police patrol and control are recommended to curtail this threat.

CIRCULATION SYSTEMS AND MATERIALS

Circulation Systems

Issues

The paved circulation system consists of a relatively short single walk with a stepped ramp along the south edge of the property from the entrance to a plaque. It appears to be less than 50 years old. There are no defined drive areas.

Recommendations

Maintain the existing circulation system and consider expanding it as discussed under Access and Security.
Steps

Issues
Immediately inside the entrance is a stepped ramp composed of concrete paving and steps of intermixed materials. There are 6 granite and 2 concrete risers. Some of the granite treads have settled and some have exposed reinforcing bars apparently holding the granite riser faces in alignment.

Recommendations
This feature should be removed and rebuilt with all granite treads. The slope is too steep to consider eliminating the steps.

Pavement Materials

Issues
There is a short concrete path associated with the stepped ramp inside the burial ground. The adjacent brick edging is falling out of alignment. There is a bituminous concrete sidewalk outside the burial ground in the public way.

Recommendations
Consider a bituminous walk with a chip seal finish to provide a more rustic appearance. If, however, a connection is made to the potential municipal parking facility and it is anticipated that this path would be plowed of snow, consideration should be given to other materials.

GRAVE MARKERS

Headstone and Footstones

Issues
An 1890 survey found approximately 270 stone grave markers. Volunteers are currently providing a new survey that is expected to find a lesser quantity of markers. The vast majority of the grave markers are slate as there were only a few interments after 1793. Some are the works of the “Charlestown Carver” and Joseph Lamson [the 1692 stone of Capt. John Carter with “pilasters of bold organic motifs and floral designs, culminating in delicately realized star-petal capitals.” Another important stone is that of Anna Cooper c 1750 by one of the Lamson family. A temporary replacement slate marker has been placed in the burial ground for Asahel Porter who was slain at the Battle of Lexington in 1775. The Baldwin Historical Society erected it in 1975.

In addition to the slate markers, there are 3 or 4 marble markers, a marble obelisk, a brownstone table tomb and a granite monument. Deterioration is evident in some of the grave markers due to weathering and vandalism. Weathering has caused delamination of some of the slate markers. Most of the markers are upright. A few are leaning or toppled. There are a number of broken markers, apparently from some time ago. There were no visible remnant pieces for some of the broken slate markers. About a half dozen should be repairable.

Recommendations
Reset, repair and clean grave markers based on the prioritized recommendations noted herein.

Table tombs

Issues
Adjacent to 4 rough hewn granite support posts near the center of the burial ground lies a large brownstone slab. The brownstone portion of this toppled table tomb has a circular and a rectangular indentation, presumably for inset stone or metal components that were inscribed with the names of the deceased.

Recommendation
Reset the table tomb top on the support posts.

Monuments

Issues
The only tomb, the Baldwin family tomb, is located along the north edge of the burial ground at the crest of Magazine Hill. The grey granite obelisk is the most conspicuous object on the site, with the inscription: “To the memory of the honorable Loammi Baldwin, who died October 20, 1807, aet. sixty-three. Erected by his children,” it honors Col. Loammi Baldwin [1745-1807], Continental Army officer, builder of the Middlesex canal and propagator of the Baldwin apple. There are 13 Baldwins entombed within, including Loammi Baldwin the Younger [1780-1838], called the father of American Civil Engineering, builder of naval dry docks, canals and turnpikes, and designer of the Bunker Hill Monument. Brother James F. Baldwin [1782-1862], builder of the Boston and Lowell Railroad and the Boston Water System, is also among the family members. In addition to suffering from paint graffiti, about 12” of settlement is apparent at the base, exposing foundation stones. One stone at the foundation is also missing.
An isolated Victorian marble obelisk is located in close proximity to a concrete block garage at the southeast corner of the property. It was erected in the memory of James Fowle, Esq, who died in 1856 by John Fowle. The foundation below the granite base has been exposed by about 12” of settlement. The marble is eroding, suffering the impacts of acid rain deposition, and has biological growths. On the back side of the obelisk is some scratched graffiti.

Recommendations
Provide earth fill to cover exposed foundations. Remove graffiti and clean monuments. Protective coat the marble obelisk.

**STRUCTURAL ELEMENTS**

**Perimeter Walls**

**Issues**
The Park and Central Street edges are lined with an 1849 stone wall that retains the burial ground above the street. Varying in height from 4’ to 5’, the wall is rubble stone construction with mortared joints. There are areas of heavy mortar application on the face, presumably in previous repair attempts. The top of the wall has a thick parge with stones set into it to prevent people from sitting on the wall. There are numerous patches in the top of the wall.

There is also a short section of low stone retaining wall at the south end facing Park Street. The chain link fence set immediately in front of it retains leaf litter, concealing the condition of the wall.

A former tree apparently caused a bulge in the wall, near the north end on Central Street. This is indicated by a depression immediately behind the bulge. In four other locations, stones are missing from the wall, typically at or near the top.

Recommendations
Remove and rebuild about a 10’ long section where the wall has bulged. Replace missing stones in other parts of the wall.

Consideration should be given to rebuilding the short section of low stone retaining wall at the south end facing Park Street at a higher elevation. This could be done in such a way as to be more harmonious with the rest of the wall, express the fact that the town pond was once in this location, and improve security of the burying ground. This solution would also work well with the fence recommendation.

**FENCES AND GATES**

**Perimeter Link Fences and Gates**

**Issues**
Much of the perimeter is enclosed with a 5’ high chain link fence. Most of it has or had three strands of barbed wire at the top. Only the north end of the Park Street edge and the Central Street edge has no fence. While there are some relatively new sections, most of the fence is rusted. There are a number of breaches in the fence including a 10’ wide and a 20’ wide breach on east side, a small breach on the north side adjacent to a neighboring house, and an area on the east side where the chain link fabric is raised about 12” above the ground. There are also sections along the south and southeast edges that have been damaged.

Recommendations
Remove the perimeter fence and replace it with vinyl coated chain link. Along Park and Central Streets, consideration should be given to providing a more attractive, simple metal picket fence. While no fence along this edge would be the most appropriate, public safety and security issues make it highly desirable to provide a barrier of some type.
SITE AMENITIES

Signs

Issues
The burial ground contains three signs and one sign post with no sign. The sign nearest the entrance is a post mounted iron plaque, painted bronze, erected by the Converse Family in America in 1962 in memory of Deacon Edward Converse, founder of the City of Woburn. The second sign is also a post mounted iron plaque, painted bronze, identifying the site as “Park Street Burial Ground.” It was erected in memory of 15 Revolutionary War soldiers, and lists each soldier.

The third sign is located at the end of the walk. It is a bronze plaque mounted on a low granite base of recent construction. It also identifies the site as “First Burial Ground, 1642 until 1794” and notes that the burial ground contains the remains of Daniel Thompson and Ashael Porter, casualties of the Battle of Lexington and Concord.

Recommendations
Consider altering the locations of existing signs such that a more inviting, informative experience is provided for visitors. Provide regulatory signs and small scale interpretive improvements.

Trash Receptacles and Seating

Issues
None of these elements are present.

Recommendations
Do not provide these amenities inside the burial ground.

Flagpoles

Issues
A single Flagpole is sited adjacent to the circular paved area that contains the monument and plaque. The flagpole is brushed aluminum, about 25’ high, and in good condition. It was reported to have been erected for the Bicentennial by re-enactment “Minutemen.” No flag was observed.

Recommendations
If the flagpole is no longer used, it should be removed. If it is being used, consideration should be given to relocating it if the walk is extended to serve the potential municipal parking lot.

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UTILITIES

Drainage

Issues
The site slopes from east to west and all drainage occurs on the surface. Storm water is collected in the street near the Park/Central Street intersection.

Recommendations
No changes are recommended.

Water Supply

Issues
No source of water is apparent inside the burial ground. A fire hydrant is located immediately outside the pedestrian entrance.

Recommendations
No changes are recommended.

Lighting

Issues
There are two wood utility poles with overhead wires on the burial ground side of the south end of Park Street. Ambient light is provided from adjacent street lights on the utility poles on Park Street. There may also be some ambient light from adjacent security lights.

Recommendations
No changes are recommended. In the future, consider relocating the two utility poles adjacent to the burial ground to the opposite side of Park Street.
FIRST BURIAL GROUND

PRESERVATION PLAN
WOBURN, MASSACHUSETTS

PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE
### PRIORITIES

#### High Priority
- Removal of trees with large cavities, leaning into the cemetery, drives or grave markers.
- Tree replacements.
- Lawn repairs.
- Inventory of stones with locations.
- Restoration of grave markers that present public safety hazards or are structurally unsound.
- Replacement of dowels in multipart stones that are visibly cracked or spalled.
- Conservation of historically significant marble markers that are in danger of becoming illegible.
- Slate marker resetting and repairs.
- Broken stone repairs if the inscriptions are legible and at least 75% of the stone is available.
- Removal of graffiti and cleaning of monuments.
- Protective coating marble obelisk.
- Resetting table tomb.
- Earth fill at exposed monument bases.
- Perimeter wall repairs.
- New wall segment on Park Street.
- Perimeter fence replacement.
- Regulatory signs.

#### Low Priority
- Pruning of trees with a small amount of dead wood and branches, and trees protected from the winds in close to the edge or other trees.
- Sign program reconsideration.
- Resetting markers that have shifted or are leaning.
- Reevaluation and conservation of marble markers that are currently in satisfactory condition, as necessary.

Items related to implementation of the potential adjacent municipal parking facility have not been prioritized as they are entirely dependent upon that project moving forward.

#### PRIORITIZED COST ESTIMATES

<table>
<thead>
<tr>
<th>Priority</th>
<th>Item</th>
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<td>Tree support systems and fertilization</td>
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Costs associated with grave marker work have not been included. Refer to the General Recommendations section for approximate costs of various types of repair.

Costs associated with items related to implementation of the potential adjacent municipal parking facility have also not been included.
Located on a hilltop, the oldest section of this cemetery is adjacent to Main Street, Route 109, just west of the village center. Originally known as the "burying place," the land for this site was set aside in 1651.

Starting in 1842, the town added land to the cemetery so it included ground that rises up on two sides of a small lake. In 1890 the cemetery was enlarged and formally dedicated as Vine Lake Cemetery, named after Vine Brook which flows into and through Vine Lake Pond. The same year the cemetery was described as "no more beautiful spot in all this fair town than that sunny enclosure, with Vine Brook murmuring by and the river sparkling in the distance."

A third expansion occurred in 1917. Landscape architects Blaney and Blaney of Boston were retained "to create the quiet restful feeling of a well-designed and cared for Rural Park."

Only the oldest historic section was examined, a hill between Main Street and Vine Lake, about 4 acres of a much larger cemetery. This part of the cemetery is characterized by a dense arrangement of free standing grave stones dating from the late 1700s through the 1900s. Steep hillside slopes facing Vine Lake are terraced with low stone walls and steps.

Dedicated solely to the burial of Medfield residents, the cemetery contains most of the original settlers and residents. Familiar names in the cemetery include Allen, Bullard, Clark, Mason, Metcalf, Morse, Plimpton and Wheelock. The earliest dated stone is 1661. A major memorial in the cemetery is the Puritan Monument, erected in 1858 in memory of 7 Puritans who emigrated from England to America from 1635 to 1639. One marker reads "In memory of Henry Adams, eldest son of Mr. Elijah Adams and Abigail, his wife, who died Ag. 7, 1787, aged 16 years. His untimely death was in consequence of incurable ulcerous sores under which he painfully lingered in great agony, confined to his bed for 132 days." The cemetery also contains 521 patients from Medfield State Hospital, many resting in unmarked graves.
LANDSCAPE CHARACTER, LAWNS AND VEGETATION

Landscape Character

Issues
A variety of evergreen and deciduous trees have been added to the old part of the cemetery, in a random pattern for the most part.

Recommendations
Given the age of this part of the cemetery, supplemental planting is not needed or desired at this time. However, some shade trees along the Main Street edge would help separate this part of the cemetery from the road.

Planting

Issues
The diversity of vegetation includes large deciduous shade trees like White Ash, European Beech, Shagbark Hickory, Horse Chestnut, American Linden, Norway Red Maple, Sugar Maple, Sycamore Maple, Red Oak, White Oak and Weeping Willow as well as small deciduous trees like Black Cherry, Flowering Crabapple and Hawthorne. Evergreen trees include Eastern Red Cedar, Eastern Hemlock, Ponderosa Pine, Red Pine, Norway Spruce and White Spruce. There is also a clipped White Pine hedge along the west property line. Other plants found include Barberry, Forsythia and Yucca.

Overall, 107 trees were examined with a distribution of about 60% evergreen and 40% deciduous. The largest trees included a 45” Norway Spruce, 42” European Beech, 41” Sugar Maple and 41” and 40” Lindens, measured about 42” above the ground. Most trees are in fair to poor condition, needing fertilization and root collar examination. No pests were observed.

Of those examined, 14 are recommended for removal including a structurally unsound Beech, a Norway Maple with a broken codominant stem, a Hemlock that is interfering with markers, a Horse Chestnut with trunk decay, a Red Oak with a base cavity, and a Sugar Maple hanging over a road that also is structurally unsound and exhibits 50% decline.

Recommendations
Remove hazardous trees, especially the Sugar Maples that are leaning over the road. Many of the trees have main multistem branches with either decay or natural structural defects, which may fail under adverse environmental conditions. Support cables help prevent large branch loss. Recommendations for support systems to help prolong the life of a tree that is still in fairly good condition generally fall into the highest priority, depending on location.

Soil samples are always recommended before decisions are made to apply fertilizer to any plants in the landscape to avoid excessive use of chemical fertilizers or lime and spending needless funds. Lime and fertilizer should be applied to all the trees as recommended by soil analysis.

Root collars or root flares are often damaged by lawn mowers. Naturally occurring girdling roots can slowly cause decline in a tree. All soil and mulch should be kept at least one foot from tree root collars so as not to encourage circling roots or decay organisms that can damage root collars.

Volunteer Growth

Issues
Except for a few small trees growing adjacent to family plot edging, volunteer growth appears to have been kept under control.

Recommendations
Continue to remove all volunteer growth.

Lawns

Issues
Lawn areas are generally in fair condition with some moss and herbaceous weeds. Bare spots are present at the lower level related to concentrated flows of storm water runoff. Erosion is becoming evident at some steep slopes.

Recommendations
Lawn areas should be top dressed with the applicable soil amendments added and then reseeded.

ACCESS AND SECURITY

Pedestrian and Universal Access

Issues
With no separate pedestrian entrance from Main Street, both vehicles and pedestrians share drive entrances. There is a bituminous concrete walk along Main Street. Once inside the cemetery walking surfaces include gravel drives, lawn and some gravel paths. The topography of many areas inside the cemetery is suitable for universal access. However, access between various areas is often steep.

Recommendations
No changes are recommended. Universal access should continue to rely on vehicular access routes.
Vehicular Access

Issues
There are two points of vehicular access to the historic portion of the cemetery from Main Street. Both have 12 to 14” square rough finished vertical granite gate posts where chains and padlocks once provided control. The posts vary in height from 40 to 48”. These devices are apparently no longer used. There may have once been gates as the west access has 2 drill holes in the west post and 2 iron latches in the east post. The east access to the old cemetery has 19’ clear between posts and the west access has 20’-6” clear.

A third access point on the far west side, Wilson Avenue, leads to the active portion of the cemetery. Apparently no longer used, it is now blocked off. The active portion of the cemetery has a separate access point.

Recommendations
No changes are recommended.

Security

Issues
The cemetery is officially open from dawn to dusk.

Recommendations
No changes are recommended because vandalism appears to be negligible.

VANDALISM

Issues
No evidence of recent vandalism was observed. A few markers are toppled, laying flat, and some older stone repairs were found.

Recommendations
No changes are recommended.

CIRCULATION SYSTEMS AND MATERIALS

Circulation Systems

Issues
A single lane loop drive, made up of Hewins and Wheeler Avenues, is the primary vehicular circulation route. Kingsbury Avenue provides an internal cul de sac. Some narrow interior paths provide routes for pedestrian circulation.

Recommendations
Maintain the existing circulation system.

Steps

Issues
There are numerous short runs of granite steps with 2 to 4 risers as well as some concrete steps at the north edge. While most are in good condition, a few have settled or rotated out of position. There is also a long run of steps opposite the bridge at Vine Lake that appears to be sinking backward into the ground.
Recommendations
Remove and reset the steps that have moved out of position to establish a uniform riser height within each set of steps. Provide a free draining foundation of suitable depth to reduce the effects of frost heaves.

The sinking stairs could be reset but they probably do not conform to contemporary requirements for outdoor stairs. For this reason, it may be better to remove them completely or rebuild them completely as code conforming steps.

Pavement Materials
Issues
Primary drives are gravel. Secondary drives are gravel or lawn. Most paths are lawn with some gravel.

Recommendations
Maintain the current paved drives in gravel. Maintain walks in grass.

GRAVE MARKERS
Headstones and Footstones
Issues
The grave markers in the older portions of the cemetery must number well over 1000. Markers dating from c1700 through the early 20th century were observed during this survey of stone conditions. Most of the earliest are slate tablets located near the center of the cemetery. The earliest stones are believed to be the two marking the grave of Samuel Morse who died in 1654. They bear no lettering but each has a hole bored through it. The earliest dated stone is the 1661 marker on the grave of Lydia Lovell.

The marker for Allan Kingsbury, Medfield’s first Civil War volunteer, has the inscription “My Country Calls and I Must Go.” He was killed at the battle of Yorktown in 1862.

Grave marker materials include slate, marble, granite as well as some brownstone and zinc. The red slate tablets, some of which had spalled, are unusual. Another unique marker is a highly polished black slate tablet marking the burial of Erich Loeffler [1863 - 1909]. Most of the slate tablets have visible mower scars a few inches above grade. Lighter stones like marble do not show the scars as clearly.

Some broken slate markers have been repaired with bronze bolts and straps, requiring holes drilled through the tablets. A few adhesive repairs of marble and slate tablets have been done quite well, with the joints tightly fitted together and only the slenderest line of a white “glue” of some sort. Other stones, however, have had adhesive repairs which are glaring and obvious, and which are supporting the growth of moss and lichen.

Multipart stones like marble tablets are often connected to their bases with iron or bronze dowels. Where subsurface soil has subsided or eroded and stone bases have tilted, or where this type of marker has been vandalized, the dowels have been exposed to moisture and corroded, staining the white marble an intense turquoise/green where bronze has been used and orange where iron has been used. The corrosion also expands the metal, causing fractures in the stone.

Earth covers flat stones rather rapidly. Some fairly recent bronze and granite markers that are set flat are now nearly concealed. This is of great concern for toppled markers. Gentle probing with implements like large wood knitting needles could lead to the discovery of older slate markers or marker fragments now completely covered.

On the terraced slopes and in some other areas as well, stones are beginning to lean due to earth washout or settlement. Tilting stones may topple and suffer damage. The Leeds markers have considerable erosion beneath the bases on the downhill side.

Several burial sites have shrubs and overgrown Yews now too close to the stones. Not only can the roots disturb the stability of the bases, but the shade also allows moisture to remain liquid longer. This supports botanical growth like mildew, fungus, lichen or moss, all of which are harmful to stone and inscriptions.
The zinc markers were for the most part in good condition. Overall, 4 large and 11 small zinc markers were found. The Hamant family plot has 1 large and 7 small markers. The J. R. Smith marker has one panel missing and open joints which have permitted moisture to enter and rust the iron armature inside. Rust stains show on the exterior of the base. The foundation of the Cushman marker is exposed. A small zinc footstone is broken.

**Recommendations**
A complete inventory of all individual grave markers dating from the earliest through at least 1900 is highly desirable. With such information, a conservation program to treat the most important and most at risk stones first could be set, thus guaranteeing that money spent on stone conservation was well directed.

In addition, survey and identify markers that have legible inscriptions but are eroding due to soiling or botanical growth. Markers that are still legible but rapidly eroding should be designated for conservatorial treatment as soon as possible. Markers with entirely illegible inscriptions need not be treated, at least not in the initial rounds of treatment.

Remove lichen and other botanical growths with the careful application of a biocide to kill the lichen, followed by gentle removal of the plant growth when it is dead. That work is best done by an experienced conservator. Because the potential for irreversible damage is great, cleaning historic grave markers should be done only under the supervision of an experienced conservator. Some conservators give instruction and supervision so that volunteers can be trained to do the work with minimal damage to the stones.

Older repairs using iron that has now rusted should be redone. Older repairs using cement mortars or other materials that have not adversely affected the markers should be left alone. Where broken pieces of markers can be found, identified, and reincorporated into the upright remnants, or can be completely reassembled and re-erected, repairs and resetting should be done by experienced conservators. Some conservators can instruct volunteers, so that the work can be carried on.

Reset markers so that there is a sufficiently stable base below grade and full inscriptions are exposed above grade.

**Monuments**

**Issues**

By the middle of the 19th century obelisks and columns were a popular type of marker and most were marble, with some use of brownstone. This cemetery has many with heights ranging from 3 to 6', not counting the plinths or bases. The most notable and prominently placed is the tall 3 obelisk Puritan Monument, which commemorates "the memory of seven Puritans who emigrated from England to America in 1635 . . ." The monument was erected in 1858 and signed "J. Foote, Boston." Sited on a slight mound, the foundation is exposed.

All monuments of this type are vulnerable to tilting, toppling and ultimately to breakage due to settlement or erosion of the subsurface soils, which exposes foundations and footings unevenly. Soil erosion has affected 25% to 40% of the monuments here, although tilting or toppling has not yet occurred.

The short marble Johnson monument is slightly leaning and missing a decorative top piece. The grey granite Langley monument has an exposed foundation on the back side and some soiling. The Russell obelisk displays an interesting combination, with the marble of the obelisk and its urn somewhat eroded overall, but relatively clean while the brownstone base has a thick growth of yellow lichen.

**Recommendations**
Provide free draining earth fill to the appropriate level at the bases of monuments where settlement or erosion has occurred. Remove biological growths as recommended for grave markers. A qualified conservator should clean and repair soiled and broken monuments.
**STRUCTURAL ELEMENTS**

**Perimeter Walls**

**Issues**

**Main Street Wall**

The stone retaining wall along Main Street is about 26” wide and ranges in height from about 12 to 42”, but is generally about 36 to 42” high. The wall has a slight backward batter. It consists of granite rubble units with flat, quarry split or hammer-faced faces laid up in a random pattern. The top course has squared corners while the lower units are more irregular. A typical stone unit is about 18” wide, 12” high and 3’ long. The joints between stones are filled with a hard mortar that has been decoratively incised. Although there are a few cracked and missing mortar joints, the stone units are undisturbed and flush with each other. There is no outward leaning or shift in alignment even where the hillside behind the wall slopes 5 or 6’ above the wall or where two large trees are present near the west end of the wall. At the west entrance into the cemetery, the curved wall appears to be a newer extension of the Main Street wall. It is built of smaller stones and their lay up is more irregular.

**Recommendations**

**Main Street Wall**

As a whole, the Main Street wall is in excellent condition and only minor repointing work is needed where there are occasional gaps or looseness in the mortar joints. This wall should be inspected by cemetery personnel and maintained on a periodic basis in order to ensure that the mortar remains tight. High strength mortars should not be used because they become so brittle that they cannot resist the seasonal movements of the wall without cracking; that is, the high strength is detrimental to the integrity of the wall and does not contribute to holding it together better.

**Interior Walls**

**Issues**

A low stone retaining wall similar to the Main Street wall runs along the east side of Hewins Avenue, a cemetery driveway. Laid up in a broken ashlar pattern, this 20” wide, 32” high wall is in excellent condition with apparently original recessed mortar joints. A thin mortar wash on top of the wall is generally free of cracks. This wall is in excellent condition. However, as the wall approaches the top of the hill it changes from a mortared wall of quarried stones to a dry laid wall with a combination of fieldstones and quarried stones. There are many large voids amongst the stone units, but the stone units themselves are well seated and retain their original positions. This wall may have been disturbed at one time and rebuilt, or it may be a remnant of an older wall that predates the other walls on the site. At the top of the hill, there are low stone transition walls with steps cutting through. There are similar walls creating terraces in the hillside between the lower Wilson Avenue and higher Hewins Avenue. These walls are built similarly to those near Main Street but the mortar joints are more deteriorated. While the stonework itself is generally intact, many of the joints are missing, eroded and deeply etched.

**Recommendations**

The site walls should be systematically observed by cemetery personnel on an annual basis. Where stones are dry laid, large voids should be filled in or chinked and any loose stones should be reset. Where mortar is missing, cracked or loose, it should be repointed. Old mortar should be chipped out to a depth at least twice the joint width. Samples of old mortar should be taken to determine its composition and any new mortar should be formulated to match original mortar in color and strength without being too hard. Joint treatment should be the same as adjacent original joints, that is, new joints should be recessed, raised or incised in a similar manner as adjacent joints.

**North Terrace Wall**

At the northern tip of the old cemetery, there are three contiguous terraced family plots with stone retaining walls along the northern edge of the terrace. While the walls along each plot are similar they differ from each other in the sizes of stone and the lay up pattern. At the easternmost plot, the steep slope of the ground has slumped or eroded downward, causing the end of the stone wall to crack and rotate downward. It was not possible to determine whether the ground movement is an active condition or whether this movement occurred long ago and has stabilized.
Mound Tomb and Vault Structures

Issues
The receiving or holding tomb facing Main Street consists of an underground vaulted area with an exposed front wall that is about 7" wide and 7" high. Access into the vault is through a green painted, padlocked iron door that has some rust corrosion. The word “Public” is carved into the granite pediment with a pecked field and a 2” flat border above the door. There is a tapered retaining wall on each side of the front wall that projects out at right angles to the front wall. The front wall and 2 tapered retaining walls are built of dry laid, smoothly dressed granite units about 10 to 14” thick. The joints between units are open, wide and free draining. There have been no significant movements or shifting between units, which may be due to the units being pinned together. A pin is visible where there is a large gap in the bedding joint between the pediment stone and one of the side jamb panels.

Recommendations
The tomb is in good condition but minor maintenance is needed at the edges of the facade. The stone units appear to be stable so that the open joints could be left open. There is an inclination to recommend filling the joints with a low strength Type N mortar in order to prevent the intrusion of freezing water, but this may prevent water that infiltrates from behind the facade to drain out. In other words, mortaring the open joints may create a future maintenance problem.

It was noted that the construction of the vault interface with the facade and retaining wall on the south side is deteriorating. Two or three small stones immediately under the pediment appear to be loose. Without excavating this corner, it was difficult to determine whether these stones have been added to replace eroded earth or whether the stones are part of the original construction and have become exposed after earth has eroded. The north and south corners of the mound immediately behind and below the ends of the pediment stone should be excavated and the vault stones reset or rebuilt in order to stabilize the vault construction. The slope of the earth is so steep at these locations that it may be better to leave the tops of the vault wall exposed rather than restoring the earth against them.

Edging of Family Plots

Issues
At least 9 of the family plots in this part of the cemetery are surrounded with granite edging. Most of the edging is raised, 6 to 8” wide, 12 to 24” deep and simply finished. Many of family plot edging units are more or less intact, but a number of them have rotated, settled at one end, or have separated at the corners. Movements are caused by earth pressures between high and low grades and from saturated, freezing earth, ie., frost heaving. It is unlikely that many the edging stones are set on foundations other than a mat of loose field stones.
**Recommendations**

The family plot stone edging needs routine maintenance work including resetting the stones. In order to prevent untimely displacement in the future, the corners can be stapled with stainless steel "dogs" or epoxy coated pins. The ground under and behind any reset stone should be good draining material. That is, if the ground behind the edging is found to be saturated or heavy with organic material, that material should be removed and replaced with gravel or crushed stone before covering with lawn. Likewise, if the foundation under the edging is disturbed or contaminated with saturated earth, it should be rebuilt and packed with gravel or crushed stone.

**FENCES AND GATES**

**Iron Fences and Gates**

**Issues**

It is apparent that the vehicular entrances once had gates of wood or iron.

**Recommendations**

If documentary evidence can be found concerning the appearance of these gates, consideration should be given to replacing them.

**Interior Fences and Gates at family Plots**

**Issues**

The circular Langley family plot has 15 cut grey granite [Rockport] posts connected by two horizontal round iron rails. There is also a smaller round center post at the gateway. The gate is missing. A few rails appear to be bent, but they have actually rotated out of position. The rails appear to be solid and have been leaded into the support posts. The rails have been painted grey with some rust corrosion. Some exposed foundations were observed on the downhill side of the posts.

Three other family plots have granite posts defining the extent of each plot. The corner Hewins plot has 12 tall granite posts. Each had a single iron eyehook at the top. Many are still intact although no chain remains. The plot for William Peters has 4 granite corner posts with eyehooks at the top. One rusted chain remains. The Sanders plot has 4 rough granite corner posts with 2 eyehooks per post. No chain remains.

**Recommendations**

At the Langley family plot, rotate the rails back into position and secure in place with lead joints. Clean, prime and paint the rails. At the other family plots, if documentary evidence can be found concerning the appearance of the chains, consideration should be given to replacing them.

**SITE AMENITIES**

**Signs**

**Issues**

The only sign identifying the cemetery is a wood sign stating "Vine Lake Cemetery." Sited at the turn some distance inside the west entrance to the new cemetery, it is not visible to passersby. Another sign some distance away on Main Street identifies Metcalf Historic District.

The west entrance which provides access to the active part of the cemetery has a metal sign stating "Use Dale Street entrance."

**Recommendations**

Provide an identification for the historic part of the cemetery in a location readily visible to passersby.

**Trash Receptacles and Seating**

**Issues**

None of these amenities exist in the older part of the cemetery. A few benches of various materials and designs have been sited adjacent to the nearby lake.

**Recommendations**

Do not add these amenities to this part of the cemetery.
VINE LAKE CEMETERY
PRESERVATION PLAN
MEDFIELD, MASSACHUSETTS

LEGEND

- Existing Evergreen/Deciduous Tree
- Easy Tree
- Lawn Drive
- Gravel Drive
- Vehicular Entry

BY:
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PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE

NORTH
MAY 2001
1" = 100'

Medfield - 91
UTILITIES
Drainage
Issues
All storm water drains on the surface, primarily to the west and northwest to Vine Lake.

Recommendations
No changes are recommended.

Water Supply
Issues
Two free standing hose bibbs were observed inside the historic part of the cemetery as well as some exposed water supply pipe. A fire hydrant is located on Main Street adjacent to the receiving tomb.

Recommendations
No additional water supply is recommended. Provide adequate cover for the exposed water supply pipe.

Lighting
Issues
There are no light fixtures in the cemetery.

Recommendations
Do not add light fixtures inside the cemetery.

PRIORITIES
High Priority
- Trees with large cavities, leaning into the cemetery, drives or grave markers.
- Lawn repairs.
- Restore grave markers that present public safety hazards or are structurally unsound.
- Replace dowels in multipart stones that are visibly cracked or spalled.
- Conserve historically significant marble markers that are in danger of becoming illegible.
- Repair broken stones if the inscriptions are legible and at least 75% of the stone is available.
- Earth fill at exposed monument bases.
- Repair receiving tomb.
- Provide identification sign.

Medium Priority
- Trees with large cavities, leaning away from drives and grave markers and not located in the front area where vehicles may drive.
- Replace dowels in multipart stones with visible metal stains at the junction between stones.
- Clean legible markers.
- Repoint Main Street wall.

Low Priority
- Trees with a small amount of dead wood and branches, and trees protected from the winds in close to the edge or other trees.
- Tree replacements.
- Reset markers that have shifted or are leaning.
- Reevaluate and conserve marble markers that are currently in satisfactory condition, as necessary.
- Reset family plot edging.
- Provide interpretive signs.

PRIORITIZED COST ESTIMATES
High Priority
- Tree removals $8,500
- Tree prunings 3,400
- Tree support systems and fertilization 3,300
- Lawn repairs 12,000
- Earth fill at monument bases 3,000
- Repair receiving tomb 5,000
- Identification sign 5,000
- Total 40,200

Medium Priority
- Tree removals 100
- Tree prunings 800
- Tree support systems and fertilization 400
- Repoint Main Street wall 5,000
- Total 6,300

Low Priority
- Tree removals 900
- Tree prunings 7,500
- Tree fertilization 4,000
- Tree replacements 3,100
- Reset family plot edging 10,000
- Interpretive signs 10,000
- Total 35,500

Costs associated with grave marker work have not been included. Refer to the General Recommendations section for approximate costs of various types of repair.
As the oldest public burial ground in the City of Newton and the sole remaining link to the city's beginnings, this 2.88 acre historic burial ground is located on a prominent site facing a major thoroughfare at the corner of Centre and Cotton Streets in Newton Centre. Without an active public cemetery in the City, there is no specific funding and no skilled or dedicated maintenance crew for this site. Neglected, the grounds have become overgrown, in poor condition and the historic artifacts are deteriorating.

The burial ground was established around 1660 on a one acre parcel given to the town by Deacon John Jackson that year to provide inhabitants of Cambridge living south of the Charles River a site for a burying place and a Meeting House. The plot was enlarged in 1701 by an additional one acre for a school house, burial ground and training field by Jackson's son Abraham. In 1753 one half of an acre was returned to John Jackson from the original donation. In 1765 the original burial ground was fenced in and served as pasture land for the sexton's cows. In 1767 Abraham's grandson, John Jackson formally deeded the two acres to the town provided that a fence was erected and maintained forever. The plot was enlarged again in 1803 and 1834.

The burial ground is clearly divided into two portions, defined by topography. The earliest, southern portion developed with the original town nucleus on an elevated knoll. It contains numerous slate burial markers mostly facing west, some standing in clusters, but mostly in relatively straight lines with numerous gaps. The markers are interspersed with occasional tombs and a few sandstone or marble memorials as well as open spaces containing unmarked graves, some of which may date to the earliest period of use. The 1834 addition includes family plots laid out in a geometrical grid pattern on lower, gently sloping terrain north of the original nucleus.

**EAST PARISH BURIAL GROUND**

Newton, 1660

**First Settlers Monument**

**National Register Status:** Listed
**Current Management:** Parks Department
**Status:** Inactive
**Condition:** Poor
Because this was the only burial ground in Newton until 1781, it contains the remains of virtually every early family of the community. The first burials were the young minister John Eliot, Jr., [son of John Eliot, Apostle to the Indians, "the Roxbury divine who had been a pioneer missionary to the Indians on Nonantum Hill and elsewhere"] and his wife. Repaired in 1822 and replaced in 1823 when the town erected memorials to the first three ministers, the tomb is not original. Also buried here are the first town clerk [1693], first school teacher [1740], first Deputy to the General Court [1708], Captain Thomas Prentice of King Phillip’s War, General Michael Jackson of the War for Independence and General William Hull of the War of 1812, as well as soldiers from numerous campaigns, from King Philip’s War (1676-1675) to the Civil War (1861-1865). The earliest extant marker is dated 1692. The last burial occurred approximately 1988 along the north edge in lots owned by the Grace Episcopal Church.

The site also contained Newton’s first Meeting House (1660 - 1697), the first school, the militia training field, and possibly the town pound, although their exact locations are unknown and have never been investigated archaeologically. Relatively level, rectangular shaped terrain around the Settlers’ Monument may indicate the general vicinity of the First Meeting House, but the area may have been leveled when the monument was erected in 1852.

In the northeastern portion of the burial ground, two shallow, irregular shaped depressions could be archaeological features associated with the early nucleus or later landscape improvement efforts. Numerous slate fragments are visible beyond the burial ground proper: on the southern slope adjacent to Cotton Street and on the eastern slope leading down to Edmand’s Brook. These fragments were probably thrown outside the burial ground by vandals or maintenance crews during mowing or seasonal site clearance. One slate marker (possibly inventory number 943) is located at the extreme eastern margins of the burial ground, abutting the chain link fence at the edge of the slope.

Adjacent Land
Abutting the older portion of the burial ground is a grassed open space called Loring Park, city owned and protected conservation land. The park is named for the Loring family who owned adjacent property in 1848. By 1874 the Loring parcel was clearly separated from the adjacent burial ground. It contains modest potential for archaeological features associated with the settlement nucleus.


LANDSCAPE CHARACTER, LAWNS AND VEGETATION
Landscape Character
Issues
The landscape character is inconsistent with the historic origins of the burial ground. At the time the original south portion was developed, trees were a relative rarity in burial grounds. By the time the family plots were laid out in the newer north section in 1834, Mount Auburn Cemetery had been established. With it came the lush landscape character of the rural cemetery movement.

Today there are quite a number of trees growing throughout the site. Most were not planted, but naturalized from other trees in the area or from existing trees in the burial ground which were few. Open areas where trees once grew are now empty with sprouting stumps and seedlings from wind blown seeds. There are obvious differences in the sizes and species of trees now in the burial ground and along the fence edge. Most of the largest trees are in the northern section.

Recommendations
The south end, with its older slate markers, should be left relatively open in character which is more appropriate to the age of development of this part of the site. If maintenance can be assured, consideration should be given to re-establishing a historically appropriate garden style planting in the northern portion of the burial ground, while relying less on evergreen trees which create too much shade to maintain sufficient ground cover.
Planting

Issues
Trees are abundant with 80% deciduous species. With 83 trees, there are 14 species and 2 related varieties of Cedar and Maple. Trees include 27 Black Oak, 9 Black Locust, 6 Sugar Maple, 6 Black Cherry, 6 White Ash, 5 American Beech, 4 Red Swamp Maple, 2 American Elm, 2 Littleleaf Linden, 1 White Birch, 8 Red Cedar, 2 Norway Spruce, 2 White Cedar and 1 Eastern Hemlock. There are fewer trees than the over 100 noted in 1990 with less Birch and evergreen trees. Trees have recently been cut along the south fence line and some trees along the Centre Street edge were removed 2 to 3 years ago. Some trees remain on the slope beyond the fence abutting Cotton Street.

The largest tree is the Eastern Hemlock in the north end with a 57” DBH [diameter at breast height]. Ten other trees grow around this Hemlock and the tree canopy of the group covers almost 25% of the northeast corner. Very little other vegetation grows in this area.

Many trees are interfering with gravestones with roots and trunks lifting and engulfing markers. Sucker growth is evident on some species of trees. Decay is common in the main stems of many trees over 26” in diameter. A couple of trees on the adjacent property have fallen on the north boundary and are lying on the fence. A standing 25’ high dead tree is also on the north fence line. A large Beech on adjacent property is the seed source for many Beeches in the area including the 50’ high Beeches in the northeast corner.

Shrubs and other plantings include Rhododendron, Winged Euonymous, Andromeda, Yew and Lilac as well as Periwinkle and English Ivy at the north end with Crocus, and Running Euonymous and other vines on the south fence.

Recommendations
In all, 35 trees are recommended for removal and a number of questionable others will require extensive care to prolong their lives. The large Eastern Hemlock should be removed because it is creating too dense a shade to maintain ground cover. It also has a double stem which could fail and split, damaging grave markers and other trees. It also has an insect problem know as Hemlock Woolly Adelgid that will kill the tree if not treated. The tree would require a continual program of insect control until a specific biological control becomes established. The two American Elms have died back which may be caused from the Dutch Elm Disease fungus and should also be removed. The Norway Spruce near the Cotton Street entrance should be removed. It has root decay from being damaged by equipment over the years and it may also fail and cause damage. Trees interfering with grave markers or tombs should be removed. The 19 existing stumps and stumps of trees to be removed should be cut as close to the ground surface as possible. No vegetation, including stumps, should be removed below the ground surface.

Three trees display outward signs of possible internal decay within the trunk and root systems. A certified Arborist should further evaluate them with a hazardous tree evaluation. Five other trees need support systems to help prevent loss of large branches. All trees to remain should be pruned. Large branches with extensive decay need to be pruned out to prevent damage or personal injury.

Volunteer Growth

Issues
There is an extensive amount of volunteer growth along the east side including Brier, Raspberry and a lot of Beech volunteer growth in the northeast corner. Volunteer growth is also becoming evident along the Loring Park edge and at gravestones.

Recommendations
Remove all Brier, Black Locust, Black Cherry, Red Cedar and Buckthorn which are invasive volunteer species. Remove the young Beech volunteer growth as well as trees growing into stone walls or fences and the remaining Poison Ivy.
Lawns

Issues

Juvenile stages of native grasses have invaded open areas. While this presents a landscape character that some may consider charming and historically appropriate, these grasses obscure grave markers and create the potential for inadvertent loss of historic resources with normal maintenance practices. There are numerous areas of erosion and no vegetative cover. Herbaceous weeds are prevalent in many areas as well as moss on north facing slopes and steep west facing slopes in the old section. Slope erosion is a major concern.

The burial ground is no longer mowed except for a small portion that has been mowed by volunteers in recent years. The unmown area has become fertile ground for volunteer growth, concealing grave markers. Lawns were formerly maintained by the Park and Recreation Department with riding mowers. This practice was scratching grave markers and the mowing was stopped. With no active public cemeteries in the town, the expertise of mowing cemeteries has been lost.

Recommendations

All lawn areas should be completely renovated after vegetative removals have occurred. Erosion repair and slope stabilization should be accomplished by filling and seeding, not with regrading by cutting or scraping. Vegetation should be trimmed close to the ground surface. Because the settlement nucleus has considerable potential for archaeological sites, this work should be conducted under the direction of an archaeologist.

ACCESS AND SECURITY

Pedestrian and Universal Access

Issues

Pedestrian access is available from Centre Street at the southwest corner of the site with one step up on a stone wall and through a 4’ wide opening in the fence which is interrupted by three concrete filled steel bollards. Space between the bollards is narrow and the entrance is not universally accessible.

There is no sidewalk across, although one is being considered along Centre Street. Located on a busy street, general access is difficult. There is no nearby parking, except on weekends along Cotton Street.

Recommendations

Remove the current steel bollard entry and develop a new 5’ wide pedestrian access with an appropriate lockable gate from Cotton Street where the vehicular gate is now located. Slopes in this area will allow universal accessibility with a modest amount of excavation at the Cotton Street end which should be done under the supervision of an archaeologist.

There are no development or improvement plans for Loring Park except for a potential walk addition along Centre Street. Current plans reputedly include routing the walk inside the burial ground at the north end of Loring Park on the Centre Street edge. Archaeological investigations should precede any construction. Routing the public sidewalk through the burial ground is not recommended because it eliminates potential security of the site and has significant potential for disturbance of archaeological resources.

Vehicular Access

Issues

Vehicular access for maintenance is available from both Centre and Cotton Streets. Each gate opening is 12’ wide with an inward swinging gate.

Recommendations

Maintain the locked vehicular access for maintenance purposes at the current width at the Centre Street entrance. Convert the Cotton Street entrance to a pedestrian entrance as described above.

Security

Issues

The site is not secure with open pedestrian access and small but actively used breaches in the chain link fence at the rear on the east side, out of view of Centre Street. One vehicular gate is padlocked and the other has a chain but no padlock.

Recommendations

Security measures should be improved by keeping gates locked, repairing fences to eliminate access points and providing increased police presence. Additional discussion of this matter is provided under the topic of vandalism.
VANDALISM

Issues
Vandalism of the property was noted in 1981. It resulted in the removal of a number of the most severely damaged markers from the site to a city building for storage. In 1990 one small area on south stone wall had been painted with graffiti. It was also noted that gravestones had been used as targets and had been scratched. Not much vandalism has been reported in the past five to six years. Volunteer efforts have cleaned up trash and debris in recent years. Some trash and debris was evident in January of 1999, but it had been cleaned up by the end of March. People were found sleeping in the burial ground in March, under the Rhododendron on the east side. The property to the immediate east of the burial ground is an apparent active site for people to congregate for illicit activities. An abundance of trash, chairs, clothing, luggage, etc. was found. The location is concealed from Centre and Cotton Streets because of the topography and dense vegetation. It is easily accessed along a path immediately north of the burial ground and can be accessed through breaches in the fence on the east side of the site. There are still numerous toppled stones as noted earlier under grave markers. One gravestone in the southwest corner had graffiti that appeared to be from a China marker or crayon.

Recommendations
While vandalism has not been a significant issue in recent years, the illicit activities on east side of the property should be curtailed before vandalism once again becomes significant inside the site. Active police patrol and control are recommended to eliminate this threat.

CIRCULATION SYSTEMS AND MATERIALS

Circulation Systems

Issues
The principal drive along the western edge of the site parallels Centre Street with a major route to the eastern edge. The latter drive separates the older southern section from the 1834 addition. The continuation of the drive along the eastern edge is lost in vegetative growth. The southern section has no apparent secondary or pedestrian circulation system. The secondary system in the northern portion is defined by the cornerstones and posts of family plots.

Recommendations
Maintain existing circulation system.

Path Edging

Issues
The few remnants of brick edging at the west edge of the Cotton Street entrance noted in the 1990 master plan were not found. Stone edging was recommended at slopes on the sides of the Centre Street vehicular entrance drive to protect slopes from vehicular damage and erosion.

Recommendations
The stone edging is not recommended as it is not historically appropriate and should not be necessary once erosion conditions are corrected.

Pavement Materials

Issues
Grass and other vegetation covers the entire site including circulation routes.

Recommendations
Surface materials should be maintained in grass until visitation reaches the point where it is not longer practical to maintain lawn. At that time a paved path system should be considered.

GRAVE MARKERS

Headstones and Footstones

Issues
The burial ground has a total of 415 markers with about 340 markers in the original area [1660-1701] and about 75 markers in the 1834 addition. In the newer part, family plot boundary markers are missing and burial marker bases indicate the original location of missing headstones. Vandalism was noted in 1981 and it resulted in the removal of a number of the most severely damaged markers for storage in a city building. The 1990 master plan noted that 178 gravestones required conservation with 109 considered urgent, 61 immediate and 8 future. Conservation requirements included resetting 165 markers, adhesive repair on 55 markers, level and/or insert 19 markers into bases, clean 52 markers and 14 required other measures.

The report identified the following carvers and monument companies as being represented in the burial ground: James Foster, Daniel Hastings, E.W. Houghton of Harvard, Ebenezer Howard, Jepson of Newton Corner, Lamson family, William Mumford and John Sand. Stonecutter Daniel Hastings is buried in one of the family tombs facing Centre Street. There are also a few primitive markers.

Recommendations
Ten markers related to the French and Indian War have been restored since the 1990 master plan. Conservation requirements for the remaining markers should be re-examined and implemented. Broken memorials, slate spalls and marker fragments should be documented where they are found, examined for markings and carvings, collected and curated or used for repair, where possible.
Table Tombs

Issues
There are 7 table tombs of various materials and in varying conditions which have generally deteriorated since 1990. Tomb 290, which was not previously reported, has a marble table and a brick base. The base is in fair condition but the table is broken and the tomb below is open to the weather. Tomb 1150, which has a brownstone table and brick base, was noted with severe differential settlement and the assumption that tomb walls had collapsed inward. The tomb is now open to the weather on one side. Tomb 1195, the Jackson brownstone table tomb, was noted with moderate instability of the table because of severe erosion below the northwest column support. Delamination is evident at the bottom of table and the legs are rotated. Tombs 1346 and 1344, Norcross and Parker/Prentis, were noted with portions of the brick arch vaults exposed. Constructed of brick and fieldstone, there has been a partial collapse of the face and the vault is open to the weather. Loose stonework was reported in tomb 1370 which has a marble table and a granite base. Tomb 1842 was not found.

Recommendations
Repair the broken table of Tomb 290 and protect the tomb below from weather. Repair and reconstruct tomb 1150 over a concealed concrete foundation using existing materials. Repair tomb 1195, install a concealed concrete footing and attach the columns to the table with concealed dowels. Rebuild the faces of tombs 1346 and 1344, and clean out and repoint the arches. Repair tomb 1370 and repoint where loose stonework is observed.

Monuments

Issues
A white marble obelisk honoring the First Settlers of Newton and marking the presumed site of the first Meeting House, which stood there from 1660 to 1697, has been placed at the high point of the site. While the structure appears in good condition, the marble is eroding from acid rain.

Recommendations
Clean and protective coat the marble.

STRUCTURAL ELEMENTS

Perimeter Walls

Issues
The entire perimeter of the burial ground is defined by stone masonry walls with various materials and construction. The 1990 master plan did not address walls on the north and east sides.

Centre Street Wall: The north end of the wall is constructed of coursed rubble Puddingstone and granite. It was poorly repointed using a hard cement mortar. Moving south, the wall varies with a heavily chinked, somewhat coursed round stone appearance. The Loring Park edge has primarily round stones that are dry laid with minimal chinking. It is more prone to failure than the other walls on this edge. The length of the walls has areas of local collapse, and dislodged and missing stones.

Cotton Street Wall: This side is generally stable with dry laid field stones that are larger than those used along Centre Street. The height of the retaining wall varies above the street, but averages about 30” high. Two 10’ long sections need rebuilding and occasional stones need to be reset along the length of the wall.

North and East Walls: Similar in construction to the Cotton Street wall, this wall averages about 2’ high. Portions of the wall have toppled or are missing in 8 locations along the east side.
Recommendations
Centre Street Wall: Starting at the north end, reset two areas, 10' and 6' long, at the top of the wall, repair the north corner of the entrance gate and reset the granite cap, repair 6' of the south corner of the entrance gate and reset the granite cap, reset 20' at the northwest corner of Loring Park where there was a local collapse, rebuild four 10' long sections of the wall along Loring Park. Remove hard mortar and repoint with lime cement mortar where appropriate.

Cotton Street Wall: Repair and rebuild the two 10' long sections and reset the occasional toppled stones.

North and East Walls: Reset about 50 linear feet near the Rhododendron and in 6 other locations where erosion has occurred. Reset about 20 linear feet at the northeast corner.

Mound Tomb and Vault Structures
Issues
There are a number of intact tombs including four in a row added by the Proprietors of Tombs in 1803. These were sealed by the city in 1913.

After the 1990 master plan, the Fuller-Hull Tomb was examined on 19 October 1992 by Fannin-Lehner and others. Recommendations included removal of front stonework and installation of a foundation, uncovering the front portion of the arch and repair of deteriorating sections, anchoring granite elements with stainless steel dowels, sealing the junction between the brick and stonework, and carefully grading an area around the top of the tomb to decrease water flow for a projected total cost of $7,145. Repairs have not been made to date. The brick arch is exposed above the granite face with a marble door. The brownstone table above is delaminating and has 3 broken and mortar patched legs.

Proprietors Tombs: The granite face capstone is loose and brick backup is exposed on Tomb A. There is also erosion and invasive vegetation. The Brownstone entry stone has been noted as cracked with no repair required. The granite edging of Tomb B has overturned. The right corner column of Tomb C has shifted and twisted. The granite joints in Tomb D require repointing. Tombs G and H are barely visible with a small fragment of the original buff colored mortar present. The field stone walls need localized chinking and repointing. Tomb I, the 1829 grey granite Henry Howey tomb, was noted with a local collapse at the entrance. Permanent closure with concrete was recommended with repointing of masonry. The ground surface in front of the tomb has a 18” diameter hole several feet deep.

Other Tombs: Tomb 232 has a brownstone table and brick base. There are some loose bricks and open joints. Tomb 985 was not found. Tomb 1047, constructed of brick and rough granite, needs repointing.

Recommendations
Repair the Fuller-Hull Tomb. On Tomb A remove and reset the capstone, repoint granite masonry, repair erosion and remove excess vegetation. Realign the base of Tomb B to the original position. Reset the capstone and column stone of Tomb C and repoint the side of the tomb with lime cement mortar. Repoint the granite joints of Tomb D. Remove excess vegetation from Tombs G and H, and repair, locally chink and repoint the fieldstone wall. The hole in front of Tomb I requires immediate repair. Left alone, soil deflation will continue and rainwater and snow melt will eventually undermine the structural integrity of the tomb. Small animals may also enter the tomb and disturb the remains interred therein. The 1990 master plan recommended permanent closure with concrete and repointing the masonry. Repoint the brick base of Tomb 232 and reinstall the table stone above existing masonry on a soft lime mortar bed. Repoint Tomb 1047 with lime cement mortar and repair erosion.
Doors at Mound Tombs and Vaults

Issues
At least 2 of the mound tombs had iron entrance doors which is evident by the iron hinge and latch pins that remain. They are both missing or have deteriorated to such an extent that brick masonry replacements have been installed.

Recommendations
Iron doors should be installed at these 2 tombs, using a visually similar, unobtrusive, standard black painted steel or cast iron plate, secured to the masonry with expansion bolts.

Edging of Family Plots

Issues
There are numerous granite post bases in place in northern 1834 expansion section. Erect vertical granite posts remain at 4 plots, although the connecting chains and/or rails are missing. A few top and side iron chain hooks remain.

Recommendations
Chain and/or rail barriers should be replaced with a historically appropriate material.

BUILDINGS

Issues
A hearse house, probably constructed for the 1834 addition, was located in the northwest corner of the burial ground. No remnants of the structure are visible on the surface.

Recommendations
Additional research on the hearse house may provide important information on the structure. Town documents, such as Annual Reports, may reveal the construction date, the cost of the building, the name of the contractor, or describe the building, hearse and mortuary equipment, and enumerate the cost of operating the town owned funeral equipment.

FENCES AND GATES

Chain Link Fences

Issues
The perimeter of the burial ground is enclosed with a 6’ high chain link fence with top rails and center rails at the corners. The fabric and top rails are heavily rusted. H section and tubular section posts are not quite as corroded. There are two chain link vehicular gates.

Generally stable, the fence has survived reasonably well since the 1990 master plan. There is one bent top rail on the south side, cut fabric in two locations and one fabric patch, as well as high fabric in several locations because of erosion on the east side, 3 bent top rails, a rail slipped out of the coupling and a bent center rail at the northeast corner, and 2 bent top rails and 2 sections of rail off the fence on the north side. The Loring Park side has a kinked top rail, a rail out of the coupling and fabric higher that the stone base. Most of the bent top rails were caused by falling trees.

Recommendations
In the immediate future, local repairs should be made to the chain link fence, closing breaches and other deficiencies to improve security. The fence along the north and east sides should be replaced with 6’ high black vinyl coated chain link fence as recommended in the 1990 master plan. This should also occur on the Cotton Street side. If possible, new fencing should be erected from outside the burial ground, and an archaeologist should monitor the activity, particularly post hole excavation.

The fence along Centre Street and Loring Park should be replaced with a 6’ high solid bar stock steel picket fence. Wood would also be appropriate on this site, but transparency of the barrier is extremely important to maintain visibility of the site. The previously recommended addition of stone pillars to frame the vehicular entrance gate would be beneficial to support new matching gates. Because gate post installation work might impact potential archaeological deposits, it should be conducted under the direction of an archaeologist.
LEGEND

- Existing Deciduous Tree
- Existing Evergreen Tree
- New Tree
- Remove Existing Tree
- Existing Stone Wall
- Existing Chain Link Fence
- Vehicular/Pedestrian Entrance

EAST PARISH BURIAL GROUND
PRESERVATION PLAN
NEWTON, MASSACHUSETTS

PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE

BY:
WALKER-KLUESING DESIGN GROUP, LANDSCAPE ARCHITECTS
JOYCE CLEMENTS, CONSULTING ARCHAEOLOGIST
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OCMULGEE ASSOCIATES INC., CONSULTING STRUCTURAL ENGINEERS
CARL CATHCART, CONSULTING ARBORIST

NOVEMBER 1999
1" = 100'

Newton - 101
SITE AMENITIES

Signs

Issues
A 10' high free standing Massachusetts Bay Colony Tercentenary Committee informational sign, c. 1930, is sited in Loring Park at the intersection of Centre and Cotton Streets. It reads "Site of Early Meeting House - The original Meeting House of the First Church in Newton was built in this burying ground in 1660. The first pastor was John Eliot, Jr., son of the Apostle to the Indians."

A metal "No Admittance After Dark - Police Take Notice" sign is located on the chain link fence near each entrance. The laminated copy of the National Register of Historic Places certificate at the pedestrian entrance is gone.

Recommendations
A site identification sign should be provided, offering visible recognition from Centre Street. More informational and interpretive signs should also be provided.

Seating and Trash Receptacles

Issues
None.

Recommendations
Do not provide seating and trash receptacles inside the burial ground.

UTILITIES

Drainage

Issues
No drainage structures were found in the site. It drains on the surface from a high point in the southeast quadrant in all directions, but primarily toward the northwest vehicular entrance. Sloped areas beneath dense trees are eroding as well as areas around individual mound tombs which are eroding toward tomb entrances. Drainage patterns are undermining some headstones and have washed out a portion of the stone wall.

Recommendations
Do not add a drainage system. Repair eroded surfaces as discussed under lawns. Regrade areas only where necessary.

Water Supply

Issues
No source of water was found inside the burial ground. A fire hydrant is located in Loring Park.

Recommendations
Water is beneficial in times of drought and would help to re-establish lawns. Consider providing hose bibbs in Loring Park outside burial ground walls.

Lighting

Issues
There are no light fixtures on the site. Street lights exist along the two perimeter streets.

Recommendations
Do not add light fixtures inside the burial ground.

PRIORITIES

High Priority
• Stone conservation including repair program, resetting and repair of slate markers and pin replacement in marbles that are visibly cracked or spalled
• Security improvements
• Repairing perimeter fences
• Repairing perimeter stone walls
• Restoration of table tombs, mound tombs and vault structures
• Cleaning and protective coating the First Settlers Monument
• Vegetative removals and pruning
• Erosion repairs
• Lawn restoration
• Identification sign placement

Medium Priority
• Stone conservation including marbles with visible metal stains at the junction between marker and base
• Family plot restoration and repair
• Restoration of iron doors at mound tombs and vaults
• Relocation of pedestrian entrance
• Fertilization of trees
• Consideration of adding water supply

Low Priority
• Stone conservation including granite markers that have shifted or are leaning, and marbles currently in satisfactory condition
• Replacement of perimeter chain link fence
• Providing a steel picket fence along Centre Street
• Informational and interpretive signs
• Additional planting
Located on the south slope of the Spring Hill neighborhood of mid to late 19th century houses, this 2.62 acre triangular site houses the oldest cemetery in the city. It is commonly understood to have been established when the town was founded in 1660. Old Common Cemetery, the town’s second cemetery was established in 1706.

Spring Hill Cemetery is a small, triangular hilltop site surrounded by private dwellings. Difficult to find with a single entrance off Brown Street at the southernmost point of cemetery, the ungated opening is marked by 3 square rusticated granite posts. East of the entrance is a short section of fieldstone retaining wall with granite cap stones, the largest and highest of which is carved with the name of the cemetery and “1675.” Another short rusticated granite post ends the wall.

The southern part of the cemetery contains exposed rock outcrops with a line of 4 tombs built on the crest of the hillside. Most of the graves are located on the more level northern section of site, generally arranged in rough rows, facing southwest.

The earliest marked grave is that of Capt. Edward Hutchinson of Boston, who died in 1675 as a result of wounds received during King Phillips War. After being shot and seriously injured on a mission against the Indians in Brookfield, he stopped in Marlborough on the way back to Boston where he died and was buried.

Also buried here is Elizabeth Ward, wife of William Ward, one of the early petitioners for settlement. She was the great grandmother of Col. Artemus Ward, the first Commander in Chief of the Continental Army before George Washington took charge. She died in 1690.

Based upon a 1934 survey, the cemetery contains 38 Revolutionary War and 5 Civil War veterans. The cemetery also contains many of the older settlers of Marlborough like Barnard, Bigelow, Eager, Goodale, Morse, Parmenter, Stevens, Stow, Temple, Weeks, Williams and Wood/Woods, as well as prominent 19th century citizens like John Cotting, Dr. Benjamin Hildreth, William Stetson and Solomon Weeks. The latest recorded burial here occurred in 1909.
Once noted in poor condition, the Cemetery Division, part of the Department of Public Works Grounds Management Division, has been providing weekly maintenance. The conditions have improved.

LANDSCAPE CHARACTER, LAWNS AND VEGETATION
Landscape Character
Issues
This cemetery is generally an open site with lawn and a few deciduous trees, much like an older burying ground. There are a few trees immediately inside the entrance on the slope and another further inside the cemetery. More vegetation is located immediately on and outside the perimeter. Much of it is growing into the perimeter fence and walls.

The entrance experience has been inundated with visual clutter including parked vehicles and apparent shared yards. With the density of the neighborhood and lack of off street parking facilities, it is unlikely that the problem of parked vehicles at the entrance will end.

Recommendations
Maintain the general open landscape character of the cemetery. Provide some screen planting along the north and west edges to obscure views of the adjacent buildings. Locate the planting in such a manner that it does not conflict with known grave sites.

Create a welcoming experience at the cemetery entrance by working with the immediate abutters and improving the landscape character of the immediate area.

Planting
Issues
A few randomly spaced Maples shade the southern entrance area. An Oak is causing a tomb to come apart. Vegetative growth at the edges is primarily Maple. A large Maple on the east side is being used as a tree house with a wood ladder nailed into the tree. Tree conditions are mostly fair to poor with some dead wood. A few stumps have been left relatively high with 24-30” exposed.

Recommendations
Remove the Oak impacting the Lewis tomb. Prune dead wood from the remaining trees inside the cemetery and remove the tree house. Stumps should be cut down flush with the ground surface.

Volunteer Growth
Issues
Some new growth [Ailanthus and others] is beginning to sprout at the bases of some grave markers in the northern portion of the cemetery. Former volunteers are now growing into the perimeter fence. Japanese bamboo [knotweed] and briar is beginning to flourish in the northwest and northeast corners. A Black Locust has become established at the entrance.

Recommendations
Remove all volunteer growth.

Lawns
Issues
Once reported to be in poor condition with mostly weeds, the lawns appear regularly mowed and in fair condition. Maintenance currently consists of mowing and leaf removal.

Recommendations
Bare spots in lawn areas should be top dressed with the applicable soil amendments [limestone and fertilizer] added and then reseeded.

ACCESS AND SECURITY
Pedestrian and Universal Access
Issues
A single access point is shared by pedestrians and vehicles. Everyone uses the vehicular entrance because the adjacent pedestrian entrance has a 27” clear opening with 4 granite steps. The top step has collapsed and there is no walk beyond the entrance. The site is too steep immediately inside the entrance for universal access with slopes of about 15%. Even though there are no probable burials in this area, rock outcrops indicate that it would be prohibitively expensive to make the entrance accessible.

Once beyond the mound tombs, there is gently sloping topography in the central area with slopes of 4 to 5%. These slopes are accessible but there is no access to the area other than driving on the gravel path up a steep slope to that area.

The high point of the cemetery is centrally located on the east side with a slope of about 10% at the northeast corner. The low point is at the entrance which is about 15’ above and a single house lot away from Main Street. Overall there is about a 40’ grade change, mostly from the entrance to the southern edge of the central part of the cemetery.

Recommendations
Consider removing the steps at the pedestrian entrance and regrading the area above to facilitate use. While a gate at this entrance might be desirable, the perimeter is unsecured so a gate would serve only a symbolic function.
To provide universal access, the vehicular access point should be kept closed for security reasons, but should be opened when permission is granted for access provided an appropriate vehicle is used. While it is not historically appropriate, consideration should be given to providing a single handicapped parking space at the top of the slope.

**Vehicular Access**

**Issues**
The single access point has an approximate 11’ clear opening. An illegally parked vehicle prevented accurate measurement. Parking occurs in the cemetery during snow emergencies. The density of the neighborhood offers no or limited alternatives at these times.

A double leaf chain link gate marks the former church access. It is padlocked and no longer used because the access crosses private property today.

**Recommendations**
A gate should be provided to prevent unauthorized vehicular access at the single access point. Refer to the discussion under fences and gates for discussion.

**Security**

**Issues**
With no gate and only a partially fenced perimeter, the cemetery is open all the time. Only a fragment of a chain was found at the vehicular entrance.

**Recommendations**
A gate should be provided to prevent unauthorized vehicular access.

**VANDALISM**

**Issues**
In the Fall of 2000, two slate grave markers had been tagged with spray paint [one red, one white] and the granite stone at the east side of the Amos Lewis mound tomb facade had also been tagged with red spray paint. Previously reported bottles, broken glass and dog excrement were not observed, nor was the spray paint tagging of the table tomb of Rev. Robert Breck. ATV’s were also observed inside the cemetery. These vehicles can damage the historic resources as well as compact earth surfaces which will result in a reduction of vegetative cover and ultimately erosion of soil surfaces.

Reexamination in the spring of 2001 found no paint graffiti, but empty alcohol beverage bottles, a spray paint can, a small broken trampoline and dog excrement were observed. A person walking a dog on leash was observed.

**Recommendations**
Continue to remove evidence of graffiti as soon as possible. Prohibit dog use for public health reasons and unauthorized vehicular access.

**CIRCULATION SYSTEMS AND MATERIALS**

**Circulation Systems**

**Issues**
The single entrance drive divides in front of the mound tombs with two routes into the rest of the site. There is no defined walk system.

**Recommendations**
Maintain the existing circulation system.

**Steps**

**Issues**
A set of 4 granite steps at the entrance is in poor condition and presents a public safety hazard.

**Recommendations**
Consider removal of the steps as described under access.

**Roads**

**Issues**
The lower part of the access drive is virtually an unpaved, granular maintenance route. It does have 2 segments of bituminous concrete paving on the slope, approximately 11’ wide. The rest is lawn, probably growing over a gravel base course.

**Recommendations**
The lower part of the access drive should be paved to reduce the erosion potential on this steep slope.

**Pavement Materials**

**Issues**
The majority of path and drive surfaces are lawn. There are two areas of bituminous paving just inside the entrance.

**Recommendations**
The lower part of the access drive should be paved as described above.
GRAVE MARKERS
Headstones and Footstones

Issues
The majority of grave markers are slate with a smaller percentage of marble. A few very early ones are granite or other stone [roughly shaped granite stones with initials and a date “ST, 1698” and “WF, 1706”]. The 1700 William Ward marker is now granite with a bronze plaque and another, presumably original, stone inset below.

Many of the approximately 700 grave markers need attention. Most of the slate markers are in good condition with a few showing signs of delamination. Some have fallen over or are standing at an angle. Some are broken and a few have been repaired with deteriorating iron strapping. One slate, Williams, was observed with an iron strap around three sides of a broken marker holding it in compression. Six slate markers have been encased in concrete, all belonging to Ward family. Many small foot stones have been placed at the rear faces of larger stones, presumably to protect them and ease maintenance requirements.

Many of the marble markers have deteriorated to the point that some are illegible.

Recommendations
Several types of repair and conservation share top priority: resetting stones that are fallen or leaning; reassembling stones that are broken or separated from their bases; and removing the botanical materials. When selecting the stones to be conserved, priority should be given to markers that have legible inscriptions. Indecipherable inscriptions cannot be restored. When selecting stones to repair and reset, those that still have readable history should be done first.

Monuments
Issues
There are perhaps a dozen marble obelisks and short monumental shafts. Most are eroded from acid rain deposition. The Hildreth monument is also leaning and shifted on its base. It may have been reset after it was toppled. Another has shifted on its base. Some have exposed foundations due to settlement of the adjacent soil. Two marble obelisks have broken tops and damaged bases. One has a sloppy glue repair. Two types of lichen were observed, grey and yellow ochre as well as normal soiling.

Recommendations
Reset the Hildreth monument and others that are shifted and/or leaning. Provide earth fill at the exposed foundations of monuments. Remove biological growths and other soiling.

Table Tombs
Issues
At western end of site, two table tombs with large horizontal stone tablets mounted on granite legs mark the burial spots of Marlborough’s first two ministers. The raised brownstone tablet of Rev. William Brinsmead [1660-1701], the town’s first minister and first pastor of the Church of Marlborough, is broken. It has a bent bronze plaque secured to the top donated by the Gen. Joseph Badger Chapter of the DAR in 1912. The brownstone tablet of Rev. Robert Breck, second minister of the Church of Marlborough, has eroded to virtual illegibility.

Recommendations
Repair the Brinsmead table tomb and reset both on the support posts. The Breck tablet inscriptions can not be restored. A protective coating could be provided to retard the rate of loss, but would be of little benefit.

STRUCTURAL ELEMENTS
Perimeter Walls

Issues
Entrance Wall and Posts: The entrance to the cemetery is at the bottom of the hill on the south side of the cemetery. Two granite posts 15” square and 7’-6” high define a vehicle entrance. Although iron hinges are present, the gates are missing. Immediately adjacent to this entrance is a pedestrian entrance with a shorter granite post and four collapsed stone steps. The granite posts are undamaged and their vertical straightness indicates that they are well set into the ground. A low, mortared fieldstone wall makes up the remainder of the south boundary. It is covered with granite capstones and a dressed, freestanding stone with the name of the cemetery and the date 1675 cut into it. Except for a small, missing stone immediately under one of the capstones, the field stone units are intact and free of significant lateral or vertical displacement. However, the mortar is deteriorated, cracked and missing and needs to be chipped out and repointed.

Freestanding Fieldstone Wall: At the east side of the cemetery, the residential lots are deeper in length and the houses are below the level of the cemetery. The property line is defined by a freestanding wall of loosely stacked fieldstones capped with large, irregular slabs of stone. Iron or steel posts of an abandoned barbed wire fence are embedded into several of the cap stones. The stone wall is fairly intact at the northeast end but has collapsed in several places at the southeast end. Many of the stones have been scattered where collapses have occurred.

Near the center of the north side of the cemetery a short section of field stone wall is related to the limits of the adjacent private house lot. It is assumed that this wall is privately owned.
**Recommendations**

**Entrance Wall and Posts:** The entrance wall needs to be repointed. New mortar should be relatively weak and soft to have some resiliency against seasonal movements. A Type N mortar only slightly stronger than a Type O should be used. It should be noted, however, that the field stone wall is probably dry laid and the mortar simply dresses the exposed surface of the wall. Therefore, seasonal temperature and moisture movements will continue to act on the back and front of the wall and gradually affect the repointed mortar. Extensive damage will redevelop in the mortar over the next 15 to 20 years unless the joints are maintained on an annual or biannual basis.

**Freestanding Fieldstone Wall:** The deteriorating east property line wall needs to be reassembled where it has collapsed and scattered. collapsing sections of the wall can be reassembled by collecting and stacking the scattered fieldstones. The stones in the intact sections do not appear to be systematically arranged. That is, they were not carefully set to create a livestock or boundary fence but instead appear to be a row of deposited stones collected from adjacent fields. Although the fieldstones could be reassembled by hand labor, the capstones will require machine assistance to lift them back into place.

**Mound Tomb and Vault Structures**

**Issues**

There are four barrel vaulted mound tombs dating from the 1830s and 1840s at the crest of the slope above the cemetery entrance. Although they differ in detail, they are about the same size and are arranged in a row side by side. The facade walls generally consist of a stone panel on each side of a door and a long lintel panel crossing over the side panels and door. The stone panels are large, very rough, flat, unadorned slabs approximately 8 inches thick. They are dressed only on their exposed faces and edges. The roughly textured dressing was done with a hand held bush hammer or tooth ax. Most of the panels appear to be dry laid on lead sheets although mortar is present at one of the tombs. Additional stone posts are also present adjacent to the side panels. The vaults probably have walls built of field or rough cut stones and roofs of stone slabs. Foundations are probably a shallow arrangement of stones. The earth mounds are very steep and unable to retain vegetation. They are eroding along the vault walls and behind the facades.

The 1849 Amos Lewis tomb is located furthest east. The facade is composed of large granite slabs with a rusted iron door. Two of the side stones have shifted. The top door hinge has been welded, and there is a galvanized steel closure at a former hasp.

Next is the 1839 Parmenter tomb. An Oak tree immediately behind this large granite slab facade is pushing it forward, displacing some of the stonework. The tomb has some inscribed marble insets and a later, better dressed, inscribed marble pediment stone on top of the lintel. A stone currently placed in front of the door may have once stood at the top of the facade, as there is an iron dowel and a dowel hole on the top of the pediment stone. The tomb also has a granite door with iron hinges.

The third tomb has no name on the facade. The large granite slabs forming the facade are leaning forward and have created a separation from the back construction. The tomb has a deteriorated accretion of mortar, brick and stones surmounting the lintel in the form of a semicircular cap. It is not clear why this was done or what it expresses. If further research does not establish its historical significance, it should be removed. The tomb also has a granite door with iron hinges that are causing rust stains.

The westernmost tomb also has no name. The facade is made up of large granite slabs and a cast concrete door. Some lead flashing was observed. The top and 2 side stones have shifted and erosion is evident at the sides of the facade.

**Recommendations**

The stone units for the mound tombs need to be reset. The tombs are more or less intact but the relatively lightweight, individual components have shifted about over time so that their overall appearance is awry. In order to rehabilitate the tombs, the individual components, including foundation stones, should be dismantled and reassembled in full beds of mortar. Backfill should be free draining materials. Restore the earth mounds to correct erosion and restore the vegetative cover.
Edging of Family Plots  
**Issues**  
Only one family plot, Goodale, has edging. The long lengths of 8” wide granite have shifted and are out of alignment. Settlement has exposed more than the original 12” exposure on the outside face.

**Recommendations**  
This family plot edging should be reset. The ground under and behind any reset stone should be good draining material. Provide earth fill to bring the soil to the proper level outside the edging.

FENCES AND GATES  
Iron Fences and Gates  
**Issues**  
The former gate at the vehicular entrance may have been wood, iron or a combination of each. A granite threshold separates two 8’ tall, 15” square granite gate posts that have iron hinge pins and a remnant of rusted chain. The adjacent pedestrian entrance has a 5’ high granite post, but no evidence of hinge pins.

**Recommendations**  
Replace the vehicular entrance gate based upon documentary evidence of the former gate.

Chain Link Fences  
**Issues**  
The perimeter is lined with a chain link fence along the west, north and the south end of the east side. The fence is generally rusted with some damaged areas, mostly bent top rails. The fence is serviceable in that it is generally stable and functional.

The west and north sides of the cemetery are defined by an old chain link fence along the rear property lines of small residential lots. Although the chain linking is more or less intact, several top rails are bent, missing or broken. The rails and posts have no protective coating and are rust stained. At the north side, at least two of the abutting property owners have raised the level of their lots a foot or two by backfilling against the fence. Moisture in the earth in direct contact with the base of the fence will shorten its life span.

Rusted iron posts along a portion of the east wall suggest that there was once a barbed wire fence there.

**Recommendations**  
Repair damaged portion of the fence and continue to monitor the fence to maintain stability. Consider adding a new fence along the east side to complete the perimeter enclosure. Work with abutters on the north side to remove fill against the fence.

Interior Fences and Gates at Family Plots  
**Issues**  
A semicircle of rusted iron picket fence with a tulip motif is located in front of the 1839 Parmenter tomb facade. All of the picket tops are missing as well as 13 of 26 round pickets. The top horizontal rail is bent and part of the bottom rail is buried.

A burial plot with an illegible marble obelisk on a shallow mound has 5 rough cut granite posts that supported a former fence.

**Recommendations**  
Restore the fence at the Parmenter tomb. If documentary evidence can be found concerning the appearance of the fence at the marble obelisk, consideration should be given to replacing it.

SITE AMENITIES  
Signs  
**Issues**  
The first apparent sign is a green “Do Not Block Driveway” highway type metal sign mounted on one of the granite entrance posts. The identification sign, “Spring Hill Cemetery - 1675,” is carved into the granite cap stone on a short section of rough cut stone retaining wall immediately east of the entrance. It is somewhat concealed by volunteer vegetation and parked cars. No informational signs were found.

**Recommendations**  
Provide a more visible identification sign and add regulatory signs. As this is the oldest burial ground in town, some interpretive signs with historic background would be beneficial. In addition, directional signs are needed to help most visitors find the site.
Trash Receptacles and Seating

Issues
No amenities of this type exist.

Recommendations
Do not provide benches or trash receptacles.

UTILITIES

Drainage

Issues
The site slopes pretty much in all directions from the high point and all drainage occurs on the surface. No storm drainage structures were observed.

Recommendations
No changes are recommended.

Water Supply

Issues
No source of water is available inside the cemetery.

Recommendations
While it may be desirable to have a water source for lawns, the cost of providing a supply line through areas of shallow rock outcrops may well be prohibitively expensive. Do not add a source of water at this time.

Lighting

Issues
No light fixtures were found inside the cemetery.

Recommendations
Do not provide light fixtures inside the cemetery.

PRIORITIES

High Priority
- Remove Oak impacting tomb.
- Remove trees with large cavities, leaning into the cemetery, drives or grave markers.
- Remove volunteer growth.
- Tree replacements.
- Lawn repairs.
- Provide gate at vehicular entry.
- Remove steps at pedestrian entry.
- Pave lower part of access drive.
- Restore grave markers that present public safety hazards or are structurally unsound.
- Replace dowels in multipart stones that are visibly cracked or spalled.
- Conserve historically significant marble markers that are in danger of becoming illegible.
- Slate marker resetting and repairs.
- Broken stone repairs if the inscriptions are legible and at least 75% of the stone is available.
- Repair mound tombs.
- Repair and reset table tombs.
- Earth fill at exposed monument bases.
- Identification and regulatory signs.

Medium Priority
- Remove trees with large cavities, leaning away from drives and grave markers.
- Replace dowels in multipart stones with visible metal stains at the junction between stones.
- Clean legible markers.
- Repoint entry wall.
- Repair perimeter chain link fence.
- Provide chain link fence along east edge.
- Restore fence at Parmenter tomb.

Low Priority
- Prune trees with a small amount of dead wood and branches, and trees protected from the winds in close to the edge or other trees.
- Reset markers that have shifted or are leaning.
- Reevaluate and conserve marble markers that are currently in satisfactory condition, as necessary.
- Provide screen planting along the edges.
- Reset family plot edging.
- Provide interpretive signs.

PRIORITIZED COST ESTIMATES

High Priority
- Tree removals $1,500
- Tree pruning and fertilization 2,000
- Tree replacements 2,500
- Lawn repairs 10,000
- Remove steps at pedestrian entrance 500
- Gate at vehicular entry 5,000
- Pave drive 6,000
- Repair mound tombs 40,000
- Identification and regulatory signs 5,000

Medium Priority
- Tree removals 4,000
- Repoint entry wall 1,000
- Repair chain link fence 1,000
- New chain link fence 8,000
- Restore Parmenter tomb fence 6,000

Low Priority
- Screen planting 6,000
- Reassemble east wall 10,000
- Reset family plot edging 2,000
- Interpretive signs 10,000

Costs associated with grave marker work have not been included. Refer to the General Recommendations section for approximate costs of various types of repair.
At the edge of the Connecticut River and framed on the north, east and south with an active agricultural setting, this 5.9 acre active cemetery is a hidden treasure. Set back from River Road, Route 47, it is reached by the single lane Cemetery Road. A paved road encircles the long rectangular shaped cemetery, separating it into five sections formed by the original cemetery plot [1714] and later expansions [1832, 1867, 1887 and 1907]. The gently sloping terrain is actively frequented by town residents, and used for walking, jogging and occasional fishing from the riverbank at the northwest corner.

Sunderland was incorporated in 1718, culminating 4 years of resettlement as the impact of the Indian Wars diminished. The cemetery was laid out in 1714 by the original Proprietors of the town of Sunderland along with the original 40 house lots on Main Street. As such it was associated with the first church established in Sunderland [First Congregational Parish] which continues as the Congregational Church. Ownership of the burial ground was associated with the church. It was officially first referred to as Riverside Cemetery c. 1875, when Cemetery Road was formally laid out and improved, replacing an informal path. A fence was installed around the cemetery at the same time. It was named Riverside Cemetery in 1879.

Ownership and maintenance was taken over by the town in 1884. The first hearse was used in 1870. It served the town until 1903.

The cemetery contains the graves of the original 40 proprietors including Ensign Simon Cooley 1746, Benjamin Graves 1756, Thomas Hovey 1728, Deacon Joseph Field 1754 and William Scott 1759 as well as early settlers and Revolutionary War soldiers.

Its location along on the banks of the Connecticut River offers potential for prehistoric archaeological sites, such as Native American planting fields located to exploit nutrient rich flood deposits from the river.
LANDSCAPE CHARACTER, LAWNS AND VEGETATION

Landscape Character

Issues
Hollis D. Graves, a cemetery commission member, began landscape improvements with ornamental trees and shrubs through the 1880’s. This work was further enhanced by the Sunderland Women’s Club in 1934 which marked and tagged trees with their names. The destructive forces of nature in 1936 and 1938 may have diminished the impact of these improvements. Today the cemetery presents a well maintained appearance with trees randomly distributed throughout with a 78% deciduous and 22% evergreen composition. A row of Spruce along the river edge denies open views to the river and conceals an unkempt river edge.

Recommendations
The general distribution and composition of tree cover should be maintained with some supplemental planting, particularly in the newer areas as well as along the east perimeter. Additional planting in the oldest one or two sections should be discouraged so that it presents a more appropriate historic image. Selective thinning should occur in limited areas of the river edge to facilitate views both to the Connecticut River and Mount Sugarloaf State Reservation to the west and northwest.

Planting

Issues
Plant material inside the developed area of the cemetery includes large deciduous shade trees [24 Maple, 11 Oak, 3 White Birch, 1 Elm and 1 Shagbark Hickory], small deciduous trees [10 Flowering Dogwood, 2 Japanese Maple and 1 Eastern Redbud], evergreen trees [5 Spruce, 3 Blue Spruce, 3 Cedar, 2 Fir and 2 White Pine], shrubs [Azalea, Lilac and Yew] and bulbs [not counting the undeveloped area along the river edge and the undeveloped south side]. The most significant tree population includes 35% Maple and 16% Oak. Many of the older Maples have cavities and some dead wood, particularly along the east side. Several large trees shade the oldest part of the cemetery, causing loss of ground cover and promoting moss growth. Arborist work has been provided each December for the past five years in the amount of $1,500 to 2,000 each year.

Recommendations
A certified Arborist should further evaluate all trees, particularly the Maples on the east side, with a Hazardous Tree Evaluation. Where possible, heavy equipment used for pruning and removals should be located on paved surfaces away from the soft surfaces of the cemetery.

Volunteer Growth

Issues
In general volunteer growth is under control except at the north perimeter and along the river edge. The south side understory has been removed in anticipation of expansion.

Recommendations
Remove volunteer growth at the north perimeter and along the river edge.

Lawns

Issues
With a few bare spots and a large area of moss on west side in the north of the road section, lawns are generally in good condition for the level of care that they receive. They are cut only, not watered or fertilized. Volunteers provide leaf raking and clean up each spring.

Recommendations
Repair lawns.

ACCESS AND SECURITY

Pedestrian and Universal Access

Issues
Although the site slopes gently, there are no paved paths inside the cemetery, which limits universal access. Pedestrians rely on sharing vehicular access routes. Parking occurs on or adjacent to the one lane drives inside the cemetery.

Recommendations
No changes are recommended for pedestrian access. Universal access should continue to rely of vehicular access routes.

Vehicular Access

Issues
There is one point of vehicular access, a single lane paved Cemetery Road, from River Road.

Recommendations
This appears sufficient for the visitation requirements and no changes are recommended.
Security
Issues
The site is open. The access drive is not gated. Surveillance is provided by neighbors and the occasional police patrol.

Recommendations
Security is apparently not an issue on this property and improved measures should not be pursued at this time.

VANDALISM
Issues
There is reportedly little vandalism, although about 5 years ago the shed was broken into and some equipment was stolen. Little of the impacts of vandalism are evident. The causes of toppled and broken stones, most of which appear to have been in that condition for some time, could be numerous. Cemetery debris, including plastic flowers and seasonal decorations, has been deposited over the river bank bordering the cemetery on the west.

Recommendations
Vandalism is not a significant problem and no changes are recommended except for clean up of the riverbank.

CIRCULATION SYSTEMS AND MATERIALS
Circulation Systems
Issues
A one lane paved road, approximately 10’ wide, encircles the perimeter of the cemetery and east-west one lane connecting drives divide it into sections. There is no apparent path system.

Recommendations
No changes to the circulation system are recommended at this time.

Pavement Materials
Issues
Bituminous concrete is the only pavement material here and it is in fair condition. The surface is in fair condition, with some cracking and unraveling at the edges.

Recommendations
Assuming the site is not snow plowed, paved surfaces should be resurfaced within 5 years with a chip sealed bituminous pavement to present a character more in keeping with the historic nature of the cemetery. Road improvements involving excavation should be undertaken only after archaeologists have tested the impact area to determine whether artifacts, archaeological features or grave shafts would be impacted during improvements.

GRAVE MARKERS
Headstones and Footstones
Issues
The collection of about 600 markers includes the full range of stone types and shapes from the early 18th to late 20th century, including slate foot stones, sandstone and limestone mid-19th century markers, multi-stoned Victorian marble monuments and two part polished granite markers. Some of the 18th century slate stones are by carvers with distinguishable styles. There are some also primitive markers. The earliest extant stone dates to 1722. Several of the slates have been repaired with iron straps, others have been set flush in cement. While many of the slates are upright and in good condition, a few markers are broken and some are leaning or toppled. Repairs are made when budget allows. Marble monuments have eroded to varying degrees of legibility, and some of the coarser grained stones are badly sugaring. Grey/green biological growths are found on stones of all types throughout the cemetery.

Many of the markers in the cemetery are surrounded with decorative plantings, statues, rosary beads and perpetual candles. A modern polished granite marker displays personal photos in decorative medallions. Although graves are oriented head to the west according to Christian tradition, several monuments in the northernmost plot are aligned north-south, perhaps to facilitate identification from the paved road. Several marble monuments mark the location of family plots, and a large sandstone mill wheel distinguishes the grave of a Vietnam War Veteran.
**Recommendations**

A stone by stone inventory should be completed of the entire cemetery, beginning with the oldest sections. Tilted and toppled stones should be reset in gravel, beginning with toppled slate markers. No attempt should be made to reassemble the broken slate pieces in situ. Pieces of broken slates should be stored in a sheltered location, preferably inside. No attempt should be made to remove or reverse old repairs to slate markers, as removal will damage the stones. Depending on the condition, consideration should be given to reassembling broken marble markers.

Minor biological growth can be carefully removed from stones throughout the cemetery if resources are available. Removing surface biological growths will improve the appearance of the stones and slow down weathering if done gently.

Extant statuary, vegetation and perpetual lights provide examples of contemporary memorialization of the dead. They should be very carefully protected so that in time they will become part of the archaeological record of the cemetery.

**Table Tombs**

**Issues**
The cemetery has one table tomb, the horizontal marble slab of Rev. Joseph Ashley that is exhibiting some delamination. The tomb has 5 marble post legs. The table slab is in somewhat precarious position because 3 of the posts are twisted, presumably because of flood waters.

**Recommendations**
Reset the table tomb with the posts set square to the top slab. Consider protective coating for the table portion.

**Monuments**

**Issues**
There are a number of large and small obelisks made of a variety of materials including brownstone, marble and granite. Some are late 1840’s architectural monuments like the 1847 broken column, 1860’s obelisks, 1867 Gothic spire and the undated Hubbard Monument with a human figure. Settlement is evident at some of these monuments, exposing stone foundations. Several are not set square on their bases, again presumably because of flood damage.

**Recommendations**
Reset leaning and skewed monuments and obelisks to a vertical and square position on appropriate footings. Provide earth fill to cover exposed stone rubble foundations to prevent undermining and destabilization. Soils should not be removed from around the bases of monuments. Footstones and contemporary memorials should be documented and recorded with reference to a site datum prior to addition of material to the ground surface.

**BUILDINGS**

**Issues**
A small wood equipment shed, approximately 12’x12’, is located in the southwest corner, in the newest area of the cemetery. It has white painted vertical wood siding and black asphalt roof shingles.

**Recommendations**
This structure is apparently adequate for the needs of the cemetery and no changes are recommended.

**FENCES AND GATES**

**Wood Fences**

**Issues**
A single row of 13 rough hewn granite posts, about 3.5 feet high, separates the burial ground from fields to the north and marks the boundary. Each of the posts has two rusted bolts projecting toward the cemetery. The remainder of the cemetery edge is unfenced. A picket fence was installed around the cemetery in 1875. The fence was extended with the 1887 and 1907 purchases. It was removed in 1952 and partially replaced with a border of shrubs. Most of the shrubs are gone now.

There are also 3 sections of two rail weathered wood fence near the shed defining the corners of the road. The fence is in fair to good condition.

**Recommendations**
Consideration should be given to restoring the picket fence, particularly along the north edge. This would help protect the granite posts from disappearing and restore a part of the historic visual character of the cemetery.

**SITE AMENITIES**

**Signs**
The entrance at the intersection of River Road and Cemetery Road has an identification sign from the first week of May to the last week of November each year. It is stored in the shed for the winter. The sign has a simple horizontal rectangular shape with a shallow peaked top. Painted white with black lettering, the wood sign is supported on two black painted square steel supports. There are no informational or interpretive signs.
**LEGEND**

- Existing Evergreen / Deciduous Tree
- Remove Existing Tree
- New Tree
- Water Supply
- Property Line
- Flagpole

**RIVERSIDE CEMETERY PRESERVATION PLAN**

**SUNDERLAND, MASSACHUSETTS**

**PREPARED FOR:**
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

**PREPARED BY:**
WALKER-KLUESING DESIGN GROUP, LANDSCAPE ARCHITECTS
JOYCE CLEMENTS, CONSULTING ARCHAEOLOGIST

OCMULGEE ASSOCIATES INC., CONSULTING STRUCTURAL ENGINEERS
CARL CATHCART, CONSULTING ARBORIST

SUN  NOV 1999

**SCALE:**
1" = 100'

**NOTES:**
- Selective thinning of woods for views
- Remove saplange
- Restore picket fence

**NORTH:**
Recommendations
It would be beneficial to add informational and/or interpretive signs.

Trash Receptacles and Seating
Issues
There are no trash receptacles, seating or other amenities

Recommendations
While benches are not part of the historic plan, they would be beneficial in terms of taking advantage of the view and increasing visitation. The addition of benches in terms of style and location must be done in such a manner so as not to detract from the primary experience of the cemetery. The addition of picnic facilities should be discouraged, not only because of the sacred nature of the site, but because of the increased probability of trash, misuse of the property and vandalism.

Flagpoles
Issues
A single 25’ high steel flagpole is located near the shed. Some rust is evident on the white painted surface.

Recommendations
Remove rust and repaint the flagpole.

UTILITIES
Drainage
Issues
No drainage structures are evident. The site drains on the surface with a gentle slope toward the east, away from the Connecticut River. The 1980 Flood Insurance Rate Map by U.S. Department of Housing and Urban Development places the site in zone B, above the 100 year flood level, but within the 500 year flood zone. In the 1936 floods, the river rose 5’ above the cemetery and left 5’ of silt which had to be removed. In 1938, the hurricane and flood damage impacted the trees, and many had to be removed and replaced or pruned. Some loss of grave markers is assumed during these floods.

Recommendations
No changes are recommended. Any efforts to improve vegetative ground cover or correct surface runoff and erosion should consist of loam added to the ground surface.

Water Supply
Issues
Water spigots are located at the southeast corner near the shed and at the northeast corner.

Recommendations
Water has numerous uses in a cemetery. The water service should be maintained. Archaeological testing should precede repair or maintenance of water pipes.

Lighting
Issues
There are no light fixtures or electric service inside the cemetery.

Recommendations
No lighting is recommended.

PRIORITIES
High Priority
• Grave marker inventory
• Stone conservation including resetting and repair of slate markers and pin replacement in marbles that are visibly cracked or spalled
• Table tomb restoration
• Vegetative removals and pruning
• Lawn repairs

Medium Priority
• Stone conservation including marbles with visible metal stains at the junction between marker and base
• Monument restoration
• Road resurfacing
• Fertilization of trees

Low Priority
• Stone conservation including granite markers that have shifted or are leaning, and marbles currently in satisfactory condition
• Picket fence restoration
• Informational and interpretive signs
• Additional planting
Prospect Hill Cemetery
Millis, c. 1714

Originally known as the Old Churchyard Cemetery, Prospect Hill Cemetery is adjacent to the former site of the first meeting house that was built in 1714 when Millis was part of Medway. Fronting on Auburn Street, Prospect Hill Cemetery is centrally located a few blocks west of the town center in an area once called Bare Hill [God’s Acre].

The cemetery expanded during the rural cemetery movement and contains elements characteristic of that style of cemetery design. With significant topography and vegetation, drives wind through steep hills and sunken areas including a sunken circular dell and a horseshoe shaped dell. The earliest marker found in the former area was dated 1845, which is an appropriate date for the improvement. The expansion area also contains the grey granite monument of Charles Wesley Emerson, 1837-1908, founder of Emerson College.

One person, whose responsibilities also include burials, currently maintains the entire site. It was formerly maintained by 2 people.
LANDSCAPE CHARACTER, LAWNS AND VEGETATION
Landscape Character

Issues

The overall character is one of steep wooded slopes, terraced areas with severe side slopes and some relatively level areas. Many areas are heavily vegetated, primarily with deciduous shade trees. There are 4 areas where extensive stands of evergreen trees add a distinctive character.

Recommendations

In general, retain the 4 stands of evergreen trees and let large deciduous shade trees predominate elsewhere. Reduce the amount of trees at the high point, in the oldest area of the cemetery, both to protect the historic resources and to provide a historically more appropriate image. Provide shade trees along Auburn Street and Veterans Way.

Most of the trees were mature and in poor to fair condition. Some are dying and a significant amount of dead wood was observed on the ground. It is recommended that 15 trees be removed, or about 30% of those examined, including a dead White Ash, an 80% dead Red Maple, a 75% dead Black Oak and a 50% dead Sugar Maple. There are also 2 Blue Spruce with over 50% decline. A White Pine has base decay and a crack in the main stem. A Red and a Sugar Maple have decay in the upper stem and another Sugar Maple has basal decay as well as 75% overall decay.

Recommendations

Remove hazardous trees. Recommendations for support systems to help prolong the life of a tree that is still in fairly good condition generally fall into the highest priority, depending on location. Many of the trees have main multistem branches with either decay or natural structural defects, which may fail under adverse environmental conditions. Support cables help prevent large branch loss. Treat Hemlocks for wooly adelgid.

Soil samples are always recommended before decisions are made to apply fertilizer to any plants in the landscape to avoid excessive use of chemical fertilizers or lime and spending needless funds. Lime and fertilizer should be applied to all the trees as recommended by soil analysis. The soil texture is sandy to gravel. Amending the soil with organic matter will help maintain nutrients and moisture.

Root collars or root flares are often damaged by lawn mowers. Naturally occurring girdling roots can slowly cause decline in a tree. All soil and mulch should be kept at least one foot from tree root collars so as not to encourage circling roots or decay organisms that can damage root collars.
Lawn areas are in fair to poor condition depending upon location. Heavy moss development is present in some areas, particularly on north facing slopes. Many of the very steep banks also exhibit varying degrees of erosion.

**Recommendations**
Lawn areas should be top dressed with the applicable soil amendments added and then reseeded. Consideration should be given to easing the severity of steep slopes to reduce erosion and maintenance requirements.

**ACCESS AND SECURITY**

**Pedestrian and Universal Access**

Most pedestrian access points are shared with vehicular drives. One pedestrian access point, linking the old and new parts of the cemetery, is provided from Veterans Way by way of a set of stone steps.

Because of the steep topography in many areas of the site, the cemetery is generally considered accessible by vehicle only. The few relatively level areas could be considered accessible except for the surface materials.

**Recommendations**
No changes are recommended. Universal access should continue to rely on vehicular access routes.

**Vehicular Access**

There are 3 points of vehicular access into the cemetery, one from Auburn Road and two from Veterans Way. Vehicular access varies somewhat in width with a 15'-4" clear opening at the east entrance, 14'-4" at the southwest and 14'-2" at the northwest.

**Recommendations**
No changes are recommended.

**Security**

The cemetery is officially open from 8-5 during Eastern Standard Time and 8-9 during Eastern Daylight Time. Because it is not locked, it is open at all times for practical purposes. There have been some recent thefts, including the sculptural part of a marble marker, some flower pots and a bird bath.

**Recommendations**
To reduce the impacts of theft, some security measures should be undertaken like providing gates or other devices at vehicular access points to close the cemetery during off hours and increased police patrols during evening hours.

**VANDALISM**

While there was no evidence of recent vandalism, it was reported that most of the damage to grave markers has been caused by falling trees.

**Recommendations**
No changes are recommended.
Steps
Issues
There are several sets of stone steps in the historic section. The circular dell has 2 access points with steps and the horseshoe dell has one with 3 sets of steps [2, 3 and 2 risers]. The stair link between the old and new sections of the cemetery has 14 risers. Many of these old stone steps have suffered settlement and some have rotated out of position making them a public safety hazard. There is also a metal stair to the top of the mound at the Holbrook lot.

Stair materials vary in the newer section with stone, concrete and galvanized steel handrails.

Recommendations
Remove and reset the steps that have moved out of position to establish a uniform riser height within each set of steps. Provide a free draining foundation of suitable depth to reduce the effects of frost heaves.

Pavement Materials
Issues
Originally gravel, the drives in the older section of the cemetery were paved with bituminous concrete in the mid 1980s for maintenance reasons [steep slopes]. They are still in relatively good condition for their age. Some of the less important drives are now maintained in lawn. All walk surfaces are grass.

The newer section of the cemetery has gravel drives. They are repaired at least twice a year because of the maintenance requirements with steep slopes.

Recommendations
Maintain the current paved drives in bituminous concrete. Resurfacing will be required in the not too distant future. Maintain walks in grass.

GRAVE MARKERS
Headstones and Footstones
Issues
There are approximately 700 grave markers in the older portion of the cemetery, ranging from the early 18th through the early 20th century, and represented by slate, marble and granite markers as well as some brownstone and zinc. Most of the older stones, primarily slate, are on the top of the hill where rows of markers face each other.

Numerous stones have been broken, or have toppled and been reset, using methods or materials not recommended today. Repairs observed included many adhesive repairs and at least 12 slate markers encased in concrete, like the 1724 David Richardson marker. The latter is not a recommended repair technique for slate or marble. The Julia Ann Hunting marker is in poor condition with a hard gray cement repair. Iron strap repairs reputedly occurred after the 1938 hurricane when over 100 trees were lost in the old section. At least 4 slate markers had iron straps and bolts, and another had both bronze and iron straps and bolts. Several slate markers are falling apart, due to the severe rusting of these early iron repairs. Cement repairs on marble tablets are detrimental because cement is harder than marble.

Stephen and Ruth Harding are marked by a double tablet with a good adhesive repair of a break, but with a bright yellow lichen. At this point it is easily removed by gentle scraping with a wood sculptor's tool. Similar work would benefit the row of Clair family slate tablets. The inscriptions may be difficult to read, but the stone is basically sound.

Among the rest of the markers, especially the marble and brownstone grave markers, the primary problem is one of botanical growths. Lichen of several varieties including red, yellow, and green-gray as well as black mildew/fungal growths and ordinary moss closer to the ground cover part or all of nearly 50% of the markers. Such growths are damaging in two ways: they invade the granular stone material and loosen it so that when they are removed they often take a bit of the stone off too; and they hold moisture so that seasonal freeze-thaw cycles loosen more of a stone's surface. That in turn can eradicate inscriptions and art work.

On brownstone, the problem condition is a loosening of layers, called spalling. The brownstone Allen grave marker is badly spalled on the back side and almost entirely covered with lichen. The spalling is so severe on this notable marker that it should be a high priority for conservation.

Typical of a number of the white and light gray marble markers is staining from corroded bronze dowels that serve to anchor and support individual stone units joined together. The stain indicates water penetration is corroding the dowels. For example, the white marble Cutler marker is set on a granite base and has copper stains from dowels that join the stone and the base, and a hard black gypsum crust under the urn on the back. The marble is sugaring and the granite is also in very poor condition. Like the Allen marker, this marker should be high on the list for conservation treatment. The 1880 William Adams marker also has a virulent green copper stain at its white marble base.
An interesting use of pink granite, the stele shape, marks the burial of a member of the Heath family. It has names on the front and a simple elegant Arts and Crafts period design cut on the back side. It demonstrates the durability of close grained granite. Granite, especially polished granite, is the most resistant to deterioration of any type of grave marker.

Of particular artistic interest are the grave markers for Captain Moses Harding [d. 1826] and Timothy Ballard [d. 1827]. The Harding stone has a very architectural incised design at the top, showing an open space of some sort with a checkerboard floor and columns, in perspective, and including Masonic symbols. The Ballard stone is a 5’-9” tall stele, and the carver has signed his surname, "Ellis". Another interesting stone is a 1930 copy of an original 1754 grave marker, which was probably slate. The slate marker for Horatio Jones and several others are unusual in the inscription style is of shadowed letters. These markers are in excellent condition at present, and should be monitored to insure that they continue to weather well.

A broken slate marker has had some darkening of the crudely lettered inscription: "Eleazar Adams. . . deceased . . . Africa. . ." In that this may be the marker of a slave’s grave may have been dated c1719, some special effort should be made to identify this burial. It is preferable not to darken incised lettering, even for legibility.

Nearly all of the stones set horizontally will soon be covered by earth and grass. It will be necessary to reset them so that they do not disappear.

Although zinc markers were available in the mid and late 19th century, they were not widely used in New England. Only a few exist here. The Bickford marker has a missing screw at the top of the front panel. Corrosion of the iron armature is evident with rust showing on the marker base.

Iron flag holders mark the burial sites of those who fought in the Revolution, Civil War, Spanish American War, and, most unusual, members of the Patrons of Husbandry, better known as the Grange. These castings are especially numerous and various here. Many have rusted.

**Recommendations**

Older repairs using iron that has now rusted should be redone. Older repairs using cement mortars or other materials that have not adversely affected the markers should be left alone. The Angeline and William Ware marker, for example, is a marble tablet set into concrete, evidently some decades ago as indicated by erosion of the concrete. Nevertheless, this has served to preserve at least the text surface of the marble. The Partridge stone has had similar treatment. Although not a method of treatment recommended now, these stones should be left alone. In the case of the William Bacon marker, now tilted, the marble tablet has been mortared together at the break and set into a brownstone base. This stone, like others so repaired, should not be reset.

Reset markers so that there is a sufficiently stable base below grade and full inscriptions are exposed above grade.

Remove lichen and other botanical growths with the careful application of a biocide to kill the lichen, followed by gentle removal of the plant growth when it is dead. That work is best done by an experienced conservator. Because the potential for irreversible damage is great, cleaning historic grave markers should be done only under the supervision of an experienced conservator. Some conservators give instruction and supervision so that volunteers can be trained to do the work with minimal damage to the stones.

Record and photographically document the iron flag holders. Then carefully conserve and reset them soon. Photographically document the Eleazar Adams marker.
In the southeast corner of the cemetery, the Col. George H. Holbrook marble obelisk had been toppled in a storm. It has been reassembled although a few sections just below the top were omitted because the equipment necessary for complete reassembly was not available. These pieces are currently stored in the maintenance building.

This cemetery also has many tall columnar markers, including obelisks, and round and square columns. Heights range from 3 to 6\textprime, not counting the plinths or bases. This type of marker is vulnerable to breakage from toppling or tilting due to settlement of the subsurface soils. Settlement and soil erosion has affected 25 to 40\% of the stones here, although tilting or toppling has not yet occurred at all washed out bases. Several others have various types of damage. The Daniels obelisk has had some readhesion of a break.

The octagonal brownstone Bullen obelisk is nearly covered with various species of lichen. The marble front [death dates of 1872 and 1873] is nearly illegible but can be saved if conserved soon. The Handel obelisk and 9 associated small stones all need to be cleaned and conserved. Other marble obelisks have gray lichen growths. A fine marble obelisk [Lovell] is in perilous condition and represents marble that can be preserved if the work is done within the next 3 years.

**Recommendations**

At all monuments where foundations are being undermined, earth fill should be provided at the base to prevent future damage. At the Emerson monument, clean the lichen from the top and soiling at the base. Remove biological growths as recommended for grave markers.

Complete the reassembly of the Holbrook obelisk. Because Col. Holbrook was an important town figure and bell founder, and his house remains below the hill, it would be beneficial to restore views to the house for interpretive purposes.

**STRUCTURAL ELEMENTS**

**Perimeter Walls**

**Issues**

There is a low, 3\’ high skillfully built fieldstone wall running along the east side of Veterans Way. It is capped with rough stone slabs. In general, the wall is in good condition except that one of the cap stones rocks back and forth slightly near the upper end of the wall where a wood fence begins. The fieldstones are well seated and interlocked.

Wall at southwest corner

Lying between the maintenance building and the sunken area is a low quarried granite wall with units dry laid in a broken ashlar pattern. The wall retains about a foot or two of earth on the cemetery side. The stones are well fitted together and are generally undisturbed. There is one location where the units are rotated outward somewhat. There may have been a tree at this location that has been removed. No remedial work is needed at this wall.

**Recommendations**

Cemetery personnel should continue to make periodic observations and replace any stones that may loosen or fall out from time to time.
Interior Walls
Issues
Wall at the southeast driveway
A drive leads from the circular sunken area down the east side of the hill to the Auburn Street entrance. The west side of the drive is defined by a dry laid fieldstone retaining wall that is 4’ high at its highest point. At this same point, where the slope of the hill also rises another 4 or 5’ above the top of the wall, the wall tilts outward about 2 to 3” and a few individual stones have fallen out. Large trees growing near the back of the wall may aggravate this leaning condition. Although the wall appears to have been expertly built and is probably several feet thick at its base, it may not have been designed for the surcharge load due to the weight of the slope of the hill above the wall.
Retaining walls at terraced plots
There are several terraced plots with dry laid fieldstone retaining walls providing structural support to some grave lots. All of the walls observed appear to be intact, with no displaced stones or fallen stones. Although the walls are well built, some of them are fairly high in some locations and appear precarious.

Recommendations
Wall at the southeast driveway
Cemetery personnel should monitor this wall and replace any loose and fallen stones. A vertical level should be used to measure the tilt in the wall. If it continues to move, indicating an active condition and potential instability, the wall should be torn down and rebuilt in a manner to withstand the surcharge load. This may require that the stone wall be thickened or that a reinforced concrete wall be built with a stone veneer.
Retaining walls at terraced plots
Cemetery personnel should monitor these walls. Loose or fallen stones should be replaced whenever they appear.

Mound Tomb and Vault Structures
Issues
Receiving Tomb
About halfway along Veterans Way is a simple, unmarked holding or receiving tomb. The front wall consists of 5 roughly dressed granite jamb stones and a 9’ long, 12” thick and 14” high headstone capped with a pediment stone. Opening the operable iron door, the interior of the vault consists of fieldstone walls and a stone slab roof, all coated with a plaster or cement parget. Fieldstone retaining walls were present on both sides and in the same plane of the mound tomb facade. The tomb and the retaining walls were in excellent condition and appear to be maintained periodically.
Currently used for the storage of old markers whose original locations are not known, the tomb was reportedly broken into this past winter. The green painted 3/8” solid steel plate door now has a missing hasp, and the area is rusting.
Richardson family tomb
The front wall of the Richardson tomb consists of several simple, 10” thick, smoothly dressed slabs of granite. The 4 jamb stones are separated by 3 inset inscribed marble memorial tablets dating from the 1850s. Capping these stones are 3 stepping lintel or pediment stones. The stones are not mortared but set with lead strips between joints. Insofar as there has been some relative movement between stone units, they are probably not set with dowels. The lower pediment has shifted at the right end and the left jamb has tilted. An earth mound covers the vault, preventing any insight on the vault construction.

Recommendations
Receiving tomb
Repair the access door such that it can be locked and repaint it.
Richardson family tomb
If the individual stones at the tomb continue to move relative to each other, the facade should be dismantled and then reassembled with stainless steel pins epoxied and mortared into drilled holes such that each unit has at least two pins across its bedding joint.

Mound tombs
There are also 2 shallow mound tombs, each with 3 horizontal cut granite slabs stacked in a simple manner with each one slightly shorter in length than the one below. One has carved letters that read “Captain Nathan Jones - Dr. Abijah Richardson - erected 1797.” The other reads “Buckman & Lovell - 1795, Richardson’s - 1845.” The latter is leaning forward. The granite is in good condition, having only some lichen on the surface. Both mounds appear to have settled because there is no earth mound to speak of immediately behind the granite.
Mound tombs
Mound tombs
Dismantle and then reassemble the Buckman & Lovell lintel after providing an appropriate foundation. Provide additional earth fill if further investigation determines that the actual level of earth on the mounds was higher.

Masonry trellis
Masonry trellis
A masonry trellis is located on the west side of Veterans Way serving as a pedestrian route from the historic section to new section of the cemetery. The trellis has about a 6’ high clear passage and consists of two pillars of articulated mortared stone [marble] and brick [brownstone fragments] with concrete trellis bars. Notches in the trellis bars were to receive wood slats that are no longer present. The 14” by 18” pillars are in good condition. The two 6’ wide by 8’ deep by 7’ long primary concrete trellis beams have reinforcing steel and large embedded stones. The reinforcing steel has corroded and split the concrete. An attempt has been made to repair the spalled and split concrete but the bottom patches are now deteriorating. The concrete cross bars are probably not reinforced and are in good condition, although the concrete is deeply etched on the surface. The foundation for the trellis is unknown.

Recommendations
The concrete trellis bars should be dismantled and the two beams replicated with new concrete. The etched crossbars can be sealed with a clear coating to retard further deterioration and can be reused.

Buildings
Buildings
The maintenance building is a small garage, about 24’ square, located at the end of Veterans Way. It is clad with metal panels on the roof and walls, green with white trim. Many of the panels have been dented and, in some places, torn where someone has attempted to pry them open. In spite of the minor vandalism, the panels have been able to resist intrusion except where one clear plastic clerestory panel has been cut open. The front of the building has numerous dents from vehicle impact. Although in somewhat battered condition, the garage appears to perform its function adequately.

Recommendations
No changes are recommended.

Fences and Gates
Fences and Gates
Wood Fences and Gates
Issues
Much of the historic section perimeter is lined with rough cut granite posts connected by two diagonally set horizontal square wood rails with ledge pins. One rail is missing. It was reported that wood gates used to exist at each of the entrances.

Recommendations
Maintain this fence. Replace the missing rail. Consider replacing the gates at the entrances.

Site amenities
Site amenities
Signs
Issues
A sign provides direction to the cemetery from Route 109. There are 2 signs at the older Auburn Road entrance. One states "No Dogs Allowed - Violators will be fined $50.00 - Per Order of DPW/Selectmen" and the other identifies "Millis Historic Trail" stop 16 with the names "Bare Hill, Prospect Hill Cemetery."

The entrance to the newer part of the cemetery from Veterans Way has 3 signs set back from Auburn Road. One identifies Prospect Hill Cemetery, another notes the hours of operation and a third states that no dogs are allowed.

A bronze plaque on the stone retaining wall near the maintenance building commemorates the Ware family Rose Bushes that were originally transplanted from Nebraska. These eventually died and were replaced with local roses.

Recommendations
A sign with some historic background information would be beneficial.

Trash Receptacles and Seating
Issues
One flat cast stone bench is sited near the flagpole. No trash receptacles were observed.

Recommendations
Do not provide additional amenities of this type.
PROSPECT HILL CEMETERY
PRESERVATION PLAN
MILLIS, MASSACHUSETTS

LEGEND

Existing Evergreen/Deciduous Tree

Existing Coniferous Woods

Existing Woods

New Deciduous Tree

Pedestrian/Vehicular Entrance

Flagpole

Paved Drive

Lawn Path

Stone Wall

Wood Fence

BY:
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PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE

NORTH
MAY 2001
1" = 200'

Millis - 125
Flagpoles
Issues
A galvanized pipe flagpole, about 30’ high, is located near the high point of the cemetery. The silver paint finish is beginning to fail as some rust corrosion is apparent.

Recommendations
Paint the flagpole.

UTILITIES
Drainage
Issues
All drainage appears to occur on the surface and most of it flows to the east toward Auburn Street. No drainage structures were observed in the sunken circular dell.

Recommendations
No changes are recommended.

Water Supply
Issues
Hose bibbs are provided throughout the cemetery. Some exposed water supply pipe was observed near the high point.

Recommendations
No additional water supply is recommended. Provide adequate cover for the exposed water supply pipe.

Lighting
Issues
No light fixtures were observed inside the cemetery.

Recommendations
No lighting is recommended.

Priorities
High Priority
- Trees with large cavities, leaning into the cemetery, drives or grave markers.
- Remove volunteer growth.
- Erosion and lawn repairs.
- Restore grave markers that present public safety hazards or are structurally unsound.
- Replace dowels in multipart stones that are visibly cracked or spalled.
- Conserve historically significant marble markers that are in danger of becoming illegible.
- Slate marker resetting and repairs.
- Broken stone repairs if the inscriptions are legible and at least 75% of the stone is available.
- Earth fill at exposed monument bases.
- Gates at vehicular access points.
- Repair steps.
- Repair receiving tomb door.
- Repair mound tombs.

Medium Priority
- Trees with large cavities, leaning away from drives and grave markers.
- Replace dowels in multipart stones with visible metal stains at the junction between stones.
- Clean legible markers.
- Repair masonry trellis.

Low Priority
- Trees with a small amount of dead wood and branches, and trees protected from the winds in close to the edge or other trees.
- Tree replacements.
- Reset markers that have shifted or are leaning.
- Reevaluate and conserve marble markers that are currently in satisfactory condition, as necessary.
- Provide interpretive signs.

Prioritized Cost Estimates
High
- Tree removals $12,000
- Tree pruning 14,500
- Tree support systems 500
- Tree fertilization 2,300
- Erosion and lawn repairs 8,000
- Earth fill at monument foundations 3,000
- Restore earth at mound tombs 700
- Gates at vehicular access points 15,000
- Repair steps 6,000
- Repair receiving tomb door 500
- Repair mound tombs 1,500

Medium
- Repair masonry trellis 2,000

Low
- Tree pruning 4,000
- Tree fertilization 4,000
- Vegetative pest management 4,000
- Tree replacements 14,000
- Interpretive signs 10,000

Costs associated with grave marker work have not been included. Refer to the General Recommendations section for approximate costs of various types of repair.
ELM STREET CEMETERY

BRAINTREE, 1716

Located on Storrs Square on the south side of Elm Street opposite the First Congregational Church [formerly the Second Parish Church] and near the Southeast Expressway [route 3], this 1.4 acre historic cemetery also known as First Burial Ground and First Parish Cemetery has a decorative Gothic Revival iron fence facing Elm Street. Stone walls separate the gently sloping rectangular site from residential and commercial uses on the other three sides. The perimeter stone wall was erected in 1747. Christopher Thayer fenced the site with a stone wall in 1783 in return for the privilege of pasturing calves there as payment. The cemetery was enlarged in 1824 when Dr. Stephen Thayer removed the old board fence on the north side and erected a stone wall in its place, added two stone posts and a gate, and other repairs in return for the pasture for calves and sheep as well as the privilege of a tomb for $3 and a passage way on the west and south 9' in width forever for that purpose. The 5 granite posts bisecting the cemetery today may indicate the former limits of the original cemetery.

Settled in 1634, Braintree was incorporated as a town in 1640. A committee was appointed to establish a burying ground in 1713 and a site purchased for 10 pounds in 1716. It was the first burial ground in town, i.e., the South or Middle Precinct. Virtually all of the families of the old Middle Precinct are represented in Elm Street Cemetery including Revolutionary War veterans. The first burial was in 1716, Mrs. Elizabeth Niles, the wife of the first pastor, Rev. Samuel Niles, with stones over the grave as a protection against wolves. The Puritan vision portrayed on the 1768 stone of Lt. Nathaniel Thayer is one of the most noted in the cemetery.
Church leaders interred here include Rev. Ezra Weld in 1811, Rev. Dr. Richard Salter Storrs in 1873 and Rev. Winfield Holland in 1934. Gen. Sylvanus Thayer was also buried here near his parents in 1872. He was later moved to Memorial Cemetery at West Point in 1877. There is also a handsome granite monument for Benjamin Vinton French, founder of the Massachusetts Horticultural Society, 1791-1860, although he is actually buried in a tomb.

For many years the church sexton shared in the responsibility for the upkeep and use of the cemetery. In 1892 the First Parish Association incorporated for the purpose of establishing a fund to provide for the care and repair of the old burial ground. The town acquired the property and funds of the cemetery in 1964. The latter was reputedly placed in the general fund and lost for use in care of cemetery. The site is now cared for by the town Cemetery Commission.

LANDSCAPE CHARACTER, LAWNS AND VEGETATION

Landscape Character

Issues

The character of the old burial ground changed in 1835 [only a few years after the founding of Mount Auburn Cemetery] when it was decreed that “any person or persons may plant trees or shrubbery on the Parish grounds under direction of the superintendent of the burying grounds provided the same is done without any expense to the Parish.” This decision ultimately created a Victorian landscape character with a variety of plant materials. That character extends throughout the site although most of the “shrubbery” is now gone and the taller vegetation is primarily deciduous.

Although the entire cemetery parcel was assembled prior to the founding of Mount Auburn Cemetery, the southern half of the property has more of the cemetery character of a site developed in concert with the changes instituted by Mount Auburn. While the northern half of the site contains most of the older grave markers, it has been overlain with more contemporary vegetation.

Recommendations

Because this is an urban cemetery with adjacent buildings in close proximity, a more heavily vegetated landscape like that associated with Mount Auburn is advantageous in that it can assist in screening incongruous buildings from a visitor experience. Vegetation in the northern half of the site should be concentrated on the east and west sides to provide that screening benefit while allowing an open expression towards Elm Street. Vegetation in the southern half of the site should have more of the Victorian character associated with cemetery development of that era.

Planting

Issues

While there are 31 trees growing in the site including 10 species, Norway Maples make up 40% of the total. Large deciduous trees include 2 American Horsechestnut, 1 Littleleaf Linden, 12 Norway Maple, 1 Sugar Maple and 4 Black Oak. A Littleleaf Linden has the largest trunk diameter. The tallest and broadest tree is a Sugar Maple. Small deciduous trees include 1 Black Cherry, 1 English Hawthorn and 2 Japanese Maple. Large evergreen trees include 2 White Cedar and 4 Colorado Blue Spruce. The average tree diameter is approximately 20". In addition to a large Rosebay Rhododendron, shrub and ground cover varieties include Black Chokeberry, Honeysuckle, Periwinkle, Rose, Snowberry, Spiraea and Yucca.

The trees are in fair to poor condition as observed by short annual terminal shoot growth, size of bud, accumulation of dead branches, percentage of crown deterioration [die back], decay throughout the main stems of tree structures and surface root loss or damage. Some of the trees are codominant and have a multistem structure making them subject to large branch failure. Located in an urban environment where people constantly walk through the area, soil compaction is a problem stressing these trees. The area does not appear to have drainage problems that would affect tree roots.
Three trees have extensive decay throughout their main stems and present a high risk of possible failure. Branches have failed and left open wounds allowing fungi to enter. Older trees under stress do not compartmentalize fast enough to slow the spread of decay and large branch failure is common. Nine other trees are too close to a wall or grave marker, have declined in health more than 50% and/or have problematic roots.

Three trees have structural growth problems with main stems that have forked branches. As they grow larger, failure at the fork leaves the tree lopsided and prone to decay fungi. Installation of support systems such as galvanized steel eyebolts and 7 strand cable helps prevent large branch and main stem failure.

There are trees with a large amount of dead wood throughout their crowns presenting hazardous conditions for people passing through. These trees are under stress.

**Recommendations**
In order for these trees to survive, a safety and plant health care program should be implemented as soon as possible. Because of poor structural condition, decline in health and/or closeness to grave markers, stone walls or fences, 11 trees are recommended for removal. Trees that have structural problems from decay should be removed as soon as possible or the area should be fenced off to keep people from walking beneath or near the trees.

To improve the health of the remaining trees some arboricultural services are recommended. Dead and dying branches 2" in diameter and larger should be pruned out. To help prevent large branch failure three trees should have support cables installed. All trees should be fertilized with a slow release fertilizer that has a 3-1-1 ratio of macronutrients. All trees should be inspected on a periodic basis to insure a safe environment and preservation of the trees.

**Volunteer Growth**

**Issues**
Volunteer Sumac, Cherry saplings and bramble type plants are growing in the southwest corner and adjacent to the Arnold Mound tomb.

**Recommendations**
Remove all weed trees and volunteer growth. All underbrush around the trees, walls and grave markers should be removed to ground level once a year.

**Lawns**

**Issues**
Lawn areas are in fair to poor condition with moss and herbaceous weeds evident in numerous locations as well as uneven settlement with many depressions and slightly mounded areas and some surficial erosion. It is evident from the types of weeds growing in the grass that the soil is deficient in nutrients and/or has a soil pH problem. Evidence of grubs was also present.

**Recommendations**
Restore and repair lawn areas.

**ACCESS AND SECURITY**

**Pedestrian and Universal Access**

**Issues**
There are two points of pedestrian access from Elm Street at northeast and northwest corners of the site, immediately adjacent to the vehicular entrances. The pedestrian passages are too narrow for universal access with only a 20" wide clearance. Gradients inside the cemetery are gently sloping and acceptable for universal access.

**Recommendations**
No changes are recommended for pedestrian access. Universal access should continue to rely on vehicular access routes.

**Vehicular Access**

**Issues**
There are two points of vehicular access from Elm Street at northeast and northwest corners of the site with 9'-6" clearance.

**Recommendations**
This system appears sufficient for the visitation requirements and no changes are recommended.

**Security**

**Issues**
While the entire perimeter of the site is walled and/or fenced, numerous sections of fence are missing and much of it is too low to prevent unauthorized access. Pedestrian access ways are always open.

**Recommendations**
Improve security measures to reduce the destructive aspects of vandalism.
VANDALISM
Issues
The impact of vandalism is apparent with a number of toppled and broken grave markers particularly at the rear or south end of the site. In addition to broken glass from beer and alcohol bottles, there is paint graffiti on a box tomb, the entrance gateway and perimeter stone wall. The site is used as a short cut by adolescents who climb over the wall at the southwest corner. A section of dismantled fence forms a bridge between an adjacent roof and the top of the west perimeter wall. Indigents have reportedly used the Vinton Tomb also at the south end of the site.

Recommendations
While vandalism may not have been a significant issue in recent years, the illicit activities on the south side of the property should be curtailed before vandalism once again becomes significant inside the site. Active police patrol and control are recommended to eliminate this threat. Repair grave markers and remove the broken glass and paint graffiti.

CIRCULATION SYSTEMS AND MATERIALS
Circulation Systems
Issues
Although the site has a relatively regular and rectangular layout, there is no apparent formalized circulation system inside the cemetery.

Recommendations
Maintain the existing informal system.

Steps
Issues
The only steps inside the cemetery are related to some of the family plots.

Recommendations
No improvements are recommended.

Pavement Materials
Issues
All surfaces inside the cemetery are lawn with no defined circulation system.

Recommendations
Surface materials should remain grass until visitation reaches the point where it is no longer practical to maintain lawn. At that time a paved path system should be considered.

GRAVE MARKERS
Headstones and Footstones
Issues
This Cemetery contains between 650 and 750 markers as well as about 20 obelisks. The older northern half of the cemetery contains approximately 266 graves, 135 of which have burial dates through the 1700s. This area primarily contains the older slate markers and some have foot stones associated with them. The southern half of the cemetery has primarily marble markers with some slate and granite. There is also a flush rusting iron plate with names near the center of the site. Closed in 1886, there were a few burials after that. 1963 was the most recent death date found in a brief examination.

Over 300 of the markers are slate, and there are 30 or more fragments of old slate partially buried in the ground. For the oldest and perhaps most historically valuable stones, the slate tablets, conditions include the usual splitting, tilting, scarring from weed whackers and breakage. The worst situation, however, is that of slates which are both broken and partially buried in the ground. There may be more slate fragments just below the present ground surface. Earth is piled up against some slates, perhaps intentionally as a means of providing support to keep them upright.
Many of the over 100 marble markers are either out of plumb or toppled to the ground. The marble stones, including the obelisks, have soiling from atmospheric pollution and botanical growth [moss, mildew, fungus, lichen]. Erosion of the marble surface due to acidic deposition [rain, fog, snow] is also present, and surfaces are “sugaring”, i.e., marble grains can be rubbed off. Thus, shallow inscriptions are becoming illegible. The marble Holbrook obelisk has had a poor adhesive repair at a break in the stone.

Although granite markers are not as numerous, they represent many different local granites: pink Westerly and gray Westerly from Rhode Island; blue and gray Quincy granite; and some Weymouth seam face granite. They have similar issues with tilting, toppling, soiling with lichen or moss, and even breakage. The large granite monument for Benjamin Vinton French, fabricated by F. Barnicoat of Quincy, has some soiling and minor vandalism.

Vandalism has caused most of the structural problems with the stones. Weathering and age have caused the soiling and surface erosion.

Recommendations
All toppled and severely leaning grave markers should be reset. Multipart stones may require deeper and larger foundations. Multipart stones that have come apart should be repinned with noncorroding pins. The joint between the vertical stone and base stone should be filled with a material matching the original installation such as lead or a high lime mortar. Stones that have been poorly reassembled should be reconstructed in their original configuration.

All partially buried markers [whole and fragments] should be excavated and cleaned under the supervision of a qualified, professional archaeologist. If identification is clear, resetting might be considered. If unidentifiable, which is more likely, they should be cleaned, clearly labeled and stored for possible teaching purposes, or used in piecing or supporting existing stones, particularly slates.

Splitting or delaminating slate markers should be treated by a conservator. Previously used fillers have proved unsatisfactory. Moisture should be prevented from entering the voids, but with a substance which remains flexible and does not expand to push the slate layers further apart.

Markers should be cleaned to remove harmful soiling and botanical growths. A stone conservator should prepare a program of work, specifying appropriate materials and methods for use. Marble that has turned black should be examined for legibility of inscriptions. Clean the black soiling off all marble markers where design and lettering can be read. If the inscription is fully eroded and the surface has no legible lettering or designs, the stone should be given a lower priority for treatment.

STRUCTURAL ELEMENTS
Perimeter Walls
Issues
The perimeter stone walls on the east, south and west sides are in generally good condition except at a few locations where stones have fallen out and where a light iron picket fence on top of the wall has been damaged or is missing. Most of the east side property wall is a granite wall consisting of large, semi-dressed units laid up in a broken ashlar pattern. The stone appears to be Quincy granite. The wall has no continuous joints and the stone is cut as opposed to being rubble or fieldstone. It is typically 42” high with an 18” wide rough hewn granite cap. This section of wall may have been built by Dr. Stephen Thayer in 1824 when he was also authorized to erect the stone posts and gates at the entrances into the cemetery. This wall has been repointed with hard mortar that has subsequently cracked and broken.

The south end of the east wall and the south and west walls are rubble walls that may be the original 1747 walls. The capstones may have been added during the 1824 construction. Like the east wall, the mortar is cracked, loose and missing. At the south end of the east wall, several stones are missing and there are openings through the wall. Except for localized loose or missing stones, the walls on all three property lines are intact and only need routine maintenance consisting of the removal of hard mortar and repointing with a softer mortar.
**Recommendations**

Replace missing stones and reset loose stones in the perimeter walls. Remove the mortar covering horizontal surfaces. Remove cracked and loose mortar and repoint with medium strength mortar such as a type N, using 1 part masonry cement and 2-1/2 to 3 parts sand. The strength should not exceed 1,000 psi. When repointing or resetting stone and masonry work the mortar should be colored to match any existing surrounding or original or early mortar. On vertical joints too thin the joint slightly concave and stipple before it sets to present a weathered look. Until the wall is fully repointed, remove the plants growing in the joints.

**Tombs and Vaults**

**Issues**

There are three vaulted tombs among the modest headstones. The tombs are in good condition in spite of some shifting of individual stones. Some of the facade units, especially Hon. E. Thayer’s tomb, are not mortared but leaded. Additional study may be needed to determine if these joints are watertight and, if not, whether the stonework should be dismantled in order to repair it.

Hon. E. Thayer’s tomb: Inside the entrance to the cemetery and facing Elm Street, is a granite faced vaulted tomb with vegetation on top. The side and rear walls consist of semi-dressed broken ashlars with smoothly dressed granite at the front facade. The hard mortar is broken or missing. Moss growing in the joints indicates chronic, deep moisture penetration into the joints. Although some of the ashlars have shifted or fallen out, the large facade units have not been displaced. It needs repointing. The iron door is rusted and the bottom of the door is buried such that it does not open. The exposed iron hinge strap has separated from the door.

Vinton Tomb: On the south edge of the cemetery facing north, is a double compartmented granite faced mound tomb with granite wing walls and grass on top. The side and back walls consist of mortared rubble and the roof consists of granite slabs. The top and sides are buried under a shallow cover of earth. Except for efflorescence on the faces of the stones, which indicates that moisture is infiltrating the mortar joints, this stonework appears to be intact. The facade is made up of large, smoothly dressed granite units that extend beyond the side walls as curved wing walls. The wing walls have displaced outward at least two inches and have dragged the main lintel stone with them. However, the stones are heavy and stable and could be left in their slightly altered condition provided they are sealed from water and frost action by repointing with mortar. Drains should be installed behind the wing walls to relieve water and earth pressure that is causing these walls to displace. The entrance has a granite step down to a small terrace paved with large bluestone slabs. The granite facade had 2 vertical marble markers [1 is missing] and 2 marble doors [1 is in place although handles are broken and the other is missing]. It is interesting to note how well the copper or bronze mounting pins of the missing plaque have killed the moss and fungal growth where exposure to rain has permitted washdown. One tomb entrance has been partially blocked up with concrete masonry units that have apparently been partially removed by indigents to allow access. Inside walls are granite with built in partial shelves to hold caskets. The inside of the tomb is now partially filled with debris and at least one marble marker.

S. V. Arnold’s Tomb: On the west edge of the cemetery facing south is a mound tomb with volunteer woody growth on top. The side walls and roof show through the shallow earth cover. The facade consists of smaller, dressed granite units. The stonework appears to be in good condition but the joints need to be repointed with mortar. It has some paint graffiti. A marble marker is located above a rusted iron door that is partially buried at the bottom. The latch is missing.

Mrs. Elizabeth Niles box tomb: Near Thayer’s Tomb at the northwest entrance, this small [3’ x 5’ x 2’-10” high] tomb of the wife of the first pastor Rev. Samuel Niles is constructed of mortared rough granite stones and a single rough hewn granite cap. Although generally in good condition, the vertical slate marker on the north side is cracked and there is paint graffiti on the top and south side.

**Recommendations**

As a minimal repair, the mound tombs should be repaired in a similar manner as the perimeter walls. For a more elaborate repair of the mound tombs, dismantle the facade stones of the tombs, clean the joints and reassemble the facades in new beds of mortar or lead as required to match original construction. Open the doors and inspect the walls and roofs from the inside to determine if further work is needed, such as repointing or adding drains on the exterior of the walls. Regrade the earth banked around the sides of the vaults. Work that involves subsurface disturbance should be conducted under the supervision of a qualified, professional archaeologist.
The granite of the Vinton tomb should be cleaned and the open joints repointed. If the missing marker and door cannot be found, plain slabs of compatible marble or granite should be installed. The other iron tomb doors should be secured which may entail reattaching them to their hinge straps. They should also be cleaned, primed and painted.

Edging of Family Plots

Issues

Seven family plots [Denton, Fogg, Hollis, Sherman, Storrs, Thayer and Vinton] have granite edging and some of them have one or two granite steps up to the plot. Most are in good condition with a little settlement or overturning and only minor or no resetting required. A volunteer tree has pushed over one length of edging at the Fogg plot. The earth has settled in the center of the Vinton plot.

Recommendations

Reset edging as required. Remove the tree from the Fogg plot before resetting. Provide earth fill in the center of the Vinton plot. After resetting the octagonal corners and steps at the Thayer plot, caulk the joints with lead to match the original installation.

BUILDINGS

Issues

Although there are no buildings in the cemetery today, a hearse shed was moved to the northeast corner in 1824. It was removed in 1831.

Recommendations

Consideration should be given to providing an archaeological investigation to determine the former location of the hearse shed for interpretive purposes.

FENCES AND GATES

Issues

Elm Street Fence

The highly visible Gothic Revival fencing along Elm Street facing the former parish house consists of decorative cast and wrought iron panels and stanchions that may have been installed about 1900, shortly after the 1892 founding of the First Parish Cemetery Association. The fencing is generally intact, although there are some missing elements. Each 32” high panel consists of a handrail, several arched pickets and a flat, bottom rail. The hollow handrail is made of two matching shapes that form the top and bottom of the handrail. The top handrail and bottom rail of the panel are connected to 52” high stanchions, which occur about 8'-10” apart along the sidewalk and about 7'-7” apart along the two entry drives.

Typically, the heavier elements of an iron fence assembly were made of cast iron and the lighter, curved elements of wrought iron. Although one would have to verify the actual makeup of the elements with metallurgical testing in order to be sure, it is likely that the stanchions and possibly the handrails are cast iron while the bottom rail and pickets are probably wrought iron. The top and bottom rails were bolted to metal clips that protruded from the stanchions. Steel clips and bolts may have been used for these attachments. Because cast iron and early wrought iron form surface oxides that protect these metals from corrosion, the Elm Street fencing is generally free of deterioration from corrosion. Nevertheless, deterioration has developed where the top and bottom rails are attached. In some cases the bolts are missing and in others the clips have corroded, especially where the bottom rails are in contact with the ground. Past repairs of the connection have included welding and some of these repairs have separated again.

With respect to long metal fences, replacing bolted connections with welds has the effect of converting a loosely jointed assembly into a continuous, rigid system that develops high internal stresses from expansion and contraction due to seasonal and daily temperature changes. While the condition of the panel and stanchion connection is the most important structural issue for the fencing, the fence has additional localized damage. Although 22 of the 25 panels are more or less intact, one of the remaining three has 6 pickets broken off, another has several pickets missing and a steel replacement handrail, and the third has a broken iron handrail. There is also one stanchion finial missing. The stanchions sit on original rough hewn granite blocks with compression rods. Concrete curbing that fills in the spaces under the panels between the granite blocks also appears to be in good condition. The fence is set level above the concrete base which takes up the sloping grade along the side walk.

Entrance gateways on the east and west ends of the fence are set back from the street and flanked by large granite posts with finely cut and dry laid cap stones. The gate posts are soiled, with some moss growing in areas sheltered from direct rainfall. The top of one of the gate posts has shifted slightly on its base. The entrances have operable cast iron vehicular gates and open pedestrian passages. The gates are intact and operable. While the gates are generally in good condition, the east gate has early signs of rust jacking at the decorative bottom panel. All of the ironwork exhibits some degree of rust and corrosion. However, it appears that no detailing has been lost, yet.
Perimeter Fence
A 24” high, lightweight iron picket fence is attached to the top of the capstones on the three property line walls at the east, south and west. It is made up of channel rails and square pointed pickets turned at 45 degrees. The fence is back braced on the cemetery side. The fence is pitted from corrosion but is generally intact along much of the east and west walls. However, numerous sections are missing or have been toppled at the south wall and the south ends of the east and west walls. While many of these sections could be retrieved and restored, many appear to be lost.

Fences and Chains at Family plots
Most of these elements are missing or partially destroyed. Some like the Holbrook plot have evidence of former iron fencing with 9 granite bases remaining. Another near the center of the cemetery with a toppled marble obelisk has 4 granite posts with some of the rusted coiled iron chain remaining.

Vinton Mound Tomb: Cast iron fencing flanks the tomb. Rusted double rails are supported by granite posts. The east gate is intact, but the west gate is missing as well as one rail. Another rail is broken and partially buried on the east side.

French family plot: Rusted straight link double iron chains are supported by 12 granite posts. Several segments of chain are missing as well as some eyebolts. One of the posts is toppled. A heavily rusted light iron gate on the north side states “1842, Charles French Family Cemetery.” The bottom of the gate is buried. It appears that the original central section of the plot expanded to the east and west based upon evidence of plugged eyebolt holes in the granite posts.

Arnold family plot: On the east edge, this plot has a square section 3 rail iron fence set diagonally between 10 granite posts. The iron work is rusted, all 3 gates are missing, one of the posts is broken, 10 rails are missing and one rail is bent.

Recommendations
Elm Street Fence
The iron fence should be restored by dismantling the entire fence, cleaning and inventorying its parts and reassembling it. Molds could be made so that missing elements could be reproduced. Missing and broken parts should be replaced with new iron or stainless steel components. Except for stainless steel, different metals [such as plain or galvanized steel] should not be mixed with or be in contact with iron. The rails should be connected to the stanchions with bolts in holes that are slightly oversized. The entire fence should be cleaned, primed and painted. A black matte or semigloss finish is appropriate. The earth covering the lower rails should be removed under the supervision of a qualified, professional archeologist.

Perimeter Fence
The preservation solution is to restore the lightweight picket fencing on top of the stone property walls to a sound and functioning condition. Bent pickets should be straightened and fasteners secured. Where sections are lost, move sections from the south wall to replace missing sections on the east and west walls and provide replicated new fencing on the south wall. The entire fence should be cleaned, primed and painted.

However, because security is an issue here, the 24” high lightweight fencing should be replaced with a heavier weight fencing similar in design to the existing fencing at a height of at least 4’ and as high as 6’ to deter trespassers. This approach should only be undertaken if a means to secure the open access from Elm Street is resolved.

Fences and Chains at Family plots
These elements should be restored where possible based upon evidence of actual former components.

SITE AMENITIES
Signs
Issues
The only identification of the cemetery is a carved inscription on a granite gate post at the northwest entrance that reads “First Burial Ground of Second Parish.” It is difficult to see from the street.

Recommendations
Provide an appropriate identification sign outside the northwest entrance. It would be beneficial to add informational and/or interpretive signs, particularly if the site becomes a part of the National Park Service bus tour related to the Adams sites.

Trash Receptacles and Seating
Issues
There are no trash receptacles or seating elements.

Recommendations
Do not provide seating and trash receptacles inside the cemetery.
LEGEND

Existing Evergreen/Deciduous Tree

New Tree

Remove Tree

Existing Stone Wall w/Picket Fence

Cast Iron Fence

Vehicular/Pedestrian Entrance

Flagpole

ELM STREET CEMETERY
PRESERVATION PLAN
BRAINTREE, MASSACHUSETTS

PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE

BY:
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NORTH

NOVEMBER 1999

1" = 100'

Braintree - 135
Flagpoles
Issues
A 25’ high fiberglass flagpole is sited near Elm Street, centered between the two entrances. It is in fair condition with a declining finish. No flag was flying. A ring of brick pavers marks the base of the flagpole and an adjacent small stone boulder is inscribed with “Lest We Forget.” It may be a memorial or veterans organization contribution.

Recommendations
If the flagpole is no longer used, it should be removed and not replaced.

UTILITIES
Drainage
Issues
No drainage structures are evident. The site drains on the surface with a gentle slope. It is relatively level with a shallow ridge line running north-south down the center of the site. The high point is near the center of the cemetery and the low point is at the southwest corner.

Recommendations
No changes are recommended unless problems are discovered.

Water Supply
Issues
No source of water was found inside the cemetery.

Recommendations
Water is beneficial in times of drought and would help to re-establish lawns. Work with adjacent property owners to provide hose bibbs or provide a source of water in the public right of way outside cemetery walls.

Lighting
Issues
No light fixtures were observed inside the cemetery. Some residual light is available from the adjacent road on the north side and the commercial neighbor at the southwest corner.

Recommendations
Do not provide light fixtures inside the cemetery. If it is deemed necessary, the addition of security lighting should be mounted on adjacent buildings wherever possible. If this is not possible or practical, security lighting should be pole mounted at the edges of the property where they would provide the least visual intrusion.

PRIORITIES
High Priority:
• Stone conservation including resetting and repair of markers and pin replacement in marbles that are visibly cracked or spalled
• Collection and disposition of partially buried markers
• Vegetative pruning and removals including volunteer growth
• Repair of structural items like the Vinton tomb
• Restore Elm Street fence and gates
• Improve security measures. Restore or replace perimeter fencing
• Lawn repairs
• Identification sign placement
• Remove broken glass and paint graffiti

Medium Priority
• Stone conservation including marbles with visible metal stains at the junction between marker and base, and cleaning legible markers
• Repair perimeter walls and remaining tombs
• Family plot restoration and repair [edging, fencing, chains and gates]
• Installation of support cables and fertilization of trees.
• Consideration of adding water supply

Low Priority
• Stone conservation including granite markers that have shifted or are leaning, and marbles currently in satisfactory condition
• Informational and interpretive signs
• Additional planting
• Resolve disposition of flag pole
• Consider archaeological investigation for former hearse house
Walnut Street cemetery, also known as the Old Burying Ground, dates to 1717 but its appearance today reflects the ideals of the 19th century rural cemetery movement. Dramatic topography is concealed behind stone walls on this relatively small 1.43 acre site. A narrow valley separates two hillocks with rows of vaulted mound tombs. Located at the eastern end of the Town Green Historic District at the corner of Walnut Street and Chestnut Road, the cemetery is no longer active, although the last interment was in 1995.

Walnut Street Cemetery began with 1/2 acre of land purchased from Samuel Clark, Jr. in 1717, 12 years after the incorporation of Brookline. The site was located on Walnut Street, originally called Sherbourne Road. It was one of the oldest roads in the Commonwealth, serving as the main route of travel west from Boston until construction of the Worcester Turnpike in 1806. Located near the First Parish Church Meeting House and town school, the site served as Brookline’s only municipal cemetery until 1875 when Walnut Hills Cemetery was established. For over a century the cemetery was informally maintained by the Clark family who were allowed to cut hay there in return for keeping a wood fence around it.

By 1840 the Old Burying Ground had fallen into disrepair because of neglect. It was enlarged that year with the purchase of 3/4 acre from Caleb Clark. It is assumed that this land was on the south side because the older slate markers are on the north side. The same year a survey and a plan for improvement were prepared by E. I. Woodward. The latter included a stone wall and moving the entrance to its present location. These and other improvements transformed the simple parish burying ground into a more fashionable rural cemetery of the time with curving paths and ornamental plantings. This landscape character blended in with the country houses it was surrounded by in Brookline. In 1850 care of the cemetery passed from First Parish Church to the Town.

Central Avenue vault tombs

**WALNUT STREET CEMETERY**

BROOKLINE, 1717
LANDSCAPE CHARACTER, LAWNS AND VEGETATION
Landscape Character

Issues
Today the site is the home of tall and stately trees, mostly located adjacent to the south and west edges which are appropriate for screening adjacent residential uses. Ornamental trees were planted with the expansion of the cemetery about 1840, most likely in the style of the rural cemetery movement. An 1898 account noted Locust, Barberry, White Daylily, Bouncing Bet and Sweet William growing. The lower level understory and flowers which were part of the lush vegetative treatment of the rural garden cemetery are no longer evident.

Recommendations
Consideration should be given to re-establishing a historically appropriate garden style planting in the southern portion of the cemetery. The northern portion, with its older slate markers, should be left more open in character which is more appropriate to the age of development of this part of the site.

Other prominent figures include John Goddard who was wagon master general in the Continental Army in charge of fortifying Dorchester Heights in 1779, and other Revolutionary War heroes like Capt. Timothy Corey, Col. Thomas Aspinwall who commanded the fort at Sewall’s Point and prevented the British from proceeding up the Charles River during the Revolution, and Dr. William Aspinwall a physician and surgeon in that war who later established a hospital for smallpox inoculation and represented Brookline in the legislature.

PLANTING
Issues
There are 41 trees growing inside the cemetery composed of 78% deciduous and 22% evergreen species. While Sugar Maples account for 1/3 of all trees, 13 species are represented [14 Sugar Maple, 6 Black Oak, 5 White Oak, 1 American Elm, 1 American Sycamore, 1 White Ash, 1 Tuliptree, 1 Black Locust, 1 Shagbark Hickory, 1 Corktree, 4 Red Pine, 2 Eastern Hemlock, 2 White Cedar and 1 Scotch Pine]. Lower scale material includes a Cherry, Japanese Barberry, Euonymous and Yew.

The plant material has been maintained very well over the years. Trees between 24 and 36" DBH [diameter at breast height] were pruned in 1998. The largest tree is a Tuliptree, perhaps one of the largest in New England at 133.45" in circumference and over 100’ tall. Other large mature trees are scattered throughout, but they are not as tall. Most trees are in fair condition with the exception of 5 trees that have signs of extensive decay in the main stem [trunk]. An additional 5 trees along the west edge of the entrance drive have root damage caused by vehicles or lawn equipment. The two Eastern Hemlock are infested with the insect Hemlock Woolly Adelgid. A large White Oak appears to be dead or is in a serious state of decline. Attached dead leaves during the dormant period are an outward sign of problems from the past growing season. It may be a temporary leaf infection of the fungus known as Anthracnose that was widespread over the past two years. The prolonged wet springs also spread the fungus spores throughout many other species. A standing dead tree trunk of approximately 25’ high is located on the south fence line.
**Recommendations**

Most of the trees on this site were planted, with the exception of 3 volunteer trees just outside the entrance growing close to the fence near the Tuliptree. These should be removed because of interference with the fence as should the large White Oak and the small evergreen tree at the Cook family plot that is interfering with plot fencing. To maintain healthy turf throughout, it would be beneficial to remove the 4 Red Pine and raise some of the lower branches of deciduous trees.

Trees that fail can cause serious damage to people, grave markers and adjacent houses. A hazardous tree evaluation is recommended for the 10 trees that display outward signs of extensive internal decay within the trunks and root systems. A root collar examination is recommended for the 5 trees on the west side of the entrance drive to determine the percent of structural root loss. Clearing the soil from around the main support roots on the drive side and testing the roots for strength loss should give sufficient information to determine potential root failure.

Trees that have open cavities, loose bark with decay beneath them, trees that go into the ground like a telephone pole, and trees that have old vertical cracks all need to be investigated for percent of sound wood loss. Soil needs to be cleared away from the bases of all trees to expose the root crown [collar]. This is where girdling roots are hidden and decay starts from suffocation of covered trunk bark. Mature trees should be treated for insects, and fertilization would help preserve and prolong the life of these trees.

**Volunteer Growth**

**Issues**

Most volunteer growth is associated directly with mound tomb and vault structures where invasive roots are causing damage.

**Recommendations**

Remove volunteer growth.

**Lawns**

**Issues**

Lawns were in fair to poor condition with erosion, bare spots, some herbaceous weeds and moss in numerous locations. Lawns are cared for by a dedicated cemetery crew. A slow release low nitrogen fertilizer is reportedly applied annually.

**Recommendations**

Repair lawn areas. Continue fertilization program.
ACCESS AND SECURITY
Pedestrian and Universal Access

**Issues**
The cemetery is accessible to pedestrians from Walnut Street through a chained and padlocked pedestrian gate with a 27” clear opening which is too narrow for universal accessibility. It is adjacent to a wider vehicular gate. The bituminous concrete walk along Walnut Street may be accessible but one is confronted with an unpaved steep slope once inside the gate. There are no paved paths inside.

**Recommendations**
No changes are recommended.

Vehicular Access

**Issues**
Service vehicles access the cemetery from Walnut Street through the inward swinging, double leaf gate with a 10’-6” clear opening.

**Recommendations**
This access procedure appears acceptable.

Security

**Issues**
Security is apparent, but not assured because the vehicular gate is chained but not locked. With a height of about 4’, much of the wall along Walnut Street is scalable. There are also two breaches in the perimeter chain link fence.

**Recommendations**
Although vandalism is not a current issue, consideration should be given to keeping the gate locked except for requested openings. Valuable artifacts like the family plot fencing are often targets of theft. Repair the breaches in the fence.

VANDALISM

**Issues**
Little vandalism has been reported in recent years. A small amount of trash and debris was found on the site including an inflatable snow sled. There was however evidence of vandalism from another time. This included broken grave markers, improperly reset markers and bases with missing markers.

**Recommendations**
Vandalism is not a significant problem and no changes are recommended at this time other than grave marker repair.

CIRCULATION SYSTEMS AND MATERIALS
Circulation Systems

**Issues**
The drive and path system were laid out c. 1840 with an apparent attempt to connect the old portion of the cemetery with an area of expansion. The south side consists of 4 interconnected parallel east-west routes while the older 3 north side routes tend to converge near the Pierce mound tomb, where the original entrance was most likely located.

**Recommendations**
No changes are recommended. If the original entrance is determined to be where it is assumed above, some form of notation should be made on the cemetery side of the wall to help visitors understand this part of the path system.

Walks

**Issues**
The path system is clearly apparent even though most of it is currently lawn. Some routes are steep and narrow, particularly getting to Ridge Avenue.

**Recommendations**
The path system should remain as it is.
Steps
Issues
There are 9 sets of steps with a total of 36 treads related to family plots throughout the cemetery. Most are granite and one is constructed of field stones. Two of the steps are edged. Three of the sets of steps [with 3, 4 and 5 treads] have shifted somewhat, resulting in variation in riser height and in overall tread levelness. Most appear to be dry laid directly on the ground surface and could easily be reset.

Recommendations
The various site steps should be reset. To the extent that the foundations for these elements are probably loose stones, they should be removed and a concrete foundation cast to keep the stone elements level and plumb. The two materials can be joined with concealed stainless steel dowels.

Pavement Materials
Issues
Circulation routes are covered with grass and/or gravel with remnants of macadam or bituminous concrete on drives. There is a small area of this remnant pavement near the southwest corner and a larger one near the southeast corner.

Recommendations
Surface materials should remain grass until visitation reaches the point where it is no longer practical to maintain lawn. At that time a paved path system should be considered. Gravel surfaces should be replaced with lawn. Remnants of macadam surfaces should remain, but not be improved.

GRAVE MARKERS
Headstones and Footstones
Issues
The collection of about 200 grave markers includes the full range of stone types and problems. About 40-50% of the memorials are marble, another 30 to 40% are granite, some 20 to 25% are slate, and a few, perhaps 5%, are sandstone. There are a number of marble and red granite obelisks. There is a concern that some markers and plots may have been lost in the c. 1840 restructuring of the burial ground.

A brief examination found: 2 broken marble and 1 broken slate that appeared repairable, although many others had missing pieces; 7 bases with missing markers; 3 delaminating slate markers; 2 toppled marble obelisks, 12 toppled marble markers and 3 toppled slate markers; 3 leaning marble obelisks and 1 leaning granite obelisk; 24 leaning marble, 10 leaning slate and 1 leaning granite marker; 1 marble obelisk and 2 granite markers need to be reset square with their bases; settlement at the base of a larger marker; and 1 buried stone and 6 flush markers becoming covered with sediment and grass.

Both iron and bronze pins were evident in the toppled and shifted stones. Slate and sandstone markers exhibit varying degrees of peeling and splitting. Most of the marble markers are quite weathered, with eroded, often illegible surfaces and some biological encrustation.

Raised lead letters embedded in stone, often found in British cemeteries, were used in the Ogden monument, which notes that the body is buried in Bath, England. Two bronze plaques, one on a pudding stone marker and another above a mound tomb vault, need conservation.

Recommendations
Reset all toppled and tilted root stones [having no base or foundation], using sufficient gravel for drainage and reduced frost heave. Reset all toppled stones on deeper and perhaps larger foundations beneath the base stones. These stones should be repinned with non-corroding pins. The pins should be set in lead, and lead strip used to fill the joint between the memorial stone and the base stone. Under no circumstances should caulk be used in resetting two part stones.

Stones that have vertical splits or are about to delaminate present difficult conservation issues. Neither mortar nor adhesives should not be used to reattach peeling stone, as hard material inserted between layers will act as a wedge, applying pressure that will continue the splitting process. Consideration should be given to having an experienced stone conservator make a cementitious profile cap that covers the skyward edge, limiting intrusion of rain and snow into the stone and movement of the stone layers. Earlier attempts in downtown Boston cemeteries using such caps in bronze and iron have proved mechanically stable, but corrosion stains on the marker can be unsightly.

Tarnished bronze plaques should be cleaned and conserved.

The installation of small, discrete, at grade, in ground markers designating family plot boundaries is encouraged.
STRUCTURAL ELEMENTS
Perimeter Walls

Issues
The street retaining walls are deteriorated in a similar manner. While generally intact, the mortar is extensively cracked, loose or missing, and at one point along Walnut Street there is a significant outward bulge.

The retaining wall along Walnut Street consists of random sized, roughly dressed pudding stones capped with granite slabs. The wall height ranges from 4' at the entrance gates at the northwest corner of the cemetery to 7' at the northeast corner at Chestnut Road. The heavily mortared joints have a raised bead, a decorative device intended to distract the eye away from the random width of the joint. However, the mortar joints are extensively cracked, loose and missing.

Overall, the rough textured wall is plumb and intact but individual stones have shifted or have fallen out of the wall. The granite capstones have also shifted about. Some of the head joints are mortared and others are filled with lead. At one location about 50' from the Chestnut Road corner, there is a significant outward bulge in the wall. It is not apparent whether this is due to a current shifting of the earth behind the wall or whether this is an old but stable distortion.

The retaining walls need urgent maintenance in order to preserve their present stability. Because of the earth retained on one side, the backsides of the walls are constantly exposed to moisture infiltration. They are also exposed to moisture infiltration at their top surfaces because of the imperfect barrier of the capstones. The capstones have no drip edges to prevent water from getting under the stones and the failed head joints allow water to enter directly from the top. The lead filled joints on the Walnut Street wall appear to be an unsuccessful attempt to seal the head joints.

There is no simple way to protect the top of the walls from moisture infiltration. Through wall flashing is probably the best technical method, but it is often aesthetically undesirable because of the visible edges and seams. Head and bed joints can be sealed with a flexible material but exceptional quality control during installation is needed to prevent premature failure [separation and tearing] and to achieve permanent colors that match surrounding stone and mortar colors. Repointing the joints with mortar is satisfactory in the short term but periodic maintenance is needed to keep up with the inevitable cracking that will occur in a large outdoor structure subject to wide variations in temperature and moisture exposure.

Recommendations
Repoint the Walnut Street retaining wall in its entirety. Reset missing stones. Remove and reset the capstones using two stainless steel pins between the capstones and wall stones. Set the capstones in full mortar beds and provide fully mortared head joints. Properly installed sealant may be added to raked mortared joints at the capstones. Weep holes should be added near the base of the walls including the wall on Chestnut Road, using copper, black iron or black PVC pipes. For aesthetic purposes, white PVC should not be used.

At the Walnut Street wall suspend a plumb bob from the edge of the capstone at the location of the bulge and mark its point on the sidewalk with paint. Repeat plumb bob observations once a month for at least a year. If any additional movement occurs, the bulged area should be dismantled and rebuilt. If no movement occurs, the area should be repointed like the rest of the wall.
Interior Walls

Issues
There is a 2 to 3' high pudding stone retaining wall near the top of the hill separating lots between Ridge Avenue and Cedar Avenue. This wall is severely disrupted. Individual stones are missing, many stones units are displaced, almost all of the mortar is broken or missing, vegetation has rooted in and around the stones, and a short section of the wall near the eastern end is missing. Restoration of this wall would essentially involve dismantling and rebuilding it. There is also a short wall at the Shepard family plot.

Recommendations
Dismantle and rebuild the retaining wall. This can be either dry laid or mortared, but weep holes should be installed if the wall is mortared.

Mound Tomb and Vault Structures

Issues
There are 20 visible tomb structures as well as two buried vaults near the southwest corner where the tops of brick arches can be seen at the surface. One appears to have a slate door. Of the visible tomb structures, there is a row of 12 facing Central Avenue, a row of 6 facing Boylston Avenue, one facing the end of Goddard Avenue and backing onto Walnut Street and one facing south on Broad Avenue. Most are in early stages of deterioration due to moisture infiltration and freeze-thaw action. That is, the structures as a whole are intact but individual stone and brick elements are displaced and mortar is severely cracked or missing.

Central Avenue Tombs: There are 12 tombs along the central valley of the cemetery. The front walls of the 6 at the eastern end are built of large, dressed, gray granite units to form a continuous wall with only small jambs and lintels at each door. The first 3 of the 6 are generally intact although they need some mortar repointing. The capstone level of the second 3 tombs is 4” lower than the first 3 and the top 2 courses of stone lean outward. This leaning condition appears to be old insofar as there is no soil subsidence behind the wall and there are two iron or steel tie rods anchoring the stones. Several of the bed joints are filled with lead sheets. It is unclear whether this was a repair or part of the original construction. The malleability of the lead makes it useful as a sealant if it is squeezed between two materials. The granite capstones are generally seated well and with little relative displacement. Iron staples tie the capstones together end to end but many of the staples are missing.

Boylston Avenue Tombs: There are six tombs facing Boylston Avenue with an 1864 receiving tomb at the west end. Dating from about 1808, they vary in size and construction. The fronts of the two at the western end are constructed of random ashlar [consisting of a tan granite or pudding stone] with gray granite jambs, lintels and capstones. There is only minor displacement in the stonework but localized areas of mortar joints are severely deteriorated. There is evidence of past, partial repointing efforts. The original joints were scratched to create a straight 3/8” wide joint within the overall random mortar joint width. Overall, the stonework is plumb and level and there is no earth erosion on the exposed west end.

The front walls of the remaining 6 tombs are built of brick with stone lintels and jambs at the doors. The last tomb is higher than its 4 neighbors. Although these tombs appear to be within one continuous wall, there are vertical stack bond joints between each tomb. If the exposed sidewall at the last tomb is typical of all of the brick tombs, then the roofs are brick barrel arches. Although there is some minor bulging and leaning in the brick walls, there is little displacement and disruption of individual bricks. The worst disruption occurs at the last vault, where the side wall is exposed, the arch and several courses of the wall are disrupted and many bricks are missing. Except for some rebuilding at this location, about 30% of the overall brick work needs to be repointed.
The fronts of the third and fourth tombs [the 1808 Capt. Timothy Corey’s family tomb and 1808 Joseph and Benjamin Goddards tomb] are constructed of dressed, gray granite units assembled to form jambs, walls, bases and heavy lintels. One door opening is bricked up and the other has a white marble family marker. The mortar joints between the stone units are cracked, loose and missing. Some of the wall units are slightly out of plumb but are level. The base units sit on a foundation of fieldstone. Vegetation grows in and around the stonework.

The fifth tomb [Andem/Kendall] is similar in appearance to the third and fourth but it is 6” lower. Several of the granite wall units have shifted in and out about 1/2”. The door opening is bricked up.

The front of the sixth tomb is also built of dressed, gray granite units but they are different in style from the third, fourth and fifth tombs. The lintel is much more shallow and perhaps its lighter weight failed to prevent the front walls from tilting outward. The bricked up door opening was partially open, allowing a view of the vault interior. Roof construction consists of 6” thick granite slabs. The roof is covered with a stoney fill about 12” thick and a layer of loam about 3 or 4” thick. The interior walls are built of angular, random sized stones that appear to be intact. A closer inspection may reveal that repointing is needed.

Rev. John Pierce Tomb: The Pierce tomb is an isolated mound tomb having a brick front and stone side walls. The earth mound is in good condition and there is no erosion. However, some of the stones on the western side have been pried apart by shrubs rooted into the stones. The capstones and the upper 5 or 6 courses of the brick front are loose and need to be rebuilt or repointed. While the lower courses are intact, there is evidence of past maintenance in the presence of 3 or 4 different styles of brick. The back of this tomb is visible in the Walnut Street retaining wall, consisting of 3 dressed granite courses within the pudding stone of the wall.

Broad Avenue Tomb: There is a modest stone tomb at the western end of Broad Avenue corresponding with the Howe plot. The side walls are partially exposed. The west corner is intact but heavily mortared while the east corner has many open joints and shifted units. The lintel stone is rotated from root invasion.

Arches: The crowns of two brick arches are nearly flush with the ground on Broad Avenue at about the location of the First Parish and Baptist Society plots. These arches appear to be tops of mound tombs. There is no evidence of any mounds at these locations but the arches may be remnants of collapsed tombs that were once present at this location. Their extent and character could be verified with excavation around these areas with an archaeologist present.

Recommendations

The following work should be performed at tomb vaults, assuming that they no longer contain any human remains.

Undisturbed front walls should be repointed and disrupted front walls should be dismantled and reassembled. When the walls are reassembled, they should be pinned to the roof and sidewall construction to prevent future independent movement.

Doors should be opened so that interiors can be inspected. Intact interiors should be left alone. Disrupted interiors should be pointed or rebuilt provided that the source of disruption, usually water, is removed. This may require uncovering the vault and repairing or waterproofing the top side of the vault.

Unless the leaning walls of the 3 vaults on Central Avenue have acquired a “historic” character, they should be dismantled and reassembled plumb. It should be verified whether there is any earth being retained by these walls. The walls should be repinned to the roof and sidewalls of the vaults.

Because brick is a poor material for retaining moist earth, the doors should be opened to verify whether the interior is rectangular or arched. If the brick wall does retain earth, it should be waterproofed on the backside. If not, periodic repointing and a surface sealer will maintain the integrity of the brickwork.

Remove invasive vegetation impinging on the front walls.
Doors at Mound Tombs and Vaults

Issues
Two iron doors are intact, one at the receiving tomb with a door knocker and a contemporary padlock. The other is on one of the Central Avenue tombs. The rest are bricked or blocked in. Numerous hinge and latch pins remain.

Recommendations
Many of the iron entrance doors at mound tombs are missing or they have deteriorated to such an extent that masonry replacements have been installed. A visually similar, unobtrusive, standard painted steel or cast iron plate, secured to the masonry with expansion bolts, should be used. A paint study should be performed on the doors to determine if green or black is the appropriate historic color. The padlock should be changed to one with a more appropriate historic character.

Edging of Family Plots

Issues
Quarter round granite edging along Broad Avenue for the Goddard and Chase family plots has rotated and shifted. The simple granite edge for the Leonard family plot appears stable. A number of granite plot boundary markers define two plots on the west side. There are few elsewhere. An iron plot boundary marker was found near the center of the site.

Recommendations
The edging should be reset on a more permanent foundation. To the extent that the foundations for these elements are probably loose stones, they should be removed and a concrete foundation cast to keep the stone elements level and plumb. The two materials can be joined with concealed stainless steel dowels.

FENCES AND GATES

Iron Fences and Gates

Issues
There is an inward swinging, double leaf iron picket vehicular gate and a single leaf pedestrian gate supported on 12’ square by 5’ high granite posts at the Walnut Street entrance. The gate construction is somewhat unusual with 1/4” thick by 1-1/2” wide vertical pickets and 1/2” thick by 2-1/2” wide horizontal members. Hinges for the vehicular gate are mounted on the rear of the support post allowing unobstructed entry, while the pedestrian gate hinges are mounted on the sides of the post. The westernmost granite post is leaning out of vertical. The paint finish on the gates is in good condition, but two of the pickets in the vehicular gate are bent.

Recommendations
Reset the granite support post to vertical position and straighten bent pickets.

Interior Fences and Gates at Family Plots

Issues
Two family plots have unique but deteriorating ornamental iron fence enclosures. The Cook family plot at the high point of Ridge Avenue has a circular enclosure of granite posts and iron fences. It has 12 slender granite posts with rounded tops. One is left that is almost intact. The rest are split and many tops are missing. There were 10 sections of iron fence with a winged hour glass [time flies] motif. Three of the five remaining sections are almost completely intact. The section facing the end of Ridge Avenue probably had a gate or 3 cast iron bollards like those found at the northwest corner facing an unnamed avenue leading to the cemetery entrance.
The Foster family plot has an iron fence enclosure with a wood post and bent twig motif. The fence sections appear to have been molded because they are only finished on one side. The enclosure is three sided with 6 sections of fence and a gate. The gate is missing, one fence section is missing and another is leaning.

**Recommendations**
Restore these beautiful and unique fences and gates.

**Chain Link Fences**

**Issues**
Three sides of the perimeter are enclosed with six foot high chain link fence. It has top rails and center rails at the corners. The fabric is heavily rusted. The top rails, H section and tubular section posts are not quite as corroded. The fence is generally stable.

On the west side there is a breach at about the middle of the length of fence. Erosion at same location has exposed the concrete foundations of the fence posts. On the south side, there are two bent top rails near the southwest corner apparently caused by falling tree limbs. On the northeast side near the intersection with the southeast side, one section of fabric about 10 feet long has been peeled back adjacent to a tree growing into the fabric. The north end of the fence has a quarter circle fence guard with barbed wire at the top of wall.

**Recommendations**
Repair the two breaches in the fence as soon as possible. Consider replacing the fence in the next ten years with a black vinyl coated chain link fence.

**SITE AMENITIES**

**Signs**
No signs of any type were found.

**Recommendations**
An identification sign should be added near the entrance with some basic rules and regulations. If more visitation is anticipated, informational and/or interpretive signs should be considered.

**Other**
There are no seating, trash receptacles or flagpoles in the cemetery.

**Recommendations**
Do not add these elements.
LEGEND

- Existing Deciduous / Evergreen Tree
- Remove Existing Tree
- New Tree
- Pedestrian / Vehicular / Entrance
- Repair Erosion
- Asphalt Path
- Lawn Path
- Stone Wall w / Chain Link Fence
- Chain Link Fence
- Ex. Utility Pole

WALNUT STREET CEMETERY
PRESEVATION PLAN
BROOKLINE, MA

PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE

BY:
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NOVEMBER 1999

1" = 100'

NORTH
UTILITY
Drainage

Issues
No drainage structures were found inside the cemetery. All drainage flows over the surface toward the southwest corner. No puddling was evident. It was apparent that during heavy rains surface drainage from Walnut Street enters the site through the gate and has been the cause of the erosion on the west portion of Broad Avenue.

Recommendations
Improve the entrance conditions on Walnut Avenue including the private drive entrance immediately west of the cemetery entrance by raising the street curb and ramping up both drive entrances to prevent street drainage from entering the site.

Water Supply

Issues
One hose bibb was found at the Walnut Street end of Goddard Avenue.

Recommendations
Verify that the hose bibb is functional. Do not add additional water.

Lighting

Issues
There are no light fixtures inside the cemetery. Street lights are on the utility poles along the Walnut Street edge.

Recommendations
Do not add light fixtures.

PRIORITIES
High Priority
- Stone conservation including resetting and repair of slate markers and pin replacement in marbles that are visibly cracked or spalled
- Hazardous tree evaluation
- Vegetative removals and pruning
- Perimeter fence repair
- Interior fence restoration
- Repair of structural items like perimeter and interior walls, and mound tomb and vault structures
- Erosion and lawn repairs
- Identification sign placement.

Medium Priority
- Stone conservation including marbles with visible metal stains at the junction between marker and base
- Restoration and replacement of iron tomb doors
- Resetting steps and family plot edging
- Vehicular gate repair
- Fertilization of trees.

Low Priority
- Stone conservation including granite markers that have shifted or are leaning, and marbles currently in satisfactory condition
- Informational and interpretive signs
- Additional planting
- Chain link fence replacement
- Addition of family plot boundary markers
The historic component of this 14.5 acre active cemetery is about 3 acres. About 1/3 of the parcel is yet to be developed. Located just south of the town center and across the road from an elementary school, the gently sloping open terrain has a shallow ridge running north-south near the center of the cemetery.

Incorporated in 1730, the community began to develop in 1701, mostly by residents of Springfield. Brimfield was laid out in 1714. Land was set aside for a cemetery in 1721, southeast of Tower Hill Road. Also known as Center Burying Ground, the site was cleared and leveled by subscription of the townspeople in 1750 and the stone wall was built around it in 1780. The site was enlarged in 1845 and 1860. The stone wall along the street was erected in 1928.

The oldest part of the cemetery is north of the northernmost drive where most of the slate and sandstone markers are located. The central area south of that tends to have more grandiose Victorian components and more marble markers. Most of the obelisks are also in this area. Development south and east of this area is the most recent.

**LANDSCAPE CHARACTER, LAWNS AND VEGETATION**

**Issues**
The site is generally open with wooded edges along the eastern perimeter. The line of Maple street trees along Wales Road is broken and incomplete. A concentration of mature evergreen trees, mostly Spruce, has been planted in the old north section. The central section is divided by a double row of Maples edging a north-south grass path.

CENTER CEMETERY

BRIMFIELD, 1720

National Register Status: Inventoried, Recommended Eligible
Current Management: Cemetery Commission
Status: Active
Condition: Good

Entrance gateway and wall along Wales Road, Route 19
Recommendations
The general landscape character is appropriate with a few recommended modifications. The line of Maples along Wales Road should be reinforced. A number of the evergreen trees in the older north section should be removed to increase the amount of light reaching the ground, reducing moisture retention in the older slate markers. In a cemetery of this size, the addition of more trees in the newer central and southern sections would help break up the vastness of the space. These trees should preferably be different species than those already on site to provide some botanic diversity.

A long term goal should be to open up the older north section such that it presents more of the landscape character that it had when it was active. Similarly, the Victorian central section should have a greater variety and diversity of plant material that is more representative of the era when this portion of the cemetery was active.

Planting
Issues
The interior of the site contains 46 trees. There are 17 Maples along the west wall. The north area has 11 Spruce, 1 large Oak and 2 Cedar. The central area has 10 older Maples in an alternating double row and 5 other Maples. Arborvitae create a screen on part of the east side. There are few shrubs including a mass of Forsythia in the northwest corner at the site of the former hearse house and 2 Junipers at the north entrance. The trees are generally in good condition. Limbing up of the trees is performed by cemetery staff. High tree work is done by outside contract.

Recommendations
No improvements are recommended.

Volunteer Growth
Issues
Volunteer growth is well controlled and exists primarily outside the cultivated area. A volunteer at the northwest corner post should be removed.

Recommendations
Remove the noted volunteer growth.

Lawns
Issues
Lawns are well maintained and generally in good condition. Maintenance of the grounds is provided by cemetery staff.

Recommendations
Repair lawn areas as required. Lawns should receive an annual application of fertilizer to sustain a reasonable level of health.

ACCESS AND SECURITY
Pedestrian and Universal Access
Issues
Although the site slopes gently, there are no paved paths inside the cemetery. This limits universal access. Pedestrians rely on sharing vehicular access routes. With no defined parking areas, parking occurs on or adjacent to the one lane drives inside the cemetery.

Recommendations
No changes are recommended for pedestrian access. Universal access should continue to rely of vehicular access routes.

Vehicular Access
Issues
There are five points of vehicular access from Wales Road, Route 19, each with a 14’ clear opening. There is also one point of access from Sturbridge Road, Route 20, although the latter is locked.

Recommendations
This system appears more than sufficient for the visitation requirements and no changes are recommended.

Security
Issues
The site is essentially open. The five primary vehicular access points are not gated. Perimeter walls are relatively low and easily scaled.

Recommendations
Security is apparently not an issue on this property and improved measures should not be pursued at this time.

VANDALISM
Issues
Little of the impacts of vandalism are evident. The causes of toppled and broken stones, most of which appear to have been in that condition for some time, could be numerous.

Recommendations
Vandalism does not appear to be a significant problem and no changes are recommended.
CIRCULATION SYSTEMS AND MATERIALS
Circulation Systems
Issues
The five east-west roads connect to one north-south road on the east side of the property in essentially a grid system. A deteriorated drive along the northeast corner to the tool shed is mostly grass along the inside of the east wall.

Recommendations
No changes to the circulation system are recommended at this time.

Walks
Issues
While there are no paved walks inside the cemetery, an apparent north-south grass path extends through the central portion of the cemetery. A bituminous walk along the public Wales Road is located outside the cemetery wall.

Recommendations
No changes are recommended at this time.

Steps
Issues
The only steps inside the cemetery are related to two family plots and they are in good condition.

Recommendations
No improvements are recommended.

Roads
Issues
Paved drives, approximately 11’ feet wide, provide access throughout.

Recommendations
No improvements are recommended.

Pavement Materials
Issues
Bituminous concrete is the only pavement material here and it is in fair to good condition with some cracks.

Recommendations
Provide crack repairs as necessary. The roads should be resurfaced within 10 years. Assuming the site is snow plowed, paved surfaces should remain in bituminous concrete.

GRAVE MARKERS
Headstones and Footstones
Issues
Because the cemetery opened in the 18th century and has remained active with periodic expansion, it contains the full gamut of grave markers from slate and sandstone to marble and granite. Each material is generally grouped in areas corresponding with specific expansion periods.

Trees and wall along Wales Road, Route 19

There are quite a number of brownstone markers with at least five marking the burial sites of Revolutionary War soldiers. Approximately 50 obelisks are located in the central area, including at least five brownstone obelisks.

The older stones need cleaning and repair due to deterioration, breakage, base failures, lichen, atmospheric contamination and delamination. Relatively little damage from lawn maintenance operations was observed. A number of the marble markers are exhibiting the deleterious effects of acid rain. But most are relatively sound, without severe "sugaring" on the surface. All of the brownstone, especially the obelisks, is affected by gray and yellow lichen. Gray lichen is also growing on the cut lettering on a number of granite markers. A 1997 proposal by Fanning-Lehner indicated that 165 grave markers required conservation. Damaged gravestones are stored in the receiving tomb.
Recommendations
Proceed with a grave marker conservation program, like that proposed by Fannin-Lehner, beginning with the older slate markers and marble markers that have visibly cracked or spalled at the junction of the base and upper stones. A conservation biocide treatment should be considered for the rare and old brownstone and marble markers. Marble markers that are in danger of becoming illegible should have the highest priority for conservation treatment. Reset all toppled markers. Continue the stone conservation program with the other less visibly damaged markers.

STRUCTURAL ELEMENTS
Perimeter Walls

Issues
Wales Road wall: These distinctive walls and gateways along the road on the west side of the cemetery were built in 1928 by the Brimfield Woman’s Business Club. Two of the stone arched gateways were erected from the bequest of Frances Parker Bliss in the same year. Although the wall is visually coherent, it is clear that the wall was constructed at three different times, with the southernmost portion built in 1966.

The walls and gateways are constructed of mortared round fieldstones. The wall has a 27” wide precast concrete cap with a shallow pitched top and no drip edge. The top of the wall appears to be set level and the height varies from 34” to 54”. The ends of the walls and other gateways are punctuated with 6’ high 36” square posts of similar construction with precast concrete globes at the top.

Other perimeter walls: A dry laid fieldstone wall in the apparent location of the 1780 wall forms the north and northeast edges. The height varies from 12” to 36”, with a typical height of about 30’.

Recommendations
Minor repointing is required throughout the Wales Road wall. Repair work should be done in a manner that fully respects the original materials. Repointing mortar should be compatible with historic mortar in color, texture [aggregate, surface finish and joint profile] and strength. Care should be exercised so as not to use a hard mortar and not to cover stones with mortar. Expansion joints should be rebuilt with a resilient compressible filler.

Variations in surface appearance are due more to repairs than aging and weathering. The wall cap has numerous localized areas of damage, particularly near joints in the cap. The damage may be indicative that the width of the cap expansion joints may be too narrow or the compressible filler has become hardened. Most areas have been repaired. The top of the cap has been parged in part, with some areas scaling off. Hairline cracks are evident in many locations of the pointed wall face. The sidewalk has settled outside the wall adjacent to the center section of the wall, exposing the wall’s stone foundation. Walls are maintained by cemetery staff.

Edging of Family Plots

Issues
Three of the family plots are edged. Two of them are centrally located on the west side facing Wales Road. Both have two granite steps up to the plots. The Wales plot with a marble obelisk has granite edging on one side and sculpted granite posts on the other corners. The Sherman plot with a granite obelisk has granite edging and raised granite posts holding cast iron rails. The Blodget family plot in the northeast corner of the site has raised granite posts and a granite threshold on the west side. The edging appears in good condition.

Recommendations
No improvements are recommended.

BUILDINGS

Issues
A wood shed at the northeast corner once served as the hearse house. Moved to this location from near the northwest corner it is now used for tool storage. It is about the size of a one car garage. The structure has both the typical Gothic Revival board and batten cladding, and cut nails, strongly suggesting a c. 1845 date. It needs to be made weather tight and structurally sound.

A free standing receiving tomb is sited just north of the north entrance. Added at some point in the 19th century, the tomb is constructed of parged concrete with a barrel vaulted roof covered with standing seam copper. Deterioration is evident at the bottom edges of the copper as well as in some areas of the concrete base. The door appears relatively new with a marble frame.

A concrete block maintenance building, about 10 years old, with an asphalt shingle roof is sited at the southern edge.
Recommendations
As the oldest structure in the cemetery, the former hearse house should be restored. These small vernacular buildings are particularly important to preserve, as most are now gone. Survey the building to determine which structural timbers and other materials date from the original construction. Identify and conserve those which may still serve their purposes. Replace only the elements which can no longer function as intended, even with repairs in kind. Insure that the work is performed by an architectural conservator in conjunction with a preservation carpenter. Paint the building with a researched original, or period appropriate, color scheme.

The roof and exterior walls of the receiving tomb should be repaired. The maintenance building is apparently adequate for the needs of the cemetery and no changes are recommended.

FENCES AND GATES
Wood Gate
Issues
A pressure treated wood gate at the bridge in the northeast corner of the site appears in good condition. It is chained and padlocked closed.

Recommendations
No improvements are recommended.

SITE AMENITIES
Signs
Issues
A bronze commemorative sign is secured to the northernmost arched entrance providing information on the construction of the front wall and arched gates. Another small metal sign at the bridge announces that the bridge is closed. There is no identification sign for the cemetery.

Recommendations
Provide an identification sign outside the northernmost entrance. It would be beneficial to add informational and/or interpretive signs. Clean and protective coat the bronze commemorative sign. Consider repatination.

Trash Receptacles and Seating
Issues
There are no trash receptacles or seating elements.

Recommendations
Do not provide seating and trash receptacles inside the cemetery.

Flagpoles
Issues
A white painted 35’ high steel flagpole with some rust evident is near the center of the site. It was erected as a memorial to Ernest G. Roberts, 1903-1971.

Recommendations
Prepare, prime and paint the flagpole.

UTILITIES
Drainage
Issues
No drainage structures are evident. The site drains on the surface with a gentle slope toward the east. An earth pile is located at the southeast corner, away from the developed area of the site.

Recommendations
No changes are recommended. Monitor the earth pile for erosion.

Lighting
Issues
No light fixtures were observed inside the cemetery. Some residual light is available from the adjacent road on the west side.

Recommendations
Do not provide additional lighting.

PRIORITIES
High Priority
- Stone conservation including resetting and repair of slate markers, pin replacement in marbles that are visibly cracked or spalled, and conservation of marble markers that are in danger of becoming illegible
- Vegetation removals
- Repair of structural items like perimeter walls and the receiving tomb
- Restore former hearse house
- Lawn repairs
- Identification sign placement

Medium Priority
- Stone conservation including marbles with visible metal stains at the junction between marker and base
- Repair of roads and flagpole
- Fertilization of trees

Low Priority
- Stone conservation including granite markers that have shifted or are leaning, and marbles currently in satisfactory condition
- Informational and interpretive signs
- Additional planting
- Resurface roads

154 - Brimfield
Close to the town common and village, this inactive burial ground was established in 1721 and served as the first town burying place. Enclosed by perimeter stone walls and over an acre in size, the gently sloping rectangular site has a steep slope at the rear that drops about 20 feet. Residential uses border the site at the southwest and southeast corners on King Street as well as to the north with conservation land beyond. An apparent commercial storage yard to the northwest is screened by a solid wood fence. A low one story gray concrete block commercial building abuts the site at the center of the east side, influencing the visual appearance of the burial ground.

The burial ground contains the graves of pre-Revolutionary prominent early settlers, the first two town ministers [Reverends Benjamin Shattuck and Daniel Rogers] and 19 Revolutionary War veterans including Luther Blanchard, the first man shot at the April 14th Battle of Old North Bridge. While the monument is to Revolutionary heroes Calvin and Luther Blanchard, only the graves of Calvin and his wife are here. The burial place of Luther, who died as a result of a wound received in the battle, is uncertain. The 16 pre-Revolutionary graves are located near the front gate.

The period of significance of the burial ground is from 1721 to 1896. The other public cemetery in Littleton is Westlawn Cemetery. It was created in 1809 and remains in active use.
**LANDSCAPE CHARACTER, LAWNS AND VEGETATION**

**Landscape Character**

**Issues**

The burial ground is heavily vegetated for a site of this period. Most of them had little, if any, vegetation when they were developed. Today tree cover is mostly mature and approximately 2/3 evergreen and 1/3 deciduous which is somewhat unusual. The year round shade created by the evergreens is a contributing factor to the biological growth on many of the grave markers. The condition of the formal double row of large White Pines is a concern.

About half of the trees inventoried are White Pine [22] with 9 Sugar Maple, 6 Red Cedar, 2 Linden, 2 Black Cherry, 1 Black Oak and 1 White Cedar. Trees and brush in the rear section were not inventoried because they are recommended for removal. A dead 20’ tall, 26” diameter tree in the corner of the west rear section was also not included because it also needs to be removed to prevent personal injury. Two large White Pine in the west row at the front of the site approaching from King Street have extensive amount of decay in their main stems [trunks] because large branches failed some years ago opening very large wounds for fungi to invade. Immediate removal of these two hazardous trees was recommended on 16 April 1999.

**Recommendations**

In general the visual character of the site should be more open to better reflect the period of its historic origin, improve the conditions to maintain lawn and reduce the impacts of biological growth on grave markers. A total of 21 inventoried trees should be removed: 14 White Pine, 5 Red Cedar and 2 Black Cherry.

Most of the White Pine to be removed are near the King Street entrance. Keeping large Pines of this age would require a significant amount of maintenance to make them less hazardous. They are deformed from past storms and many have surface roots, indicating possible shallow root systems. Once the two most hazardous Pines have been removed, the remaining Pines will be more subject to blow down, branch failure, top failure and up rooting. Prevailing winds would normally blow these trees toward King Street.

No large tree is considered safe in winds exceeding 55 MPH when all conditions are right for failure, including soil moisture, shallow roots and large crowns. Tree crowns growing above surrounding tree canopies presents a greater risk of failure.

The 5 Red Cedars recommended for removal have grown into grave markers. The 2 Wild Black Cherry are declining as evident from crown dieback. Some trees [White Pines and 1 White Cedar] have multisistem crowns which need support cables installed to help prevent large branch failure. The Pines should also have the end weight reduced on most horizontal branches to prevent future breakage. Raising lower branches on dense trees like Pine will also improve light conditions, benefiting the lawn beneath, reducing the growth of lichens and other biological growth on grave markers and provide a broader view of the burial ground.

All existing trees to remain should have dead wood and broken branches removed and receive an annual application of fertilizer to sustain a reasonable level of health.

**Planting**

**Issues**

The double row of White Pines in the center of the burial ground were planted some time during this century. Most of the rest of the vegetation inside the site appears to be volunteer growth. Daffodils have been planted outside the wall fronting King Street.

**Recommendations**

The quantity and placement of new vegetation should be limited to areas that do not interfere with the grave markers, paths, fences and walls.

**Volunteer Growth**

**Issues**

There is a large area of volunteer growth at the rear of the site.

**Recommendations**

Remove all volunteer growth.
Lawns

Issues

Lawns were in fair to poor condition with bare spots, some herbaceous weeds and moss. There is a large debris pile at the rear of the site, mostly organic material from leaf clean up with some sand and gravel. Another leaf pile is located outside the burial ground, at southwest corner of the White Street commercial building. It is much taller that the stone wall containing it.

The Cemetery Department has one full time maintenance staff person with supplemental help as necessary. In addition to Spring and Fall clean up, the grass is mown, and leaves and debris are removed.

Recommendations

Remove leaf and debris piles. Repair lawn areas. Lawns should receive an annual application of fertilizer to sustain a reasonable level of health.

ACCESS AND SECURITY

Pedestrian and Universal Access

Issues

The burial ground has two points of access. The main entrance is on King Street, Routes 2A and 110. There is a paved public sidewalk and available paved parallel parking spaces outside the gate. It has a gated vehicular entrance and an open narrow pedestrian entrance. The site slopes gently inside the gate and has an earth path into the cemetery. Exposed tree roots on the path obstruct universal access. There is a secondary pedestrian entrance on White Street that is apparently rarely used. The site slopes steeply up immediately inside the gate.

Recommendations

The main entrance should remain on King Street as it is the historic, most visible and most accessible entrance. Universal access is dependent upon improvements to the vehicular gate and surface materials inside the cemetery.

Vehicular Access

Issues

Maintenance vehicles enter the site from King Street. Other vehicles are not allowed inside the burial ground because it is a relatively small site and there are no paved surfaces.

Recommendations

Maintain the current vehicular access.
Security
Issues
There is no security to the site because of the open pedestrian access and easily crossed perimeter walls.

Recommendations
Improved security measures are not deemed necessary at this time because of the limited vandalism that has occurred in recent years.

VANDALISM
Issues
Little vandalism has been reported or is evident. Blue paint was noted on two slate markers as well as an area of broken glass along the west edge.

Recommendations
Vandalism is not a significant problem and no changes are recommended other than removal of paint graffiti and broken glass.

CIRCULATION SYSTEMS AND MATERIALS
Circulation Systems
Issues
A single centrally located unpaved earth path leads from the main entrance into the middle of the site. It serves maintenance vehicles and pedestrians. There is no formal circulation system in the north half of the burial ground. A steep unpaved lawn path leads from the White Street entrance part way into the site before it dissipates into the landscape.

Recommendations
Maintain the circulation system in its current form.

Steps
Issues
While there are no steps associated with normal circulation routes, there are two granite steps related to the Sawyer family plot located immediately inside the entrance. The steps have settled and are uneven.

Recommendations
Reset the steps at the same time the plot edging is reset.

Pavement Materials
Issues
All walking surfaces are grass or earth.

Recommendations
Surface materials should remain grass until visitation reaches the point where it is no longer practical to maintain lawn. At that time a paved path system should be considered.

GRAVE MARKERS
Headstones and Footstones
Issues
The vast majority of grave markers are slate, with some marble and a few granite. Most are set in north-south lines facing east and west. The slate markers exhibit a wide range of stone carving styles and motifs. In general the slates are in good condition with some biological growth. The marble markers exhibit typical weathering patterns with erosion, softening of features and inscriptions, and a limited amount of grey/green biological growth. At least 25 slate and 15 marble markers need to be reset because they are leaning significantly or have been toppled. A much smaller number of slate and marble markers are broken and should be repaired.

Footstones were reputedly taken down some time ago and buried adjacent to the appropriate headstone to ease maintenance requirements.

A stone conservation and repair program was initiated in 1994 with the majority of the work completed to date near the King Street entrance. The firm of Fannin/Lehner has cleaned and reset the Elizabeth Cogswell footstone, 1749 Thomas Goldsmith headstone, 1849 Mary Robbins marker and 1886 Nehemiah B. Robbins marker.
Recommendations
Continue implementation of the stone conservation and repair program. Reset tilted and toppled stones in gravel, starting with the slate markers. No attempt should be made to reassemble the broken slate pieces in situ. Pieces of broken slates should be stored in a sheltered location, preferably inside. No attempt should be made to remove or reverse old repairs to slate markers as this will damage the stones. Depending on individual conditions, consideration should be given to repairing broken marble markers. Remove the minor biological growth from stones. Removing surface biological growths will improve the appearance of the stones and slow down weathering if done gently.

Table Tombs
Issues
A single slate table tomb is located immediately next to the Rogers granite obelisk. The 1779 Elizabeth Rogers marker has concrete support legs and is in good condition with a small amount of lichen.

Recommendations
Monitor lichen expansion.

Monuments
Issues
There are three granite obelisks in this burial ground. The largest is the centrally located Rogers gray granite monument. It appears stable with some earth settlement at the base exposing a portion of the rubble stone foundation. The Sawyer monument, immediately adjacent to the King Street entrance, has the same settlement issues as does the Blanchard monument which is just beyond the Sawyer obelisk. This 1900 gray granite monument has 6 to 8" of earth settlement at the base. At the southwest corner of the site, the smaller Eliot monument which is not an obelisk is leaning slightly.

Recommendations
Reset the Eliot monument to a vertical position and provide earth fill to cover the exposed foundations of the obelisks and raise the level of the ground to the proper level to prevent undermining and destabilization.

STRUCTURAL ELEMENTS
Perimeter Walls
Issues
The perimeter walls date from 1748 when the town voted to build them. There are two free standing stone wall types, one on the entrance or King Street side and another for the rest of the perimeter.

The King Street edge is in good condition. It has a 42" high large chinked grey granite wall with a granite cap. With a vertical face on the street side and buttressed on the burial ground side, it is 18-22" wide at the top and 32-36" wide at the base. There are two 12" square by 54" high granite posts at the entrance gate with a 9'-5" opening. The west post is slightly leaning, causing some binding of the swing gate. The top of the east post has been capped with a 2" thick layer of concrete to conceal a broken top. A gap between the east post and the wall allows free pedestrian access. The gap is 18" wide at the base and narrows to 14.5" because the end wall stones have shifted out of alignment.

The other perimeter walls are generally low piled local fieldstone. About 50' of wall is missing from the King Street end of the west edge. The adjacent 9 granite posts are assumed to be on adjacent property because the drill holes in the posts face the residential property. In the next 200' of wall there are a few locations where stones have become dislodged and should be reset. There is also one small opening in the wall where it has been reformed to create a pedestrian passageway. The remainder of this length of wall is in relatively good shape.
On the north edge of the burial ground, there is a 40' length next to the adjacent residence where the wall is down. There is another short section with missing stones. The White Street edge is a low retaining condition, and it has a few top stones that have fallen. The south corner of this side is formed by 9 granite posts and a pedestrian gate. The east edge along the commercial building and residence is in relatively good shape with a few fallen stones.

**Recommendations**
Reset the west gate post to vertical position as well as the shifted stones at the pedestrian way. Replace the missing wall along the west edge and replace missing and fallen stones in all other locations.

**Mound Tomb and Vault Structures**

**Issues**
Assumed to be the receiving tomb, a mound tomb faces the White Street pedestrian entrance. The earth surface appears stable. The slate door with iron hinge straps is about 2/3 concealed with earth fill, and the identifying marker above the door is missing.

The Proctor mound may also be a mound tomb with no visible access. It is marked with a single vertical tablet at the top of the mound. The earth surface here also appears to be stable.

**Recommendations**
Remove the earth fill blocking the door at the White Street tomb and inspect the interior of the tomb to insure stability of the structure.

**Edging of Family Plots**

**Issues**
Family plots here have three types of edging as well as some that have the corner boundaries marked with vertical granite posts. Edging types include granite edging, granite posts with iron chains and cast iron posts with iron chains.

Two plots have granite edging. The Sawyer family plot, just inside the King Street entrance, is edged with 7" wide by 18" high granite. Slight settlement and leaning of the edging has occurred as well as settlement of the adjacent earth. The Johnson family plot, immediately inside White Street entrance, is edged with 8.5" wide by 18" high granite. It is in worse condition with separation and overturning as well as more significant settlement on the north side.

Three plots have granite posts with iron chains. The Breck family plot, just inside the King Street entrance, has six granite posts with chain hooks, but no chain. One of the posts has the top half broken off and missing, and another post has a broken top portion. The Rogers family plot, west of the Proctor mound, has six granite posts with chain hooks and one length of chain intact. Two of the posts are intact; one is missing; two are broken; and one has a broken top. A small plot, southwest of the Proctor mound, has four granite posts with 3 of the 8 lengths of chain in place. Two of the posts are leaning.

One plot has cast iron posts with iron chains. The Wright/Smith family plot at the northeast corner of the site had eight cast iron posts on stone bases. One of the posts is broken, one is missing, and most of the rest have been twisted to some degree on their stone base, presumably in an attempt to remove them. All of the chain is missing.

**Vertical granite corner posts are located at two of the significant features of the burial ground, the Rogers obelisk and Proctor mound. Significant settlement is evident at one of the former posts with the unfinished base exposed.**

**Recommendations**
Reset all granite edging as required. Add earth fill at the base and top of all edging as required including the Rogers obelisk corner post. Restore granite posts, cast iron posts and chain.

**FENCES AND GATES**

**Cast Iron Fences and Gates**

**Issues**
The wrought iron King Street vehicular gate was the gift of George Cheyne Shattuck, a descendant of the town’s first minister, Rev. Benjamin Shattuck, who died in 1763. It was donated about 1900. The gate serves as the vehicular entrance control. It is a picketed gate with 4’-9.5” to the top of the pickets and a decorative pattern at the bottom. With the hinges set on the street side of the granite support posts, the gate allows a clearance of 9’-5”.

Because the west gate post is leaning slightly, the gate does not close properly. The latch is fitted for a lock, but one has not been used. It has a center rest of granite for the closed position. The gate is generally in good condition with a little rust showing. The pineapple finial is broken off and missing from the west gate leaf.

The cast iron pedestrian gate on White Street is heavily rusted but in serviceable condition. It has a 4’ clear opening with hinge and latch obstructions in the 4’-8” dimension between the 8” square by 4’ high granite support posts. The top of the gate is 3’-9” above grade with about 8” clearance at the bottom once the earth and other debris is removed.
Recommendations
Replace the missing finial from the King Street gate and repaint the entire gate. Restore the White Street gate and remove obstructing earth and other debris.

SITE AMENITIES
Signs
Issues
Two bronze plaques are secured to vertical granite tablets adjacent to the main entrance. One identifies the burial ground and provides some information. The other identifies the 19 Revolutionary War veterans in the cemetery and 10 others at Westlawn Cemetery. Both plaques are in good condition. Revolutionary War graves are markers with round discs set horizontal and flush with the ground in front of each marker.

Recommendations
Signs are in good condition and no improvements are recommended.

Other
Issues
There are no trash receptacles, seating or other amenities in the burying ground.

Recommendations
Do not provide trash receptacles, seating or other amenities.

UTILITIES
Drainage
Issues
No drainage structures were found inside the burial ground. In general, the site drains on the surface and flows to low spots at sides of the central area. Two down spouts discharge into the burial ground from the commercial building on White Street. No apparent damage was evident. The same building is also discharging an odiferous dark liquid immediately adjacent to the burial ground at a point between the two rain leaders.

Recommendations
Work with the adjacent property owner to resolve drainage from roof leaders before it becomes a problem and the other discharge that has an unpleasant odor and is a distraction for visitors.

Water Supply
Issues
There is no source of water inside the burial ground. When water is needed, it is obtained from a neighbor.

Recommendations
Water is beneficial in times of drought. Explore a means of adding a hose bibb outside the site on the King and/or White Street edge.

Lighting
Issues
While there are no light fixtures inside the burial ground, there are street lights on utility poles some distance from the front of the burial ground, and ambient light from adjacent uses.

Recommendations
Do not add light fixtures inside the cemetery.

PRIORITY
High Priority
• Stone conservation including repair program, resetting and repair of slate markers and pin replacement in marbles that are visibly cracked or spalled
• Vegetative removals and pruning
• Resetting west gate post
• Repair of pedestrian entrance wall opening
• Providing fill at exposed obelisk foundations
• Removing earth at White Street tomb
• Resolving roof leader and other discharges
• Lawn repairs

Medium Priority
• Stone conservation including marbles with visible metal stains at the junction between marker and base
• Family plot restoration and repair
• Resetting Eliot monument
• Repairing and replacing perimeter stone walls
• Repairing and repainting iron gates
• Fertilization of trees
• Consideration of adding water supply

Low Priority
• Stone conservation including granite markers that have shifted or are leaning, and marbles currently in satisfactory condition
Also known as the Old Graveyard, this one acre site is the second oldest burial ground in Old Bridgewater. Closed since the 1870s, the site is no longer an active burial ground. The burial ground has a parking area that is used by both the town and St. John’s Church on the southeast side, and a parking and wooded area on northeast side. The latter property line is defined by granite posts and some boulders at northeast corner. Town Offices and the high school and elementary school on each side of the Town Offices are located across Central Street on the southwest side. Located on Central Street, the Old Burial Ground is the Historic District’s oldest property. It is adjacent to the Center or new cemetery on northwest side, a private nonprofit cemetery established in 1854. Small cherub motifs at the tops of the gate posts of the new cemetery are appropriate to the mid 19th century period of its development. The latter was significantly enlarged in 1877 on lands donated from the abutting estate of K. L. Shelton. The Shelton estate included an exuberant Victorian manor, a barn, carriage house and greenhouse, although no architectural or landscape features from the Shelton estate extended into the old graveyard. Central Street was widened in May 1882 and the first 40 graves were removed to other sites in the graveyard, or moved by the families into the “new” cemetery. Raised about three feet above Central Street by a fieldstone and granite wall on the south and east sides, this gently sloping site contains a number of large trees to give it somewhat of a wooded appearance. The high point is near the southwest corner, close to the low point at the vehicular entrance. A low area is also located at the northeast corner.
Mention is first made of this graveyard of 100 rods in the deed of Deacon Samuel Allen, dated June 28, 1703. He and his wife Sarah are buried in unmarked graves. It was enlarged with a gift of 121 rods from Matthew Allen, Jr. on November 20, 1759. The northeast corner was designated as the pauper’s corner [section E]. There were several burials before 1700 but no stones mark these graves. After 1724 Rev. John Angier cut initials and death dates on many flat field stones marking many of these early graves.

Many of the town’s early settlers were buried here including Reverend John Angier the first minister, Reverend Samuel Angier the second minister, Isaac Otis the first doctor, Josiah Otis a doctor, Captain Jonathan Pass and Deacon Thomas Whitman, prominent families of the town, and war veterans including French and Indian War [3], Revolutionary War [72], War of 1812 [13], Civil War [1].

LANDSCAPE CHARACTER, LAWNS AND VEGETATION
Landscape Character
Issues
Tree cover is mostly mature and approximately 82% deciduous and 18% evergreen. There are too many trees inside the site for a burial ground of this vintage. It was reported that trees lined the Central Street edge until the 1938 hurricane destroyed them.

Recommendations
There is a general need to be more aggressive with tree removals to open up the site, complimenting the age of the burial ground.

Planting
Issues
Tree cover includes 44% Maple with 15 Maple [2 Red Maple], 6 Hickory, 5 Linden, 1 Oak, 1 Sycamore, 4 Pine and 2 Spruce. There are also 8 large stumps present. Some trees have been recently removed and at least 4 others should be removed very soon. There is a general need to prune the remaining trees to remove dead wood and lighten crowns to protect the historic resource of the burial ground.

Recommendations
Remove trees as required and prune those to remain. New or replacement trees should be placed outside the perimeter walls where possible. Large deciduous shade trees should be added along the edge of the parking lot to screen the visual intrusiveness of the cars. Replacement of the former tree lined image along Central Street will not be an easy task because right of way improvements have left a green verge along the curb that may be too narrow to adequately plant trees. The trees should not be placed inside the burial ground above the retaining wall because they will adversely impact the wall and most likely grave sites and grave markers as well.

Volunteer Growth
Issues
An area of volunteer growth is present in the northeast corner adjacent to the former hearse house location, a paupers area where few grave markers are present.

Recommendations
Remove all volunteer growth.
Lawn areas are in fair condition. Some areas have moss present, particularly where trees have been removed. Some erosion was apparent in four areas on steep banks adjacent to the road into the burial ground as well as at the top of the wall near the vehicular entrance and behind the wall near the pedestrian entrance. While modest slope erosion is visible, there is no evidence of grave shafts, coffins or coffin hardware. Lawns are mowed several times each season.

Recommendations
Repair erosion and lawn areas. The steep banks adjacent to the road should be stabilized to prevent exposure of grave shafts as the ground surface gradually erodes with time.

ACCESS AND SECURITY
Pedestrian and Universal Access

The pedestrian entrance is near the southwest corner opposite a crosswalk to the Town Office building with a pedestrian crossing signal on Central Street. There is a concrete sidewalk along street edge and access into the site requires negotiating a short steep grass slope. A 6’ wide opening in the wall is defined by two 6’x12’ by 4’ high granite posts. An iron hinge pin remains on the north post.

There is also access into the cemetery from a parking lot on the east side, through or adjacent to the former hearse house site. It has an 11’ wide opening and is a potential route for a universal access compliant entrance.

Recommendations
The Central Street entrance should be regraded to allow universal access. Work should be performed in conjunction with an archaeologist to insure protection of any potential historic resources at the entrance.

Vehicular Access

Vehicular access is available from Central Street at the northwest corner of the site that also connects to the new cemetery road system at the northeast corner of the site. The access point is defined by a 13’ wide opening set back from the street in a curving stone wall with 2 granite gate posts that are 6’ high by 1’6” square. Iron hinge pins remain on the cemetery side of the posts. There is a 3’ wide space outside each gate post with a short 2’ high, 7” diameter octagonal granite post centered in each opening.

Recommendations
This system appears sufficient for the visitation requirements and no changes are recommended.
Security
Issues
The site is open with easy access on all sides. Perimeter walls are relatively low and easily scaled.

Recommendations
Security is apparently not an issue on this property and improved measures should not be pursued at this time.

VANDALISM
Issues
Little vandalism has been reported. A minor amount of trash and debris was evident at the northeast corner where volunteer growth was present.

Recommendations
Vandalism is not a significant problem and no changes are recommended other than removal of trash and debris.

CIRCULATION SYSTEMS AND MATERIALS
Circulation Systems
Issues
Other than the road along one edge, there does not appear to be a defined path system, although circulation is unimpeded. There are no indications of historic paths or walkways.

Recommendations
Maintain the existing system. Do not add a path system.

Roads
Issues
The access road may have been built as a way to the new graveyard. It has apparently been realigned and simplified based upon the alignment shown on the Latham map.

Recommendations
The access road should remain as it is.

Pavement Materials
Issues
The bituminous concrete paved drive is in fair condition. All walking surfaces are grass.

Recommendations
Resurface the drive with bituminous concrete within five years. Although a gravel surface would be a more historically appropriate material, gradients are too steep to maintain it as such without a significant and continual effort. Surface materials for walks should remain grass until visitation reaches the point where it is no longer practical to maintain lawn. At that time a paved path system should be considered.

GRAVE MARKERS
Headstones and Footstones
Issues
This burial ground contains approximately 600 grave markers. The 1882 Latham map noted 581, not including footstones. At that time all footstones were moved to locations immediately behind the respective headstones. About 2/3 of the markers are slate. The remaining 1/3 are mostly marble with one granite marker. Several early graves are marked with primitive inscribed fieldstone slabs. Many of the slate markers are in remarkably good condition, with only a few exhibiting signs of delamination or spalling. They also represent some of the finest “carver” stones of this period. Grave markers are set closely together in fairly regular rows, mostly facing southwest. Several rectangular depressions indicate where grave markers have fallen or been removed. The Pauper’s Corner contains two markers, one for Mary Hewens and a small unmarked stone. Surface depressions beneath the leaf cover suggest deflated terrain associated with unmarked burials. A modest swale cuts through the area, around a small mound or berm.

A large number of stones are tilted or toppled and 20 or more are broken. Stone rubbings have been prohibited because of the fragility of some of the markers. The marble markers have eroded somewhat with grey and yellow lichen colonies flourishing on most stones. Grey and pale green biological growths on slate markers are less widely distributed. There is no evidence of mower damage. An automobile reportedly went over the wall at the southwest corner and damaged some of the grave markers 2 to 3 years ago. Several older broken slate markers have been reassembled using iron straps, which are now rusted.
Recommendations

Leaning and toppled stones should be reset, beginning with the slate markers. No attempt should be made to remove or reverse old repairs to slate markers. Pieces of broken ‘carver stones’ should be stored in a sheltered location, preferably inside. No attempt should be made to reassemble the broken pieces in situ.

Unstable or sugaring marble surfaces should not be cleaned or otherwise treated. Biological growths on top of stable slate and marble surfaces should be carefully removed with dry brushing during dormant seasons. Stubborn growths may be carefully removed with wooden or plastic scrapers. Seek the advice of a stone conservator regarding the pros and cons of applying a biocide on these stones.

The northeastern portion of the burial ground where the Pauper’s Corner is located should be examined by an archaeologist. Small piles of dirt and boulders were deposited there apparently when the abutting parking lot was constructed.

STRUCTURAL ELEMENTS

Perimeter Walls

Issues

Stone retaining walls form two sides of the burial ground, the front or south side [rebuilt in 1882 for the widening of Central Street] and the east side [1822]. The south wall is 3.5 to 4’ high with a rough hewn granite cap set in mortar. The wall appears to be in good condition and was apparently recently repointed.

Recommendations

Some localized repointing maintenance is needed at the retaining walls. When repointing, minimize the width of mortar joints to emphasize the character of the stone. Maintain the walls by inspecting them annually and resetting any displaced stones.

The existing stone wall should be extended to the northeastern property boundary after the former hearse house location is determined. It should match the extant wall in material and construction method. In order to prevent impacts to unmarked burials in the Pauper’s Section and archaeological evidence of the hearse house the new wall should be constructed above ground only and no subsurface excavations should take place. An archaeologist should be on site during construction.

Edging of Family Plots

Issues

One family plot near the southern corner and pedestrian entrance is defined by 4 vertical granite posts. The chain hooks are intact but the chain is missing.

Recommendations

Replace the chain to match the historic chain based upon historic images, if available.

BUILDINGS

Issues

A hearse house was located near the northeast corner, but no remnants are visible. It appears on O. H. Bailey’s 1877 view of East Bridgewater and may have been at the opening defined by granite posts at the end of the south perimeter wall or immediately east of that opening. One of the granite posts is broken off at grade and the other is intact with an iron bolt protruding from it.

Recommendations

Additional research on the hearse house may provide important information on the structure. Town documents, such as Annual Reports and Selectmen’s Records, may reveal the construction date, the cost of the building, the name of the contractor, or describe the hearse and mortuary equipment, and enumerate the cost of operating the town owned funeral equipment.
FENCES AND GATES

Issues
While there are no fences or gates remaining, there is a line of 12 granite posts along the northern margin of the graveyard, marking the boundary. The fence line was probably erected toward the end of the 19th century, based on the style of the rough hewn granite posts. They were probably linked by wire rope or chain which has disintegrated or been removed. Many of the granite posts are askew. Iron hinge pins indicate that gates once existed at both the vehicular and pedestrian entrances.

Recommendations
The original granite post and chain or wire rope fence should be restored to demarcate and protect the northern boundary of the cemetery in conformity with the original fence. A qualified archaeologist should be on site during restoration and repair of the fence. Restoration and stabilization procedures should be conducted from outside the cemetery. The former gates at the pedestrian and vehicular entrances should be replicated based upon historic images, if available.

SITE AMENITIES

Signs

Issues
There is one small metal identification sign near the northwest corner on the hill above the vehicular entrance. It is difficult to see because of the size and color. There are no informational or interpretive signs.

Recommendations
Provide a new identification sign at the Central Street pedestrian entrance. It would be beneficial to add informational and interpretive signs.

Seating and Trash Receptacles

Issues
There are none of these amenities on the site.

Recommendations
Do not provide this type of amenity.

Flagpoles

Issues
There is one metal flagpole, approximately 35 feet high, opposite the pedestrian entrance. It is rusting and apparently not used. Small flags are placed at war veterans grave markers by the local American Legion post.

Recommendations
The flagpole should be removed because it appears inappropriate in this burial ground, particularly with another one sited across the street at the Town Office building. The practice of flagging veterans graves for Memorial Day should continue. Consideration should be given to employing the American flags that were in use during the war years that each veteran fought in.

UTILITIES

Drainage

Issues
No drainage structures were found inside the burial ground. In general, the site drains on the surface and flows toward the northeast corner with some of the west side of the site being intercepted by the drive and flowing to Central Street. Sedimentation was evident at the pedestrian entrance.

Recommendations
No changes are recommended. Sedimentation issues should be resolved with lawn repair.

Water Supply

Issues
No source of water was found inside the burial ground.

Recommendations
Water is beneficial in times of drought and would help to re-establish lawns. Work with the adjacent church to provide hose bibbs outside burial ground walls.

Lighting

Issues
There are no light fixtures inside the burial ground but there are street lights on utility poles adjacent to the site that provide some illumination.

Recommendations
No additional lighting is recommended.
LEGEND

- Existing Deciduous Tree
- Existing Evergreen Tree
- New Tree
- Remove Existing Tree
- Remove Volunteer Growth
- Existing Stone Wall
- Repair Erosion
- Vehicular/Pedestrian Entrance
- Property Line

FR.  Existing Flagpole

OLD BURIAL GROUND
PRESERVATION PLAN
EAST BRIDGEWATER, MASSACHUSETTS

PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE

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NORTH
1" = 100'
NOVEMBER 1999
PRIORITIES
High Priority
• Stone conservation including resetting and repair of slate markers and pin replacement in marbles that are visibly cracked or spalled
• Vegetative pruning and removals including volunteer growth
• Restoration and stabilization of the Pauper's Corner
• Erosion and lawn repairs

Medium Priority
• Stone conservation including marbles with visible metal stains at the junction between marker and base
• Perimeter wall maintenance
• Hearse house research and perimeter wall extension
• Identification sign placement
• Fertilization of trees
• Consideration of adding water supply.

Low Priority
• Stone conservation including granite markers that have shifted or are leaning, and marbles currently in satisfactory condition
• Resurface drive
• Regrade Central Street pedestrian entrance
• Restore north boundary fence
• Family plot chain restoration
• Replicate gates at Central Street entrances
• Remove flagpole
• Informational and interpretive sign placement
This inactive 1.06 acre site with an impressive ocean view is the oldest burial ground in town. Facing Front Beach and a small park overlooking the beach, the site slopes toward the ocean with an average slope of about 10% and a 30' vertical grade change. The property is edged with motels and appurtenant parking lots immediately north and south of the property. The top of the slope at Mill Lane has adjacent small scale residential development and a small cemetery [Old Parish Annex or The Annex of Old Parish Cemetery]. Mill Pond Park is also nearby. Located near the heart of the heavily visited downtown area, it has been reported that quite a number of visitors stroll through the burying ground during the summer and that it is also used as a shortcut by local residents.

Richard Tarr, Rockport’s first settler, arrived on Front Beach in 1690 and built his home nearby. He used this field to graze cattle and near the end of his life gave the site to the town for a burial site. With 650 gravesites and gravestones dating from 1732, Old Parish Burying Ground contains the remains of some of Rockport’s famous citizens including Hannah Jumper who led the movement to make Rockport a “dry” town in 1856. Richard Tarr and John Poole, Rockport’s first and second settlers also rest here as well as most of the other early settlers, veterans of the French and Indian War, Revolutionary War and War of 1812.

LANDSCAPE CHARACTER, LAWNS AND VEGETATION
Landscape Character
Issues
The site has an open appearance which is appropriate for a burial ground of this vintage. Trees are located along the edges of the site, both inside and outside the property.

Recommendations
This general appearance should be maintained. Supplemental planting along the north and south edges would be very appropriate to screen out the visual distractions of adjacent uses.
Planting

*Issues*

Very little planting is present inside the burial ground. There is a large Oak at the northwest corner, a nearby Azalea, a small locust on the north side near the oak, a Crabapple near the hearse house and three Hawthornes along the southern edge. English Ivy and Running Euonymous are growing on some of the walls. Roses and bulbs have been planted along part of the Mill Lane wall on the residential side of the burial ground.

*Recommendations*

The Crabapple and Hawthornes along the south edge of the site should be removed and replaced with large deciduous shade trees which will create a greater visual separation between the burial ground and the adjacent motel which are incongruous abutters. Large deciduous shade trees should also be provided along the north edge for the same reason. As a precautionary measure, an archaeologist should monitor all the planting procedures within the burying ground.

Volunteer Growth

*Issues*

Aside from an occasional sapling at a grave marker, there is little volunteer growth inside the site. A number of trees are located just outside the wall along the north edge. These Oaks, Locusts and Black Cherries are generally not creating problems at this time, but safety pruning would benefit the burying ground. A large Oak outside the wall at the corner near the Annex entrance has grown into the wall and pushed some stones over. It has also grown into the Annex entrance gate, breaking the gate top rail from the hinge support post.

*Recommendations*

All volunteer growth inside the site should be removed. Work with adjacent property owners to have adjacent trees safety pruned. Remove the large Oak near the Annex entrance.

Lawns

*Issues*

Lawns are in poor condition with many small bare spots, weed growth and moss, primarily because of the nutrient poor, rapid draining, dry and sandy soil. There are areas of erosion on the main path, along the north edge and at the top of the mound tomb. Lawns are not watered and appear to be infrequently mowed. Lawn maintenance by the town DPW includes grass cutting, debris removal and insect control for grubs.

*Recommendations*

Soil improvements are necessary to add nutrients and increase water retention capacity. Once this is accomplished lawn areas should be reseeded. Consideration should be given to providing a source of water at Beach Street and Mill Lane to help establish lawns and maintain them during times of drought.

ACCESS AND SECURITY

Pedestrian and Universal Access

*Issues*

Pedestrian access to the site is available from both Beach Street and Mill Lane. The Beach Street access is adjacent to the hearse house with one granite step up into the burial ground through a 3’-4” wide opening. Mill Lane pedestrian access is through a wood picket gate with 6’-8” wide clearance and a gate latch that is wired closed. The gate is framed by two rough hewn 3’-6” high granite gate posts that are roughly 8” x 12” at the top. Most people walk around the gate post through a narrow opening in the wall.

Because of the gradient of the burial ground, universal access throughout the site is not feasible. Handicapped visitors can enter the site from Mill Lane and the vehicular access at Beach Street, but not traverse the site. The hearse house is not universally accessible because of the two granite steps up into the building.

*Recommendations*

No changes are recommended. The painted wood picket gate should be maintained.
Vehicular Access

Issues
Primary vehicular access is from Beach Street which is for maintenance vehicles only. Two 12” x 12” x 4.5’ high rough hewn granite gate posts frame the 10’ wide removable wood picket fence that is bolted in place. The post nearest the hearse house is leaning and 3 of the 4 iron hinge pins of a former gate remain in place.

There are no parking facilities inside the site. Metered parking is available on the opposite side of Beach Street. Mill Lane is too narrow to accommodate parking.

Recommendations
No changes are recommended. The leaning gate post should be reset and the painted removable wood picket fence should be maintained.

Security

Issues
Other than the prevention of unauthorized vehicular access, no other security measures are in place.

Recommendations
Security does not appear to be an issue in this burial ground and no changes are recommended.

VANDALISM

Issues
Some old paint vandalism is evident on two slate markers. It was reported that there is some trash accumulation during the summer from visitors.

Recommendations
Vandalism is not a significant problem and no changes are recommended other than removing the old paint graffiti.

CIRCULATION SYSTEMS AND MATERIALS

Circulation Systems

Issues
Existing paths are grass and there are no roads inside the burial ground. The path system is composed of a central east-west path that connects the two gates.

Recommendations
Maintain the existing path system. Do not add a road system.
Steps

Issues

There are three granite steps on the site, all adjacent to the hearse house. One provides access up to the site from Beach Street at the lower pedestrian entrance and two adjacent steps provide access up into the hearse house.

Recommendations

No changes are recommended.

Pavement Materials

Issues

All surface materials are grass.

Recommendations

Surface materials should remain grass until visitation reaches the point where it is not longer practical to maintain lawn. At that time a paved path system should be considered.

GRAVE MARKERS

Headstones and Footstones

Issues

Although in the center of the Cape Ann quarries, one of the most prolific producers of granite in America from 1800 to 1920, the 400 or so marker collection are about half slate, half marble, and only about 5-10% granite. Part of the explanation is that the burial ground opened about 75 years before the quarries opened on Cape Ann and granite had not come into fashion as grave marker material during the early years of the burial ground operation. There is no evidence of slate blistering, but several of the slate markers are splitting. The marble markers are highly weathered, exhibiting sugared surfaces and many illegible inscriptions. Yellow-orange botanical growth or lichen is present on a large portion of the markers. The three most important historic markers include the stones of Hannah Jumper, Richard Tarr and John Poole. The Hannah Jumper white marble stone is eroded but still legible. A new small granite marker, dedicated in 1994 by the Sandy Bay Historical Society, was placed horizontally on the ground in front of the marble marker. A large marble memorial stone with a scroll form was erected by the town in 1854 for Richard Tarr, first settler d. 1731-2. The original slate marker of John Poole, second settler d. 1727 5/19, is set in granite. Poole was reinterred from Little Meadow at the top of King Street in 1878. There is also the granite obelisk of Rev. David Jewett and a memorial bronze plaque set in a granite boulder by the Cape Ann Chapter of the DAR in recognition of the unknown graves of Revolutionary War soldiers resting in the burial ground.

A brief survey of the markers found a few delaminating slate, 3 broken slate, 5 broken marble, 4 marble to be reset on their bases, 28 leaning slate, 54 leaning marble and 3 leaning marble on granite bases. About 8 of the markers suffer from unfortunate prior repairs, primarily with iron or bronze straps. One of the delaminating slate markers has bronze pins through the face. There is no evidence of mower damage. It was reported that some of the markers were turned 180 degrees some time ago to protect them from damage caused by blowing sand.

Recommendations

Repair and reset all broken, leaning and toppled markers. Clean the stable, unsugared marble markers and consider protective measures to prevent damage from salt and wind driven sand. Consideration should be given to removing prior repairs made with iron or bronze straps. Seek a metal conservator’s advice on cleaning and possibly applying a protective coat to the DAR bronze memorial plaque.

Table Tombs

Issues

The John Gott marble table tomb dated 1812 is becoming illegible with erosion of the top surface.

Recommendations

Seek a stone conservator’s advice regarding applying a protective coat on the marble table tomb.
STRUCTURAL ELEMENTS

Perimeter Walls

Issues

Beach Street wall: Constructed of horizontally coursed granite with mortar joints, this 3.5-4' high wall appears stable but needs repointing. A utility pole on Beach Street is anchored to an eyebolt in the base of the wall. This could place stress on the wall during high winds.

Mill Lane and South edge walls: This dry laid free standing rubble stone wall is about 3 feet high and crudely constructed with a few loose and toppled stones. There is also a short section of railroad tie retaining wall along the south edge.

North edge wall: This low dry laid rubble stone retaining wall is in fair condition with a partial collapse in a section about 20' long. There is also a cast in place concrete curb on top of the wall in a nearby 20' long section, presumably where that section of wall failed.

Recommendations

Repoint the Beach Street wall and work with the utility company to find another means to anchor the utility pole. Repair the north, south and Mill Lane walls.

Mound Tomb and Vault Structures

Issues

The Whipple mound tomb of 1840 has a granite facade with a small marble plaque set into granite. The marble inscription is becoming illegible with deterioration. There is some erosion evident at the top of the mound and a drainage problem at the black painted iron door. The bottom of the door is set lower than the top of the adjacent retaining wall along the street. Some rust is evident at the door which has a contemporary lock.

Recommendations

Repoint the granite facade and protective coat the marble plaque. Provide a weep in the retaining wall below the door to prevent trapped water at the base of the door. Repaint the door with an appropriate rust passivating paint and replace the lock with a more historically appropriate device.

Edging of Family Plots

Issues

Three of the family plots are edged with granite. One corner of the Rev. David Jewett plot edging is broken because of rust jacking of the former iron fence enclosure. Half of the edging at the Haskell plot needs to be reset because of settlement and/or frost heaving. Edging at the Giles plot is in good condition.

Recommendations

Repair the broken edging at the Jewett plot and reset the edging at the Haskell plot.

BUILDINGS

Issues

There is a small wood shingle shed on a granite foundation at the entrance to the burial ground that is used for storage. Painted white with a green asphalt shingle roof, the structure may be the original 1836-1870 hearse house or it could have been moved to this site from Beech Grove Cemetery. It houses the original one horse hearse purchased in 1836 that was used 26 years. Recently returned to this site, the hearse was removed from the hearse house in 1961 because room was needed for the storage of lawnmowers and other maintenance equipment. The historic hearse can be seen through the single window facing the street.

The structure shows some signs of 18th century construction with mortise and tenon joinery and pegged joints, large uneven vertical saw marks apparently from a pit saw, and wrought nails. Further close analysis of the construction could probably indicate a date of construction within a decade or two.

While the structure is generally in good condition, the roofing is near the end of its useful life and the siding needs repair and paint. The foundation is open on the uphill side allowing access for small animals.

Recommendations

The building is certainly historic enough to warrant study and careful maintenance. It should be restored and repainted.
FENCES AND GATES
Cast Iron Fences and Gates
Issues
There is a broken cast iron gate with an arch of decorative iron work over the gate at the entrance to the cemetery Annex at the high point of the site. It has been speculated that the gate may have been relocated from the larger adjacent Old Parish Burying Ground.

Recommendations
The gate should remain in its current location unless it can be confirmed that it was relocated from the Old Parish Burying Ground. There is no other decorative iron work in the burying ground.

Interior Fences and Gates at Family Plots
Issues
There is evidence that the Rev. David Jewett plot once had an iron fence enclosure. It is no longer in place.

Recommendations
The fencing should not be replaced.

Chain Link Fences
Issues
There is a short section of 4’ high green vinyl coated chain link fence immediately adjacent to the hearse house that is assumed to belong to the adjacent motel.

Recommendations
The chain link fence should be removed and replaced with a historically more appropriate type of fencing.

SITE AMENITIES
Signs
Issues
There is only one sign on the site, a “No Dogs” sign attached to the hearse house facing Beach Street. There are two signs in the Beach Street right of way adjacent to the burial ground, a Massachusetts Bay Colony Tercentenary Committee sign identifying the site and providing some historic information, and a commercial sign identifying “Motel Peg Leg” sited directly in front of hearse house. The former sign was recently repainted and is in excellent condition.

Recommendations
A site identification sign should be provided, preferably secured to the hearse house. Informational and interpretive signs should also be provided.

Seating and Trash Receptacles
Issues
None.

Recommendations
Do not provide seating and trash receptacles inside the burying ground. Both are available across the street at Front Beach.

Flagpoles
Issues
There is one flagpole immediately adjacent to the hearse house that is assumed to belong to the neighboring motel.

Recommendations
Work with the motel to relocate the flagpole so that it does not compete with the view of the burying ground.

SITE AMENITIES
Drainage
Issues
In general, the site drains on the surface and flows toward the ocean. No drainage structures were found inside the burial ground. There are some catch basins at the top of the site along Mill Lane adjacent to the burial ground. Erosion is evident on the path. The area in front of the mound tomb entraps water.

Recommendations
Resolve the erosion conditions related to the pathway and verify that surface drainage from Mill Lane does not enter the site and traverse the slope aggravating erosion conditions. Eliminate the trapped water at the mound tomb as recommended above.

Water Supply
Issues
No source of water was found inside the burial ground.

Recommendations
Water is beneficial in times of drought. Explore a means of adding hose bibbs in the Beach Street and Mill Lane right of way.

Lighting
Issues
There are no light fixtures on the site. Street lights exist along the two perimeter streets and there is lighting in the adjacent motel parking areas.

Recommendations
Do not add light fixtures inside the burial ground.

UTILITIES
Drainage
Issues
In general, the site drains on the surface and flows toward the ocean. No drainage structures were found inside the burial ground. There are some catch basins at the top of the site along Mill Lane adjacent to the burial ground. Erosion is evident on the path. The area in front of the mound tomb entraps water.

Recommendations
Resolve the erosion conditions related to the pathway and verify that surface drainage from Mill Lane does not enter the site and traverse the slope aggravating erosion conditions. Eliminate the trapped water at the mound tomb as recommended above.

Water Supply
Issues
No source of water was found inside the burial ground.

Recommendations
Water is beneficial in times of drought. Explore a means of adding hose bibbs in the Beach Street and Mill Lane right of way.

Lighting
Issues
There are no light fixtures on the site. Street lights exist along the two perimeter streets and there is lighting in the adjacent motel parking areas.

Recommendations
Do not add light fixtures inside the burial ground.
PRIORITIES
High Priority
- Stone conservation including resetting and repair of slate markers and pin replacement in marbles that are visibly cracked or spalled
- Vegetative removals and pruning
- Repair of structural items like the north perimeter wall
- Erosion and lawn repairs
- Consideration of adding water supply
- Identification sign placement

Medium Priority
- Stone conservation including marbles with visible metal stains at the junction between marker and base
- Repointing of the Beach Street wall and mound tomb
- Repair of the Mill Lane and south perimeter wall
- Hearse house and family plot restoration
- Maintenance of wood fencing and gates
- Repair and fertilization of trees

Low Priority
- Stone conservation including granite markers that have shifted or are leaning, and marbles currently in satisfactory condition
- Informational and interpretive signs
- Additional planting
Corbin Cemetery was the first cemetery in Dudley. It was named for James Corbin who was born at Muddy River near Brookline in 1662. He died in Dudley in 1736. He was one of the first settlers of Woodstock CT in 1686 and Dudley in 1724, as well as the first selectman.

The land was donated by James Corbin in 1735 for a public burying ground. The same year he gave $0.10 as a bequest to the town “for upkeep of Corbin Cemetery for perpetual care.” In 1927 one of his descendants, Louise Corbin of Southbridge gave a gift of $10.00 for upkeep of the cemetery.

All of the lots have been sold in this 5.74 acre cemetery, but burials still occur in some family plots.

**Recommendations**
Maintain the evergreen tree separation from the road and extend that character at the north end along the road as possible.

Maintain the general open character of the interior of the cemetery.

**LANDSCAPE CHARACTER, LAWNS AND VEGETATION**

**Landscape Character**

**Issues**
Stands of evergreen trees separate much of the cemetery from Corbin Road, a bituminous paved two lane drive. This includes a stand of primarily Spruce at the south end and stand of mostly Pine in the center between the perimeter cemetery wall and the road.

The interior of the cemetery is relatively open with well spaced large old Oaks in the central portion. Younger Maples, mostly Red, contribute to the character of the north and south ends of the cemetery. There are also Flowering Dogwood and occasional clumps of volunteer Black Cherry.
Planting
Issues
At total of 24 trees inside the cemetery were examined. They were all deciduous and included 1 Sugar Maple, 14 Red Maple, 3 White Oak, 5 Red Oak and 1 Flowering Dogwood. The largest is a 53” DBH Red Oak. Most are in fair condition although 3 removals are recommended including 2 Red Maples [23” and 20” DBH] with cavities in the main stem, and a 28” DBH White Oak that is structurally unsound.

In addition, 26 assorted conifers were examined outside the cemetery, adjacent to Corbin Road. They are in fair condition and would benefit from crown cleaning.

Shrub plantings at some of the grave markers have become overgrown to such a point that they obscure adjacent grave markers.

Recommendations
Remove the 3 hazardous trees. Crown thin the largest Red Oak and crown clean most of the rest of the trees. Provide support systems for 10 trees. Fertilize 7 and examine the root collars of 8 trees. Remove shrubs at markers that are not being cared for.

Volunteer Growth
Issues
In addition to the volunteer Black Cherries in the interior of the cemetery, a young Ailanthus was observed in the south side and brier is beginning to establish itself in the northeast corner. There are also volunteer trees at the perimeter wall, mostly on the east and west sides.

Recommendations
Remove all volunteer growth. Work with adjacent property owners to remove trees impacting perimeter walls.

Lawns
Issues
Most lawn areas are generally good condition with some moss and herbaceous weeds on the slope of the west side. Some bare spots and erosion was observed on the steep banks along Corbin Road.

Recommendations
Lawn areas should be top dressed with the applicable soil amendments added and then reseeded.

Interior of cemetery
ACCESS AND SECURITY
Pedestrian and Universal Access
Issues
All access is obtained through 3 vehicular entrances/exits related to Corbin Road. There are no designated parking spaces or walks. Passageways have about a 13'-3" clear opening. All surface materials other than paved drives are grass. Most slopes are universally accessible.

Recommendations
No changes are recommended for pedestrian access. Universal access should continue to rely on vehicular access routes.

Security
Issues
The cemetery is always open with no security measures in place.

Recommendations
Because vandalism does not appear to be an issue, additional security measures are not recommended at this time.

VANDALISM
Issues
It was reported that there was no vandalism to speak of, and other than observing one beer can inside the cemetery and another just outside, there was no evidence of vandalism.

Recommendations
No changes are recommended.

CIRCULATION SYSTEMS AND MATERIALS
Circulation Systems
Issues
The one way vehicular circulation system has a single central entrance from Corbin Road that divides in two directions to the exits. The single lane drive varies in width from 10 to 11'. Grass maintenance access drives extend from the paved drive. There is no defined walk system.

Recommendations
Maintain the existing circulation system. Once the cemetery becomes inactive, consideration should be given to removing the paved south exit drive in favor of lawn to reduce vehicular damage to adjacent perimeter walls.

Steps
Issues
Set into the stone wall extension of the receiving tomb is a set of steps with 4 stone risers. The vertical face of the risers is partially parged with mortar.

Recommendations
Rebuild steps.

Road Edging
Issues
Except for 2 sections of precast concrete curbing at a tight curve in the drive at the southeast corner, drives are not edged. The drive is located tight against the perimeter wall at the south and southeast edges.

Recommendations
If it is possible with the layout of the existing burial plots, the curve at the southeast corner should be eased to such an extent that the curbing can be removed. If this is not feasible, the existing curbing should be removed and replaced with something more substantial to protect the corner burial plot. No other drive edging is recommended.

Pavement Materials
Issues
While it was noted that “all walks and main drive kept cut with lawn mower” in the 1920s, the main drive is paved with bituminous concrete today. The paved surfaces are in fair to good condition.

Recommendations
As long as the cemetery continues to have burials, it is advantageous to maintain the current pavement materials.
GRAVE MARKERS

Headstones and Footstones

Issues

There are a number of slate markers on the older central section intermixed with some marble and granite markers as well as some family plots. The perimeter contains mostly granite markers with some marble, a brownstone and a zinc [Barnes] marker.

Overall the grave markers were in fair to good condition. A brief survey found 12 leaning slate markers, 1 toppled and 7 broken. There were also 5 leaning marble markers, 2 toppled and 1 broken. Two multipart marble markers exhibited signs of internal dowel corrosion and another had already broken apart. One granite marker was leaning.

Recommendations

Reset, repair and clean grave markers based on the prioritized recommendations noted herein.

Monuments

Issues

The cemetery contains a few larger monuments and obelisks in varying conditions. The marble Corbin monument at the high point of the cemetery has some acid rain deterioration and has been twisted such that it is slightly off center. The marble Love monument is also twisted and has an exposed foundation as does the marble Durkee monument. The Congdon obelisk is leaning. Biota ranged in color from light to dark gray to yellow ochre.

Recommendations

Reset leaning and twisted monuments. Provide earth fill at the exposed foundations to help keep them stable. Remove biological growths. Provide protective coating at the Corbin monument to deter acid rain damage.

Perimeter Walls

Issues

West Wall: This field stone wall is partially free standing and partially retaining. Stones have been chinked in place and there is mortar in the interior of the wall. Some mortar has been placed at or near the surface in some areas. Color variation is apparent between old and new mortars with lighter, less gray older mortar. The wall is capped with a 5” thick, 28” wide cast in place concrete cap with cold joints. That is, no expansion material was provided between joints. The wall has numerous localized areas of damage particularly near joints in the cap. The damage suggests that the width of the cap joints is too narrow to accommodate expansion. No weep holes were seen in the retaining portions of the wall.

The south portion of the wall is free standing and generally in good condition. The cap is broken in a 10’ long section that has slightly shifted. At the top of the wall south of the center entrance are 2 iron rings formerly used for tethering horses.

The middle portion of the wall retains the cemetery above the road. It is displaying movement in several areas including a 20’ long section at the south end, a 40’ section in the center that is also leaning toward the road, and toward the north end a lateral shift of about 1” has occurred in the cap.

The north portion of the wall retains the road above the cemetery. It varies in height from about 4’-6’ on the cemetery side. It has 3 areas of spalling in the concrete cap near joints.

The south pier is leaning and the north pier has been rebuilt. Piers at the north and south exits appear stable.

Recommendations

West Wall: Rebuild the areas in the wall that are displaying significant movement. Perform this work in a manner that respects the original materials. Use repointing mortar that is compatible with historic mortar in color, texture [aggregate, surface finish and joint profile], strength and location. Exercise care so as not to use a hard mortar and not to cover stones with mortar. Provide expansion joints with a resilient compressible filler.

In 1926, memorial gates were erected by Mary Knight Conant, 93, in memory of her grandfather Dr. John Eliot Eaton. The bronze plaques indicate that these were the central and north gates. Piers are about 8’-2” high. At the central entrance, the south pier is leaning and the north pier has been rebuilt. Piers at the north and south exits appear stable.

North, East and South Walls: The other three edges of the cemetery are defined by a dry laid free standing wall of piled up field stone. The north wall varies in height from 2-4’. It is relatively intact but has 3 areas of localized collapse, and at least 2 of them are related to trees outside the wall. The east wall is about 30” high and has a large area of collapse near the north end and a smaller one near the center. There are also about 200’ of miscellaneous repairs at the south end. The south wall is about the same height and 450’ long. It also needs miscellaneous repairs, including rebuilding about 60’. Some areas have mortar repairs and an old mortar parget coat at the top. It is likely that some of the wall damage is the result of the close proximity of the paved drive. Many of the stones have been scattered where collapses have occurred.

Recommendations

Reset, repair and clean grave markers based on the prioritized recommendations noted herein.

Monuments

Issues

The cemetery contains a few larger monuments and obelisks in varying conditions. The marble Corbin monument at the high point of the cemetery has some acid rain deterioration and has been twisted such that it is slightly off center. The marble Love monument is also twisted and has an exposed foundation as does the marble Durkee monument. The Congdon obelisk is leaning. Biota ranged in color from light to dark gray to yellow ochre.

Recommendations

Reset leaning and twisted monuments. Provide earth fill at the exposed foundations to help keep them stable. Remove biological growths. Provide protective coating at the Corbin monument to deter acid rain damage.
North, East and South Walls: The deteriorating portions of the wall need to be reassembled where it has collapsed. Collapsed sections can be reassembled by collecting and stacking the scattered fieldstones. The stones in the intact sections do not appear to be systematically arranged. That is, they appear to be a row of deposited stones collected from adjacent fields. For the most part the walls could be reassembled by hand labor.

Interior Walls

Issues
The low field stone retaining wall extension of the receiving tomb has mortar joints and has been patched. The field stone units are intact and free of significant lateral or vertical displacement except for a partial collapse where the wall abuts the perimeter wall next to the entrance. The mortar is deteriorated, cracked and missing and needs to be chipped out and repointed.

Recommendations
The collapsed portion of this wall needs to be rebuilt and the rest of it needs to be repointed. New mortar should be relatively weak and soft to have some resiliency against seasonal movements. A Type N mortar only slightly stronger than a Type O should be used. It should be noted, however, that the field stone wall is probably dry laid and the mortar simply dresses the exposed surface of the wall. Therefore, seasonal temperature and moisture movements will continue to act on the back and front of the wall and gradually affect the repointed mortar. Extensive damage will redevelop in the mortar over the next 15 to 20 years unless the joints are maintained on an annual or biannual basis.

Mound Tomb and Vault Structures

Issues
Covered with ivy, the grey granite facade of the receiving tomb has the date 1868 on it. The approximately 11’ high facade appears to be in good and stable condition. Paint in the padlocked iron door is failing and rust is apparent.

Recommendations
The receiving tomb appears to be in good condition and needs no work except for restoring the iron door.

Edging of Family Plots

Issues
All of the family plots that are edged have raised granite edging. Most [Conant, Congdon, Kingsbury, Love and Prince] have components that have slightly shifted from frost heaving and settlement. Edging at the Eaton plot requires no work at this time.

Recommendations
The edging needs routine maintenance work including resetting the stones. In order to prevent untimely displacement in the future, the corners can be stapled with stainless steel “dogs” or epoxy coated pins. The ground under and behind any reset stone should be good draining material. That is, if the ground behind the edging is found to be saturated or heavy with organic material, that material should be removed and replaced with gravel or crushed stone before covering with lawn. Likewise, if the foundation under the edging is disturbed or contaminated with saturated earth, it should be rebuilt on a foundation of compacted gravel or crushed stone.

BUILDINGS

Issues
A small wood maintenance building is located adjacent to the north exit. It has a brown textured plywood facade with an asphalt shingle roof. Some shingles are missing on the street side of the roof. The building was used for equipment storage, but now that lawn mowing is contracted out to a private vendor, the building is no longer needed.

Recommendations
Remove the building.

Wall along Corbin Road
FENCES AND GATES
Iron Fences and Gates

Issues
A double leaf iron gate, restored in 2000 by the Dudley Cemetery Restoration Society, is located at the south exit. One leaf has a bent hinge rod and some rust at the bend points. The only evidence of former gates at the other two gate openings is an iron pin on the south pier of the north exit.

Recommendations
Repair and paint the south gate.

Chain Link Fences and Gates

Issues
The maintenance building is surrounded by a 6' high galvanized steel chain link fence with barbed wire at the top. The fenced enclosure is about 24' square. Green vinyl privacy slats have been placed on the north and east sides of the fence. Vines are also present on the west fence facing the perimeter wall.

Recommendations
Remove the fence at the same time the building is removed.

Interior Fences and Gates at family Plots

Issues
There are a few stone posts with remnants of chains defining the edges of some family plots. The Brown plot has 4 rough finish granite posts with peaked tops. There were 2 eyelets on the sides of the posts. Some remain as well as some rusted chain. The Healy plot has 4 granite posts with exposed foundations. Each post has 2 iron eyehooks on the sides of each post. Some of the chain remains, causing some staining of the granite posts. The Rickard plot has 4 rough cut granite posts with iron eyelets at the top and center. No chains remain. One granite top is broken and another post is leaning.

Recommendations
Restore posts and chains with chains to match existing. Where no chain exists, do not restore the chain unless documentary evidence provides sufficient description of the historic chain used on a specific plot. Adapt chains so that they can be detached to facilitate maintenance.

SITE AMENITIES

Signs

Issues
At the center entrance there is a bronze plaque “To perpetuate the memory of Dr. John Eliot Eaton, 1756-1812” as well a bronze identification plaque “Corbin Cemetery - 1735.” There is also a metal sign stating “Entrance Only” and a metal highway type sign near the entrance with cemetery rules and regulations.

The bronze plaques on the stone gate piers were erected by Mary Knight Conant in memory of her grandfather Dr. John Eliot Eaton. The bronze plaques were unveiled by Louise and Donald Corbin, descendants of James Corbin, in 1926. The bronze identification plaques were reportedly installed in 2000 by the Dudley Cemetery Restoration Society.

At the south exit are a bronze cemetery identification plaque and a metal sign stating “Exit Only - Do Not Enter.” At the north exit are a bronze Eaton plaque, bronze cemetery identification plaque and a metal sign stating “Exit Only - Do Not Enter.”

Recommendations
Interpretive signs would help provide an informative experience for visitors.

Trash Receptacles and Seating

Issues
No amenities of this type exist.

Recommendations
Do not provide benches or trash receptacles.
UTILITIES

Drainage

Issues

The site slopes from west to east and all drainage occurs on the surface. No storm drainage structures were found.

Recommendations

No changes are recommended.

Water Supply

Issues

Hose bibbs are provided in the cemetery.

Recommendations

No additional water supply is recommended.

Lighting

Issues

No light fixtures were found inside the cemetery.

Recommendations

Do not provide light fixtures inside the cemetery.

PRIORITIES

High Priority

• Remove hazardous trees.
• Remove trees with large cavities, leaning into the cemetery, drives or grave markers.
• Replace trees inside the cemetery.
• Remove all invasive Brier.
• Repair lawns.
• Restore grave markers that present public safety hazards or are structurally unsound.
• Replace dowels in multipart stones that are visibly cracked or spalled.
• Conserve historically significant marble markers that are in danger of becoming illegible.
• Reset and repair slate markers.
• Repair broken stones if the inscriptions are legible and at least 75% of the stone is available.
• Protective coat marble Corbin monument.
• Earth fill at exposed monument bases.
• Repair Corbin Road wall.
• Remove maintenance building and fence.

Low Priority

• Prune trees with a small amount of dead wood and branches, and trees protected from the winds in close to the edge or other trees.
• Additional planting along Corbin Road.
• Reset markers and monuments that have shifted or are leaning.
• Reevaluate and conserve marble markers that are currently in satisfactory condition, as necessary.
• Repair wall and steps next to receiving tomb.
• Repair dry laid stone perimeter walls.
• Restore iron door at receiving tomb.
• Reset family plot edging.
• Restore posts and chains at family plots.
• Provide interpretive signs.

PRIORITIZED COST ESTIMATES

High Priority

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Medium Priority

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Low Priority

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Costs associated with grave marker work have not been included. Refer to the General Recommendations section for approximate costs of various types of repair.

186 - Dudley
Called Chocksett, the “land of the foxes”, this is the oldest cemetery in town, located east of and near the town center between Clinton Road [Route 62] and Maple Street. This roughly rectangular 3.3 acre site has also been referred to as Old Village Burial Ground, Kendall Hill Cemetery and Old Chocksett Cemetery.

Sandwiched between undeveloped land and residential uses the cemetery contains the remains of the town’s five earliest settlers, Gamaliel Beaman [d 1745, the earliest legible marker found], Benjamin Houghton [d 1764], Samuel Sawyer [d 1784], brothers David [d 1771] and Deacon Jonathan [d 1766] Osgood. In addition to Revolutionary War leader Colonel Asa Whitcomb [d 1804], soldiers of the Indian Wars, French and Indian War, Revolutionary War and War of 1812 are also interred in the original one acre section. Additional acreage was purchased about 1818 and 1838 from Augustine Holcomb allowing the later burial of Civil War soldiers and other community members. The most recent burial occurred in 1965.

The terrain in the oldest section at the north end of the site rolls dramatically and appears unchanged from when the cemetery opened. It also has a high percentage of slate markers. The area of the last addition to the south is relatively level and may have been smoothed over to facilitate burials. It has many family plots and is more expressive of the character of a cemetery developed during the Victorian era. The topography of the central area is slightly rolling and it serves as a transition area in the development of the cemetery with a mixture of slate and marble markers and a few family plots. Long straight narrow passages between headstones facing north and south are still evident in this area.
LANDSCAPE CHARACTER, LAWNS AND VEGETATION

Landscape Character

Issues
The landscape is composed of lawns with varied terrain and primarily large old deciduous trees [Oaks and Maples] with one evergreen tree. Most of the trees are along the edges of the property with a few Oaks scattered in the interior of the older north end and Maples lining the single drive. The Clinton Road edge is relatively open allowing views to and from the cemetery. The Clinton Road realignment in the 1960’s left a large open lawn area between the road and the cemetery.

Although the cemetery development and grave markers in the south end of the site have a Victorian character, the planting has not been sustained in the same style. Some perennials are however reportedly growing along the east edge in an area of volunteer growth.

Recommendations
Accentuate the different development phases of the cemetery with plantings appropriate to each phase. The north end and central section should be relatively open with few trees and no other plantings. The south end should be developed with more of a lush planted Victorian character. This may include restoration of the perennials in the area based upon definitive evidence of those plantings.

Add planting in the public right of way along Clinton Road to provide some degree of screening of outside elements while not obscuring view of the cemetery.

Planting

Issues
The approximately 68 mature trees in the cemetery are mostly Maples and Oaks, with a few volunteer native Cherries and an Arborvitae. The south end of the site contains 2 shrubs including 1 Hydrangea as well as some reported perennials along the east edge of the south end. A few old stumps remain, generally cut off about 2' above grade. The DPW plans to remove 5 large dying trees.

Recommendations
Existing trees need a more aggressive approach in terms of removals and safety pruning. Remove at least 14 dead, dying and diseased trees as well as a great deal of dead wood that is present in standing trees to remain. Some trees have large cavities and/or storm damage. Cut stumps down to, but not below, finish grade.

A tree replacement program should be developed. It is understood that the DPW will provide appropriate replacements which should generally include replacement of the trees removed with the same species in the areas that they were removed from.

Volunteer Growth

Issues
An extensive area of volunteer growth including poison ivy and other volunteers is present along the east side. A young volunteer tree is also developing at the edge of the Wright family plot.

Recommendations
Remove all weed trees and volunteer growth.

Lawns

Issues
Lawn areas are in fair to poor condition with moss and herbaceous weeds evident in numerous locations as well as uneven settlement with many slightly mounded areas of old graves, depressions and some surficial erosion.

Recommendations
Repair lawn areas.

ACCESS AND SECURITY

Pedestrian and Universal Access

Issues
Pedestrian access is provided through gated entrances at the north and south. The pedestrian gates are typically closed and thus the vehicular gateways which are typically open are used. The route through the cemetery is used in part as a short cut by residents of a nearby elderly housing project to the Post Office on the opposite side of Clinton Road. Gradients along the drive in the north end of the site are too steep for universal access. In addition, when Clinton Road was reconstructed it was installed too high for the cemetery entrance, leaving a poor grade transition into the cemetery.

Recommendations
No changes are recommended for pedestrian access. Universal access should continue to rely on vehicular access routes.
Vehicular Access
Issues
There are two points of vehicular access, one from Clinton Road and one from Maple Street, each with a 12'-8" clear opening.

Recommendations
This system appears sufficient for the visitation requirements and no changes are recommended.

Security
Issues
The site is essentially open. The two vehicular access points are gated but apparently never closed. Perimeter walls are relatively low with breaches and can be easily scaled.

Recommendations
Security is apparently not a significant issue on this property and improved measures should not be pursued at this time.

VANDALISM
Issues
There is some evidence of vandalism in the form of numerous broken and toppled grave markers. Although this is reputedly not a current problem, recent activities have targeted the Allen/Parker tomb with attempts to break in and abscond with the contents. There are wooded areas to the east and west, and the latter has some trash and debris scattered throughout.

Recommendations
Vandalism is not a significant problem and no changes are recommended at this time other than grave marker repair.

CIRCULATION SYSTEMS AND MATERIALS
Circulation Systems
Issues
There is a single gravel road connecting Clinton Road [route 62] and Maple Street. There is no formal pedestrian circulation system. Covered with grass throughout, the pedestrian system is informal.

Recommendations
No changes to the circulation system are recommended at this time.

Steps
Issues
The only steps inside the cemetery are related to the Bartlett and Wilder family plots and they are in good condition.

Recommendations
No improvements are recommended.

Roads
Issues
The one lane gravel drive is in fair condition despite the maintenance requirements. In a few areas trees constrict the clear width to 10’.

Recommendations
Maintain the drive as is. It should not be widened because of the potential for intruding onto graves close to the road.

Pavement Materials
Issues
Other than the bituminous pavement from the public roads to the entrance gates, gravel is the only pavement material in use. It is apparently minimally maintained and lightly used as grass is growing in the center strip. All walking surfaces are grass with no defined circulation system.

Recommendations
Gravel is a historically appropriate material for drives and it should remain as long as it is properly maintained. Surface materials for walks should remain grass until visitation reaches the point where it is no longer practical to maintain lawn. At that time a paved path system should be considered.
GRAVE MARKERS
Headstones and Footstones
Issues
Based upon a 1918 inventory, the cemetery contains at least 1,300 grave markers, not including foot stones. Gravemarkers were also inventoried and photographed in the 1960’s. Volunteer efforts subsequently repaired and reset a small number of stones. In 1994 Rosanne Foley, a Historic Graveyard Preservation Consultant, prepared a report that detailed the most badly damaged stones and prioritized conservation requirements. In 1999 the Historical Commission inventoried every gravestone and listed each stone that required cleaning, resetting and/or repair. The 1994 report noted 102 stones that need work including 31 that are broken. The rest need resetting and/or cleaning. The 1999 inventory noted 276 stones that need work including 53 that are broken.

The older north section contains primarily slate markers with stone carvers Paul Colburn [1761-1825] and James Wilder [1741-1794] of Lancaster represented. The south section has mostly marble markers, a few granite and one small zinc marker. There is evidence of lawnmower scarring. The Levistuard obelisk is leaning and an easy target for overturning. Severe settlement at the base has exposed about 1’ of the foundation. While not as severe, this condition can be found at many of the taller markers. Continued erosion and settlement will lead to displacement of foundation stones and eventual toppling of these stones.

Recommendations
In general, follow the prioritized recommendations noted in the 1994 report. Reset head and foot stones that are leaning or toppled. Reset mismatched foot stones to their proper place. Repair broken stones. Clean lichen and other soiling from head and foot stones. Provide earth fill at the bases of taller markers where required to cover exposed foundations.

STRUCTURAL ELEMENTS
Perimeter Walls
Issues
The entire cemetery is enclosed by dry laid field stone walls that are reputedly part of the original cemetery. The boundary wall separating the original parcel from the 1837 addition was removed. The majority of the walls are free standing with a height of 2 to 3’. There are numerous breaches along the east and west edges. Dry laid retaining walls edge the north face and the north end of the west edge. The north face varies in height, retaining 12 to 36’. The west face retains up to about 5’ in height. All walls require localized resetting of stones. The west retaining wall appears to have lost many of the top courses of stones through erosion or settlement, exposing and undermining the foundations of the granite bases of the guard rail.

Recommendations
Provide localized resetting of stones in walls and repair breaches.

Tombs and Vaults
Issues
The cemetery contains two mound tomb structures, the 1880 Fitch and Hastings double tomb with marble doors noting Kilburn and Hastings, and a single unnamed tomb that is referred to as the Allen/Parker tomb. The double tomb has a granite face and wing walls, and a decorative marble top. The structure appears sound, requiring some minor repointing and erosion repair at the wing walls. The Hastings marble door is broken and rusting iron pin connections are hastening the fracturing process. Tan sealant or adhesive has been hastily applied to a portion of the panel. There are 3 small free standing planters on the top of the tomb. Their scale and character indicates that they may not be original to the tomb.

The door of the granite faced single tomb is missing and has been replaced with plywood. The large granite cap stone over the entrance has shifted outward about 1”. Erosion is evident along both sides of the tomb face.

Recommendations
Repair the Hastings marble door and replace the unnamed tomb door. Clean the granite and marble, repoint as necessary and repair the erosion at the sides of tomb entrances.
Edging of Family Plots

Issues
Numerous family plots have granite edging. Most [Bartlett, Bailey, Houghton, Jewett, Kendall, Porter, Waite and Wilder] have slightly shifted from frost heaving and settlement. One [Bailey] has an exposed foundation and another [Breck] has heaved from an adjacent tree. The small markers at the Houghton plot edging are unsecured.

At least nine other family plots have granite perimeter posts that once supported chain enclosures. Some of these also have edging. All of the chains are missing. The Conant family plot has 6 granite posts and edging with many of the eyebolts remaining in place for a double chain enclosure.

Recommendations
Reset granite edging as required and add earth fill at the base and top of the edging where necessary. Secure the small markers to the Houghton plot edging. Restore the granite posts and chain where possible based only upon evidence of actual former components.

FENCES AND GATES

Issues
Nellie Reed [1843-1900] Memorial Entrance Gates
South Entrance Gate: Four cut granite piers support decorative cast iron gates including a central double leaf vehicular gate and single leaf pedestrian gates on each side. All gates are hinged from the two taller [approximately 8’ high] central posts. End posts are about 5’ high. There is a 12’-8” clear opening at the vehicular entrance and a 3’-10” clear opening at pedestrian entrances. The tall central posts have decorative caps that have been displaced and improperly reset. Gate bottoms are buried in earth preventing free swinging. The cast iron is in good condition with some rust evident.

North Entrance Gate: Three cut granite piers support a double leaf decorative cast iron gated vehicular entrance in the center and a single decorative cast iron pedestrian gate on the west side. It is identical in construction to the south entrance gate. A decorative granite cap requires resetting. The west vehicular gate leaf is bent at the end and there are 5 missing picket tops and a bent picket on the vehicular gates. Gate bottoms are buried in earth preventing free swinging. The cast iron is in fair condition with some heavy corrosion at the bottom of both vehicular gates on the bottom rails and pickets.

North Fence
A low iron post and rail fence is mounted on the fieldstone wall facing Clinton Road. The fence moves with the wall which is a dry laid, heavily chinked, rubble field stone retaining wall that needs some localized resetting. The cast iron fence support posts are 4” square and 22” high, variably spaced, typically between 5’ and 6’ on center, and anchored to stones in the top of the wall with a single pin. The fence has two horizontal 1” diameter pipe rails. Many of the posts are leaning, 2 are unsecured, and 4 have mortar bases to form a connection to the wall. A few of the post tops are twisted. Some of the rails are bent, 5 are unsecured, and 7couplings are evident indicating replacement rails. A few rails have rusted through. Much of the fence is heavily rusted although some of it has an inappropriate silver paint.

West Fence
This iron pipe rail fence with a pair of horizontal rails is located adjacent to and above the west retaining wall in the older section of the cemetery. The posts are set on granite block bases. The fence is heavily rusted, although about 50’ of the north end has been painted more recently. Some rust is also evident in this length. One area of the fence is significantly bent and has two vertical supports missing. This was apparently caused by a tree or large limb fall. Four other bent top rails were also apparently caused by tree or limb falls.
SITE AMENITIES

Signs

Issues
A white painted wood identification sign is centrally sited along the north edge. A commercial sign is located nearby in the public right of way. It is a distraction in terms of visitors seeing the identification sign. There are also bronze plaques identifying the memorial gates at the north and south entrances.

Recommendations
Prepare, prime and paint the identification sign frame and support posts. Work with public officials and the owner of the commercial sign to relocate it to the opposite side of Redstone Hill Road. Clean and protective coat the bronze plaques. Add interpretive and/or informational signs at a later date.

Trash Receptacles, Seating and other Amenities

Issues
There are no amenities of this type inside the cemetery.

Recommendations
In general, the addition of these elements is discouraged. However, if benches are desired, they should be added only in the south end of the cemetery where they would be more appropriate, in the Victorian era portion of the site.

UTILITIES

Drainage

Issues
No drainage structures are evident. The site drains on the surface with a gentle slope toward the west.

Recommendations
No changes are recommended.

Water Supply

Issues
While there is no source of water inside the cemetery, there is a fire hydrant outside the site on the north side.

Recommendations
No changes are recommended in terms of water supply. However, if the former richly vegetated character of the south end is restored, it would be advantageous to add a source of water at the end of the drive from Maple Street. Because excavation for the water line should follow the road bed, damage of archaeological artifacts should be minimal. As a precaution an archaeologist should oversee the excavation.

Lighting

Issues
No light fixtures were observed inside the cemetery. Some residual light may be available from the adjacent roads on the north and south sides where overhead wires abut the edges.

Recommendations
Do not provide light fixtures in the cemetery. Consider relocating the overhead wires to the opposite sides of abutting streets.
LEGEND

- Existing Evergreen/Deciduous Tree
- Remove Ex. Tree
- Remove Volunteer Growth
- New Tree
- Existing Drive
- Vehicular/Pedestrian Entrance
- Ex. Stone Wall
- Ex. Stone Wall with Iron Fence
- Repair Wall
- Existing Sign
- Fire Hydrant
- Utility Pole
- Overhead Wire

CHOCKSETT CEMETERY
PRESERVATION PLAN
STERLING, MASSACHUSETTS

BY:
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PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIA-
PRIORITIES
High Priority:
• Stone conservation including resetting and repair of markers and pin replacement in marbles that are visibly cracked or spalled
• Vegetative pruning and removals including volunteer growth
• Repair of structural items like perimeter walls and tombs
• Lawn repairs including earth fill at obelisks

Medium Priority
• Stone conservation including marbles with visible metal stains at the junction between marker and base, and cleaning legible markers
• Restoration and repair of entry gates and perimeter fencing
• Family plot restoration and repair [edging, fencing, chains and gates]
• Fertilization of trees
• Identification sign and bronze plaque maintenance

Low Priority
• Stone conservation including granite markers that have shifted or are leaning, and marbles currently in satisfactory condition, and resetting mismatched foot stones
• Informational and interpretive signs
• Additional planting
• Consideration of adding water supply

Another consideration to protect the overall historic visual character of the cemetery would be to acquire or obtain protective easements on the large wooded parcels immediately east and west of the cemetery. This heavily vegetated character provides a strong complement for the era that the cemetery developed. The hillside on the east side is particularly important in that it overlooks the cemetery and provides an important wooded backdrop. The low area on the west side also provides an important wooded edge.
OLD BURIAL GROUND

STURBRIDGE, C. 1740

This 1.5 acre burial ground was opened about 1740 and the last burial was made in 1894. No longer active, the site is located in the village setting of the Sturbridge Common Historic District, which is listed in the State and National Register of Historic Places. Across Main Street [Route 131] from the town common, the site is immediately below the red brick 1855 Center School building which more recently served as the town Police Station. Access to the building’s cellar is obtained from the burial ground. The west wall adjacent to the building contains cement mortar and a dressed granite slab indicating that the original burial ground wall was altered when the school was constructed. Renovation of the building is anticipated to make it into a conference center.

The school is sited near the site of the first Congregational Church in Sturbridge. The church was organized in 1736 and the meeting house was built the same year. The meeting house and burying ground were located on a six acre tract, part of a grant by the heirs of Gurdon Saltonstall, one of the early Massachusetts governors. The building served as the first meeting house from 1736 to 1784 and the Baptist Meeting House from 1832 to 1838.

The site terrain undulates with small mounds separated by distinctive depressions. It slopes approximately 20’ in 350’ for an average gradient of almost 6%, although there are many areas with much steeper slopes, particularly the topographically interesting hummocks at the rear of the site. The center of the burial ground contains a large depression where subsoils are exposed, but no evidence of graves is visible.
The burial ground contains the remains of Sturbridge's first settlers, James Deneson, Experience Deneson and Moses Marcy, as well as Revolutionary and Civil War casualties, town officers, and the town’s first three ministers [Caleb Rice, Joshua Payne and Otis Lane]. It was not originally enclosed. In the town meeting of 12 May 1794, almost half a century after the first interment, it was voted to enclose the burying ground with a wall. Veterans of four companies of Revolutionary soldiers from Sturbridge built the stone wall with each company building one side. The wall was rebuilt following the Civil War.

LANDSCAPE CHARACTER, LAWNS AND VEGETATION
Landscape Character

Issues
This burial ground contains too many trees, particularly evergreens. Few old burial grounds had more than a few trees prior to 1830. Most of the existing trees were not on this site at the turn of the century. Most were planted, with the exception of the trees growing next to the walls which are most likely volunteers. With an overall composition of 56% deciduous and 44% evergreen, insufficient light is able to reach the ground surface making it difficult to maintain a ground cover, increasing erosion potential and increasing biological growth on grave markers because of the higher moisture levels.

Recommendations
Tree cover should be significantly reduced, not only to make the overall image more historically appropriate, but also to allow more light to reach ground level increasing the ability to maintain a stable ground cover, reducing erosion potential, and creating a better environment for grave marker conservation.

Planting

Issues
There are 79 trees in this burial ground representing 12 species and varieties including 20 Sugar Maple, 6 Red Maple, 6 White Ash, 4 White Oak, 4 Norway Maple, 2 Black Cherry, 1 Black Oak, 1 Poplar, 17 Eastern Hemlock, 16 White Pine and 2 White Spruce. The quantity of shrubs and ground cover are limited but include Winged Euonymous, Barberry and Vinca.

The largest tree is a 44" diameter White Ash growing near the south wall close to the middle stone entrance. This may be the oldest tree in the burial ground. It appears to have decay throughout the main stems. While not recommended for removal, it should be checked from the crown to the root collars with a hazardous tree evaluation. A certified Arborist needs to climb into the tree to inspect the branches for cracks and decay.

Most trees along stone walls were not cut or disturbed because of their location. This is where some of the oldest and largest trees are typically found. However, with age comes deterioration and the invasion of disease, causing tree failure.
**Recommendations**

There are 26 trees with high priority for removal. It may be desirable to remove additional trees at a later date. Reasons for removal include deformed trees, interference with perimeter walls, decay in main stems, decline to the point of no return, surface roots with decay and close proximity to grave markers. A number of trees have either multistem or v crotches, making them prone to storm damage and failure in storms with winds of over 55 miles per hour, and snow and ice storms. A tree will always have a certain amount of breakage. However, support cables installed professionally have proven to prevent large branch breakage.

Most of the trees in the southeast portion of the burial ground have surface roots that have been damaged from foot traffic and maintenance equipment. These trees should be removed. Root failure is very unpredictable. However, when groups of trees are thinned from removals, the percentage of failures increases dramatically.

Trees should be cut only to the ground surface, and the remaining tree trunks treated to prevent further growth. Stumps and roots should not be ground below the ground surface. Most trees have some dead or broken branches. Some trees are one sided from trees that were removed next to them. Pruning to remove dead branches that are 2 inches in diameter and larger will help prevent personal injuries and damage to grave markers. Pruning to reduce wind weight on evergreen trees, especially White Pine, will also help to maintain tree structure and reduce damage to the burial ground. Raising lower branches will allow more light to the soil which will help other plant material to grow.

Trees like the Ash near the southwest corner that display outward signs of extensive internal decay within the trunks and root systems need to be checked from the crown to the root flare with a hazardous tree evaluation. One of the Hemlocks near the wall on the northwest side has signs of the Hemlock Woolly Adelgid insect. Treatment will reduce the spread of the problem and the decline of these trees.

A number of trees have been removed in the past few years leaving some open spaces. Even with all the problems noted, the trees in this burial ground have received some maintenance over the years. This is evident from old pruning wounds, stumps, open spaces, one sided trees and surface roots remaining from ground out stumps. Fertilization of mature trees would help preserve and prolong the life of all of these trees.

**Volunteer Growth**

Brier and other vegetation is starting to take hold along much of the southern edge of the site.

**Recommendations**

Remove all volunteer growth.

**Lawns**

Lawn areas are mostly in poor condition with numerous bare spots, moss, depressions, surface erosion, exposed tree roots and compaction caused by maintenance vehicles along maintenance routes. Native grasses and weeds have taken over in most sunny spots, most likely due to lack of fertility in the soil. There is no grass under the heavy foliage evergreen trees. The grounds have been maintained by the town Department of Public Works since 1987.

**Recommendations**

Restore lawn areas after tree removals have been completed. Procedures to prevent soil erosion should involve addition of material to the ground surface. No cutting into the ground surface should take place.
ACCESS AND SECURITY
Pedestrian and Universal Access

Issues
The burial ground has two points of pedestrian access. The main entrance is on a steep, paved, one lane access road parallel to Main Street. It may be in the position of an original roadway. Parallel parking occurs outside the gate. The gate has an 8'-8" wide opening. The site slopes gently inside the gate and a grass path leads into the cemetery. A secondary informal pedestrian entrance has been created with the dismantling of the south stone wall at the rear of the site approximately 200' from the southeast corner adjacent to a privately owned playground. There is moderately steep access into the burial ground over lawn from this point.

Recommendations
The main entrance should remain on the Main Street side as it is the historic, most visible and most accessible entrance. Universal access is dependent upon improvements to the surface materials inside the cemetery.

Vehicular Access

Issues
Maintenance vehicles enter the site from Haynes Street to the west. Other vehicles are not allowed inside the burial ground.

Recommendations
This system appears sufficient for the current visitation and maintenance requirements and no changes are recommended.

Security

Issues
There is no security to the site because of the open pedestrian access, and relatively low and easily scaled perimeter walls.

Recommendations
Security is apparently not an issue on this property and improved measures should not be pursued at this time.

VANDALISM

Issues
Only minor vandalism has been reported and very little recently. An area with beer bottles was found near the front and a broken picnic table at the rear. Vandalism noted by Fannin-Lehner included broken stones and scratched graffiti. Some of the broken stones might be attributed to the damage caused by the hurricane of 1938 which ripped the roof off the adjacent former police station. The presence and proximity of the former police station as well as some residential development may have had much to do with the limited vandalism.

Recommendations
Vandalism is not a significant problem and no changes are recommended at this time other than grave marker repair and consideration of increased police patrols.
CIRCULATION SYSTEMS AND MATERIALS

Circulation Systems

Issues
Relatively informal grass/dirt routes used by maintenance vehicles wind through the site. These routes form the circulation system. The principal access way into the burial ground is clearly visible from the main gate for approximately 40'. Although the last burial was made around 1894, circulation patterns leading into the center of the burial ground may be contemporary with 20th century use.

Recommendations
Maintain the existing system. Do not add a path system. Traffic patterns from the front gate into the burial ground should be enhanced rather than disguised, because it provides visible evidence of site usage. The informal pedestrian access way created along the southern wall and the vehicular entrance at the southwestern wall should not be repaired or closed, as they represent integral parts of the burial ground’s history and developmental sequence.

Pavement Materials

Issues
All walking and driving surfaces are grass or earth.

Recommendations
Surface materials should remain grass until visitation reaches the point where it is no longer practical to maintain lawn. At that time a paved path system should be considered.

GRAVE MARKERS

Headstones and Footstones

Issues
An inventory was made of all gravestones in 1995 by Fannin-Lehner as well as assessment and conservation report in 1996-97. A total of 568 grave markers were noted with 157 requiring varying degrees of conservation with an estimated cost of $47,205. The markers are primarily slate with many marble and some brownstone. The town is currently in the 4th year of a 5 year grave marker conservation program. Work began at the low end of the site and has progressed uphill. Training has also been provided for headstone maintenance.

Recommendations
Continue with the grave marker conservation program. The small pile of crushed stone at the rear of the site that was left over from recent grave marker conservation efforts should be removed. A very careful pedestrian survey along the entire perimeter of the burial ground will identify where several slate markers have been placed on top of or at the base of the burial ground walls. The position of these markers should be carefully recorded on burial ground maps, and the markers removed for safe keeping in consultation with preservationists.

STRUCTURAL ELEMENTS

Perimeter Walls

Issues
Perimeter walls are primarily dry laid fieldstone, small portions of which have been repaired with cement mortar and modest brick rubble. The front or north wall facing Main Street is dry laid fieldstone with flat fitted cap stones that are approximately 28” wide. The 30” high wall follows the grade. Near the upper end of the wall, the main entrance is framed by 3’ square mortared stone gate posts that are about 5’ and 6’ high. The cap, parged on top, projects slightly. A stone is missing from the back corner of one of the caps. Selective repointing is required at the gate posts.

Most of the west wall retains earth above the burial ground. The west wall is approximately 4’ high adjacent to the former school building. Some mortar has been placed in the upper courses of the dry laid wall and some stones are missing. The central area of the wall is 2 to 3’ high with two 6’ long granite slabs placed at the top of the wall. A partial collapse occurred at the 4’ high corner where the wall turns. Many stones have fallen out of the wall beyond this point. A vehicular entrance was opened through the free standing south end of the west wall.

The south and east walls are free standing. Where the south wall passes an adjacent private building, there is an area of minor wall collapse and another area of wall disturbance. Near the midpoint of the south wall, an 8’ wide breach was created near a low point to serve as an informal pedestrian entrance. There is some localized damage at another low point further east. The east end of the wall is approximately 3’ high and it reduces in height to about 2.5’ high along the east side. Localized disturbance is apparent adjacent to the dumpster along this edge.
Some repairs to the stone walls have been provided by volunteers like the Lion’s Club and Boy Scouts. Along the eastern wall, about 103′ from the northeast corner, disturbed subsoils, poured cement conglomerations and displaced fieldstones reveal where the wall was repaired after ice storms 2 or 3 years ago. In the same vicinity several broken slate markers are resting face down on the top of the wall. A modest rubble pile consisting of brick and slate is visible approximately 28′ north of the south east corner wall and modern, stamped bricks are embedded in the ground surface outside the burial ground around the southeast corner. Along the southern wall, approximately 5′ south of the Curtis family markers, fragments of a broken slate marker lie on the ground at the base of the wall. Small slate fragments are also visible along the northern wall, approximately 50′ west of the main gate. A small slate marker with an urn and willow motif closely abuts the western fieldstone wall, and a small slate marker for Oliver Stone is perilously close to the eastern wall, at the base of a huge tree. Along the western wall, close to the adjacent school shed, an anomalous feature was built into the wall and dressed with fieldstones and cement mortar.

Recommendations
Provide selective repointing at the gate posts. Repair perimeter walls, rebuilding collapsed sections and resetting fallen and displaced stones. Work with adjacent property owners to reduce disturbances to walls caused by their operations.

Volunteer helpers should document [in writing and with photographs] all the changes they make to the property, including repairs to perimeter walls. Particularly important is documentation of removal of slate markers previously used for wall repair, and the nature and source of repair material.

Mound Tomb and Vault Structures
Issues
The burial ground has one mound tomb, the Wight family tomb, near the Main Street entrance. Constructed with a shallow domed flat fieldstone roof covered with grass and a long marble marker face with brick backup, the face has collapsed.

Recommendations
The mound tomb should be restored. Disturbance to the ground surface around the tomb should be carefully monitored by an archaeologist. No material should be removed from the tomb entrance or top without careful documentation by an archaeologist.

FENCES AND GATES
Iron Fences and Gates
Issues
On the Main Street side of the burial ground is a decorative wrought iron double leaf swing gate that was the gift of Mrs. Joseph Fiske in 1920. She was the daughter-in-law of Josiah Fiske, founder of the textile mill in Fiskdale. The surface adjacent to the gate is flush with the ground beyond the burial ground, indicating that the entrance gate area has been filled and leveled. The gate has an 8′-8″ wide opening and no lock. The gate has rust with some severe corrosion and needs restoration. On the left gate leaf, the bottom hinge point has corroded to the point that it is not attached and a couple of pickets are bent at the top. The bottom left corner of the right gate leaf has part of the ring missing as well as part of the bottom of the vertical frame piece.

Recommendations
Restore the gate.

SITE AMENITIES
Issues
There are no site amenities in this burial ground, including signs.

Recommendations
An appropriate identification sign is important and informational/interpretive signs would be beneficial. Other than signs, do not add site amenities.
LEGEND

- Existing Deciduous Tree
- Existing Evergreen Tree
- New Tree
- Remove Existing Tree
- Existing Stone Wall
- Vehicular/Pedestrian Entrance
- Low Point
- Utility Pole

OLD BURIAL GROUND
PRESERVATION PLAN
STURBRIDGE, MASSACHUSETTS

PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE

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1" = 100'

Sturbridge - 201
UTILITIES

Drainage

Issues
No drainage structures were found inside the burial ground. About 75% of the site drains on the surface and flows toward the northeast corner where it collects at the low point and leaches through the wall or into the ground. Some minor low points at the south edge of the property collect surface drainage before it flows onto adjacent property. A rain leader on the former Police Station discharges storm water onto the high point of the site.

Recommendations
Work with the adjacent property owner to resolve drainage from the roof leader before it becomes a problem.

Water Supply

Issues
No source of water was found inside the burial ground.

Recommendations
Water is beneficial in times of drought and would help to re-establish lawns. Work with adjacent property owners to provide hose bibs or provide a source of water in the public right of way outside the burial ground walls.

Lighting

Issues
With no light fixtures inside the burial ground, there is spill light from adjacent buildings and perimeter streets. Two utility poles have anchor cables located inside the site, creating a potential disturbance to archaeological resources.

Recommendations
Do not add light fixtures inside the burial ground. Work with utility companies concerning utility pole and anchor support locations to protect historic resources.

PRIORITIES

High Priority
- Continuation of stone conservation program
- Vegetative removals and pruning
- Gate restoration
- Repair of structural items like perimeter walls and the mound tomb
- Erosion and lawn repairs
- Identification sign placement

Medium Priority
- Fertilization of trees
- Resolving roof leader discharges
- Consideration of adding water supply

Low Priority
- Informational and interpretive signs
- Additional planting
- Consideration of removing utility pole anchors

Concurrent with the ongoing preservation efforts, volunteers may wish to conduct historical research into the history of the old burial ground. Particularly important will be site plans and 19th century maps and atlases which show the configuration of the burial ground, the adjacent roadway, the abutting school building, and the original Meetinghouse which preceded the school. Town records may prove helpful for documenting changes to the burial ground, and monies spent on repair and modification to the perimeter walls when the adjacent school building was constructed.
Established in 1742 as the first public burial ground in Spencer, this 3.5 acre hilltop site has views to distant hills to the south and southwest. The Old Cemetery is located above and just off Main Street [Route 9] behind the Congregational Church, the site of the 1771 Meeting House which burned in 1862. A historic landmark in a historic district, it has frontage on both North and Pope Streets bordering residential uses and David Prouty High School which was named after the shoe manufacturing Prouty family.

The central area of the cemetery slopes gently to the south and drops steeply at the south and southeast property lines, where a cliff like rock outcrop rises straight up from the chuchyard below. The southeast and southwest corners of the property are defined by low, stone retaining walls that taper as the surrounding land rises to meet the grade of the cemetery. The north side and most of the west side are defined by loosely built fieldstone walls. The primary entrance is through formal stone pillars and iron gates on North Street, at its intersection with Powers Street.

First known as the West Parish of Leicester in 1744, Spencer was incorporated in 1775. The town’s name honored Lt. Gov. Spencer Phipps. Two acres of land were donated by Nathaniel Cunningham to the town in 1740 for a meeting house. Half of it was used for a cemetery which was established in 1742, the same as the earliest noted death date, for Elizabeth Adams. Early burials were done haphazardly, not following any formal lot lines and the locations of many bodies were not marked. Additions were made to the cemetery in 1791 [1/2 acre], 1817 [1.5 acres] and 1857 [1/2 acre]. By 1860 improvements were made and the cemetery was divided into lots and ranges. A further land addition was made in 1872 when a trust fund was established by private individuals. The last addition occurred in 1914 with 4,000 square feet.
The cemetery is primarily Protestant, with many of the families still residents of the town and active in town leadership and business. It contains the remains of many war veterans including 54 from the Revolutionary War, 37 from the Civil War and at least one each from the Spanish American War and World War I. While all of the lots have been sold, there are occasional burials in family plots.

LANDSCAPE CHARACTER, LAWNS AND VEGETATION
Landscape Character
Issues
The character of the landscape is primarily open lawn with deciduous shade trees at the north, east and west perimeters and slightly inside west perimeter. Two evergreen trees provide some screening of the adjacent church. Only a few trees are perceived to be in the interior of the property. At least 16 trees were destroyed by the 1938 hurricane.

Recommendations
The general composition of vegetation should be maintained because it keeps the center of the cemetery open, screens adjacent uses at the edges and allows distant views to the south.

Planting
Issues
There are 39 trees inside the cemetery including 35 Maples, or about 90% of the total tree composition. A Beech and a Linden are sited near the gated entrance. The latter has sucker growth at the base and a healing frost crack. There are also 2 Spruce near the church. Shrub introduction has been limited with only a single Yew located in the southwest corner. The vast majority of trees are large, old and declining. Most have some dead wood in the crown and some have significant cavities, both presenting potential hazards to the historic resources of the cemetery. A large Maple in the southwest quadrant is severely impacting the edging of a family plot and others are restricting walk widths and the north drive.

Recommendations
Immediate priorities include pruning and cabling as necessary. Tree conditions should be monitored annually with removals when necessary. Additional large shade trees should be planted at the perimeter of the cemetery in locations where they will not impact grave markers, retaining walls or views.

Volunteer Growth
Issues
The impact of volunteer growth on the property is negligible with some evident on the northern edge on adjacent property which is beginning to impact the perimeter wall.

Recommendations
Work with the adjacent property owner to control volunteer growth.

Lawns
Issues
Except for erosion at the mound tomb, lawn areas are in fair condition with some moss and small bare spots.

Recommendations
Repair erosion and restore lawn areas.

ACCESS AND SECURITY
Pedestrian and Universal Access
Issues
There are two pedestrian points of access, not including open drive access points which are also used by pedestrians. There is a 4 foot wide pedestrian gate on North Street adjacent to the drive with no walk on either side of the gate. The gradient inside the gate is too steep to be considered universally accessible. A walk up some steps on the west side of the church connects to a 3 foot wide bituminous paved walk north into the cemetery. The walk is too narrow and too deteriorated to be considered universally accessible.

Recommendations
No changes are recommended for pedestrian access. Universal access should continue to rely on vehicular access routes. Paved pedestrian routes should not be improved until the trees impeding access require removal for safety reasons.
Vehicular Access

*Issues*
There are four points of vehicular access, two on North Street to the east and two on Pope Street to the west. The narrowest opening is the 11 foot wide vehicular gate. With no defined parking areas, parking occurs on or along the drives inside the cemetery or on public streets outside the cemetery.

*Recommendations*
This system appears sufficient for the visitation requirements and no changes are recommended.

Security

*Issues*
The site is essentially open. Only one access point is gated and that is apparently always open. Perimeter walls are relatively low and easily scaled.

*Recommendations*
Security is apparently not an issue on this property and improved measures should not be pursued at this time.

VANDALISM

*Issues*
There is reportedly little vandalism, although a number of youths were apprehended and fined for damage they caused last year. Little of the impact of vandalism is evident except for a number of toppled and broken stones, most of which appear to have been in that condition for some time.

*Recommendations*
Vandalism is apparently not a significant problem. No changes are recommended to prevent future potential vandalism.

CIRCULATION SYSTEMS AND MATERIALS

Circulation Systems

*Issues*
There are two parallel roads running east-west connecting North and Pope Streets and a paved path running north-south along the west side of the site that provides access to the Congregational Church and Main Street.

*Recommendations*
No changes to the circulation system are recommended at this time.

Walks

*Issues*
Concrete walks were reportedly laid out in 1872 when a trust fund was created to provide care and improvements. No evidence of them exists today. A single 3’ wide paved bituminous concrete walk runs north-south, parallel to Pope Street. It is in poor condition with trees growing into it, deforming the surface and reducing the width.

*Recommendations*
The paved walk should be removed and replaced with bituminous concrete at a 4’ width once the trees impeding access are removed.

Steps

*Issues*
At the west side of the church, a series of dry laid, crudely dressed granite steps provides access from Main Street to the cemetery. Treads and risers are uneven and an intermediate landing is washed out underneath. The steel pipe handrails do not comply with today’s Building Code requirements. These steps may not be part of the cemetery as they appear to be on church property. There is also one buried step or threshold at the walk north from the central road.

*Recommendations*
For safety reasons, barricade the entrance at the west side of the church to prevent access from the granite steps until the church has rebuilt or removed them.

Roads

*Issues*
Two paved drives, approximately 10’ wide, traverse the site in an east-west direction. The bituminous concrete surface is deteriorated and in poor condition with the crushed stone base course serving as paving for much of its length. There is a road hazard at the northeast corner where the edges are depressed and the center is raised. Trees are growing into the northernmost drive. Access to the central west entry is steep.

*Recommendations*
The two roads should be removed and replaced.
Road Edging

Issues
Roads are typically not edged except for a short length of thin marble retaining a low steep embankment along the south side of the northeast service entrance. The stone appears to be grave marker material.

Recommendations
Remove the marble edging and regrade the embankment to a stable slope. Work should be performed in conjunction with an archaeologist to insure protection of any potential historic resource in this area.

Pavement Materials

Issues
Bituminous concrete is the only pavement material here and it is in very poor condition.

Recommendations
If paved surfaces are not heavily snow plowed, they should be replaced with a chip sealed bituminous pavement to present a character more in keeping with the historic nature of the cemetery. Snow plowed surfaces should remain bituminous concrete.

GRAVE MARKERS

Headstones and Footstones

Issues
The collection of about 600 grave markers begins in 1740 and continues through the 1980s. They are primarily slate and marble with the older slate stones on the south side, which contains more individual markers. The north side contains more family plots and granite markers. Publications cite four significant grave markers: the 1753 stone of William Sinclair; 1775 stone of Ann Cunningham; 1774 marker of Joseph Bigelow and 1791 marker of Artamus Lamb. The latter two have been attributed to the Sikes family of carvers who worked in western Massachusetts. To one writer the Lamb stone suggests that the Sikes family “were among the last carvers in New England to retain the purity of the older style when elsewhere in New England the neoclassical style was in ascendance.” The slate makers are generally well maintained, with most standing upright and stable. Several dozen slate markers are broken or split. Others have been repaired with iron straps or reset in concrete collars or foundations. A number of markers are leaning or toppled.

Recommendations
Tilted and toppled stones should be reset in compacted gravel [some conservators recommend pea gravel], beginning with toppled slate markers. Concrete foundations or collars are not recommended. Stones that have already been reset in concrete should be left as is.

No attempt should be made to reassemble the broken slate markers in situ. Pieces of broken stones should be stored in a sheltered location, preferably inside. For broken or highly weathered markers of important personages, consider placing a replicate marker or full size photograph on a Plexiglas marker at the burial site. No attempt should be made to remove or reverse old repairs to slate markers, as removal will damage the stones. Approximately 70 markers would benefit from cleaning. Biological growth is minimal, but can be carefully removed if resources are available. Removing surface biological growths will improve the appearance of the stones and will slow down weathering if done carefully.

Monuments

Issues
There are several marble and granite obelisks. Two of them are leaning and one has been broken and reset. Settlement is apparent at the bases of some of them, exposing foundation materials.

Recommendations
Reset leaning obelisks to a vertical position and provide earth fill to cover exposed foundations.
STRUCTURAL ELEMENTS
Perimeter Walls

Issues

North Street wall: Along the east property line, this wall is assembled of large, dry laid stones capped with wide, shallow slabs of stones. Starting as a four foot high retaining wall at the southeast corner of the cemetery, the wall tapers up to 1’ high where it meets the low entrance wall and pillars opposite Powers Street. The wall is generally stable except it appears that the upper stones are gradually shifting outward in the section of wall just south of the entrance gate. The ground rises steeply at this location and may be creeping downhill, plowing the wall over as it shifts. After the gate, the wall remains about a foot high. At the northeast corner, a service entrance cuts through the wall. It has a 12-1/2” square granite post on each side. One of the posts has been snapped off and glued back together. The glue however has failed and the upper piece simply sits loosely on the lower part.

North Street main entrance [Draper Memorial gate]: The main entrance consists of a double leaf vehicular iron gate mounted on large 8’-8” high stone pillars. Low stone walls sweep away from the pillars to meet shorter 3’-8” high stone pillars and then to the property line walls discussed above. Both the pillars and the low walls are built of well mortared, small, uniformly sized stone units. The top of each pillar is capped with domes made of the same small units. The entrance stone work is in generally good shape although maintenance is needed. The domes and upper courses of the pillars are cracked and need resetting and repointing, One of the low walls has a large vertical crack that needs repair. Except for a few other hairline cracks, the stone pillars and low walls are in good condition.

North perimeter wall: The north property line is defined by a loosely built fieldstone wall interrupted occasionally by tree trunks and roots.

Pope Street perimeter wall: Along the west property line, a loosely built fieldstone wall bounds about two thirds of the cemetery’s length adjacent to the street. The cemetery is at the same level as Pope Street until the street starts to curve toward the west. The south end of the wall is defined by concrete posts with jagged stones set vertically into the tops. As the street curves away, the adjacent David Prouty High School property drops gradually along the remaining third of the cemetery yard. The cemetery ground adjacent to the school property is retained by a stone wall. Access from the schoolyard is prevented by a chain link fence. The wall is densely covered with leaves and undergrowth. At the southwest corner of the cemetery, several stones have fallen out of the wall, leaving a large gap under the chain link fence. Remnants of a concrete cap remain where the stones are missing.

South Property Line. The south property line is defined by the cliff like drop in elevation from the cemetery down to the churchyard. No safety features exist to prevent people from falling over this edge. The back wall of the church is only 2’ from the cliff wall. The rock outcrop along the south property line is irregular in height, although it descends gradually from the back wall of the church along the parking area behind the parish hall until it is less than 4’ high at the southeast corner of the cemetery. The undulations of the outcrop are filled with stonework in order to maintain a uniform grade in the cemetery grounds. The stonework is generally dry laid without mortar except for one well mortared section that was rebuilt recently. This rebuilt area also has PVC pipe weepholes at the base of the wall.

Recommendations

Some localized maintenance is needed at the retaining walls and at the formal entrance. Maintain the stone retaining walls by inspecting them annually and resetting any displaced stones. In the immediate future, reset the displaced stones on the east wall and rebuild the missing stonework at the southwest corner. Rebuild the dome stonework and upper courses of the gate pillars. Dismantle the stonework on either side of the crack in the low wall and rebuild it. Alignment of vertical or near vertical joints should be avoided. Repair the broken corner post at the service entrance with pins and epoxy. Consideration should be given to providing a transparent safety feature, like a fence or barrier rail, at the top of the south wall for public safety while maintaining the view.

Mound Tomb and Vault Structures

Issues

Receiving Tomb: Facing the North Street main entrance, the front of the tomb consists of three, 6” thick slabs of dressed granite. The joints of the jams and lintel are open but there is no significant displacement or settlement. Although the iron door of the tomb is chained and padlocked shut, it can be seen that the interior walls are cemented or plastered. The underside of the stone slabs that roof the vault are untreated. The thickness of the stone side walls appear to widen as they descend downward. The earth embankment has eroded away at the front of the tomb on both sides. Because of the impossibly steep slope from the front of the tomb around the corner to the top, it is possible that the ground originally tapered around the corner and continued out in front of the tomb on both sides of the entrance jams. The tomb appears to be stable and in generally good condition. The door should be opened and the interior inspected more closely for any damage from infiltrating water.
The door is in relatively good condition with rust evident at the base of the door, bottom hinge and near latch. It appears that water is trapped at the front of the door causing much of the rust. The vault has a small brick vent at the top of mound which has been set slightly below ground surface. It is open to the weather.

Recommendations
Dismantle the facade stones of the holding tomb, clean the joints and recondition the foundation stones and reassemble them in new beds of mortar. Open the door and inspect the walls and roof from the inside to determine if further work is needed. Regrade the earth banked around the sides of the vault and restore the eroded earth with appropriate slopes, if possible, to prevent future erosion.

Edging of Family Plots
Issues
Ten of the family plots are edged with rectangular granite curbs that retain a raised area of earth which usually has a monument centered in it. Some are in good condition, but many have suffered from settlement and/or overturning and have heaved or rotated out of position. The bottoms of the stones usually sit on a foundation of loose stones just below the ground surface. Stone corners are nominally pinned together with iron cramps. The Drake plot edging, on south side near Pope Street and the school, is being displaced and overturned by tree roots. The adjacent Rich plot has slight settlement. The Morse and Baxter/Lamb plots on south side have slightly shifted and settled. On the northeast side the Bemis and Whitmore plots have also shifted and need resetting. While the Pope and Capen/Jones plots on the northwest side suffer the same condition, the Morse and Packard plots near Pope Street appear stable.

Recommendations
Displaced edge stones should be reset and the ground raised adjacent to them to cover the foundations and bottoms of the granite edging. The existing corner pins are generally ineffective and should be replaced with concealed stainless steel angles and adhesive anchors. Alternatively, the stone foundations could be replaced with a continuous concrete pad and the edge stones could be set on top of the concrete on mortar beds, with vertical stainless steel pins connecting the two materials.

BUILDINGS
Issues
A small wood structure sited at the northwest corner is out of visual proximity of the cemetery. The maintenance building is about the size of a one car garage with wood siding and appears in good condition. A new metal overhead door was recently installed that is wide enough to allow maintenance equipment access.

Recommendations
A slightly larger structure is desired to better house maintenance equipment. It is preferred that this be a wood structure with a character compatible with the historic district. A more utilitarian structure would not severely impact this historic site if it were placed in the same location as the existing building.

FENCES AND GATES
Iron Fences and Gates
Issues
The 1913 James Draper [1778-1868] memorial gate at the North Street main entrance has a wrought iron vehicular and pedestrian gate. The former is a double swing gate with an 11’ opening. While the south gate leaf is operable, the north gate leaf appears not to move. The single swing pedestrian gate with a 4’ wide opening is operable but appears to be infrequently used. Both gates are sound and intact with no apparent missing pieces. The paint finish is failing and rust is evident on much of the surface.

Recommendations
Repair, prepare, prime and paint the gates.

Chain Link Fences
Issues
Initially erected as part of the 1949 G. Henry Wilson bequest, the 5 foot high chain link fence along a portion of Pope Street and the adjacent school is in fair condition, with no corrosion or damaged parts. Set in shallow concrete bases among loose fieldstones, the fence posts are tilted at various angles.

Recommendations
Fence posts should be reset in a vertical position for appearance reasons as well as to prevent leaning posts from becoming a hazard.
LEGEND

- Existing Deciduous Tree
- Existing Evergreen Tree
- New Tree
- Remove Existing Tree
- Existing Stone Wall
- Existing Chain Link Fence
- Vehicular/Pedestrian Entrance
- Lawn Paths
- Utility Pole
- Flagpole

OLD CEMETERY PRESERVATION PLAN
SPENCER, MASSACHUSETTS

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NOVEMBER 1999
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MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE
Wood Fences
Issues
There are no wood fences on the site.

Recommendations
A desire has been expressed to install a new fence like the original picket fence. Further investigation in terms of the historic location and style of that fence needs to be completed prior to making a determination if such a fence is appropriate today.

SITE AMENITIES
Signs
Issues
The site is barely visible from Main Street and thus difficult to find. There are no directional, identification or interpretive signs. The only sign is on the inside face of the North Street gate, facing the cemetery, and commemorating the James Draper [1778-1868] Memorial Gate. It is painted silver.

Recommendations
An important first step would include providing a sign at the intersection of Main and North Streets directing visitors to the site, and an identification sign outside the North Street gate. The gate sign should be cleaned and restored. It would be beneficial to add interpretive signs.

Flagpoles
Issues
The cemetery has a single 30' high steel flagpole near the North Street entrance. It is painted white and heavily rusted.

Recommendations
The flagpole should be restored or replaced.

Other
Issues
There are no trash receptacles, seating or other amenities

Recommendations
While benches are not part of the historic plan, they would be beneficial in terms of taking advantage of the view and increasing visitation. The addition of benches in terms of style and location must be done so as not to detract from the primary experience of the cemetery.

UTILITIES
Drainage
Issues
No drainage structures were found inside the cemetery. In general, the site drains on the surface and flows toward the south side with some of the north side of the site being intercepted by the central drive and flowing east. No problems were evident.

Recommendations
No changes are recommended.

Water Supply
Issues
A source of water was located in the central area of the cemetery, but the water supply was recently cut off in North Street.

Recommendations
Water has numerous uses in a cemetery and service should be restored.

Lighting
Issues
The are no light fixtures inside the cemetery. Street lights on utility poles adjacent to the site provide some illumination. Overhead wires serving the church cross the cemetery at the southeast corner of the site.

Recommendations
No additional lighting is recommended. Work to place overhead wires underground or reroute the service such that it does not impact views to and from the site.

PRIORITIES
High Priority
- Stone conservation including resetting and repair of slate markers and pin replacement in marbles that are visibly cracked or spalled
- Vegetative removals and pruning
- Perimeter fence and gate restoration
- Structural items like perimeter walls and mound tomb
- Erosion and lawn repairs
- Road work
- Directional and identification sign placement
- Restoration of water supply

Medium Priority
- Stone conservation including marbles with visible metal stains at the junction between marker and base
- Family plot restoration and repair
- Path work
- Fertilization of trees

Low Priority
- Stone conservation including granite markers that have shifted or are leaning, and marbles currently in satisfactory condition
- Maintenance building replacement
- Informational and interpretive signs
- Additional planting
- Consideration of removing overhead wires
Located on Main Street, Route 16, Center Cemetery was originally part of the town common which was also the site of the town’s first school. It was closely associated with the First Congregational Church which is now located on the opposite side of Main Street and the Common along with a number of period houses. Surrounded by stone walls, the upper areas of the rolling terrain of the 2.5 acre cemetery have been terraced in part.

Said to date back at least to the town’s incorporation in 1746, this is one of the oldest cemeteries in Douglas. It was enlarged at some point with the land of Joseph Richardson and others as well as some recent acquisition. While the high ground in the historic southwest section of the cemetery is no longer actively used, it is part of a larger active cemetery that is expanding to the northwest along Main Street.

Many of the prominent residents of Douglas are buried here, especially those who were not directly connected with the industrial development of East Douglas. It contains town pioneers William Dudley, Deacon Jeremiah Whiting and Benjamin Wallis as well as 46 Revolutionary War soldiers.

There are apparently a number of graves without markers since they are occasionally uncovered when new graves are dug. Several headstones placed immediately abutting the wall on Main Street indicate that the original graves once extended beyond the wall, or the markers have been moved from their original location. A brass IOOF marker and marble headstone have been placed immediately adjacent to the perimeter wall on the west, amid surrounding open space. The single marker amid open space, close to the perimeter wall suggests that it has been moved from its original location. Exposed subsoils in the western part of the cemetery probably represent material excavated from recent graves that is being used to create terraced slopes.
After the cemetery fell into disrepair in the early 1900’s, a warrant was passed in the 1907 annual Town Meeting which allowed $100 “for righting stones and other necessary work.” Earth and rubble piles are evident in the northwest corner, both inside and outside the cemetery. A marble marker fragment visible in the western wall and some small slate fragments in rubble outside the cemetery represent material redeposited during episodic repair and site clearance.

LANDSCAPE CHARACTER, LAWNS AND VEGETATION

Landscape Character

Issues

The character of the landscape is primarily open rolling and terraced lawn with deciduous shade trees at the south and east perimeters. A short line of evergreen trees at the northeast corner blends in with the wooded parcel beyond. Only a few trees are perceived to be in the interior of the property.

Recommendations

The general composition should be maintained because it keeps the center of the historic area of the cemetery relatively open.

Planting

Issues

There are 24 trees inside the cemetery composed of 2/3 large deciduous shade trees and 1/3 evergreen trees with Maple, Oak, Ash, Cedar, Spruce and White Pine. Because most of the evergreens are at the rear of the property, deciduous trees appear to predominate. The majority of trees are large, old and declining Maples. Most have some dead wood in the crown and some have significant cavities, both presenting potential hazards to the historic resources of the cemetery. A large tree was recently removed next to the Sherman family plot in the center of the cemetery. The apparent former line of trees along Main Street has been significantly fragmented with losses. Some resprouting stumps remain.

Recommendations

Immediate priorities include pruning to remove dead wood and lighten crowns, and cabling as necessary. Care should be exercised when vehicles are used in these operations to insure protection of historic resources. Tree conditions should be monitored annually with removals when necessary. Trees should be removed to ground level only, and roots treated to prevent regrowth. Additional large shade trees should be planted immediately outside the perimeter of the cemetery along Main and Southeast Main Streets. As a precautionary measure, an archaeologist should monitor all the planting procedures along this edge.

Volunteer Growth

Issues

Volunteer growth is located along a short section of the top of the Main Street wall, in the northeast corner and along the north side.

Recommendations

Remove volunteer growth.

Lawns

Issues

Lawn areas are in fair to poor condition with bare spots and moss. No significant erosion was evident. Lawn care consists of mowing and leaf removal.

Recommendations

Repair lawn areas.
ACCESS AND SECURITY
Pedestrian and Universal Access

Issues
With pedestrian access points on Main Street and Southeast Main Street, the two gateways are not considered universally accessible because of steep gradients at the former entrance and steps at the latter. Steep gradients make the Main Street side of the cemetery inaccessible. There are no paved paths inside the cemetery which also limits universal access.

Recommendations
No changes are recommended for pedestrian access. Universal access should continue to rely on vehicular access routes.

Vehicular Access

Issues
There are two points of vehicular access, one from Main Street and one from Southeast Main Street. With no defined parking areas, parking occurs on or along the drive inside the cemetery.

Recommendations
This system appears sufficient for the visitation requirements and no changes are recommended.

Security

Issues
There is no security to the site because it is enclosed with low perimeter walls that are easily scaled. The site has no gates and is always open. There is an occasional police patrol.

Recommendations
Security is apparently not an issue on this property and improved measures should not be pursued at this time.

VANDALISM

Issues
While there reportedly has been no vandalism since the 1960s, some broken glass was found at the pedestrian entrance on Southeast Main Street. The local Police Department makes occasional patrols through the cemetery.

Recommendations
Vandalism is not a significant problem and no changes are recommended at this time other than grave marker repair.

CIRCULATION SYSTEMS AND MATERIALS

Circulation Systems

Issues
There is one gravel road connecting Main and Southeast Main Streets. Covered with grass throughout, the pedestrian system is informal.

Recommendations
No changes to the circulation system are recommended.

Steps

Issues
There are stone steps at the Southeast Main Street entrance and at some of the family plots. All exhibit signs of settlement.

Recommendations
Reset the steps.

Roads

Issues
The one lane gravel road is in fair condition despite the maintenance requirements and steep slope from Main Street. Drainage from Main Street into the vehicular entrance was eroding the gravel road before a shallow asphalt berm was installed along the street edge, preventing runoff from entering the site.

Recommendations
Maintain the road as is. It should not be widened because of the potential for intruding onto unmarked graves close to the road.
Pavement Materials

Issues
Gravel is the only pavement material here. All walking surfaces are grass with no defined circulation system.

Recommendations
Gravel is a historically appropriate material for drives and it should remain as long as it is properly maintained. Surface materials for walks should remain grass until visitation reaches the point where it is no longer practical to maintain lawn. At that time a paved path system should be considered.

GRAVE MARKERS

Headstones and Footstones

Issues
On high ground facing the First Congregational Church, there are about 30 18th century markers. The earliest markers are undecorated slate slabs and granite, including markers for 46 Revolutionary War soldiers. Many of the older stones appear to be the elaborately carved work of Ebenezer Winslow of Uxbridge. Winslow signed the elaborate slate marker for John Taylor. Twenty less elaborate slate markers also appear to be his work. These bear faces with wings, surfaces, fronds and tendrils. Two other slates resemble the work of the Soule brothers of Uxbridge and Dudley. Some of the slates are very dark grey, nearly black. Some of the slate markers are broken, others are splitting.

Most of the historic markers are 19th century marble, signed by about a half dozen different workshops. Many of the Greek Revival marble markers are two part stones, with the memorial stone pinned to a marble base with metal anchors. The iron pins have rusted, cracking the marble and leaving rust stains near the base.

Some of the markers, mostly granite, are set in slotted bases without metal pins. Several of these have failed. The early 20th century polished granite memorials are generally in excellent condition, except for spotty biological growth. All stone varieties are subjected to biological weathering, in most cases a grey mold, in some instances a grey lichen.

Two zinc or “white bronze” markers are located at the high point of the site. Zinc monuments are recognized by their bluish tint and hollow sound when tapped. Generally the zinc monuments are in fair condition, although one is missing its finial figure, opening the interior of the marker to weather, and the second has a cracked flame finial. While there are no signs of corrosion from weather exposure, both are conditions that encourage accelerated deterioration if water intrusion is not stopped. One marker also has 4 missing panel bolts.

There are a number of leaning and toppled markers, including several large monuments, as well as some broken stones.

Recommendations
The first priority is to reset tilted and toppled stones. Reset all toppled and tilted root stones that do not have a base or foundation with sufficient gravel for drainage and reduced frost heaving. Reset all toppled stones on deeper and perhaps larger foundations beneath the base stones. The second priority is to remove metal pins from two part stones and reset them with noncorroding anchors or dowel pins. Third, the zinc monuments should be repaired to prevent water intrusion. Engaging a metals conservator who could advise on the various repair options is desirable. Both zinc monuments should be inspected annually for splits or evidence of slumping, a form of metal fatigue. Special care should be taken to maintain the foundations of zinc monuments so as not to introduce stresses that would result in metal damage. Finally, removing surface biological growths will improve the appearance of the stones and will slow down weathering impacts.
STRUCTURAL ELEMENTS
Perimeter Walls

Main Street Wall: This fitted and chinked stone wall retains the cemetery above the street. Varying in height from 12-33”, it has an 18-22” wide rough hewn granite cap. A few face stones are missing in the wall. The vehicular entrance at the northwest corner is framed by 10” square by 45” high gate posts approximately 12’ apart. One post has 3 eyebolts projecting from the face and the other has remnants of one. There are 33” wide pedestrian openings at each side with short granite posts [7-1/2” square by 30” high] centered in the space. Mortared stone end posts with peaked granite cap stones are 24“ square by 48” high.

A pedestrian entrance near the center of the wall has a 5’ wide center opening between 12” square by 33” high granite posts. Rings on top of the posts hold an iron chain that closes the opening. There are 15” wide openings between the posts and the adjacent perimeter wall. Embedded in the tops of the walls on each side of the entrance are 5 iron rings, spaced 10’ on center, for tethering horses during funeral services.

Southeast Main Street Wall: Similar in construction to the Main Street wall, this wall also retains the cemetery above the street except for the east end which is free standing. It is generally in better condition that the Main Street wall except for some settlement at the intersection with the Main Street wall where some separation is evident near a free standing rough hewn granite post [9” square by 6’ high] just outside the corner. The east end of the wall should be reset. The vehicular entrance near the southeast corner has a clearance of 13’-4” between 10” square gate posts that are 24 and 30” high to accommodate the grade change. The pedestrian opening on the west side of this entrance is 3’ wide with a 10” square by 26” high granite post in the center. The pedestrian opening on the east side has an 11” wide opening.

A pedestrian entrance near the center of the wall is similar to the pedestrian entrance on Main Street with a 6’-3” wide opening between 8” square by 28” high granite gate posts. The posts have a similar ring and chain detail at the top. Rust jacking at the ring connection has cracked the top of the east post. There are 14” wide spaces between the gate posts and perimeter wall. This entrance also has 5 iron rings embedded into the top of the wall on the east side of the entrance at 10 feet on center, with one of the 5 rings missing.

East Wall: This 3-4’ high stone retaining wall above the adjacent parcel is generally in good condition. One tree on the adjacent property is pushing into the wall.

North Wall: This free standing, piled stone wall is 18-24” high. It is not in great condition because of the type of wall construction.

Recommendations
Replace the missing face stones in the Main Street wall. Repair the joint separation at the Main and Southeast Main Street wall intersection. Reset the east end of the Southeast Main Street wall. Repair the east gate post of the Southeast Main Street pedestrian entrance. Work with the adjacent property owner to remove the tree impacting the east wall. Restore the north wall. It is preferred not to relocate this wall to the perimeter of the new cemetery expansion so that a defined and protective edge will be maintained at the historic section.
MOUND TOMBS AND VAULTS

Issues
Dug into the slope, the receiving tomb has an iron door and 6 steps leading down into a chamber with a concrete floor. No drain was found. The interior parged or plastered walls of the chamber have a painted decorative stencil design. The far wall has three circles, each about 16 inches in diameter, within which are lettered verses from the Scriptures.

The tomb is capped with a single granite slab roof covered with earth. The capstone is 10' wide, 12' long and 14” thick, representing 140 cubic feet of granite weighing 12 tons. The Blanchard quarry in Uxbridge was the only quarry in the vicinity equipped to cut and lift a capstone of this size. It was dragged five miles on a sled with hardwood runners, a “stone boat”, by 25 yoke of oxen to the cemetery.

Although no longer used, the iron door is operable and in good condition, locked with a bolt mechanism. The outside of the door is painted black, but the inside is unpainted. Dirt and organic debris outside the door impede operation of the door. This material may be covering a dry well or other drain, which is necessary because the area currently traps water which will be destructive to the tomb.

Recommendations
The receiving tomb is an unusual structure and should be treated with care. Dirt and organic debris outside the tomb door should be removed under the direction of an archaeologist because it may contain evidence of historic landscape treatment. If a drain is found, it should be cleaned to function properly. If no drain is found, consideration should be given to providing one. The inside of the iron door should be painted to protect it from corrosion.

EDGING OF FAMILY PLOTS

Issues
A number of family plots are edged with stone. Some are in good condition, but many have suffered from settlement and/or overturning and have heaved or rotated out of position.

Recommendations
Displaced edge stones should be reset and the ground raised adjacent to them to cover the foundations and bottoms of the stone edging. The existing corner pins are generally ineffective and should be replaced with concealed stainless steel angles and adhesive anchors. Alternatively, the stone foundations could be replaced with a continuous concrete pad and the edge stones could be set on top of the concrete on mortar beds, with vertical stainless steel pins connecting the two materials. Family plots, such as the Wallis plot, should be carefully documented and the location of “missing” plot boundary markers identified.

BUILDINGS

Issues
A small tool house, approximately 12’x12’, is located near the northeast corner adjacent to the Southeast Main Street vehicular entrance. It has white painted vertical board wood siding with black asphalt shingle roofing.

Recommendations
The structure is apparently of sufficient size to house the necessary maintenance equipment. It has a character that is reasonably compatible with the historic area. No changes are recommended.

FENCES AND GATES

Interior Fences and Gates at Family Plots

Issues
One family plot has an iron gate and horizontal iron rails. A section of the railing was removed because of interference with a tree. The iron work is reasonably intact but heavily rusted.

Recommendations
Restore all ironwork and replace missing components to match existing. Replace the section of missing railing after the tree is removed.

SITE AMENITIES

Signs

Issues
A single bronze plaque by the DAR is secured to a vehicular gate post on Main Street. It identifies the cemetery and provides some interpretive information.

Recommendations
Add a more visible identification sign at the Main Street pedestrian entrance. Add interpretive and/or informational signs at a later date.

Trash Receptacles, Seating and other Amenities

Issues
There are no amenities of this type inside the cemetery.

Recommendations
Do not provide these amenities.
UTILITIES

Drainage

Issues
No drainage structures were found inside the cemetery, although one should be found at the receiving tomb. In general, the site drains on the surface and flows from the Main Street side to the rear or northwest side. Surface drainage from Southeast Main Street is impacting the southeast corner with sediment deposits outside the perimeter wall.

Recommendations
Resolve the sedimentation issues related to Southeast Main Street.

Water Supply

Issues
Self draining water spigots are distributed with sufficient frequency throughout the site.

Recommendations
No changes are recommended related to water supply.

Lighting

Issues
There is no electric supply to the site. Perimeter lights on adjacent street related utility poles provide some light. Overhead wires adjacent to the southwest corner of the cemetery extend along the front of the expansion area.

Recommendations
Do not provide light fixtures in the cemetery. Consider relocating the overhead wires to the opposite side of Main Street.

PRIORITIES

High Priority
• Stone conservation including resetting and repair of markers and pin replacement in marble markers that are visibly cracked or spalled
• Vegetative pruning and removals including volunteer growth
• Repair of perimeter walls
• Debris removal at the receiving tomb
• Iron work restoration
• Identification sign placement.

Medium Priority
• Stone conservation including marbles with visible metal stains at the junction between marker and base
• Zinc marker repair
• Resetting steps at Southeast Main Street pedestrian entrance
• Family plot edging repair
• Tree planting
• Lawn repairs
• Fertilization of trees
• Resolution of sedimentation along Southeast Main Street.

Low Priority
• Stone conservation including granite markers that have shifted or are leaning, and marbles currently in satisfactory condition
• Informational and interpretive sign placement.

Center Cemetery is part of the town’s Common Preservation Project which includes building a bandstand, erecting lampposts and benches, locating electrical, phone and cable wires below grade, restoration of the Soldiers’ Monument and repair of two cannons. Because the burial ground and school were originally situated on the town common it would be prudent to conduct archaeological evaluations of all proposed impact areas prior to any construction or restoration efforts. Research should be directed toward locating the site of the original school, and determining whether unmarked graves remain in the town common.
This charming 4.7 acre site was the first cemetery in the town and it was the location where early settlers were buried. The oldest part of the cemetery is on two hillocks at the south end of the site. While there is anecdotal evidence that the hillocks used to be an Indian burial ground, no archaeological investigations have been performed to date to confirm or deny this potential. There is also speculation that the site was selected for a burial ground because it had steep side slopes and was thus unsuitable for farming.

The cemetery is located just outside the village center adjacent to the gravel single lane Branch Road [Nillingdon Road]. The north edge of the cemetery is lined with old Sugar Maples that separate the cemetery from the road. A double row of Sugar Maples leads part way into the cemetery, down a gentle slope. At the end of the short drive are two hillocks covered with mature White Pines and Sugar Maples. The drive bisects the hillocks and also goes around the perimeter of each.

The cemetery can be seen as divided into three distinct parts. The newer active portion, established c 1850, is on the north side closest to the public way. The central area is generally undeveloped for grave sites because it is too wet. There are numerous small, partially buried boulders on the surface in this area. The oldest part is at the south end where the two hillocks are located.
LANDSCAPE CHARACTER, LAWNS AND VEGETATION

Landscape Character

Issues
The cemetery may once have been ringed by regularly spaced Sugar Maples. Some remnants of this planting remains. Deciduous woods frame 3 sides of the property. It is probable that the land on the edges was formerly farmed.

The northern portion of the cemetery is generally open with a row of Sugar Maples lining the public way and a double row bisecting the site along the entrance drive. This simple treatment has been supplemented with some new plantings that do not have an appropriate supporting character.

The southern portion of the property, with the two hillocks, is generally more vegetated. While it has primarily White Pine, there are also 2 large Red Oakes and a large Hemlock. Overall the vegetation is 73% deciduous [68% Sugar Maple] and 27% evergreen [26% White Pine].

Recommendations
Maintain and reinforce the general landscape character with a distinct difference between the northern and southern portions of the property. Reduce the quantity of trees on the southern hillocks such that it is more in character with the age of that portion of the cemetery. Reestablish the perimeter line of Sugar Maples.

Planting

Issues
There are 89 trees inside the cemetery including 61 Sugar Maple [Acer saccharum], 23 White Pine [Pinus strobus], 2 Red Oak [Quercus rubra], 1 Eastern Hemlock [Tsuga canadensis], a recently planted 10 foot tall Purpleleaf Beech [Fagus sylvatica purpurea] and a Cherry [Prunus species] clump.

Most are large, weathered and beyond maturity. Lightning has struck many Pines over the years and caused decay in their main stems. Dead and broken branches and tops of trees were noted in the Pines and Sugar Maples. There were no indications of any pest problems. There are 17 trees and one tall trunk recommended for removal. The evaluation found 5 high risk, 7 medium risk and 6 low risk trees.

Tree work is currently performed by outside contractors when a problem is noted. Numerous stumps are evident on the north side and between the two hillocks.

Recommendations
The small Purpleleaf Beech should be moved to higher ground where excessive ground moisture will not present a problem for future development. A location by itself in the northeast quadrant where it would not interfere with grave sites would be more appropriate. The low branching character and shallow roots could disrupt grave markers. If it is relocated, it must remain in the northern portion of the property where it would be more compatible with style and age of cemetery.

The Cherry clump is not healthy and should be removed.

Recommendations for support systems to help prolong the life of a tree that is still in fairly good condition generally fall into the highest priority, depending on location. There is a general consensus that steel support cables do not attract lightning to trees. Lightning damage can, however, be intense because of the fracturing of wood around eyebolts when the electrical force comes in contact with the bolt and cable. Many of the trees have main multistem branches with either decay or natural structural defects, which may fail under adverse environmental conditions. Support cables have proven to be of help in preventing large branch loss, enabling the tree to regenerate new growth and maintain its vigor.

Soil samples are always recommended before decisions are made to apply fertilizer to any plants in the landscape to avoid spending needless funds and excessive use of chemical fertilizers or lime. It is recommended that this be done and lime and fertilizer be applied to all the trees as recommended by the soil analysis. Sugar Maples are high nitrogen feeders. They should be given fertilizer first.

Root collars or root flares are often damaged by lawn mowers. Naturally occurring girdling roots can slowly cause decline in a tree. It is simple to check them and do repairs as necessary. All soil and mulch should be kept at least 1’ from tree root collar as so not to encourage circling roots or decay organisms that can damage root collars. This is also important when installing new trees.
A number of the trees should be reevaluated in 2 to 3 years for health and structural condition. If a violent wind, lightning or ice storm occurs in the meantime, those trees should be inspected shortly afterwards. People should not be allowed to enter this cemetery during high winds or storms because of the age and condition of the trees. There is no such thing as a perfectly safe tree. To reduce the possibility of an accident, post signs or gate the cemetery to prevent visitation during storms.

The stumps on the hillocks should be cut flush with the ground so as not to distract from the appearance of the cemetery.

Volunteer Growth
Issues
This type of growth has been well controlled and is minimal.

Recommendations
Continue to control volunteer growth.

Lawns
Issues
Lawns are in fair to poor condition with many small bare spots, moss and herbaceous weeds. Some slumping is evident on the steep south facing slopes. There are also mounds or small hummocks on these slopes that could be early burials.

Some erosion is also evident in relation to individual grave markers set parallel to steep slopes in the southern portion of the cemetery. Water flow has caused a build up of soils on the uphill sides of the grave markers and an erosion of soils on the downhill sides. This ultimately causes the grave markers to act as miniature retaining walls. Subject to the earth forces above, the markers ultimately lean downhill which creates a long term hazard for the resource. Areas of soil are exposed because a substantial vegetative ground cover has not been established due to the dense shade in this area.

Maintenance is provided by 2 teenagers who are hired by the town each summer to mow all of the town cemeteries. They generally attend to each site every week.

Recommendations
Lawn areas should be top dressed, have the applicable soil amendments added and then reseeded.

Remove earth sediment on the uphill side of individual grave markers and place it in the depression on the downhill side. Restore disturbed lawn areas. Monitor annually and repair disturbed earth as needed.
ACCESS AND SECURITY
Pedestrian and Universal Access
Issues
Pedestrian access is available from Nillingdon Road via the existing entrance drive. No other walks have been provided. The majority of the site has a gradient of about 8.7% making universal access throughout the site not feasible. Disabled visitors can enter the site with vehicular support.

Recommendations
No changes are recommended.

Vehicular Access
Issues
There is a single point of vehicular access from Nillingdon Road via the existing entrance drive.

Recommendations
No changes are recommended.

Security
Issues
No security measures are in place.

Recommendations
Security does not appear to be an issue at this time and no changes are recommended.

CIRCULATION SYSTEMS AND MATERIALS
Circulation Systems
Issues
The circulation system consists of a single, one lane, gravel and sometimes lawn drive. It is generally 8' wide. When it reaches the hillocks it branches into a perimeter drive and a central drive that bisects the hillocks.

Recommendations
Maintain the existing circulation system.

Pavement Materials
Issues
Most of the drive is gravel. Portions of the south end of the drive have reverted to lawn. All other surfaces are lawn. Snow is not plowed.

An area of erosion was observed at the south end of the central drive. Exposed tree roots were found in drive areas at the south end of the site.

Recommendations
Resurface the gravel drives. Consider making the drive that bisects the two hillocks lawn to discourage vehicular traffic in this sensitive area.

GRAVE MARKERS
Headstones and Footstones
Issues
Generally, the styles of the grave markers in the cemetery vary according to the section in which they are located. In the older southern portion the markers are predominantly tablets, a mix of slate and marble. Many are made of a rather coarse grained marble. Since New Marlborough is not far from the Lee marble quarry and many of the markers date from the early 19th century when the quarry was especially active, it is reasonable to expect that some of these tablets are of Lee marble.

The 1755 marble marker for Samuel Allin at the top of the east hillock was the earliest found. An unusual 1760 early marble marker for Eli Freeman can be found on the west side of the east hillock. All of the stones face west, regardless of their position on the slope, i.e., whether they face away from or into the steep slope. There are a few foot stones, some with initials to identify them with the proper head stone. One bronze pin repair was found on a delaminating marble marker. It was a good repair in good condition.

In the more recent northern portion of the cemetery the markers are more widely spaced and not set in regular rows. They are of various designs, primarily marble and granite with one 1864 zinc marker.
A study done some years ago included a count of markers with different types of damage. At that time 26% of 621 stones were leaning, toppled or broken. Those tilted at both less and more than a 45° angle numbered 103. Another 45 were observed to be toppled, lying flat on the ground. There were 38 broken and 13 “loose” markers. Repair needs were identified for 9 “monuments,” presumably the obelisks, columns or stones with two or more discrete sections of which one was a tall vertical. These figures appear to remain a reasonably accurate accounting of that type of damage.

Local Historic Society volunteers plan a new inventory of stones needing repair. There is an inventory of the inscriptions that is about 25 years old, without locations for the stones. A plan has been started that has stone locations.

The slower and more insidious type of damage that is caused by soiling of all types is more universal in the cemetery. Virtually every marker has some sort of botanical growth on at least some part of its surface. Moss grows at the bases of many markers. Red and yellow lichens, as well as the more common green-gray kind, grow on both the tablets and on the more complex shaped markers. Weathered limestone or coarse grained marble have black soiling from ordinary air pollution. Microscopic particles of carbon have been deposited and partly absorbed by the grainy stones. The botanical soiling is not only aesthetically distracting, it also hastens stone decay. The mycelia, root like structures, penetrate the stone and break down whatever may be serving as a binder. The surface growth also prevents moisture from evaporating quickly, thus making the stones more susceptible to the crumbling caused when moisture freezes, expands, exerting force on the stone, then thaws and contracts, leaving a loose rough surface on the stone.

A condition that can lead to tilting or toppling is the receding soil grade at the base of markers. When soil has begun to wash away, the washout will occur at an ever greater rate until the problem is solved. The one zinc marker in the cemetery has some of its below grade base exposed. If that marker tilts, the seams of the zinc may open, leading to damage. Markers which have columns or obelisks, such as the 1862 Harmon marker, lose their structural integrity when soil around the base washes out.

The small flag holders that mark the burials of military men are sometimes overlooked. They should not be, as they are an important type of memorial device. They are often in poor condition, however, as the earlier ones were made of cast iron, iron and bronze, or other metals that can corrode due to galvanic action. In several spots, small flags were simply stuck in the ground by grave markers, with no metal holder identifying the war in which the deceased fought. In the cemetery are markers identifying soldiers of the Grand Army of the Republic (Civil War), World Wars I and II, the Korean War, and possibly the American Revolution.

Fallen markers are being obscured by a covering of thick pine needles, or a thin layer of soil and grass or moss. Since several tablets are lying flat with soil encroaching over the edges, it is reasonable to guess that there may be more that are now completely covered.

**Recommendations**

Several types of repair and conservation share top priority: resetting stones that are fallen or tilted; reassembling stones which are broken or separated from their bases; and removing the botanical materials. When selecting the stones to be conserved, priority should be given to markers that have inscriptions that are still legible. Indecipherable inscriptions cannot be restored. So, too, when selecting stones to repair and reset, those that still have readable history should be done first.

**Monuments**

There are numerous [approximately 22] obelisks of various sizes. Most of them are marble and at least half of them are on the west hillock. Many have exposed foundations. The Peet obelisk has a twisted top, one is leaning and another is toppled in the northeast corner.

**Recommendations**

Provide earth fill at the exposed foundations of monuments. Repair the other monuments as necessary.
STRUCTURAL ELEMENTS
Edging of Family Plots
Issues
While none of the plots have stone edging, some have marble posts. On the east side of the west hillock, the Stevens plots have 7 marble posts. Many of them appear to be missing. Three have small holes for small diameter rails or chains. Four marble corner posts mark the 1852 Maudru plot on the south end of the site. One post is leaning and two have broken tops.

Recommendations
In a few locations there are small stones which may have marked the corners of family burial plots. These should be identified and reinstated, where possible.

FENCES AND GATES
Perimeter Fences and Gates
Issues
While a fence was reportedly required as part of the deed conveyance, no fences or gates were present. There is anecdotal evidence of a former light weight iron or fabric fence and gate during the 1920s. A cut off, tubular metal pipe about 2” diameter was found near the entrance drive. It may have been a fence or gate post.

Recommendations
Remnants of a woven wire fence are evident on the east and west sides of the cemetery outside the tree line. It is assumed that the town installed this fence at some point to provide separation from adjacent farm land.

Recommendations
Provide a fence as required by the deed of conveyance, based upon documentary evidence of the style and location of the original fence.

With the current adjacent land uses, there appears to be no need to re-establish the perimeter fence line. However if these land uses should change, consideration should be given to providing a fence along these edges.

Interior Fences and Gates at Family Plots
Issues
While there are no fences and gates at any of the family plots, there were single rails at the Maudru plot that are missing.

Recommendations
If documentary evidence can be found concerning the appearance of these rails, consideration should be given to replacing them.

SITE AMENITIES
Signs
Issues
No identification, regulatory or informational signs were found.

Recommendations
Provide each of these sign types, starting with and identification sign that notes the age and historic designation of the cemetery.

Trash Receptacles and Seating
Issues
One contemporary single seat wood bench is associated with a grave site. No other amenities of this type exist.

Recommendations
Do not provide additional benches or trash receptacles.
NEW MARLBOROUGH CEMETERY

PRESERVATION PLAN
NEW MARLBOROUGH, MASSACHUSETTS

PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE

BY:
WALKER-KLUESING DESIGN GROUP, LANDSCAPE ARCHITECTS
SUZANNE SPENCER-WOOD, CONSULTING ARCHAEOLOGIST
SARA B. CHASE, PRESERVATION CONSULTANT
OCMULGEE ASSOCIATES INC., CONSULTING STRUCTURAL ENGINEERS
CARL CATHCART, CONSULTING ARBORIST

NEW MARLBOROUGH CEMETERY
NORTH FEBRUARY 2001
1" = 100’

LEGEND

Existing
Evergreen/Deciduous Tree
Remove Tree
New Tree
Stump
Contour Line
Erosion
Pedestrian/Vehicular Entrance
UTILITIES

Drainage

Issues

The cemetery drains on the surface to the south-west. The drive is crossed by a shallow swale with a corrugated metal pipe culvert in approximately the center of the cemetery. The culvert may be filled in and partially blocked as the adjacent low area ponds when it rains.

Recommendations

The culvert should be cleaned and/or reset at a lower elevation to insure drainage. The culvert pipe should ideally be replaced with more appropriate materials and/or the ends should be concealed from view.

Water Supply

Issues

No source of water was found inside the cemetery.

Recommendations

Do not add a source of water at this time.

Lighting

Issues

No light fixtures were found inside the cemetery.

Recommendations

Do not provide light fixtures inside the cemetery.

PRIORITIES

High Priority

- Remove trees with large cavities, leaning into cemetery, drives, Nillingdon Road or grave markers.
- Replace trees along drives.
- Relocate Beech.
- Cut tree stumps flush.
- Earth fill at exposed monument foundations.
- Inventory of markers with locations.
- Restore grave markers that present public safety hazards or are structurally unsound.
- Replace dowels in multipart stones that are visibly cracked or spalled.
- Conserve historically significant marble markers in danger of becoming illegible.
- Reset and repair slate markers.
- Repair broken stones if inscriptions are legible and at least 75% of the stone is available.
- Resurface gravel entry drive.
- Provide drainage improvements.
- Restore lawns.
- Provide identification and regulatory signs.

Medium Priority

- Remove trees with large cavities, leaning into the woods, away from drives and grave markers, and not located in the front area where vehicles may drive.
- Replace dowels in multipart stones with visible metal stains at junction between stones.
- Clean legible markers.

Low Priority

- Prune trees with a small amount of dead wood and branches, and trees protected from the winds in close to the edge or other trees.
- Replace trees along perimeter.
- Reset markers that have shifted or are leaning.
- Reevaluate and conserve marble markers currently in satisfactory condition as necessary.
- Fence along Nillingdon Road.
- Informational and interpretive signs.

PRIORITIZED COST ESTIMATES

High Priority

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</tbody>
</table>

Costs associated with grave marker work has not been included. Refer to the General Recommendations section for approximate costs of various types of repair.
Pope Cemetery, also known as Oak Hill Cemetery, is one of 41 historic burial grounds in the city. The 0.74 acre wooded site has a rectangular shape and is moderately sloping from a high point in the northeast corner to the southwest corner near the entrance with an average gradient of about 10%. Development has enveloped the site making it difficult to find and access. All but legally landlocked, three sides of the cemetery are above and bordered by the leveled site of Mobile Home Estates. The entrance faces historic Popes Lane on the west with undeveloped land beyond. Once an important local road, Popes Lane is now an unused paper street. The cemetery represents an immense preservation challenge to the town with major issues of vegetation, erosion, security and stone conservation.

No longer an active cemetery, Pope Cemetery was established in 1755, created from land donated by Jasper Pope when an earlier Pope family cemetery in West Peabody was disturbed during construction of the Boston and Maine Railroad. It contains the remains of at least one Revolutionary War veteran, Nathaniel Pope. The Pope family is represented with greatest number of markers, and they mark both ends of the range of death dates [1763-1887]. The earliest commemorates Nathaniel Pope’s family and was erected after 1779. The earliest other family name is Gilbert, dated 1780. Two or three rows of crude fieldstone markers reveal that the cemetery was probably also used by economically modest community families. A large slate marker is clearly identified as the work of stone carver J. Park of Groton.

National Register Status: Not Inventoried
Current Management: Friends Group
Status: Inactive
Condition: Poor

POPE CEMETERY
PEABODY, 1755

LANDSCAPE CHARACTER, LAWNS AND VEGETATION
Landscape Character
Issues
Left untended, the cemetery has naturalized and become wooded. Hazardous and dead trees are scattered throughout. Large trees with old basal wounds outside the cemetery walls on Popes Lane have extensive decay in the main stem, presenting a significant hazard to neighboring houses and grave markers. Many of the individual trees are not indicated on the plan and most should be removed because they interfere with grave markers, stone walls and each other.
There is a steep, severely eroded bank along about 2/3 of the north side starting at the northeast corner. It is possible that burial markers may have tumbled downslope. While there is no visible indication of grave shafts, private property abuts most of the perimeter and the outside edges of the cemetery was thus inaccessible during the site examination.

Recommendations
Numerous mature oak and hickory throughout the cemetery should be removed to prevent further damage from falling limbs and root growth. Approximately 80% of the trees recommended to be removed are 2 to 8” in diameter. The remainder are generally 9 to 12”. A couple of large trees have had large branch failure and they should be removed. This does not include trees to be kept within 10’ of the north edge to help prevent erosion. Thinning and removals will help preserve the remaining trees with less competition and allow the growth of grass if desired. Trees should be cut by hand or by equipment located off site. All trees and shrubs should be removed to ground level only, and roots treated to prevent regrowth.

Those to remain include 11 Black Oak, 1 Shagbark Hickory and 4 White Pine. They are in fairly good condition, of different age, growing away from grave markers and spaced throughout the cemetery. Two trees will need support cables to help prevent major branch loss. All trees should be pruned of dead branches 2” in diameter and larger to help prevent potential personal injury and property damage as well as improving health and appearance.

From an archaeological perspective, the most pressing need is stabilization of the north and south edges from further erosion. Prior to stabilization efforts, archaeologists should conduct a pedestrian survey along the entire perimeter slope to determine whether grave shafts are visible and conduct a search for burial markers [formal, carved stones or more subtly carved or modified field stones] in the talus at the toe of the slope. Permission from property abutters will be necessary prior to the survey. Archaeological testing upslope along the margins of the cemetery is also essential prior to restoration and repair of walls. This testing will confirm if and how many graves are located on the terrace above the slope. Archaeologists should also excavate one or two test trenches abutting the rough field stones southeast of the Deacon James Putnam marker to confirm the association of grave shafts with the field stones. Finally, archaeologists should excavate test trenches in the open, northern portion of the cemetery to determine whether this section of the cemetery was ever used for interments. These tasks have been enumerated in order of severity so that preservation and documentation efforts can be prioritized in accordance with a restoration budget.

Volunteer Growth
Issues
In this wooded area, most or all of the vegetation is considered volunteer growth.

Recommendations
Shrubs and other larger volunteer growth as previously noted should be cut to ground level and the roots should be treated to prevent regrowth.

Lawns
Issues
The ground surface is covered with a thin layer of forest duff.

Recommendations
Once tree removals occur there will be sufficient light for lower level growth. Lawn or ground cover is recommended to protect against erosion. If this is not provided for, other taller understory material will naturally develop. Care should be taken with renovations for either ground cover or grass particularly around trees to remain because the tree roots are so close to the surface. Filling holes of decaying stumps and sunken graves, and cleaning the area of tree litter will facilitate the planting of grass or ground cover.

Planting
Issues
Other than a few bulbs and some Common Periwinkle, there is little evidence of purposefully planted material.

Recommendations
A screen planting of native material may be desirable at the edges to obscure views of the adjacent trailer park. Additional planting may also be desirable at the entrance if development occurs on the opposite side of Popes Lane.
ACCESS AND SECURITY
Pedestrian and Universal Access
Issues
Access to the site occurs on roads through Mobile Home Estates where no sidewalks are evident. One road dead ends at the north on Popes Lane at which point there is a long, very steep grade down to the entrance along the road right of way. New steps would be required to make this a suitable pedestrian access route. Another road dead ends at the south at which point there is a relatively level unpaved path through private property to the Popes Lane entrance. There is limited parking potential in both dead end street locations. Gradients are too steep for universal access into the site from the entrance.

Recommendations
Consideration should be given to working with whoever develops the parcel on the west side of Popes Lane to include an access drive from the south and public parking near the cemetery entrance. Because gradients are too steep inside the cemetery, universal access into the site is not recommended.

Vehicular Access
Issues
There is potential vehicular access across private property from the south to the entrance along an unpaved path, formerly Popes Lane.

Recommendations
Consideration should be given to improving this route as recommended above.

Security
Issues
Located in a relatively concealed area and with open access on all sides, there is little security afforded to the site. While it is sited above most of the neighbors, some of them provide a watchful presence preventing destructive activities. After years of neglect, a letter in 1992 voiced concern about the deplorable condition of the site. Conditions have improved inside the cemetery since then with the removal of trash and debris, but conditions outside on the west side of the cemetery have gotten worse.

Another aspect of concern about security relates to the fact that there is little definition of the property line. Stone walls along the south and west sides serve as apparent boundaries. There are no such features to the north or east. Encroachment has apparently occurred with a wood shed and stockade fence intruding onto the property at the northwest corner.

Recommendations
A boundary survey is recommended as well as the installation of some form of boundary definition along the north and east sides.

VANDALISM
Issues
Most of the vandalism on this site occurred in the past. It was primarily related to the dumping of trash and a few broken and toppled markers. Considerable refuse has been dumped outside the cemetery opposite the entrance, including concrete pipes, cinder blocks, wood, particle board, wood, glass and plastic.

Recommendations
Remove trash and debris from the site and the immediate surrounding area to present the appearance that this important site is being cared for.
CIRCULATION SYSTEMS AND MATERIALS

Circulation Systems

Issues
There are no formal circulation systems inside the cemetery. A number of informal and ill defined earth paths crisscross the property.

Recommendations
A pathway should be re-established from the entrance to the grave sites. Do not add a road system.

Roads

Issues
There are no roads inside the cemetery.

Recommendations
No roads should be provided inside the cemetery.

Pavement Materials

Issues
There are no paved surfaces on the site.

Recommendations
Surface materials should remain as is until visitation reaches the point where it is not longer practical to maintain this surface. At that time a paved path system should be considered.

GRAVE MARKERS

Headstones and Footstones

Issues
An inventory taken in 1901 documented 46 stones standing at the turn of the century. Today there are a total of about 37 headstones in the cemetery, not including footstones and most here are accompanied with footstones. About half are slate with a mixture of motifs. One of the slate markers is unusually thick at 4 to 6”. About a third are marble and the rest are granite. Two of the polished granite markers are dated 1830 which is surprising for stones of that material. There are no table tombs or monuments. Most of the markers are concentrated in an upslope area in the eastern third of the property, mostly on the south side with a southern orientation. There are 4 more along the south wall further east, and another 2 centrally located at the far east end. Marked by the tops of rubble stones set in relatively straight lines, there is an area of probable graves east of the main area. There is no visible evidence of other burials downslope in the area adjacent to the entrance.

Given the surroundings of the site, it is surprising to find so many markers standing and intact when it has been reported that none have been reset to date. A number should, however, be reset because they are leaning significantly or have toppled. This includes 8 slate, 13 marble and 7 granite markers including footstones. There are also 2 broken slate and 6 broken marble markers.

Recommendations
Reset leaning and toppled grave markers and repair broken markers.

STRUCTURAL ELEMENTS

Perimeter Walls

Issues
There is a stone retaining wall on the Popes Lane side, a freestanding stone wall on the south side and a concrete retaining wall along or near the east edge and the eastern third of the south edge.

The Popes Lane or west wall is a rubble stone wall that curves inward at the entrance and has a split and roughly cut granite cap extending from the entrance. It does not extend all the way to the north edge. The wall has a maximum height of 48” with 42” exposed at the entrance where it gently curves in and less at the ends. There is also a lower stone retaining wall extending into the site beyond the entrance. The cap is 10” high and 12 to 14” wide. South of the entrance, a 10’ section of wall has collapsed below the cap. North of the entrance another 10’ section has collapsed including the cap. North of where the cap ends is another section of collapsed wall.

The south wall is composed of low piled rubble stone wall. About a 40’ long section is missing above the adjacent concrete wall. It appears to have been lost with construction of the concrete wall. There is also extensive erosion and undercutting of the stone wall above much of the adjacent concrete wall. The latter has a dangerous and precipitous drop along the east edge without protective measures.
POPE CEMETERY PRESERVATION PLAN
PEABODY, MASSACHUSETTS

PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE

BY:
WALKER-KLUESING DESIGN GROUP, LANDSCAPE ARCHITECTS
JOYCE CLEMENTS, CONSULTING ARCHAEOLOGIST
NOVEMBER 1999
SARA B. CHASE, PRESERVATION CONSULTANT
1" = 40'
OCMULGEE ASSOCIATES INC., CONSULTING STRUCTURAL ENGINEERS
CARL CATHCART, CONSULTING ARBORIST

LEGEND

- Existing Deciduous Tree
- Existing Evergreen Tree
- Remove Existing Tree
- Remove Existing Vegetation
- New Tree
- Repair Existing Stone Wall
- Pedestrian & Vehicular Entrance
- Property Line
- Repair Erosion

REBUILD 110' LENGTH OF STONE WALL BELOW CAP
EX. CONCRETE RETAINING WALL
REPAIR GAPS IN STONE WALL
REPAIR EROSION
RE-ESTABLISH PATHWAY
REPLACE GATE RESET
REPLACE TRASH & DEBRIS
SELECTIVELY CLEAR ENTIRE CEMETERY SITE
EX. GARAGE
**Recommendations**

Repair the west wall by rebuilding about 10 linear feet of the wall below the cap south of the entrance and resetting one cap length and rebuilding the wall below the cap north of the entrance. Rebuild the wall north of where the cap ends. Work with the owner of the adjacent trailer park to repair damage to the south wall and erosion conditions before more of the wall is lost.

**FENCES AND GATES**

Wood Fences and Gates

*Issues*

Remnants of a former wood gate at the Pope Lane entrance include two 7” square wood post supports with iron bottom hinge pins in each post. The supports are 36” and 41” high with 9’-9” clearance between the posts. The wood is has advanced decay and the entrance gate is missing.

*Recommendations*

Replace the wood gates in a historically appropriate manner based upon historic photographs or sketches of the entrance, if available.

**SITE AMENITIES**

*Issues*

There are no site amenities like signs, trash receptacles or seating.

*Recommendations*

Add directional signs, identification, informational and interpretive signs. Do not add trash receptacles or seating.

**UTILITIES**

Drainage

*Issues*

The site drains on the surface and generally flows toward the south. No drainage structures were found inside the cemetery.

*Recommendations*

No changes are recommended at this time.

Water Supply

*Issues*

No source of water was found inside the cemetery.

*Recommendations*

Do not add a source of water at this time.

Lighting

*Issues*

There are no light fixtures on the site. Some ambient light may be available from the surrounding development.

*Recommendations*

Do not add light fixtures inside the cemetery.

**PRIORITIES**

High Priority

- Perimeter survey and boundary marking
- Archaeological investigations
- Erosion repair
- Vegetative removals and pruning
- Trash and debris removal
- Stone conservation including resetting and repair of slate markers and pin replacement in marbles that are visibly cracked or spalled
- Repair of structural items like the south and west perimeter walls
- Improved access
- Identification sign placement

Medium Priority

- Stone conservation including marbles with visible metal stains at the junction between marker and base
- Establishment of lawn or ground cover
- Fertilization of trees
- Improved parking facilities
- Re-establishment of pathways
- Directional signs

Low Priority

- Stone conservation including granite markers that have shifted or are leaning, and marbles currently in satisfactory condition
- Replacement of wood gate
- Informational and interpretive signs
- Additional screen planting
This rectangular 0.63 acre inactive cemetery is prominently located on High Street, Route 35, and serves as the only downtown green space. It is sited on the street between Friendly’s parking lot to south [separated by a wood fence] and a long two story building to the north. A wide grass strip separates the site from Gould Street to west and residential development on the far side. A relatively flat site, gently sloping from north to south, it has one pronounced shallow mound near the center commemorating the death of Revolutionary War Veteran Edmund Putnam and some much shallower mounds in other locations.

Originally known as Porter’s Burial Ground, it was first used for burial around 1758. Col. Jeremiah Page sold the plot in 1805 to Israel Hutchinson, Jr., Thomas Putnam and Caleb Oakes “for ten cents.” They were to “forever permit the inhabitants of that part of Danvers called the Neck and all other persons who have been so accustomed, to occupy the same land as a Burying Ground, forever... keeping always the same ground enclosed with a decent fence not less than five feet high at their own charge.”

The town purchased the land in 1870 and two years later voted to place a suitable fence around the burial ground and close it for burial purposes. Today High Street Cemetery derives its principal significance as the burial place for town military veterans and contains the graves of participants of three wars: Revolutionary War [14], Civil War [3] and Spanish-American War [5]. Four of the Revolutionary War veterans were moved to this site by the town from small outlying plot cemeteries in 1928-29.
The archaeological evidence from the Danvers cemetery is well suited to interpretations of episodic repair and renewal of archaeological resources. Visible evidence of changes to the wall and entranceway could complement documentary references of modification and repair available in the Town Records. Because of its association with military veterans, the cemetery also provides an opportunity to search military records for biographical information on the individuals buried in the cemetery. The large Masonic marker symbolizes the frequent association between Freemasonry and the military, which may stimulate research for area students. Furthermore, clearly visible stylistic changes in burial markers reveals changing attitudes toward death and dying. As it has in the past, the Danvers cemetery can be creatively used by area teachers to discuss patterns in local history, archaeology, religion and social ideology.

LANDSCAPE CHARACTER, LAWNS AND VEGETATION

Landscape Character

Issues

The cemetery has an open character with trees at the perimeter on three sides and a building edging the fourth side. Early postcards show large trees within the cemetery where none exist today. A large depression near the cannon in the southeast quadrant may be the result of a tree that was removed some time ago.

Recommendations

The current open landscape character is appropriate for a cemetery of this vintage.

Planting

Issues

There are 8 large deciduous trees inside the site and 12 more immediately outside the perimeter of the site. The former includes three 8-12” caliper Maples along the east side, a 24” DBH Maple along the south side and 4 young deciduous trees along the west side. Immediately outside the site are 8 small deciduous trees along the High Street verge, a 12” Locust and 24” Oak along the south side as well as 2 large Maples near the northwest corner. The one nearest the Porter family plot contains dead wood and represents a hazard to the historic resources of the cemetery. In addition there is a Yew and a volunteer Cherry in the northwest corner.

Recommendations

Where possible, new or replacement trees should be placed outside the cemetery walls. This is achievable on the east and west sides and may be so on the south side with the cooperation of the adjacent property owner. It is not possible on the north side. Large deciduous shade trees should be added along the north edge to screen the visual intrusiveness of the adjacent building in locations where they will not impact grave markers or walls. As a precautionary measure, an archaeologist should monitor all the planting procedures within the cemetery.

Principal impacts to the archaeological resources currently result from tree growth which is displacing stone walls and markers. The large Maple near the Porter family plot should be safety pruned and trees pushing into walls should be removed. Dead branches should be removed using equipment placed outside the cemetery.
Volunteer Growth

Issues
The stumps of former volunteer growth remain along the south, west and north edges. Two areas along the south edge are resprouting. Volunteer shrub growth has dislocated a large marble marker in the northwestern corner.

Recommendations
Continue to keep the site free of volunteer growth. Carefully cut the shrub roots and branches growing through the marble marker and maintain the stem at ground level.

Lawns

Issues
Lawn cover is thin with bare spots, moss and depressions. Maintenance by the Grounds division of DPW includes mowing, leaf raking and trash removal. It was reported that in recent times the site was not mowed for an entire year.

Recommendations
Repair lawn areas. Consider adding a source of water to improve the probability of successful lawn establishment.

ACCESS AND SECURITY

Pedestrian and Universal Access

Issues
A concrete sidewalk along the High Street right of way provides pedestrian access to the single at grade entrance gate. The gate opening between 14” square by 5’-5” high granite posts is approximately 8’-5” with about an 8’ clearance. Pedestrian openings at each side of the gate are approximately 37” wide with 9” square by 26” high granite posts centered in each opening. There are also 15’ square by 4’ high granite posts on the wall side of each opening. All of the posts have peaked tops.

Where the site is relatively level, there are no paved paths inside the cemetery which limits universal access.

Recommendations
No changes are recommended at this time.

Vehicular Access

Issues
The gated entrance on High Street provides vehicular access for maintenance vehicles.

Recommendations
No changes are recommended.

Security

Issues
There is no security to the site because it is enclosed with low perimeter walls and the gate is fixed open.

Recommendations
The prominent, visible location of the cemetery diminishes the importance of additional security measures.

VANDALISM

Issues
This highly visible, exposed site exhibits little evidence of vandalism in recent times. There was some broken glass and a little trash. The few toppled or broken markers and shifted marble obelisk suggest that vandalism has occurred in the past.

Recommendations
Vandalism is not a significant problem and no changes are recommended at this time other than grave marker repair.
CIRCULATION SYSTEMS AND MATERIALS

Circulation Systems

Issues
There is no formal circulation system. Covered with grass throughout, the circulation system is informal. There is an apparent path west from the gate and markers are oriented perpendicular to this route in north-south lines, facing east and west.

Recommendations
Maintain the existing informal system.

Steps

Issues
One set of rough cut granite steps exists at the Porter family plot. With two 7 to 9" high by 12" wide treads and three steps up from the cemetery to the plot, the uneven treads need to be reset.

Recommendations
Reset the two treads.

Pavement Materials

Issues
All walking surfaces are grass with no defined circulation system.

Recommendations
Surface materials should remain grass until visitation reaches the point where it is not longer practical to maintain lawn. At that time a paved path system should be considered.

GRAVE MARKERS

Headstones and Footstones

Issues
The cemetery contains approximately 135 grave markers dated from 1758 to 1875, not including footstones. They are made up of about 1/3 slate and 2/3 marble with one granite marker. There are two horizontal brownstone bases [one with a horizontal marble marker] and at least one other brownstone base. Many of the slate markers are decorated with an urn or urn and willow motif. The 1792 Mrs. Lydia Green stone has a winged soul and the 1808 William Mercy stone has a cosmological sun symbol. The latter also has mower damage. Some of the slate stones may have been cut in the manner of the Haverhill carvers, the ornamental style in Essex County. The Porter family plot marble obelisk dates to 1836 and the enclosure contains space for about 8 adult graves. A marble marker in the center of the cemetery contains a well preserved Masonic emblem. There are no table tombs, monuments or mound tombs.

Recommendations
The first priority is to reset significantly leaning and toppled stones. Reset those without a base or foundation with sufficient gravel for drainage and reduced frost heaving. Reset all toppled stones with bases on deeper and perhaps larger foundations beneath the base stones.

Many of the marble stones are suffering from atmospheric deterioration. Approximately 7 of the slate and 14 of the marble markers are leaning. Another 2 slate and 12 marble are lying flat or against other objects. Some of those lying flat are in danger of being covered with earth or turf and disappearing. A number of stones are broken including 2 slate and 12 marble markers. The short marble obelisk in the Porter family plot is set on a granite base. The obelisk is leaning and portions of it have shifted. The latter is probably the result of former vandalism.

Clean, repair and reset all markers that are fallen and/or broken. Another high priority is to remove the metal pins from two part stones and reset them with noncorroding anchors or dowel pins. Reset the obelisk including its base and anchor the obelisk to the base. Clean marble markers that are sound and upright for legibility. Removing surface biological growths will improve the appearance of the stones and slow down weathering.

Open space in the vicinity of the field artillery piece suggests that unmarked graves may be located in the southeastern corner. There is however no documentary evidence of a pauper’s section. A large cemetery near the Town Poor House provided burial space for 19th century town poor.

Recommendations
The first priority is to reset significantly leaning and toppled stones. Reset those without a base or foundation with sufficient gravel for drainage and reduced frost heaving. Reset all toppled stones with bases on deeper and perhaps larger foundations beneath the base stones.

Most of the marble markers require immediate conservation. A professional stone conservator should prepare a program of work specifying appropriate methods and materials for use, and should be on hand to supervise any work done by local personnel.

Remove the metal pins from two part stones and reset them with noncorroding anchors or dowel pins. Reset the obelisk including its base and anchor the obelisk to the base. Clean marble markers that are sound and upright for legibility. Removing surface biological growths will improve the appearance of the stones and slow down weathering.
STRUCTURAL ELEMENTS
Perimeter Walls

Issues
The stone wall on all four sides has a split and rough cut granite cap. It appears to have been constructed and repaired episodically with walls on the north and west built with large rounded fieldstones while the south wall was built from smaller fieldstones. The west or Gould Street wall contains several massive fieldstones, some of which are now out of alignment, particularly in the northwest corner.

The wall on the High Street edge varies from 18 to 32” high and has a 12” wide cap. The cap needs resetting in several areas. The south wall is wider and the cap is offset on the south edge. The west wall is also wider with the cap offset on the cemetery side. There is a large loose stone in the wall north of the Porter family plot which should be considered a public safety hazard.

The wall appears in reasonable shape although it has various heavy applications of mortar repairs with inappropriate color choices [i.e., too light and gray in color] and numerous patches utilizing bricks. Where mortar is present, most of it is loose.

A portion near the center of the west side has apparently been rebuilt near some stumps inside the wall. On the south side a large Maple is pushing on the inside of the wall near the east end. A stump near the center caused the wall to lean slightly to the south, and the west end is leaning significantly south at some sprouts of former volunteer growth. Tree growth at the northwestern corner has displaced the wall and massive tree roots intrude under the wall into the cemetery. Along the north wall a large fragment of poured cement and a marble plinth have been used to repair the wall beneath a downspout from the adjacent building. It was reported that wall maintenance and repairs are provided by the Grounds division of the DPW.

Recommendations
Reset the tops of three 20’ long sections south of the entrance on High Street. Check the entire wall for loose stones and reset as required. Provide additional matching stones as necessary for structural soundness. Carefully remove all loose mortar and repoint with a high lime mortar. A wall with stones as irregular as this needs a very flexible mortar.

Interior Walls

Issues
The Porter family plot on the west edge of the site is raised about the elevation of the rest of the cemetery with a coursed Rockport granite wall. It has a 12” wide by 9” high rough cut granite cap that has slightly shifted in alignment.

Recommendations
Reset cap.

Edging of Family Plots

Issues
The Major Joseph Stearns plot has 8 granite bases. Immediately southwest, are two granite corner posts opposite a long granite slab that once served as the base for 3 markers. There are also granite corner posts at two other family plots.

Recommendations
No changes are recommended.
FENCES AND GATES
Cast Iron Fences and Gates
Issues
The High Street entrance has a wrought iron gate dated 1843. High Street and the adjacent public sidewalk was raised approximately 6” at the gate at some point, burying the bottom of the gate into the grade. Contact with the earth is causing the gate to rust. A semicircular depression at the entranceway indicates that a gate of a different type may have preceded the iron gate.

An iron fence once sat on top of the perimeter stone wall on all four sides of the cemetery as evidenced by drill holes and remnants of post bottoms in the tops of the walls. The fence is no longer there and the post stubs are rusting, which will eventually damage the wall. It is assumed that the fence dates to the same period as the iron gate.

Recommendations
Adjust the grade at the gate so that the gate swings freely while insuring proper drainage to avoid entrapment of water at the entrance. Clean rusting metal to bright metal and paint the gate and the post stubs.

Research photographic and other records to ascertain the character of the earlier iron fence that was once located on top of the stone wall. Consider replication of the fence.

Interior Fences and Gates at Family Plots
Issues
At one time there were iron fences around the Porter family plot and the Major Joseph Stearns plot. Both are missing.

Recommendations
Research photographic and other records to ascertain the character of the former iron fence and gate at the Porter family plot. Consider replication of the fence. Do not replace the fence and gate at the Stearns family plot for maintenance reasons.

Wood Fences
Issues
Nineteenth century postcards indicate a white painted wood picket fence in the background, possibly surrounding the cemetery rather than being mounted on top of the perimeter walls. There is no visual evidence to indicate that a picket fence was anchored to the existing stone walls.

Recommendations
Do not replace the wood picket fence.

SITE AMENITIES
Signs
Issues
The site does not have an identification sign or any informational or interpretive signs.

Recommendations
The recommendation to provide an appropriate identification sign at the High Street entrance has been acted upon by the Commission. Provide informational and interpretive signs, particularly at the Porter family plot and war veteran grave sites.

Trash Receptacles
Issues
A single green painted 55 gallon drum is located immediately inside the High Street entrance.

Recommendations
While functional and inexpensive, the character of the receptacle would be improved if it was smaller and had a stronger visual relationship with the wrought iron gate. It would also have been preferable to locate the receptacle outside the gate if the sidewalk were wider. Given the narrowness of the walk, the location is acceptable.

Seating
Issues
There are no benches inside the cemetery.

Recommendations
Do not provide benches.
Danvers - 239
LEGEND

- Existing Tree
- New Tree
- Remove Existing Tree
- Existing Stone Wall
- Existing Wood Fence
- Vehicular Entrance

HIGH STREET CEMETERY
PRESERVATION PLAN
DANVERS, MASSACHUSETTS

HIGH STREET

PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE

BY:
WALKER-KLUESING DESIGN GROUP, LANDSCAPE ARCHITECTS
JOYCE CLEMENTS, CONSULTING ARCHAEOLOGIST
NOVEMBER 1999
SARA B. CHASE, PRESERVATION CONSULTANT
1" = 40'
OCMULGEE ASSOCIATES INC., CONSULTING STRUCTURAL ENGINEERS
CARL CATHCART, CONSULTING ARBORIST

Danvers - 239
Flagpoles

Issues
There are no flagpoles associated with the cemetery.

Recommendations
Do not provide a flagpole.

Cannon

Issues
The Spanish-American War Veterans memorial field artillery piece and carriage, a 1917 WWI piece, was donated to commemorate veterans. It provides a visual symbol of the cemetery’s association with war veterans. Located in the southeast corner, the piece rests on a concrete base and is painted green with black wheels. The wood wheel spokes are deteriorated.

Recommendations
Clean and restore the field artillery piece and carriage. Paint colors should be historically appropriate.

UTILITIES

Drainage

Issues
The site drains on the surface from north to south with low points in the southwest and southeast corners. Four roof leaders empty onto the site from the adjacent building on the north side. No drain structures were found on site.

Recommendations
Work with the adjacent property owner to resolve drainage from roof leaders before it becomes a problem.

Water Supply

Issues
No source of water was found inside the cemetery.

Recommendations
Water is beneficial in times of drought and would help to reestablish lawns. Work with adjacent property owners to provide hose bibbs or provide a source of water in the public right of way outside cemetery walls.

Lighting

Issues
There are no light fixtures inside the site. Street lights on utility poles associated with High Street and Gould Street provide some illumination inside the site.

Recommendations
Do not provide light fixtures inside the cemetery.

PRIORITIES

High Priority
• Stone conservation including resetting and repair of markers and pin replacement in marble markers that are visibly cracked or spalled
• Vegetative pruning
• Gate repair
• Repair of perimeter walls
• Identification sign placement

Medium Priority
• Stone conservation including marbles with visible metal stains at the junction between marker and base
• Porter family plot wall cap and tread repair
• Field artillery piece and carriage restoration
• Tree planting
• Lawn repairs
• Fertilization of trees
• Consideration of adding water supply

Low Priority
• Stone conservation including markers that have shifted or are leaning, and marbles currently in satisfactory condition
• Informational and interpretive signs
• Trash receptacle replacement
• Consideration of replicating the iron fence on top of the perimeter wall
The Village Cemetery is a rectangularly shaped site approximately one acre in size in the William Street Historic District at the corner of Center and Franklin Streets. It is a gently sloping site except where it sharply slopes down toward Center Street. The site has residential and civic buildings on two sides and is enclosed by a variety of wood fences and stone walls.

Although Tisbury was first settled in 1669, the origin of Old Village Cemetery, formerly known as Proprietors’ Burying Ground, is not known. It has been in use since at least since 1770 as noted by the earliest grave marker found at a single plot for Abigail West Daggett, who died in 1770.

Purchasers of lots in the three 19th century developments in the District were guaranteed plots in and access to this cemetery. In 1803 burial plots were sold to 22 landowners and most of the grave-stones date in early 1800s. The cemetery was extended in 1832 with the gift of Capt. William Daggett to Center Street. There is a Daggett plot near the corner of Center and Franklin Streets as well as the Town receiving tomb.

In addition to being the resting place of many notable Vineyard families, actress Katherine Cornell, a Tisbury resident who gave funds for the restoration of Town Hall is buried here as well as two of the three Liberty Pole heroines, Maria Allen Smith and Polly Daggett Hillman, local girls who raised a liberty pole in defiance of the British.
LANDSCAPE CHARACTER, LAWNS AND VEGETATION

Landscape Character

Issues
Tree cover is mostly mature and approximately 75% evergreen and 25% deciduous which is somewhat unusual. The year round shade created by the evergreens is a contributing factor to the biological growth on many of the grave markers. The age of the large Spruce is a concern, particularly when recent wind damage caused broken lower limbs in two of them.

Recommendations
There is a general need for pruning the larger trees to remove dead wood and lighten crowns.

Planting

Issues
Tree cover is primarily evergreen with 17 Spruce and 13 Cedar. Deciduous trees include 4 Larch, 3 Cherry, 2 Oak, 1 Maple and 1 Holly. An Oak and Cherry stump are evident. Shrubs include one each of Azalea, Barberry, Hydrangea and Yew. There are also two Falsecypress and several Yucca as well as some English Ivy.

Recommendations
The Cedar near the center of the cemetery is overcrowded by a large Spruce and should be removed as should the Cedar near the Larch in the southwest quadrant. The remaining Cherry next to the receiving tomb should be removed before it impacts the tomb like the former Cherry impacted the wall. The Cherry near the Town Hall growing in the fence line should at least be pruned if not removed. Additional large shade trees should be planted at the perimeter of the cemetery in locations where they will not impact grave markers or retaining walls.

Volunteer Growth

Issues
Volunteer growth was evident along the iron fence at the Norton family plot and along the southern edge at the east side.

Recommendations
Remove all volunteer growth.

Lawns

Issues
Lawns were in fair to poor condition with a few bare spots, some herbaceous weeds, and moss on north facing slopes on the north and west sides. Erosion was evident on the slope facing Center Street.

Recommendations
Repair lawn areas.

ACCESS AND SECURITY

Pedestrian and Universal Access

Issues
The cemetery is accessible to pedestrians from Franklin Street and Center Street through latched, but not locked, pedestrian gates as well as through an open pedestrian easement adjacent to Town Hall. The slopes at the Center Street entrance are accessible but one is confronted with a steep slope once inside the gate. The Franklin Street entrance has steps. The path adjacent to Town Hall appears to be gentle enough to be considered accessible.

Recommendations
The steps at the Franklin Street entrance should be removed and the area regraded to allow universal access. Work should be performed in conjunction with an archaeologist to insure protection of any potential historic resource at the entrance. The path adjacent to Town Hall should also be utilized as an accessible route.

Vehicular Access

Issues
Service vehicles access the cemetery with the removal of selected fence panels on Franklin and Center Streets.

Recommendations
This access procedure appears acceptable and has not visibly harmed the site.

Security

Issues
While the cemetery is essentially enclosed with fences and gates, there is open access adjacent to Town Hall and none of the gates are locked. The cemetery is reportedly used for short cuts, particularly during meetings at Town Hall.

Recommendations
Security does not appear to be an issue in this cemetery and no changes are recommended.

VANDALISM

Issues
The impact of vandalism was evident, although not excessively so, in the form of four toppled headstones. No broken glass or paint graffiti was evident. The Town reported that about 10 headstones typically topple over each year [for reasons unknown] and that they have a program to reset them.

Recommendations
Vandalism does not appear to be a significant problem and remedial measures are in place to rectify damage caused by such activities. No changes are recommended.
CIRCULATION SYSTEMS AND MATERIALS
Circulation Systems
Issues
Existing paths are grass and there are no roads inside the cemetery. The path system is composed of a central north-south path that intersects with two east-west paths. The north-south path connects the Town Hall with the Center Street gate. There is one east-west path along the north edge and another in a central location connecting with the Franklin Street gate.

Recommendations
Maintain the existing path system. Do not add a road system.

Walks
Issues
A path system exists although it is not clearly apparent to visitors. Headstones impede through access at each path, and the grass surface blends with adjacent grass surfaces.

Recommendations
The path system should remain as it is. Improvement could impact the disposition of headstones which would not be desirable.

Steps
Issues
There are steps in two locations in the cemetery including the Franklin Street gate where there is a stone step and a tree root forming a second step. There are also stone steps up to the Cornell memorial bench adjacent to Town Hall.

Recommendations
Refer to recommendations regarding pedestrian and universal access.

Pavement Materials
Issues
All surface materials are grass.

Recommendations
Surface materials should remain grass until visitation reaches the point where it is no longer practical to maintain lawn. At that time a paved path system should be considered.

GRAVE MARKERS
Headstones and Footstones
Issues
There are approximately 475 primarily early 19th century grave markers fairly densely distributed in this one acre cemetery. No footstones were evident. The vast majority of markers are marble, about half of which are set in slate or granite bases. Most are pinned to their bases, but a fair number are set into slots in the base stone. Many are leaning out of vertical position with 4 topped over and 1 almost buried. Two others are leaning against a tree and 8 are leaning against a family plot iron fence. A marble marker is encapsulated by the roots of a Spruce almost to the point of disappearing.

Recommendations
As a first cemetery wide priority, slate markers that are leaning should be made plumb. A stone conservator should examine each stone with metal anchors and/or dowels to determine the feasibility of systematically replacing them with more nonreactive materials. Markers should be reset on existing granite bases with pins. Similarly, markers should be reset on slate bases in good condition. Slate bases that are spalled or split pose special problems as to how to reestablish a firm footing for markers. Solutions should be considered for each stone individually. Markers set in slotted bases should be reset without pins, using lead strip in the gap between die and base, first having removed all debris from the opening and allowed the base stone to dry for a day or two after washing. Foundations should be stabilized as necessary prior to repinning markers. Exposed foundation materials at larger markers should be covered with earth fill. No cleaning should be permitted for marble markers with unstable or sugaring surfaces. Yellow biological growths on the surface of markers should be removed if the stone is stable to the touch.

Slate and granite each account for about 10% of the markers and are generally in good to excellent condition. The marble memorials, on the other hand, are eroded and subjected to extensive green and black biological growths. Many are attached to their base stone with metal pins, which are now corroding and causing cracks. A number of stones suffer from unfortunate prior repair techniques including bronze straps and inappropriately colored epoxy adhesives. There are several broken markers that have not been repaired yet. Settlement is apparent at the bases of the larger markers, exposing foundation materials. There is no evidence of mower damage.
STRUCTURAL ELEMENTS
Perimeter Walls

Issues
Franklin Street Stone Wall: This wall begins as high as a curb and gradually increases to about 30” high where it ends next to the receiving tomb. The stone wall consists of mortared fieldstones ranging in size from 12” to 24” at the bottom of the wall to 6” diameter at the top. The mortar is generally hard and tight with little if any cracking. However, as the wall passes by the receiving tomb, it gradually leans out over the sidewalk until it is about 2” out of plumb at the corner next to the receiving tomb. A triangular corner post has separated from the mortared stonework. Roughly cut granite posts are embedded at regular intervals into the fieldstone work. These posts are similar to those supporting the picket fencing and also occur along Center Street on the north and along the south property line.

Northwest Retaining Wall: Although the ground along Center Street is lower than the rest of the cemetery, at a point 69’ from the northeast corner it rises abruptly and is considerably higher than the adjacent properties along the east property line. The difference in ground elevation is retained by a stone wall consisting of large granite stones with dressed or broken faces. The 69’ long Center Street section of retaining wall is also capping with three courses of concrete masonry. The mortar between the lower stones is generally cracked where the mortar meets the stones, with crack widths up to 1/8”. The concrete masonry units are a standard 8” wide and 8” high, but an unusual 24” long. The top course consists of solid, beveled cap units. Water infiltration into the masonry units has caused extension deterioration in the faces of the units and at the mortar joints. Unit faces have a random cracking pattern resembling spider webs. These cracks also exhibit efflorescence from salts leaching through the masonry. Mortar is cracked or missing at several locations. The concrete masonry appears to have shifted near the corner of the retaining wall.

West Retaining Wall: The granite stone wall seen on Center Street turns the corner and runs along the east property line but without the concrete masonry courses. Except for a few feet at the southern end, this 133’ long wall is completely hidden by overgrown ivy. Where it is visible, the mortar is cracked, loose or missing.

Southwest and South Decorative Stone Walls: From the end of the picket fence to the southeast corner of the cemetery and along most of the south property line, the cemetery is bounded by a decorative stone wall. It is a freestanding wall that is 6’ high on the outside and about 3’ high on the cemetery side. Only 10 to 12” wide at the top, it consists of uniform 4 to 6” diameter round stones mortared with deeply recessed joints. The mortar is generally tight and free of cracks, although there are many random holes or gaps in the mortar. The southeast corner of the wall appears to have been built first with a freestanding stone corner post, followed with the rest of the wall butted to the faces of the post. As a result of the vertical joint and lack of interlocking stones at the post, there is a large 3/4” crack at one of the interfaces.

Extending out of the freestanding stone wall is a railing system made of pipe stanchions and rails. Although the ends of the stanchions embedded in the stone wall do not appear to have corroded or damaged the wall, the visible sections of handrail and stanchions are severely corroded.
About 42' from the southeast corner, the freestanding stone wall meets a one story stone building, where it joins seamlessly with the building walls, which are also built of the same small, round stones. The 26' wide building is an addition to the clapboarded town hall. At the junction of the addition and the clapboarded wall, the stone wall continues as a low wall but it is incorporated into the foundation wall of the main town hall structure, although it stands 8' proud of the clapboarded walls. The decorative stone wall stops about 40' along the town hall wall, whereas the town hall continues along the property line. The stonework incorporated into the two buildings is in excellent condition although mortar repointing at the junction between the addition and the main Town Hall is lighter in color than the grayer color of the older mortar.

Recommendations
The fieldstone retaining wall adjacent to the receiving tomb tilts outward and should be rebuilt plumb. Excavate the earth between the west side of the receiving tomb and the stone retaining wall. Inspect and stabilize the west wall of the tomb if any movement has occurred. This may be the cause of the tilt in the retaining wall. Inspect the back of the stone retaining wall to determine its condition and thickness at the base. If the thickness is insufficient for a gravity retaining wall, less than 2' for a 30' high wall, dismantle the stone wall and rebuild it with additional stones at the base.

The upper part of the stone retaining wall at the northeast corner of the cemetery on Center Street should be removed. Remove the concrete masonry units from the top of the wall and remove the ivy along the east property line. Repoint the stonework of the base wall along Center Street and the east property line.

Minor repairs are needed at the southeast corner of the decorative stone wall. Repair the cracked joint at the southeast corner and remove the metal railing on top.

Interior Walls
Issues
At one location, near the Cleveland family plot, within the cemetery where the earth rises sharply from Center Street into the main plateau, there is a 34" high retaining wall consisting of rusticated concrete masonry units. About 25% of the units have damaged faces or disintegrating interiors due to moisture passing through the units from the earth side to the open side. This wall is capped with 2" of concrete. The concrete masonry units are typical of an early period in the history of concrete or cinder block manufacturing. These units may have been manufactured in the 1910’s or 1920’s by a local company using a Sears Roebuck press fitted with “rock face” patterns to simulate the appearance of stone. The rusticated pattern seen at the cemetery was one of the most popular, although other patterns also were available.

Recommendations
Repair the retaining wall adjacent to the Cleveland plot by dismantling the wall and setting aside intact concrete block units for reuse. Replace severely damaged units with matching units salvaged from other sites. Alternatively, replace the damaged units with roughly cut granite units. Build a concrete footing and reassemble the wall using through wall flashing at the top and a waterproofing membrane on the earth side.

Mound Tomb Structure
Issues
The front of the Town receiving tomb consists of roughly dressed, 6" thick slabs of pink granite. The joints of the jambs and lintel are open but there is no significant displacement or settlement. Although the iron door of the tomb is sealed shut, the upper sides of the tomb are visible where the earth has eroded away. The earth covered roof appears to be supported by granite slabs spanning from wall to wall. However, the walls are still covered with earth and could not be seen. There is erosion on the banks of the mound tomb. The iron door appears in good condition.

Recommendations
In general, the tomb appears to be in good condition but a restoration effort should include dismantling the facade stones of the receiving tomb, cleaning the joints and reconditioning the foundation stones, and reassembling them in new beds of mortar. The tomb door should be opened to inspect the walls and roof from the inside to determine if further work is needed. The earth banked around the sides of the vault should be regraded to eliminate signs of erosion.

Edging of Family Plots
Issues
Six of the family plots are edged. The Norton Plot is edged with an iron fence, the Hursell plot with rough cut rectangular granite edging, and four others with free standing granite posts. Three of the latter had chain barriers, and one, the Dillingham plot, has horizontal iron rails. One side of the one at the northwest corner, the Daggett plot, is edged with stone in addition to granite posts. There is also granite edging around the raised platform at the Cornell memorial bench.
The iron fence and rails of the Norton and Dillingham plots are discussed under interior fences and gates at family plots. The Hursell plot granite edging is composed of long units, 6” wide by 13” deep, that are pinned together at the corners. While the western and southern curbs are mostly embedded into the ground, the eastern and northern curbs have been fully exposed by settlement and erosion of the surrounding ground. Although the curbs are bedded on a layer of fieldstones, the northern curb has rotated outward at the top and the eastern curb has rotated outward at the bottom.

In the three family plots with granite posts and chain barriers, all of the chain is missing except for a short fragment left in place at one post. One of the granite posts is broken at the Smith plot.

**Recommendations**
The rotated granite edging at the Hursell plot should be reset and the ground level should be raised adjacent to it. The corner pins may be reused if they are undamaged. If damaged, they should be replaced with matching stainless steel pins when the stones are reset. Chain barriers should be replaced to match the existing fragment. Repair the broken granite post at the Smith plot and clean all granite posts.

**FENCES AND GATES**

**Perimeter Wood Fences**

**Issues**
The iron fence and gate at family plots.

**Franklin Street Picket Fencing:** Although contemporary, this wood picket fence may have been a replacement of a more historic element. The 4’ high picket fence runs from the southwest corner of the cemetery along Franklin Street for about 109’. The pickets are nailed to a 2x8” top rail that lies flatwise across the tops of roughly cut granite posts. As the ground slopes downward toward the north, the last 30’ of the picket fence overlaps a stone retaining wall. The pickets, 2x8” top rails and 2x4” bottom rails are untreated Spruce or Fir. Although it has been recently painted, there is considerable moss and mildew on the fence elements and localized areas of rot in the top rail, especially where sections are spliced with a ship lap detail. The worst damage occurs in the first two sections at the south end. Pickets in the third section are wracked.

**Center Street Picket Fencing.** The 198’ long Center Street fencing is generally the same as the Franklin Street picket fencing, except it is in better condition with its fresh coat of paint. Three or four sections near the corner at Franklin Street have peeling paint and mildew, but there is no evidence of rot. A few random pickets are broken or loose. Three posts are pressure treated 4x4s rather than the typical roughly cut granite.

**West Picket Fencing:** As the height of the stone wall becomes lower along the property line, 68’ of it is topped with an unpainted picket fence. The picket fencing is in fair condition overall but has considerable rot where the rails are spliced with ship lap joints. The southernmost section of fencing has fallen over.

**Miscellaneous South Fencing:** Beyond the town hall, the remaining fencing on the south property line consists of a solid board fence with a section of foundation wall adjacent to a neighboring barn. This section of fencing and wall appear to belong to the adjacent property owner.

**Recommendations**
Some localized maintenance is needed at the picket fencing along Franklin and Center Street. Maintain the picket fencing on Franklin and Center Streets by inspecting it annually and replacing damaged pickets and rails. Replace the 4x4” wood posts with roughly cut granite posts. The fencing should be painted on a regular cycle. Annual maintenance can be minimized if replacements parts are made with pressure treated wood. Replace the picket fencing on the east property line with a new picket fence. Run the new fence along the entire length on top of the stone retaining wall, including the 69’ along Center Street.

**Interior Fences and Gates at Family Plots**

**Issues**
The Norton family plot is enclosed by an iron fence and gate. The fence is corroded with rust and some of the fence components are missing. The Dillingham family plot is enclosed by granite posts with iron rails and a gate. Four of the rail sections, upper and lower round iron rails, and the gate are intact. Five of the rail sections missing and four of the granite posts are broken. The latter was apparently caused by rust jacking at the ends of the iron rails.

**Recommendations**
Restore all ironwork and replace missing components to match existing. Repair the broken granite posts at the Dillingham plot and clean all granite posts.
SITE AMENITIES

Signs
Issues
There are no identification or interpretive signs. The single sign found was a “No Parking” sign secured to removable fence panel on Center Street that is used for vehicular access.

Recommendations
Add an identification sign at the Franklin Street entrance. Add interpretive signs and/or informational brochures at a later date.

Trash Receptacles
Issues
None

Recommendations
Do not add trash receptacles.

Seating
Issues
The only bench in the cemetery is the marble Cornell Memorial Bench adjacent to Town Hall.

Recommendations
Do not add other benches.

UTILITIES

Drainage
Issues
No drainage structures were found inside the cemetery. In general, the site drains on the surface and flows from the south side to Center Street on the north side. There is a concentrated flow of surface drainage along the pedestrian way adjacent to Town Hall into the cemetery resulting in sediment deposits in the cemetery. Roof runoff from the building uses the same route. Erosion was evident in the pedestrian way, but not in the cemetery.

Recommendations
Resolve the erosion and sedimentation issues related to the pedestrian way adjacent to Town Hall.

Water Supply
Issues
No source of water was found inside the cemetery.

Recommendations
Water is beneficial in times of drought. Explore a means of adding a hose bibb on the side of the Town Hall facing the cemetery.

Lighting
Issues
No light fixtures were found. There are overhead wires crossing the northeast corner of the cemetery. The wires do not appear to be connected to the adjacent residence.

Recommendations
Do not add light fixtures inside the cemetery. If supplemental light is found to be desirable, consider adding it to the Town Hall facade and/or utility poles on the streets adjacent to the cemetery. Investigate the possibility of removing the overhead wires crossing the northeast corner of the cemetery.

PRIORITIES

High Priority
- Stone conservation including resetting and repair of slate markers and pin replacement in marbles that are visibly cracked or spalled
- Vegetative removals and pruning
- Perimeter and interior fence and gate restoration
- Repair of structural items like perimeter and interior walls and the mound tomb
- Erosion and lawn repairs
- Identification sign placement

Medium Priority
- Stone conservation including marbles with visible metal stains at the junction between marker and base
- Family plot restoration and repair
- Fertilization of trees
- Consideration of adding water supply

Low Priority
- Stone conservation including granite markers that have shifted or are leaning, and marbles currently in satisfactory condition
- Informational and interpretive signs
- Additional planting
- Consideration of removing overhead wires
Center Cemetery is a 2.4 acre long narrow rectangular site in Worthington Center. It contains what may be the oldest grave markers in the town including Nahum Eager, one of the first residents or settlers of the town and Rev. Huntington, the first minister. Many of the markers at the west end of the site were moved there from the former meeting house and cemetery site on a nearby hill. Many Brewsters are buried here, direct descendants of passengers on the Mayflower voyage, as well as veterans of Revolutionary War and Civil War. The oldest legible stone is that of Ashel Rowe [d 1790]. Although difficult to read, the slate Kinne marker may date from 1777.

Ringville Cemetery is named after the Ring family who owned a significant amount of land in the area. Raised above the gravel Witt Hill Road with a striking stone retaining wall, the cemetery is a short distance south of Center Cemetery. The parcel has an irregular shape sloping south and toward the bordering Watts Stream to the west. A recent addition, increasing the size of the cemetery to 3.1 acres, reportedly has limited usefulness for burials because of ledge and a high water table. 1814 was the earliest legible date seen in a brief survey of the grave markers.

Center and Ringville Cemeteries represent 2 of the 6 historic cemeteries in the town. Along with North Cemetery, these 3 remain active while the other 3 [Converse, Benjamin and Brewster] are closed and inactive. Recent efforts of the Historical Society, volunteers and Boy Scouts have resulted in the initial restoration of Brewster Cemetery where some cleaning work has been completed as well as some righting of grave markers.
In addition to having responsibility for burials, the Cemetery Commission provides basic maintenance including cutting grass and removing leaves and trash. An endowment for North Cemetery is used for the maintenance of that cemetery and the purchase of equipment that is used for the maintenance of all of the cemeteries. They are no longer mown with a scythe. Even though the Town has a tree warden who is an arborist, these historic cemeteries have not benefited from tree work. To date the allocated funds for this endeavor have been devoted to town street trees. This year, however, it has been reported that unused funds may be utilized in the cemeteries.

LANDSCAPE CHARACTER, LAWNS AND VEGETATION

Landscape Character

Issues

Both sites present an image of old New England rural cemeteries. The long and narrow rectangular site of Center Cemetery is edged with Sugar Maples on all 4 sides, spaced approximately 20’ apart, and formally subdivided into 3 distinct areas by 2 rows of trees. The central area, with the most obelisks, is the highest. In contrast, the irregular sloping Ringville Cemetery site only has mature Sugar Maples along the road and separating the older part of the cemetery from the recent addition.

Recommendations

A strategy for tree care and replacement is necessary because the majestic Sugar Maples are old and in poor condition. As the older Sugar Maples are removed, new ones should be provided in their place to maintain that sense of rural New England. New trees should not be randomly introduced into the interiors of the cemeteries.

Planting

Issues

All of the trees in Center Cemetery are Sugar Maples except for one White Ash [a 9” DBH volunteer located along Sam Hill Road] with a total of 76 trees. Both trees are native but the Ash is out of place in the overall scheme of this planted landscape. The average size of the Maples is 28.65” DBH and the largest is 42” DBH. It is evident from the different sizes of trees that some of the Maples replaced others that died. The cemetery also contains some Hydrangea, a Yucca and a Yew.

The trees are mostly old and in fair to poor condition. Many trees have a high percentage of decay in their main stems. Environmental conditions like wind and ice storms and drought have stressed many of them, particularly the older ones. Branches have failed and left open wounds allowing decay fungi to invade and spread. As trees age, growth slows and fungi take advantage of weakened conditions by spreading more quickly than a tree can compartmentalize to stop the spread of decay. A common result is large branch failure. Some structurally weakened trees lean toward the perimeter of the cemetery. While most are not a high risk to people visiting or working in the cemetery, 9 trees are a potential high risk and are recommended for removal.
Most of the trees have codominant and multiple main stems. The growth patterns on 32 trees with multistem and long extending branches are prone to branch failure. Low arching branches have been allowed to develop over the years on the north and east sides shading out grass and encouraging moss growth in the soil and lichen growth on grave markers. Most of the Maples have open growth habits so light should not be a major problem. However, trees outside the cemetery coupled with the existing Maples do create shade problems with the lawns and lichens.

The major trees in the older portion of Ringville Cemetery are along Witt Hill Road to the north and the east stone wall. The former serve as an edge between the cemetery and the road and the latter separate the old cemetery from the new addition. All 21 trees are Sugar Maples. Sugar Maple stumps and spaces between trees indicate tree loss. The average tree diameter is approximately 28” DBH. All trees are approximately the same size and assumed to have been planted within a few years of each other. The cemetery also contains some Hydrangea and a Rose. The new addition has 8 to 10’ high White Pines along two edges separating the area from active farm fields.

In general the Maples are also in fair to poor condition as indicated from short annual terminal shoot growth, size of bud, accumulation of dead branches, percent of crown deterioration [die back], decay throughout the main stems of the tree structure and surface root loss or damage.

This appears to be an area that is prone to electrical discharge from lighting storms because a couple of trees had old lighting scars from the crown of the tree to the main stem.

It appears that these trees have had some pruning in the past 5 years because of some old pruning wounds. However, large amounts of deadwood have accumulated since. A number of trees have codominant and multiple main stems like those in Center Cemetery. Ringville Cemetery does not have the same shade problems that Center Cemetery has.

Four trees have either declined more than 50% or have deteriorated from decay. Environmental conditions such as lightning, wind, ice storms and droughts have stressed many of these trees. Four trees have extensive decay and present a high risk of failure because of past branch failure. Some of the high risk trees were either codominant stems or multistem trees at one time.

Recommendations
Many trees are recommended for removal. At Center Cemetery 9 trees that have structural problems from decay should be removed as soon as possible or the area should be fenced off to keep people from passing beneath or near these trees. Remove potentially hazardous trees and grind stumps to the grade of the surrounding soil only where they do not interfere with grave sites or grave markers. Work with the adjacent property owner at Center Cemetery to remove trees outside the cemetery to allow light to penetrate into problem shaded areas.
To improve the health of the trees some arboricultural services are recommended. Prune trees of dead and dying branches 2” in diameter and larger to decrease risk of injury or damage.

It would be a good investment to install support systems in structurally unsound trees to help prevent large branch and main stem failure, and prolong the lives of these old trees. Support cables [7 strand galvanized steel cable with eyebolts] should be installed on 30 trees at Center Cemetery and 10 trees at Ringville Cemetery. Support cables are installed approximately 2/3 above the main forks or 2/3 out to the end of the extending branch. Removing these long extending large old branches from these old trees would interrupt the manufacturing of nutrients and start an accelerated decline in the health of a tree.

Fertilize all trees with a slow release fertilizer having a 3-1-1 ratio of macronutrients. Once trees are in a healthy condition from fertilization, mulch and prune to lightly thin where branches are shading grave markers and grass. Trees should be inspected on a periodic basis to insure a safe environment and the preservation of trees.

Volunteer Growth

Issues
Although once a problem, volunteer growth is now well controlled in both cemeteries. Some detrimental growth was recently removed from an area adjacent to a large monument at Ringville.

Recommendations
Continue to remove all weed trees and volunteer growth including under brush around trees.

Lawns

Issues
Center Cemetery has some bare spots, moss, a few perennial weeds and some depressions. Ringville has similar conditions but there is less shade and the ground cover is generally more dense. It is evident from the type of weeds growing in these sites that the soil is either lacking in nutrients or the soil acidity is too low or too high.

Recommendations
Repair lawn areas.

ACCESS AND SECURITY

Pedestrian and Universal Access
Issues
Open all along Sam Hill Road, Center Cemetery has no formal pedestrian entrance. Ringville Cemetery has 2 points of pedestrian access with steps. There is a deteriorating iron gate at one of the entrances with a 5’ wide opening. The other has no gate. Some of the slopes in each site are too steep for universal access and all surfacing materials are grass. Parking is possible along the public roads at both sites, and visitors can drive into the sites on grass drives.

Recommendations
No changes are recommended for pedestrian access. Universal access should continue to rely on vehicular access routes.

Vehicular Access

Issues
Adjacent to public roads, both cemeteries have multiple points of vehicular access. While Center Cemetery has 4 formal points of entrance, access can be made anywhere along Sam Hill Road without the former fencing in place. Ringville Cemetery has 3 points of vehicular access from Witt Hill Road, 2 to the older cemetery and 1 to the recent addition on the west side. Openings are 9’ wide at the east, 12’ wide in the center and 14’ wide at the west. The latter, through an informal opening created in the stone wall, appears to be the most used.

Recommendations
This system appears sufficient for the visitation requirements and no changes are recommended.
Security
Issues
The sites are essentially open. Vehicular access points are not gated. The pedestrian gate at Ringville cemetery is low and dysfunctional. Perimeter walls are relatively low and can be easily scaled.

Recommendations
Security is apparently not a significant issue on these properties and improved measures should not be pursued at this time.

VANDALISM
Issues
Although no vandalism has been reported recently, there is evidence of such activities in the past with some toppled and broken grave markers at both cemeteries and some old paint graffiti on the iron doors of the receiving tomb at Ringville Cemetery. Some occasional vandalism has been reported at North Cemetery.

Recommendations
Vandalism is not a significant problem and no changes are recommended at this time other than grave marker repair and removal of old paint graffiti.

CIRCULATION SYSTEMS AND MATERIALS
Circulation Systems
Issues
Center Cemetery has an incomplete rectangular vehicular circulation system with multiple connections to Sam Hill Road. The circulation system at Ringville Cemetery appears more informal with multiple connections to Witt Hill Road. Circulation at the older ends of both sites is not clearly defined. Covered with grass throughout, there is no formal pedestrian circulation system at either site.

Recommendations
No changes to the circulation systems are recommended at this time.

Walks
Issues
There are no defined walks in Center Cemetery and a single central grass path in Ringville Cemetery.

Recommendations
No changes are recommended at this time.

Steps
Issues
While there are no steps at Center Cemetery, Ringville contains 3 sets of rough hewn stone steps. The central pedestrian entrance has 2 sets of 4 risers with random riser heights and tread widths. At the end of the grass path opposite that entrance is another set of stone steps with 3 risers. The top stone needs to be reset. Another set of 4 risers is located in front of the receiving tomb.

Recommendations
Reset the top stone at the set of steps opposite the pedestrian entrance.

Roads
Issues
The one lane drives are in fair condition despite the maintenance requirements.

Recommendations
Maintain the drives as they are.

Pavement Materials
Issues
Gravel and grass are the only pavement material in use. It is apparently minimally maintained and lightly used. All walking surfaces are grass, generally with no defined circulation system.

Recommendations
Gravel is a historically appropriate material for drives and it should remain as long as it is properly maintained. Surface materials for walks should remain grass until visitation reaches the point where it is no longer practical to maintain lawn. At that time a paved path system should be considered.
GRAVE MARKERS
Headstones and Footstones

Issues
The grave markers are predominantly marble in the older western section of Center Cemetery with some slate and brownstone, and a small zinc marker and a wood cross. Many of the slate markers may be old but they are illegible, delaminated or broken. Numerous marker stubs remain. It is unusual to find a marble grave marker as old as the 1785 Hart stone in this area. The central portion has approximately 20 granite and 30 marble grave markers with 7 or 8 obelisks. The approximately 58 grave markers in the still active section at the east end are primarily granite. Although the grave marker layout is somewhat random in the far west end, there is a regular rectangular layout throughout most of site. A few cast iron and/or bronze flag holders marking the graves of veterans of the Revolution and other wars were found. These seemed to be in reasonably good condition.

While the most serious problems are found west of the center of the site and mostly at the far west end, the two problem conditions that prevail throughout Center Cemetery are structural problems leading to tilted or toppled stones, and accumulated soiling of stone surfaces. A quick survey found 29 markers significantly leaning, 16 toppled and 10 broken. A portion of an old strap repaired marble marker was found lying on top of the perimeter stone wall. In part, the structural problems are caused by frost action, settlement, erosion and plantings. The latter also exacerbates soiling. By impeding the rapid evaporation of moisture and remaining damp, the stones support mildew and fungal growth. Two most common types of soiling here include lichen [particularly on slate and granite] and a black or dark brown fungus.

The erosion of soil from the bases of the markers and subsequent exposure of the stone footings makes the stones easy for vandals to push over and also permits the stones to lose mortar or lead caulking and thus separate from their bases. The taller a marker is, and the less securely it is anchored to its base, the more likely it is to fall. Obelisks are in particular danger due to their greater vertical exposure. Many of the larger monuments and obelisks exhibit settlement at their bases, exposing stone foundations. The Bartlett brownstone obelisk is leaning.

At Ringville Cemetery the upper portion of the cemetery has approximately 25 granite and 55 marble markers. The downhill portion has approximately 56 marble and a few granite markers as well as some slate tablets. A quick survey found 9 broken markers, 2 broken bases, 8 toppled markers and 23 leaning. Some staining from iron dowels was evident in the 2 part marble markers. Most of the damage was noted in the downhill area. Some markers in the upper area have plantings which are growing too close to the stones, causing soiling to build up on the stone surfaces.

All of the granite markers have some lichen growing on them. Some are nearly covered with a gray-green lichen and others have yellow lichen. The marble markers all have some degree of mildew and black fungal growth on them. Some are nearly covered. The slates also have some lichen on them.

Recommendations
The first priority is to reset all toppled and significantly leaning markers in a sound vertical position. In addition, remove all plants that are rooted immediately adjacent to the markers. Re-pin units that have come apart cleanly.

Reset the Bartlett obelisk to a vertical position and provide earth fill to cover the exposed foundations of this and other obelisks to raise the level of the ground to the proper level to prevent erosion, undermining and eventual destabilization.

Cleaning the markers is also critically important. Continued mildew and fungus growth can eradicate the surface detail and inscriptions. Conduct a survey to identify all markers that are severely soiled but still have legible inscriptions and carefully clean those first under the supervision and instruction of a stone conservator. Those whose inscriptions are entirely eroded or otherwise illegible should be cleaned only after all of the legible markers are conserved.

The zinc marker appears to be in sound condition, but should be monitored periodically for opening joints. The seams at the sides of the central or shaft portion of the marker appear to be splitting, as do the seams on one side of the top. A conservator should be consulted to determine the best way to close the splits to prevent moisture from getting inside, causing rust.
LEGEND

- Existing Evergreen/Deciduous Tree
- New Tree
- Remove Existing Tree
- Existing Stone Wall
- New Wood Fence
- Vehicular/Pedestrian Entrance
- Existing Lawn Drive
- Identification Sign

CENTER CEMETERY
PRESERVATION PLAN
WORTHINGTON, MASSACHUSETTS

PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

MASSACHUSETTS HISTORIC CEMETRIES PRESERVATION INITIATIVE
STRUCTURAL ELEMENTS
Perimeter Walls

Issues
Free standing dry laid field stone walls form 3 of the perimeter edges of Center Cemetery. Because the walls have no mortar, they are structurally vulnerable to pressure from either side. Piling leaves against them, even temporarily, may accelerate rebuilding requirements. Some of the large flat stones as well as the smaller and rounder stones have shifted and some minor rebuilding is necessary.

Ringville Cemetery,
Stone wall along Witt Hill Road

The dry laid rubble stone retaining wall along Witt Hill Road at Ringville Cemetery was built about 1900 with stone hauled by oxen and wagons from West Chesterfield Gorge, 8 to 9 miles away. It appears to have been built in two stages with a slightly different character for each. The west end appears to be relatively level with a vertical face while the sloping east end has about a 6” batter on the face. Overall, the wall appears to be in stable condition with some slight shifting of the granite cap stones that are about 4” thick, 16 to 20” wide and very long, with one about 21’ long.

Along the east end or downhill slope of the cemetery, the dry laid free standing fieldstone wall is lower and more casual. The similarly constructed walls along the line separating the older part of the cemetery from the recent addition, at the west edge and along the Witt Hill Road edge of the addition are in the worst condition and will require more substantial rebuilding.

Recommendations
Provide localized resetting of stones in walls and repair breaches. Discontinue piling leaves against the dry laid stone wall to keep the wall in sound condition.

Tombs and Vaults

Issues
Ringville Cemetery has a free standing brick vault serving as a receiving tomb. Donated by the Blair family, the 9'-4” by 7'-4” structure has a granite entrance face with iron doors and a concrete top. Some separation has occurred at the mortar joints in the granite, between the brick and granite, and at the top of the granite. At the top courses of brick there are some areas of missing mortar as well as separation and cracks in the mortar. Some of the bricks have spalled at the northeast corner. The concrete cap does not have a drip edge. Although rusted, the iron doors appear operable. There are no vaults or tombs at Center Cemetery.

Recommendations
The brickwork should have a total repointing, using a mortar which has the color, aggregate, and strength of the original mortar. The ironwork should be cleaned, primed and painted.

Edging of Family Plots

Issues
Two of the family plots at Center Cemetery have tubular iron rails and stone posts. The Brewster family plot, near the high point of the cemetery, has 10 granite posts with iron rails and iron chains at the two pedestrian entrances. Long spans of rails have iron support posts. Some of the rails are bent. At the Daniels family plot which has 4 marble posts, 2 of the 4 iron rails are in place and 2 are missing. Only one family plot at Ringville Cemetery has low granite edging. It is in good condition except for some lichen growth.

Recommendations
Restore these elements where possible.
FENCES AND GATES

Issues
Neither cemetery currently has fences. At Center Cemetery, it was reported that the oldest legible records indicate that a wood fence was built along and parallel to Sam Hill Road in 1875. It was made of Chestnut with horizontal top and bottom rails and a diagonal cross pattern between the posts with a center brace. The fence was removed in the mid 1960’s. Based upon the remaining evidence of flat stones with iron dowels set in them, the posts were spaced about 8’ apart and were located on the cemetery side of the street trees along Sam Hill Road.

There is evidence of former vehicular gates at Ringville Cemetery as well as an existing pedestrian gate. The latter is a rusting iron gate that spans a 5’ wide opening. It is damaged, bent in part apparently due to a shift in the wall. The two points of vehicular access to the older portion of the cemetery once had gates. There are 2 iron hinge pins on one of the 4’ high rough hewn granite gate posts at the east entrance. At the center entrance, one of the rough hewn granite gate posts has a hook and the other has 2 iron hinge pins and 3 iron rings. The east post is leaning.

Recommendations
Replicate the Center Cemetery fence and Ringville Cemetery gates based upon photographic or other records. Repair the pedestrian gate at Ringville Cemetery after repairing the stone wall. Clean, prime and paint the gate.

SITE AMENITIES

Issues
Each site has an identification sign, a metal street sign on a metal post. No other information is provided.

Recommendations
Upgrade the identification signs in a manner that is appropriate to these historic cemeteries. Add interpretive and/or informational signs at a later date.

Trash Receptacles, Seating and other Amenities

Issues
Other than one bench in the newest area of Center Cemetery, there are no amenities of this type inside these cemeteries.

Recommendations
Do not provide these amenities.

UTILITIES

Drainage

Issues
No drainage structures are evident. Both sites rely on surface drainage.

Recommendations
No changes are recommended.

Water Supply

Issues
While there is no source of water inside the cemeteries, there are fire hydrants outside the sites in the public way.

Recommendations
No changes are recommended in terms of water supply.

Lighting

Issues
No source of electricity or light fixtures was observed inside the cemeteries. Overhead wires are adjacent to the new addition at Ringville Cemetery.

Recommendations
Do not provide light fixtures in these cemeteries.

PRIORITIES

High Priority
• Stone conservation including resetting and repair of markers and pin replacement in marbles that are visibly cracked or spalled
• Vegetative pruning and removals
• Repair of structural items like perimeter walls and the receiving tomb
• Lawn repairs including earth fill at obelisks
• Remove paint graffiti

Medium Priority
• Stone conservation including marbles with visible metal stains at the junction between marker and base, and cleaning legible markers
• Installation of support cables and fertilization of trees.
• Family plot restoration and repair [edging, fencing, chains and gates]
• Reset step at Ringville Cemetery
• Upgrade identification signs

Low Priority
• Stone conservation including marbles currently in satisfactory condition
• Replicate perimeter iron fences and gates, and wood fence at Center Cemetery
• Informational and interpretive signs
• Additional planting.
Located on Main Street a few blocks southeast of the town center, the monumental historic stone arched entrance to Oak Ridge Cemetery is highly visible. About 55 acres in size today, the cemetery began with one acre for a burial ground given by Col. Benjamin Freeman to the Poll Parish of Southbridge in May of 1801. Poll Parish was later incorporated into the town of Southbridge and additional adjoining land sections were purchased to bring the total land area to 25 acres. In 1921 an additional 30 acres of adjoining forest land was given to the town by Miss Ella Cole to be used as a cemetery when needed.

Because of the size of the cemetery only the oldest area at the north end, between Main Street and Oak Ridge Avenue, was examined. Most of this area slopes from a high point toward Main Street and is the narrowest part of the cemetery. It is surrounded by private property on the north and east and a YMCA on the west. The newer part of the cemetery is to the south.

The property was managed by a Cemetery Commission until 1975, when the Department of Public Works assumed the responsibility for care.

LANDSCAPE CHARACTER, LAWNS AND VEGETATION
Landscape Character
Issues
The older north end of the cemetery is generally open, with a few trees along the edge. The southern part has numerous trees in a random pattern and a high diversity of plant material types. Over time, the land adjacent to the cemetery has been developed such that some structures are now in close proximity to the property. The YMCA building, in particular, has created a significant visual intrusion at the current entrance.
Recommendations
Provide some planting to screen the YMCA building from the entrance experience. Provide additional screen planting at buildings close to the east and west property lines. Some replacement trees could be added to the wider south end of the project area but few should be added to the older north end.

Planting
Issues
Plantings include a variety of deciduous trees like White Ash, American Elm, Horse Chestnut, Black Locust, Sugar Maple. White Poplar, Black Walnut, Black Cherry, Flowering Crabapple and White Mulberry. Evergreen trees include White Cedar, Chamaecyparis, Eastern Hemlock, Norway Spruce and White Spruce. Yews are located at many grave sites and many are overgrown. Other shrubs found include Barberry, Yucca and some leggy Rhododendron near the Oak Ridge entrance. Euonymous is climbing over a wall in the northeast corner.

In the older section of the cemetery 62 trees were examined and most of them are in poor to fair condition. About 50% [33] of them should be removed because they present a hazard to the public, adjacent properties and/or the historic resources of the cemetery.

Recommendations
Remove the hazardous trees and prune most of the trees to remain. To help ensure the longevity of 3 large Sugar Maples, the installation of support cables will help prevent large branch failure. Work with abutting property owners to remove hazardous trees leaning into the cemetery.

Trees would benefit with the addition of organic material to the soil beneath their canopies. This helps retain fertilizer and moisture. Mulching also reduces mowing requirements and tree roots do not have to compete with grass roots for nutrients and moisture. A 3 to 4" depth of mulch should be applied beneath most tree canopies. Composted wood chips or other composted material would be very beneficial together with fertilizer. A granular fertilizer early in the spring could be applied first and then mulched over.

Shrubs concealing small grave markers should also be removed.

Volunteer Growth
Issues
This type of growth is found primarily at the edges of the property, mostly outside the cemetery.

Recommendations
Remove volunteer growth inside the cemetery and work with abutting property owners to have volunteer growth that is detrimental to cemetery resources removed.

Lawns
Issues
The quality of lawn area varies a great deal, from good to poor. There are some areas of moss, herbaceous weeds and bare spots. Two areas of erosion were observed.

Recommendations
Eroded areas should be repaired as soon as possible to prevent further damage. Soil tests should be taken throughout the cemetery to determine soil acidity [pH]. From these analyses, pH adjustment and fertilizer requirements can be determined. A lime and fertilization program is recommended to improve lawn quality.

ACCESS AND SECURITY
Pedestrian and Universal Access
Issues
The site is generally considered accessible only by vehicle because of the numerous steep slopes. The central path from the Main Street entrance, which is padlocked closed and not used, has some slopes of about 13%. Most of the drives extending from the Oak Ridge Avenue entrance including Broad, West, North and Main Avenues have areas that slope about 11%.

Pedestrian access from Oak Ridge Avenue includes a concrete sidewalk to the pedestrian gate with a 42” clear opening, but no paved walk inside the cemetery. The 13’ wide bituminous paved drive serves both pedestrians and vehicles.

Recommendations
No changes are recommended. Because of the steep slopes, universal access should continue to rely on vehicular routes.

Vehicular Access
Issues
Access for vehicles is provided primarily at the Oak Ridge Avenue entrance gate which has a 12’ clear opening. Another access point from Coombs Street at the south end is also available. No designated parking spaces have been provided. Visitors park along drives.

The Main Street gate has a 70” clear opening which was reputedly set 6” too narrow for use by hearses.

Recommendations
No changes are recommended.
Security
Issues
The site has little security. The occasional police patrols may deter some negative activities.

Recommendations
Because vandalism does not appear to be an issue at this time, additional security measures are not recommended.

VANDALISM
Issues
It appears that there were problems in the past based upon the quantity of broken and toppled markers. Recent evidence of vandalism is minimum with a small amount of written graffiti on the Ammidown family tomb, and a small swastika scratched on the face of the slate marker of Mrs. Sally Baylies. The latter could have been there for some time. One beer bottle was found in the north end.

Recommendations
Besides removing written graffiti, no other changes are recommended at this time.

CIRCULATION SYSTEMS AND MATERIALS
Circulation Systems
Issues
The primary circulation systems are the drives which are about 13' wide. Broad Avenue extends into the cemetery from Oak Ridge Avenue. A loop drive, consisting of West, North and Main Avenues, extends from Broad Avenue into the project area. First and Fourth Avenues also connect Broad Avenue with North Avenue. The former entrance from Main Street and Central Path is no longer used.

Recommendations
No changes are recommended.

Steps
Issues
Most of the steps in this part of the cemetery are related to family plots and they are primarily granite. A set of concrete steps immediately west of the receiving tomb appears to have been hit by a snow plow. The cheek wall on the west side of the steps has extensively deteriorated. The finished surface of the concrete is cracked and spalled, and the underlying concrete appears to be punky. It is likely that the all of the exposed concrete in this wall is unrepairable.

Recommendations
To repair the set of concrete steps, chip the deteriorated concrete down to sound concrete, which is likely to be just below the ground surface, and replace with new, formed concrete.

To repair the set of granite steps, disassemble and reset them on a proper foundation. Provide earth fill at the base of the steps to restore the original grade.

Road Edging
Issues
A few lengths of old 2’ wide concrete gutter that apparently no longer serve a purpose are located near the receiving tomb.

Recommendations
If it is determined that the gutter was part of the original drive construction, it should remain in place. If not, the gutter should be removed.

Pavement Materials
Issues
The former gravel drives are generally paved with macadam or bituminous concrete. Broad Avenue is in fair condition but the others have deteriorated with only a few remnant pieces of paving left in the exposed gravel base. First and Fourth Avenues, and all walks are lawn.

Central Path extends into the cemetery from the gate and has about a 10’ clear width. The straight path is edged with 4” wide granite curbs and 2’ wide concrete gutters or wheelways on each side of a crowned section. The center is lawn and relatively level in section. Much of the edging [about 250 linear feet] has rotated out of position and would benefit from being reset. Much of the concrete gutter is steeply sloped in relation to the edging.

Recommendations
Because of the steep slopes, driving surfaces should be paved to reduce erosion potential and maintenance requirements, and provide a universally accessible route to this part of the cemetery.

Along Central Path, reset edging and replace gutters that are out of alignment.
GRAVE MARKERS
Headstones and Footstones

Issues

While predominantly marble, this portion of the cemetery has a mix of slate, sandstone, brownstone and granite markers as well as zinc. There are also a few unusual granite tablets cut in the manner of slate tablets. In the northernmost section all of the markers face Central Path. They are in fair to poor condition with a significant amount of damage. A brief survey found 8 broken slate markers, 1 broken sandstone, 15 broken marble, 2 marble markers being enveloped by a tree, 11 toppled marble, 4 multipart marble markers broken at dowel joints, and 3 marble adhesive repairs. Although slate markers show evidence of mower or weed whacker scarring, the gouges are not deep or numerous.

The primary problem affecting over 75% of the markers is structural. Soil has eroded away from the bases leaving one or more corners exposed with the loose stone or gravel setting material beneath the base often visible. Not too many are tilting badly yet, but this condition should be remedied before they do. More commonly, footstones are shifted out of place due to washout of the earth around or above them.

The second major problem is soiling and erosion of inscriptions. This adversely affects preservation of the main purpose of a marker, identifying the location of a specific burial. In this cemetery, where the majority of the markers are made of marble, atmospheric pollution [including acid rain] and accumulated dirt and botanical growth obscure lettering and designs. As with the soil erosion, for most of the markers there is still time to prevent complete obscuring of the words and symbols.

All of the brownstone markers, among the large stones here, have abundant lichen growth of several different species. Many of the marble markers have the black mildew/fungal growth and/or grey and green lichen. Even some granite markers are afflicted with botanical growth on unpolished portions.

Where broken or toppled stones are lying flat on the ground, they are becoming quickly covered with grass and disappearing. The Ames family plot has footstones of polished granite, a masonry type and finish quite resistant to atmospheric pollution. But as earth encroaches over the edges, the originally gold leafed names have become almost obscured and have lost all but faint traces of the gilding.

Only 2 zinc markers were found and they are in good condition, except for an odd black stain on the drapery over the urn on the Spencer marker. It is unusual for zinc to corrode or support mildew growth even where water may not evaporate quickly such as in the drapery folds. The stain was not analyzed at this time. Of interest is the identification of the Monumental Bronze Company of Bridgeport, Connecticut, on the Leach marker. Substantial archives exist on that company, and some of their large format periodical publications identify many of the markers they manufactured.

Recommendations

In addition to preparing a detailed record of the markers, an inventory should be made of all markers that have accumulated botanical and atmospheric materials to help determine which stones should have conservatorial cleaning. Some will be found to be completely illegible, even when delicate measures are taken to see if there is any way to pick up surface indentations that can imply the original text and/or design.

Clearly those stones should not be given expensive treatment. Other stones have artwork and inscriptions that are still legible if properly cleaned. Of those stones, some criteria for ranking importance [earliest dates, most important families, most notable carving, etc.] should be made so as to set a clear cleaning policy. Unless cleaning is done by qualified conservators or under their instruction and supervision, it may result in more damage than good. This is most critical on marble and brownstone because they are geologically grainy and improper removal of lichen could remove inscriptions as well.

The first condition to be remedied is the structural stability of the stones that have eroded soil at their bases by providing a free draining earth fill to the appropriate level.

Stones that toppled may need various treatments, depending on their original positions. Those that were upright should be restored to their original position. Broken markers should be repaired by qualified conservators who know which types of adhesives, repair methods and materials for breaks, cracks or base filling are best in which circumstances. Where mortar is used for repairs, it should be formulated to match the stone in strength [high lime], color, aggregate and surface finish.
Monuments

Issues
The tall vertical types of markers [obelisks, columns, squared pillars] occur frequently, evidence of the taste of the Victorian period from c1840 through 1900. In the area immediately south of the long Central Path are more than 25 obelisks and columns. Earth settlement or erosion has occurred at the bases of many of these larger structures including the Norcross obelisk and Litchfield/Cheney monument, exposing and undermining foundations. Over time this will lead to the tilting or toppling of these elements and potential breakage. The latter monument also shows the effects of environmental pollution. A few of the marble obelisks have been broken. Some have not been repaired. One has a mortar repair and another has been reset, staying in place by weight and gravity.

Recommendations
Provide free draining earth fill to the appropriate level at the bases of monuments where settlement or erosion has occurred. A qualified conservator should clean and repair soiled and broken monuments.

STRUCTURAL ELEMENTS
Perimeter Walls

Issues
Main Street Entrance Arch
The 1878 Main Street entrance consists of a passage through a monumental stone arch made up of relatively small, mortared granite units, probably quarried in nearby Monson. The cut stone is coursed. The arch is in fair condition. Although there has been little, if any, shifting and displacement of the stonework, there is evidence of extensive water infiltration into the joints and behind the stones.

Moss, potentially nourished by the lime in the mortar, has developed at the joints in the upper 5 or 6 courses where water seeps out and many joints are cracked or have missing mortar. The joints are at least 1/2" wide and appear to have been originally tooled so as to be slightly recessed from the flat margins cut on the stones. That might account for the retention of enough moisture to support plant growth. There is evidence that some of the joints have been partially repointed. It is only a matter of time before freeze-thaw action in the joints will begin to wedge upon and displace individual stones.

Main Street Wall
The 3’ high walls on both sides of the arch are mortared coursed granite with a 7” thick by 17” wide split face granite cap. These walls have deteriorated in a manner similar to the arch with missing mortar and loose and tilted granite capstones. On the south side of the wall and arch, the ground level has settled or been eroded to such an extent that foundations are exposed. Because there is a foot or two difference between the earth grade on the cemetery side and the sidewalk on the street side, water and soil can flow through the stonework and attack the mortar from behind. Water also infiltrates through cracked joints between the capstones.
To some extent, the cracking and shifting of stone units does not affect the structural integrity of such a low wall, but it creates a “look” of deterioration. A large tree on the west side of the gate is pushing the wall over in that immediate area.

East and West Boundary Walls
The 2.5-3’ high walls extending south along the sides from the Main Street entrance are traditional loosely laid fieldstone walls. The walls are fairly stable, but do have increasing accumulated tree droppings and the like. In some locations the earth grade is a few feet higher on one side of the wall than on the opposite side and in other locations the walls are completely freestanding. The casual but tight arrangement of the stones are a classic feature of these walls. There is one location where the wall on the west side has been altered with heavy mortar to buttress the foundation of a red barn that encroaches on the cemetery boundary. Nearby, the roots and growth of two volunteer trees have caused stones to topple.

Oak Ridge Avenue and YMCA Wall
A 3’ high mortared fieldstone wall separates Oak Ridge Avenue from the adjacent YMCA property. The wall may have been unmortared in the past but it has been extensively rebuilt with the addition of flat stones and mortared joints. The heavily mortared stonework has numerous cracks through the mortar joints and between the joints and stone arrises. Several joints are completely open and there are occasional missing or loose stones. The wall appears to lean back near the east end but it has been buttressed with a tapered base on the YMCA side of the wall.

The lower section of the wall east of the YMCA, particularly in the area adjacent to the play area, has been partially knocked over and scattered. It has been partially rebuilt but without the eye of the original wall builders. Instead of being fitted together like a puzzle, the replaced stones are merely set one on top of the other, like marbles, and mortared where necessary to maintain stability. At the higher section of the wall behind the YMCA, the wall generally retains its original character.

Recommendations

Main Street Entrance Arch and Walls
The entire arch should be repointed. The relatively uniform joints should be cut back to a depth at least twice the joint width and pointed with a medium strength mortar matching the original mortar in color, composition and finish. Where mortar deterioration penetrates into the work deeper than just an inch or so, it must be raked out completely, even to the extent that individual units are loosened and have to be reset.

The adjacent walls can be repointed at the same time as the arch but annual or biannual maintenance will be needed. If mortar cracking is chronic in one or two locations, the soil behind the wall needs to be opened up and drainage fill material installed to prevent the buildup of water and clayey or loamy soil that can create pressure on the mortared face of the wall.

East and West Boundary Walls
Where the walls have fallen over, they should be rebuilt by an experienced fieldstone mason. Elsewhere, the walls need to be inspected each year so any seasonal deterioration can be corrected. Seasonal deterioration can include any stones that have fallen out or any unusual leaning or heaving. It should be noted, however, that the very nature of these walls is to be rough, uneven and crooked. But fallen stones should not be simply placed on top of the overall pile. Rather, they should be restored to their original location, if possible, or set to fit with adjacent stones.

Oak Ridge Avenue and YMCA Wall
Extensive rebuilding is needed along the boundary behind the YMCA. This wall needs to be maintained on a periodic basis in order to ensure that the stonework remains tight and can withstand the energetic activities of the adjacent playground and parking lot. Because the wall is not particularly aesthetic in its appearance, a gray medium strength mortar can be used for repointing joints and setting stones. High strength mortars should be not be used because they become so brittle that they cannot resist the seasonal movements of the wall without cracking, that is, the high strength is detrimental to the integrity of the wall and does not contribute to holding it together better.
Mound Tomb and Vault Structures

Issues
Receiving Tomb
The receiving tomb facing Oak Ridge Avenue is still used, primarily for storage. It consists of an underground vaulted area with an exposed front wall that is about 13’ wide and 12’ high. Access into the vault is through a metal door. There is a tapered retaining wall on each side of the front wall. The front wall and two tapered retaining walls are built of dry laid, roughly dressed grey granite units about 8 to 10” thick, 18” high and about 5’ long. Based on the presence of brickwork on the back of the front wall parapet, the vault roof construction is probably a brick arch. Unless the brickwork is coated with felt and tar or a plaster parget, the mortar may be extensively deteriorated at the top of the arch. Even so, it may be in good condition below the top surfaces of the bricks. There are no signs of distress suggesting that there is any extreme deterioration occurring in the vault construction.

The stonework of the front wall of the vault is intact and in excellent condition. However, the stonework of the retaining walls on each side has shifted horizontally and twisted out of alignment. At some units the tightly fitted vertical joints have become one inch in width. One unit has swivelled 5” out of position, leaving the adjacent joint 2” wide. It is likely that the worst movements have been caused by water flowing down the hillside and becoming channeled as it passes through the wall. Encroachment by 2 mature Sugar Maples is also impacting the tomb wing walls. The structural integrity of the retaining walls is also compromised by the erosion of the ground in front of the walls where the rubble stone foundations are exposed.

Nevertheless, the retaining walls do not lean over, an indication that the stonework is adequate to carry the weight of the earth against them. It is likely though that there are large and small stones behind the granite units. Classic “gravity” retaining walls have a battered or tapered back surface that undercuts the ground laid over and against the wall.

Ammidown Mausoleum
Located above the receiving tomb, this free standing grey granite family tomb with white marble tablets mounted on the outside was built in 1867. Architecturally, it is a small Greek Revival style temple with a variety of finishes that range from coarsely hammered granite to smooth, inscribed marble. The roof consists of six granite slabs with a ridge stone and decorative acroterion at each end. The stonework, laid in mortared joints, is in excellent condition. There is, however, some minor deterioration. It was noted that there are iron shims or spacers showing at the surface of some of the horizontal joints. It is possible that they have raised edges that restrain the stone units. These spacers are pitted from corrosion at the surface of the stone. The mausoleum is in excellent condition, but the mortar joints need minor repointing. The marble door was broken and has been patched. Earth has settled or eroded at the entrance step to such an extent that the foundation is exposed.

Wells Mausoleum
Another free standing vault or mausoleum in the south part of the cemetery, the Wells family tomb, was not extensively examined because it was outside the project area. It appears to be in relatively good condition but should have missing mortar carefully reapplied. The structure has bronze doors, vents and a rear window. The doors have graffiti and some advanced corrosion.

Recommendations
Receiving Tomb: The tomb itself is in good condition but the wing walls on both sides need to be taken down and rebuilt. The brickwork exposed at the tomb parapet should be repointed. In order to repair the retaining walls, the stone units should be numbered and dismantled. Some collapse or movement of the loose stones, if any, behind the wall should be expected if they are disturbed by the removal of the dressed stones. The existing foundation should be probed to determine its makeup. Is it a single course or two of loose, broken stones or fieldstones, or is it well laid and of significant depth? It does not necessarily have to be 4’ deep, as it is presently, but it should be at least 2 to 3’ deep. If the foundation is shallow and crude, it should be excavated and replaced with a 3 or 4’ deep concrete foundation.

The stone units should be reset without mortar but should be pinned together, using two 3/4” diameter, 6” long stainless steel pins epoxied halfway into each upper unit and set halfway into grout filled oversized holes in the lower unit. If good stone and gravelly material is not present now, it should be placed behind the retaining wall in order to provide good drainage for water flowing down the hillside. A perimeter drain may also be necessary to channel water around the wall and to prevent it from flowing through the wall.

Ammidown Mausoleum: Deteriorated joints should be repointed with a medium strength mortar matching the original mortar in composition and color. The visible surfaces of the iron spacers should be cleaned and treated with a rust inhibitive coating having a color matching the mortar.

Southbridge - 265
Edging of Family Plots

Issues
Each of the 13 edged family plots in this part of the cemetery is surrounded with granite and some have associated granite steps and/or planters. Most of the edging is raised but two of them are set flush with the surrounding earth. Most of the edging is 6 to 8” wide, 12 to 24” deep and simply finished. Edging at the Sumner plot is 30” deep. Others are more detailed or have more elaborate finishes like the Sumner, Ammidown, Litchfield/Cheney and Norcross plots. Dowels or eyebolts holding the stones together were evident at the Harding and Litchfield/Cheney plots.

Settlement or erosion of the surrounding earth has exposed the foundation of Ammidown edging, one side of which is being held up with iron pipes. Steps at the Ammidown, Dresser, Hanson, Litchfield/Cheney, Morton, Page and Sumner plots have also moved out of alignment.

Many of family plot edging units are more or less intact, but a number of them have rotated, settled at one end, or have separated at the corners. Movements are caused by earth pressures between high and low grades and from saturated, freezing earth, i.e., frost heaving. It is unlikely that many the edging stones are set on foundations other than a mat of loose field stones.

Recommendations
The family plot stone edging needs routine maintenance work including resetting the stones. In order to prevent untimely displacement in the future, the corners can be stapled with stainless steel “dogs” or epoxy coated pins. The ground under and behind any reset stone should be good draining material. That is, if the ground behind the edging is found to be saturated or heavy with organic material, that material should be removed and replaced with gravel or crushed stone before covering with lawn. Likewise, if the foundation under the edging is disturbed or contaminated with saturated earth, it should be rebuilt and packed with gravel or crushed stone.

BUILDINGS

Issues
Near the Oak Ridge Avenue entrance is a charming multilevel wood Victorian building used for maintenance purposes. Noted as a tool house in 1954, this structure may have originally served as a receiving or waiting building. It was not examined because it was outside the project area.

Recommendations
Continue to maintain this structure.
FENCES AND GATES
Iron Fences and Gates

Issues
Main Street Entrance Gate and Fence: Chained and padlocked, this entrance is no longer used. The frame of the double leaf iron gates at this entrance is constructed with tubular steel and channel. The paint finish has failed and the metal is rusting. The gates are missing all but one of the winged arrow picket finials. Other elements are bent.

Oak Ridge Avenue Entrance Gate and Fence: This assembly consists of a green painted central double swing vehicular gate with single leaf pedestrian gates at the ends separated with an 8'-11.5" long section of fence. The north pedestrian gate is chained and welded closed. The overall assembly has 6 cast iron posts and spear headed picket fences and gates. Overall it is in poor to fair condition. The posts are made up of several cast iron pieces that snap or seat together to make up each decorative square post, base, tapering cap and finial. Damage from vehicle impact and general wear and tear have caused some of iron pieces to break or separate, such that the south vehicular gate post has been damaged and has welded repairs. It is also diagonally braced with a steel channel and bolts. The north pedestrian gate post is askew and the top is missing allowing water infiltration. Other post tops are loose or damaged. The fences in generally good condition although a few of the spearheads are missing and some of the pickets are bent. There is also extensive corrosion and rust jacking where decorative bent bars on the gates scroll together and overlap at the bottom of the gate leaves and at the top center.

Recommendations
Main Street Entrance Gate and Fence: The 1878 iron gateway should be cleaned and the rust fully removed. It should then be coated with a modern polymeric coating that adheres well and prevents rust.

Oak Ridge Avenue Entrance Gate and Fence: There is no easy on site way to repair the posts and fences. All of the pieces should be dismantled, cleaned, reassembled and repainted. Broken or missing parts should be replicated. Specialty casting studios should replicate the pieces in iron or stainless steel so that black steel is not inadvertently mixed with the original iron. Mixing metals can lead to accelerated corrosion of one of them, the steel in this case, through galvanic action. Welding should not be used with cast iron.
Chain Link Fences and Gates
Issues
A 5’ high rusted, but serviceable, galvanized steel chain link fence is located along the east edge.

Recommendations
No changes are recommended at this time.

Interior Fences and Gates at family Plots
Issues
In the portion of the cemetery that was examined, only the Dresser plot had evidence of former fencing with 3 granite posts that have center pins on the top that once served as a foundation for a fence.

Recommendations
If documentary evidence can be found concerning the appearance of these rails, consideration should be given to replacing them.

SITE AMENITIES
Signs
Issues
The historic entrance on Main Street has a bronze plaque at the gate with the date 1801, identifying the date the cemetery was established. A metal sign on the gate states “No Entry Permitted. Please Use Entrance at Oak Ridge. No Trespassing.” Metal “No Parking” signs are located on each side of the gate.

A metal sign is secured to the Oak Ridge Avenue Gate stating “Open During Daylight Hours Only. No Trespassing after Hours, Subject to Arrest. Prohibited: Pets, Recreation Use, Alcohol, Unregistered Vehicles [ATVs].”

Recommendations
An identification sign with some historic background information should be provided near the Oak Ridge Avenue entrance. Some interpretive signs would enrich the experience of cemetery visitors.

Trash Receptacles and Seating
Issues
While one wire mesh trash receptacle was observed in the fall of 2000, none were seen in the spring of 2001. No benches were found in this part of the cemetery.

Recommendations
Consider eliminating trash receptacles from the oldest part of the cemetery. Do not add benches in this part of the cemetery.

UTILITIES
Drainage
Issues
No drainage structures were found in this part of the cemetery, although a catch basin is located immediately outside the Main Street entrance. All storm drainage occurs on the surface and flows from the high point to the edges of the site.

Recommendations
Do not add drainage structures as they do not appear to be necessary.

Water Supply
Issues
The cemetery has a water supply and some hose bibs were observed.

Recommendations
No changes are recommended in regard to water supply.

Lighting
Issues
No lights were seen inside the cemetery. There may be ambient light in some areas from adjacent street lights.

Recommendations
No additional lighting is recommended.
PRIORITIES

High Priority
- Trees with large cavities, leaning into the cemetery, drives or grave markers.
- Screen planting.
- Erosion and lawn repairs.
- Restore grave markers that present public safety hazards or are structurally unsound.
- Replace dowels in multipart stones that are visibly cracked or spalled.
- Conserve historically significant marble markers that are in danger of becoming illegible.
- Repair broken stones if the inscriptions are legible and at least 75% of the stone is available.
- Provide earth fill at the exposed foundations of monuments.
- Reset family plot edging on First Avenue.
- Provide identification sign at Oak Ridge Avenue entrance.

Low Priority
- Trees with a small amount of dead wood and branches, and trees protected from the winds in close to the edge or other trees.
- Tree replacements.
- Reset markers that have shifted or are leaning.
- Reevaluate and conserve marble markers that are currently in satisfactory condition, as necessary.
- Reset remaining family plot edging.
- Repoint Ammidown mausoleum.
- Provide interpretive signs.

Medium Priority
- Trees with large cavities, leaning away from drives and grave markers and not located in the front area where vehicles may drive.
- Replace dowels in multipart stones with visible metal stains at the junction between stones.
- Clean legible markers.
- Pave West, North and Main Avenues.
- Repair Central Path.
- Repoint Main Street arch and walls.
- Rebuild perimeter walls.
- Repair receiving tomb and walls.
- Repair steps.
- Repair entry gates and fences.

PRIORITIZED COST ESTIMATES

High Priority
- Tree removals $20,800
- Tree pruning 2,100
- Tree support systems and fertilization 2,700
- Screen planting 12,200
- Erosion and lawn repairs 2,000
- Earth fill at monument foundations 2,500
- Reset family plot edging on 1st Ave. 3,300
- Identification sign 5,000
- Other 50,600

Medium Priority
- Tree pruning 300
- Tree support systems and fertilization 200
- Pave West, North and Main Avenues 14,200
- Repair Central Path 7,500
- Repoint Main Street arch and walls 5,000
- Rebuild perimeter walls 11,000
- Repair receiving tomb and walls 18,000
- Repair steps 2,000
- Repair entry gates and fences 6,000
- Other 64,200

Low Priority
- Tree removals 4,400
- Tree pruning 1,600
- Tree replacements 1,900
- Reset remaining family plot edging 4,200
- Repoint Ammidown mausoleum 1,200
- Interpretive signs 10,000
- Other 23,300

Costs associated with grave marker work have not been included. Refer to the General Recommendations section for approximate costs of various types of repair.
These small wooded sites represent three of the eleven historic burial grounds in the town. All are family burial grounds from the 1800s, reputedly related to the Native American Wampanoag Indian culture that originally inhabited the area. Only Pocknett Burial Ground has visible grave markers. The Jones and Mye Burial Grounds do not. The Mye and Pocknett sites are very small at 0.03 and 0.08 acres respectively. The Jones site is comparatively large at 0.25 acres. The proposed Mashpee Historic District will include William Jones and Pocknett Burial Grounds which were active between 1800 and 1860.

**William Jones Burial Ground**
Commemorated on 10 April 1851 as a new burial ground, two people, Thomas H. and Rebecca Jones, were buried there that day. There is no visible evidence of fencing materials or depressions indicative of a fence line or mounds indicating buried stone walls. There is no surficial archaeological evidence to indicate the bounds of the original cemetery, or to define its internal configuration. There are no remnant archaeological features such as head or footstones, commemorative markers, paths, walkways, entranceways or decorative plantings.

**Pocknett Burial Ground**
c 1800s

Shallow depressions are visible on the northwestern portion of the site and they should be further protected until their origin can be investigated by archaeologists.

A comparison of historic and contemporary maps and reference to aerial photographs of the project area reveals that the original alignment of South Sandwich Road [Wakeby Road] has been altered and Route 130 [Main Street] has been widened. Early maps also show a woods road or cart path just beyond the project area to the east. It is possible that portions of the burial ground were impacted when the road beds were modified.

**ARCHAEOLOGY**

**Issues**

William Jones Burial Ground
Commemorated on 10 April 1851 as a new burial ground, two people, Thomas H. and Rebecca Jones, were buried there that day. There is no visible evidence of fencing materials or depressions indicative of a fence line or mounds indicating buried stone walls. There is no surficial archaeological evidence to indicate the bounds of the original cemetery, or to define its internal configuration. There are no remnant archaeological features such as head or footstones, commemorative markers, paths, walkways, entranceways or decorative plantings.
On the eastern margins of the site several borrow pits should not be confused with burials which would have been located to the west of the roadway. The old road bed was reportedly excavated some years ago to provide sand for the adjacent bog. Extensively disturbed, the site contains some highway debris including asphalt, sand and gravel. There is also disturbed earth on the burial ground side of the intersection with recent utility improvements.

Roxanna C. Mye Burial Ground
The earliest documentary reference to Roxanna C. Mye Burial Ground is a 1928 deed which reserved the right to own the old burying ground and a right of way from a 60 acre parcel transferred from Bion F. Reynolds to Edmund Wright. The precise location of the burying ground is not defined in the deed. Abutters are identified on an 1877 map of Mashpee with the location of the Reynolds parcel. Visual reference to that parcel suggests that the burial ground was located in the extreme northeast corner of the tract. Little additional information on the burial ground is available.

Today this tiny parcel is located on Highview Avenue between private homes in a residential subdivision. Several small depressions are visible and appear to be aligned east-west, the proper orientation for Christian burials. There are no visible head or footstones, walkways, paths, decorative plantings, fences or entrances.

Pocknett Burying Ground
This site is named for the Pocknett family of Mashpee Wampanoag Indians. A portion of the site is clearly defined and demarcated, and clearly visible from Meetinghouse Road. The cemetery is surrounded by dense woodlands on the other three sides and a well defined narrow dirt road to the Mashpee River on the south side.

There is little published information on the cemetery, although the Pocknett family is well documented in Mashpee history. Family members who live in the area confirm that their relatives are buried here. The burial ground contains sufficient room for 6 to 8 graves and additional burials are possible beyond the fenced area. Modest depressions, visible to the north, are consistent with deflated terrain associated with burials. There are no visible depressions beyond the fence to the south. There is a slight possibility that the burial ground extends beyond the fence to the east because of the level terrain, although there is no surficial archaeological evidence of graves in this position.

Recommendations
Each site represents a significant preservation challenge to the town with the Jones Burial Ground perhaps the most pressing because of impending intersection improvements bordering the property.
William Jones Burial Ground
Prior to any changes to the alignment of South Sandwich Road, archaeologists must identify the boundaries of the burial ground, determine the internal configuration of the burials and search for associated archaeological features. Property deeds, family genealogies, town histories, cemetery records, historic photographs and oral traditions may provide additional information.

Roxanna C. Mye Burial Ground
Mye Burial Ground’s small size and location affords some protection from major developmental impacts. However, the site is threatened by gradual encroachment of neighboring lawns, landscape improvements and area children playing on the open ground. Because it is not visually demarcated or protected, with time its original function may be forgotten and the sacred ground used inappropriately. Furthermore, the property deed fails to define the extent of the burial ground, and it is possible that it originally encompassed a larger plot.

Comprehensive historical research may clarify the original dimensions and location of the burial ground. A complete chain of title back to the original land apportionment may indicate the precise location. Genealogical information on the Myes and their extended family could suggest likely interments. Following documentary research, subsurface excavations should be conducted to confirm whether the burial ground contains graves. The internal configuration of the graves should be established, as should the site’s precise boundaries. Information collected from the subdivision contractor may indicate whether anomalous subsurface conditions or bones were encountered when the adjacent residences were constructed.

Pocknett Burial Ground
If traffic on Meetinghouse Road increased substantially, or if the road is widened it will be necessary to further protect Pocknett Burial Ground. Future residential development in this open space could also impact unmarked burials located beyond the enclosure. It is imperative that sensitive zones around the burial ground are protected until it can be determined whether additional burials are located beyond the fenced area. Archaeologists should conduct subsurface testing to determine the precise boundaries of the cemetery and when the full extent of the burial ground is known it should be clearly demarcated and fenced. Cemetery custodians believe that ten individuals are buried in this site. Landscape and other maintenance should be limited to above ground procedures until the full extent of the cemetery is defined.

Concurrent with the archaeological investigations further documentary research may identify individuals who could be buried in the small plot. Genealogical research and death records may provide the names of close family members who died at the time the cemetery was in use. Oral traditions collected from Pocknett family members may provide clues to likely interments. Historical maps and atlases and town plot plans may indicate the original configuration.
LANDSCAPE CHARACTER, LAWNS AND VEGETATION

Landscape Character

Issues

All three sites have reverted to woodland with lack of maintenance. William Jones Burial Ground is primarily Oak and Pine with some small Cherry and brier. Some of the trees have been topped and some are dead. There are potential views of the nearby bog to the northeast.

Roxanna C. Mye Burial Ground contains 2 large Pines [12-18” DBH], approximately 15 Oaks [about half of them are 6-8” DBH with the rest saplings], some small Cherry, 4 small American Holly and some low brier which is starting to intrude. Some of the older trees are damaged with one of them topped and another dead. There are potential views to Johns Pond.

The fenced area of Pocknett Burial Ground is surrounded by woods on three sides, mostly Oaks up to 8” DBH. A large Oak on the north side needs safety pruning as well as a large Pine on the south side. There are some small White Pine on the west side as well as some introduced Forsythia and variegated Euonymous on the east side of the fence.

Maintenance is currently provided by the Department of Public Works and Historical Commission volunteers who remove trash, cut grass and provide selective pruning.

Recommendations

All sites need extensive vegetative management with pruning and removals to open them up. All dead trees and dead wood should be removed as well as underbrush and particularly invasive brier. This work will also improve visibility at the difficult road intersection adjacent to William Jones Burial Ground.

Tree work should ideally be performed by equipment located off site. The vegetative understory should be cut to ground surface by hand held equipment. No vegetation should be pulled out of the ground. Roots should be treated to prevent regrowth.

Planting

Issues

All sites contain native material except Pocknett Burial Ground which has some limited introduced material as noted above.

Recommendations

Ornamental plantings in burial grounds of this age and style should be limited.

Volunteer Growth

Issues

In these wooded areas, most of the vegetation is considered volunteer growth.

Recommendations

Most of this volunteer growth, including understory, should be cut to ground level and the roots should be treated to prevent regrowth.

Lawns

Issues

The ground surface of each site is covered with a thin layer of forest duff and leaf litter. Lawn development is limited to adjacent roadway right of ways.

Recommendations

Once tree removals occur there will be sufficient light for lower level growth. Lawn or ground cover is recommended to protect against erosion. If this is not provided for, other taller understory material, including brier, will naturally develop. Care should be taken with renovations for either ground cover or grass particularly around trees to remain because tree roots are so close to the surface. Filling holes of decaying stumps and sunken graves, and cleaning the area of tree litter will facilitate the planting of grass or ground cover.
Mashpee - 275
William Jones, Roxanna C. Mye and Pocknett Burial Grounds Preservation Plan, Mashpee, Massachusetts

Prepared for:
Commonwealth of Massachusetts
Department of Environmental Management

Massachusetts Historic Cemeteries Preservation Initiative

WILLIAM JONES BURIAL GROUND

LEGEND

Existing Woods

Remove Disturbed Earth

New Wood Fence

Utility Pole

Existing Dirt Road

Vehicular/Pedestrian Entrance

IMPROVE VISIBILITY AT INTERSECTION

ROUTE 130

Potentially View Into Bog

MASHPEE, MASSACHUSETTS

November 1999

1" = 40'

Sara B. Chase, Preservation Consultant

Ocmulgee Associates Inc., Consulting Structural Engineers

Carl Cathcart, Consulting Arborist

Joyce Clements, Consulting Archaeologist

Walker-Kluesing Design Group, Landscape Architects
ACCESS AND SECURITY
Pedestrian and Universal Access

Issues
Access to each site occurs on adjacent roads. No sidewalks are evident. Parking occurs along the edge of roadways. While the ground surface material is not considered accessible at each site, there are no slope barriers for universal access at Mye and Pocknett Burial Grounds. The varied topography at Jones Burial Ground presents some slope barriers.

Recommendations
Because the full extent of archaeological resources is unknown at this time, universal access into each site is not recommended.

Vehicular Access

Issues
All three sites are adjacent to roadways but there is no defined vehicular access or space for visitor parking. There is unpaved parking on an adjacent parcel to the east of the Jones Burial ground, but access from that lot is difficult at best.

Recommendations
Do not improve vehicular access or parking until the full extent of archaeological resources is known.

Security

Issues
While all sites are in highly visible locations, they suffer from neglect because of questions regarding precise boundaries and extent of archaeological resources. The absence of grave markers may have reduced intentional vandalism, but the undefined boundaries expose each site to potential unintentional damage with disturbance of archaeological resources. A wire fabric fence separating neighboring properties has apparently been extended onto burial ground land at Mye Burial Ground. Intersection improvements are being contemplated adjacent to Jones Burial Ground.

Recommendations
Provide a boundary survey of each site and a visible definition of the property lines.

VANDALISM

Issues
Other than the broken headstones at Pocknett Burial Ground, no other evidence of vandalism was found. It is assumed that the lack of grave markers has meant that the sites are not recognizable as burial grounds and have not attracted attention to themselves.

Recommendations
Vandalism is not a significant problem and no changes are recommended.

GRAVE MARKERS
Headstones and Footstones

Issues
Only Pocknett Burial Ground has visible grave markers, two broken white marble markers and a marble footstone. The broken markers are propped up with wood frames. The Reliance S. Pocknett marker is fractured at the base with a horizontal break. The Emma F. Stevens marker has a horizontal break and two triangular fractured pieces suggesting that it was struck with a heavy object. With the initials E.F.S., the footstone appears undamaged. Both died in 1871.

William Jones Burial Ground: While there are no evident grave markers, the Mashpee Historical Commission has an inventory that identifies eight individuals buried here. Highway Department officials report that a headstone was removed from the site approximately thirty years ago. Although there are oral traditions that the original burials were moved, there is no documentary evidence to substantiate this.

Roxanna C. Mye Burial Ground: It is not known if there has been a burial here and none of the interments are known by name.

Recommendations

Pavement Materials

Issues
There are no paved surfaces on any of the sites.

Recommendations
Surface materials should remain as is until visitation reaches the point where it is no longer practical to maintain this surface. At that time paved path systems should be considered.

CIRCULATION SYSTEMS AND MATERIALS

Circulation Systems

Issues
There are no formal or defined circulation systems inside any of the burial grounds.

Recommendations
No formal or defined circulation systems are recommended at this time.
Mashpee - 277

William Jones, Roxanna C. Mye and Pocknett Burial Grounds Preservation Plan
Mashpee, Massachusetts

Prepared for:
Commonwealth of Massachusetts
Department of Environmental Management

Massachusetts Historic Cemeteries Preservation Initiative

November 1999

Sara B. Chase, Preservation Consultant

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Carl Cathcart, Consulting Arborist

1" = 40'

Legend

Existing Woods       New Wood Fence
Existing Evergreens  Property Line
Recommendations
Repair the broken grave markers at Pocknett Burial Ground and conduct archaeological investigations as previously noted.

FENCES AND GATES
Wood Fences
Issues
Pocknett Burial Ground is enclosed on three sides by approximately 60' of split rail wood fence that was installed c. 1975. The west or rear of the burial ground is open along its entire length.

The other two sites do not have fenced enclosures although maintenance of a fence was noted in the 1852 deed of Jones Burial Ground.

Recommendations
After boundaries are defined, all three sites should be enclosed by protective fencing that would preferably have the character of a typical wood fence of c. 1850 Mashpee. The fence would visually define the burial ground without impacting burials or other archaeological features associated with it. While a stone wall enclosure would have been acceptable in many communities, few were seen in this area.

SITE AMENITIES
Issues
None of the sites have identification, informational or interpretive signs. There are also no site amenities like trash receptacles or seating.

Recommendations
Add identification, informational and interpretive signs. Do not add trash receptacles or seating.

UTILITIES
Drainage
Issues
All sites drain on the surface and no drainage structures were found inside any of the sites. Soils are sandy and porous with little ability to retain water.

Recommendations
Improvements are not necessary and no changes are recommended.

Water Supply
Issues
No source of water was found inside any of the sites.

Recommendations
Do not add a source of water at this time.

Lighting
Issues
There are no light fixtures on the sites. Some ambient light may be available from the surrounding development and roadways.

Recommendations
Do not add light fixtures inside the burial grounds. Work with utility companies concerning utility pole and anchor support locations to protect historic resources.

PRIORITIES
High Priority
• Perimeter survey and boundary marking
• Archaeological investigations
• Vegetative removals and pruning
• Fencing
• Stone conservation including resetting and repair of markers
• Identification sign placement

Medium Priority
• Establishment of lawn or ground cover

Low Priority
• Informational and interpretive signs
The east portion of the cemetery is characterized by numerous small stone curb edged family plots that form a series of terraces as the ground rises toward the rear. The ground rises about 20’ to a crest at the back near the center of the property. Two mound tombs are situated near the top of the crest. The newer west portion of the cemetery has individual headstones and is relatively flat.

According to the “History of Chelmsford” by Rev. Wilson Waters, a Town committee was chosen to select a piece of ground for a burying place in the North part of the Town in 1841. The land was purchased for $150 from Benjamin Blood and Samuel F. Wood “between North Chelmsford and Middlesex Village.” The site expanded to 3.84 acres in 1890 with the purchase of land on the lower west side to create a long, narrow trapezoidal lot.
LANDSCAPE CHARACTER, LAWNS AND VEGETATION

Landscape Character

Issues

Although the cemetery was created in the 1840s, it does not have the scale or landscape development of a typical early rural cemetery. The site is generally open with scattered mature Oaks in the center and east, Maples on the west side and lawns throughout.

The site generally slopes to the south with a high point in the center. One could overlook the Merrimack River, but the site slopes away from the river and volunteer growth creates visual separation. A propane tank, serving the railroad, has been sited on the north edge of the cemetery. It is historically and visually incompatible with this historic cemetery.

Recommendations

Maintain the current landscape character. Provide heavier planting along the east and west edges to screen incompatible uses. In addition screen the propane tank along the railroad tracks.

Planting

Issues

The cemetery contains 36 trees including 19 Maples [12 Red Maple - Acer rubrum, and 7 Sugar Maple - Acer saccharum], 15 Oaks [10 White Oak - Quercus alba, and 5 Black Oak - Quercus velutina], 1 American Elm [Ulmus americana] and 1 Black Birch [Betula lenta]. They are all large deciduous shade trees and most are fully mature. There are no indications of pest problems other than the Elm that appears to have died from Dutch Elm Disease.

Recommendations

Most of the trees [21] are in fairly good condition and should respond to pruning and fertilization, remaining an asset to the cemetery. However, 15 trees [42%] are recommended for removal. This includes 9 [75%] Red Maple, 2 [28%] Sugar Maple, 1 White Oak, 1 Black Oak, 1 American Elm and 1 Black Birch. Many have decay throughout their main stems that can lead to structural failure and damage to the historic resources of this cemetery.

Volunteer Growth

Issues

Volunteer growth has been kept under control for the most part with some invasive Bittersweet at the northeast corner. Most volunteer growth is outside the cemetery along the east, north and west edges.

Recommendations

Remove all invasive Bittersweet and work with abutters on east side to remove Bittersweet on adjacent property.

Lawns

Issues

Lawns areas are generally in good condition. Some bare spots were apparent later in the year. The number of edged and raised plots increases maintenance requirements.

Recommendations

Topdress and seed bare spots. Consider using ground cover in raised plots to reduce intensive maintenance requirements.

ACCESS AND SECURITY

Pedestrian and Universal Access

Issues

All access is obtained through 3 vehicular access points from Middlesex Street. There is about a 13’-6” clear opening at the center and west entrances with about 14’ clear between posts. The east opening is slightly wider with about 15’ clear.

Recommendations

Consider closing the central access point with a closed gate. Universal access should continue to rely on vehicular access routes.

Vehicular Access

Issues

The 3 points of vehicular access from Middlesex Street all have single vehicle widths. Only the east and west entrances are paved. Vehicular access for maintenance of the railroad tracks is provided at the northeast corner of the cemetery. It is a single lane unpaved route.

Recommendations

Once the site expanded to the west, the current central entrance became less important. Because this entrance is not paved and rarely used, it should be gated closed with appropriate gates to discourage vehicular use of this entrance.

Security

Issues

The site has no security. Only the west side is fenced and most of that fence is privately owned.

Recommendations

Because vandalism does not appear to be an issue, additional security measures are not recommended at this time.
VANDALISM
Issues
No evidence of vandalism was found.

Recommendations
No changes are recommended at this time.

CIRCULATION SYSTEMS AND MATERIALS
Circulation Systems
Issues
The vehicular circulation system consists of 3 entrances connecting to a paved single lane perimeter loop drive with one paved cross connection on the west side. There are 3 other internal unpaved [lawn] cross connections. Paved widths vary with a 10’ width typical on the south side. The only named drive is “Central Avenue.” Most of the southernmost drive is heavily deteriorated and it is located perilously close to the top of the retaining wall along Middlesex Street. There is no separate pedestrian circulation system.

Recommendations
Consideration should be given to eliminating most of the southernmost drive and closing the central entrance. The southernmost drive should be returned to lawn as it most likely was initially. The remaining paved surfaces are sufficient for vehicular access into the cemetery.

Road Edging
Issues
While there is no road edging or curbing, there is a galvanized metal guard rail along a portion of the north drive, adjacent to a very steep slope down to the railroad tracks.

Recommendations
Do not add road edging. Although necessary, the character of the guard rail is incompatible with the nature of this historic cemetery. It should be painted to reduce its visual intrusion.

Pavement Materials
Issues
The drives are constructed of bituminous concrete and most are in good condition. The drive on the south side adjacent to Middlesex Street is in poor condition. The bituminous surface is breaking up and reverting to gravel/lawn. The central access point is not paved. All walks are lawn.

Recommendations
Refer to recommendations for circulation systems.

GRAVE MARKERS
Headstones and Footstones
Issues
Most of the grave markers in the cemetery are granite with some marble. On the more recent west side, most of the markers are granite. While most markers are in good condition, a few are leaning or have been toppled. At least two marble markers have had repairs with mortar.

Recommendations
Reset, repair and clean grave markers based on the prioritized recommendations noted herein.

Monuments
Issues
There are several larger monuments, mostly related to the high point of the cemetery. Settlement of the earth is evident at the bases of a number of them, exposing the foundations.

Recommendations
Provide earth fill at the exposed foundations of monuments.

STRUCTURAL ELEMENTS
Perimeter Walls
Issues
The front of the cemetery is raised above Middlesex Street by a stone retaining wall with three stone pillared entrances. The main wall is generally about 3’ high, typically ranging between 2 and 4’ with an area about 4’ high near the east end. Width varies between 15 and 20”. The wall consists of large, random sized, roughly cut granite stones laid in dry beds. There is little displacement of individual stone units and the wall is generally plumb although it is a bit wavy along its length. It appears that portions of the top courses of the stonework have been reset relatively recently but with a modern hard mortar and without any particular skill. These top courses may actually have been added to the original wall in order to raise its height for a portion of its length.

With railroad tracks immediately adjacent to the cemetery, it has been reported that one can feel vibrations in the monuments when freight trains pass.

Recommendations
Reset, repair and clean grave markers based on the prioritized recommendations noted herein.
Mortar joints are generally intact but with a variety of cracks, looseness and gaps at the stone edges that are common with stonework construction exposed to outdoor temperature variations. At various locations along the length of the wall, the mortar is missing and the joints between stone units are very wide. These discontinuities occur at telephone poles, indicating that the wall may have been dismantled and reset without mortar when the poles were installed.

Short retaining walls return into the cemetery at the central and west entrances. The wall at the east end is about 15” wide by 18” high. It returns along the east side about half way down the property line. The wall at the west end is free standing, about 20” wide by 22” high.

Overall the Middlesex Street wall appears vertical and solid with only one area of disruption toward the east end, west of the receiving tomb. Construction of the top of the wall east of that is different than the majority of the wall with smaller pieces.

The retaining wall is punctuated by three entrances. Two are bounded by piers made up of small, cut stone units with a uniform “rock-faced” finish and raised mortar joints. The piers are in good condition except for fine hairline vertical and horizontal cracks present between the mortar and the edges or arrises of the stones. At this time, there has been no loss of mortar or displacement of the stones. However, the cracks allow moisture to infiltrate into the interior of the piers. Eventually, trapped, freezing moisture can create pressures that will cause the mortar to disintegrate and will displace stone units. It was noted that there is no “rust-jacking” disruption where iron gate hinges are embedded.

Two built up coursed and mortared cut granite posts, 28” square and 7” high, with cap stones, frame the west entrance. An inset stone on one post identifies the cemetery as “Riverside.” There are 2 iron hinge pins on each post, indicating that gates once hung there. Some joint cracking is related to the hinge pins. Some repointing has been done on the west post. It does not match the original mortar in color and the application appears hurried. The east pier is leaning.

The center entrance is of the same construction as the west entrance. There is some mortar separation on the east post. Iron rings were found at each side of the central entrance [7 to the east and 6 to the west] at the top of the wall. More may exist as portions of the top of the wall are buried. It is assumed that they were used for tethering horses outside the entrance.

The east entrance appears to be of more recent construction with new piers of solid granite and separate cap stones. The posts are 24” square with a split or rock face finish. Cap stones have a honed finish. The cap stone on the west post is twisted such that it is not square with the post. These piers appear to be in good condition.

**Recommendations**
The retaining wall needs routine maintenance work. It should be repointed where mortar is missing, heavily cracked or loose.

The stone pillars at the west and center entrances need to be watched and maintained if they begin to deteriorate. Reset the west cap stone at the east entrance.

Mound Tomb and Vault Structures

**Issues**

There are three mound tombs, one facing Middlesex Street and two near the crest of the cemetery. The tomb at the east end of the site facing Middlesex Street was originally a temporary receiving tomb and is no longer used. It extends under the internal cemetery drive. The tomb appears in good condition. It has a granite facade and an iron door. The bottom of the door is buried, which may have been caused by street improvements. The door is rusted and has a horizontal crack.

The two tombs at the top of the crest are also in good condition. However, the earth embankments covering the vaults are steeper than the natural angle for earth stability. As a result, some of the ground has eroded [creeping or slumping downward] behind the facade stones exposing the top of the vault. Based on a glimpse of the end of a stone revealed by erosion, it appears that the vault roofs are flat slabs of stone. The facades for both tombs are intact, without any displacement or tilting.

The 1847 R. V. Howard tomb also has a granite facade with an iron door. Some corrosion is evident on the black door. There is also earth fill at the base of the door. The nearby S. F. Wood tomb has a granite facade with an obelisk at the top. The door has been sealed with a granite slab inscribed with names. The tomb has two bronze pins or “dogs” that staple the lintel stone to the first vault slab. This plot also has an iron fence around it.
Recommendations
The mound tombs are in good condition and need no work except for restoring the earth mounds to correct erosion and restore the vegetative cover. The soil at the base of the Howard tomb door should be removed to provide proper drainage.

Edging of Family Plots
Issues
Over 50%, more than 100, of the family plots in the old part of the cemetery are edged with granite and some have associated granite steps. This may have been due in part to the fact that Chelmsford had significant granite quarry operations. One edge stone was measured at 16’-10” long by 8” wide by at least 24” deep.

Most of them are more or less intact, but there are several curb and post units that have rotated, settled at one end, or have separated at the corners. Movements are caused by earth pressures between high and low grades and from saturated, freezing earth, i.e., frost heaving. It is unlikely that the curbstones are set on foundations other than a mat of loose field stones.

Iron rods holding the stones together were evident at one of the plots. Settlement or erosion of the surrounding earth has exposed the foundation of several and steps at some have also moved out of alignment. Erosion and sedimentation has also covered the tops of some edging.

Recommendations
The family plot stone edging needs routine maintenance work including resetting the stones. In order to prevent untimely displacement in the future, the corners can be stapled with stainless steel “dogs” or epoxy coated pins. The ground under and behind any reset stone should be good draining material. That is, if the ground behind the curb is found to be saturated or heavy with organic material, that material should be removed and replaced with gravel or crushed stone before covering with lawn. Likewise, if the foundation under the curb is disturbed or contaminated with saturated earth, it should be rebuilt and packed with gravel or crushed stone.

FENCES AND GATES
Iron Fences and Gates
Issues
The former gates at center and west entrances are missing, but the iron hinge pins remain. It is unknown at this time what materials the gates were constructed of.

Recommendations
Based upon documentary evidence that may be found, replicate the gate at the central entrance and set it in a closed position to indicate that this entrance should no longer be used.

The gate at the west entrance could also be replicated and set in an open position.

Wood Fences and Gates
Issues
An undated property line drawing noted that a picket fence lined the west edge. It was reported that this wood picket fence was removed in the early to mid 1990s and replaced with chain link because it was in poor condition.

Recommendations
Even though an opaque boundary fence would be somewhat beneficial given the nature of the operations on abutting properties, it is unlikely that it would be high enough to provide sufficient screening. Do not replicate the wood fence because of the high ongoing maintenance costs.

Chain Link Fences and Gates
Issues
The west edge of the cemetery has two chain link fence expressions, one public and one private. The southern part is town owned. It is 4’ high and the south end has vehicular damage. The northern part is privately owned. It is 6’ high with barbed wire at the top. Both fences are in good condition except for the noted vehicular damage.

The east edge of the cemetery has the remains of a wire fence with an end post and remnants of woven wire fabric.

There is no fence across the back or north property line except for a chain link enclosure of a propane tank that serves the railroad. This land is leased to the railroad for a nominal fee.

Recommendations
Repair the section of fence that has vehicular damage on the west edge. Replace the fence along the east edge with vinyl coated chain link to define the edge of the cemetery.
Interior Fences and Gates at Family Plots

Issues
Only one plot retains its fencing and one other retains its iron chains. There is evidence that others once existed.

The S. F. Wood tomb plot is surrounded by a black painted iron picket fence with an oak leaf/acorn motif at the top of the rails. The gate is missing. The fence is supported by 9 iron support posts on granite foundations with some intermediate granite support blocks. The iron picket fence is in good condition, but the paint finish is starting to fail with some rust evident. Most of the original snap together joints are intact, although a few have broken and have been welded together.

Recommendations
Because this type of work is a disappearing resource, restore both plot enclosures.

SITE AMENITIES

Signs

Issues
The cemetery has identification signs at each entrance with “Riverside” cut in relief at the center and west stone entrance piers and “Riverside Cemetery” cut in relief at the east stone entrance piers. Small, free standing, painted wood “No dogs allowed in cemetery” signs are placed at the east and west entrances.

Recommendations
A sign with some historic background information would be beneficial.

Trash Receptacles and Seating

Issues
White plastic trash receptacles were observed on the west side of the cemetery in October, but they had been removed in December. No seating is provided.

Recommendations
Because the cemetery is still visited on a regular basis, trash receptacles are beneficial. Receptacles should be more visually compatible with the cemetery and placed near the east and west entrances so that they do not detract from the experience of the cemetery.

UTILITIES

Drainage

Issues
The entire site slopes toward Middlesex Street and all surface drainage is collected in the street. During the hurricane of 1938 there was some reported flooding of the western portion of the site. The 1980 Flood Boundary and Floodway Map by National Flood Insurance Program indicates that the western portion of the site [most of the area west of Tobin Avenue] is within the 500 year flood zone.

Recommendations
No changes are recommended.

Water Supply

Issues
Hose bibbs are provided throughout the cemetery. A fire hydrant is also located near the west end on Middlesex Street.
RIVERSIDE CEMETERY
PRESERVATION PLAN
NORTH CHELMSFORD, MASSACHUSETTS

LEGEND

Existing Deciduous Tree  Pedestrian/Vehicular Entrance
Remove Tree           Existing Woods
New Tree               Chain Link Fence
Utility Pole           Fire Hydrant

BY:
WALKER-KLUESING DESIGN GROUP, LANDSCAPE ARCHITECTS
SUZANNE SPENCER-WOOD, CONSULTING ARCHAEOLOGIST
OCMULGEE ASSOCIATES INC., CONSULTING STRUCTURAL ENGINEERS
CARL CATHCART, CONSULTING ARBORIST

PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE
Recommendations
No additional water supply is recommended.

Lighting

Issues
The cemetery side of Middlesex Street is lined with wood utility poles with overhead wires. There may be some ambient light from street lights mounted on those poles.

Recommendations
No additional lighting is recommended.

PRIORITIES

High Priority
- Trees with large cavities, leaning into cemetery, drives or grave markers.
- Removal of all invasive Bittersweet.
- Restoration of earth at mound tombs.
- Soil removal at base of Howard tomb door.
- Earth fill at monument and edging exposed foundations.
- Reset stones at family plot edging.
- Restore grave markers that present public safety hazards or are structurally unsound.
- Dowel replacement in multipart stones that are visibly cracked or spalled.
- Conservation of historically significant marble markers in danger of becoming illegible.
- Slate marker resetting and repairs.
- Broken stone repairs if the inscriptions are legible and at least 75% of the stone is available.

Medium Priority
- Trees with large cavities, leaning away from drives and grave markers, and not located in the front area where vehicles may drive.
- Tree replacements.
- Lawn repairs.
- Repoint Middlesex Street retaining wall and reset west cap stone at east entrance.
- Chain link fence repair on the west edge.
- New chain link fence along the east edge.
- Interior fence and gate restoration at Wood and Byam family plots.
- Dowel replacement in multipart stones with visible metal stains at the junction between stones.
- Cleaning legible markers.

Low Priority
- Trees with a small amount of dead wood and branches, and trees protected from the winds in close to the edge or other trees.
- Tree replacements.
- Screen planting along east and west edges.
- Screen planting at propane tank.
- Ground cover in raised plots.
- Change the southern most drive to lawn.
- Reset other stones at family plot edging.
- Replicate gate at central entrance.
- Trash receptacle replacement.
- Paint guard rail.
- Informational and interpretive signs.
- Reset markers that have shifted or are leaning.
- Reevaluate and conserve marble markers that are currently in satisfactory condition, as necessary.

PRIORITIZED COST ESTIMATES

High Priority
- Tree removals $8,000
- Tree pruning and support systems 3,000
- Tree fertilization 1,000
- Tree replacements 8,000
- Remove Bittersweet 1,000
- Ground cover in raised plot [test area] 1,000
- Repair earth at mound tombs 1,000
- Earth fill at monument/edging fdns. 1,000
- Reset family plot edging 15,000
  39,000

Medium Priority
- Tree removals 500
- Tree pruning 500
- Lawn repairs 1,000
- Repoint wall along Middlesex Street and reset cap stone at east entrance 12,500
- Repair west chain link fence 1,000
- New east chain link fence 2,500
- Restore family plot fences 5,000
  23,000

Low Priority
- Tree removals 1,000
- Tree pruning 3,000
- Screen planting along edges 5,000
- Screen planting at propane tank 3,000
- Change southernmost drive to lawn 13,000
- Ground cover in raised plots 44,000
- Reset other stones at plot edging 21,000
- Replicate gate at central entrance 20,000
- Paint guard rail 3,000
- Informational & interpretive signs 5,000
  118,000

Costs associated with grave marker work has not been included. Refer to the General Recommendations section for approximate costs of various types of repair.
Set on the slope of what was once called Sunset Hill, this beautiful 5.6 acre site on the western end of Greater Nahant on the Nahant peninsula overlooks Lynn Bay and Long Beach. Developed as a burial place for Nahant’s residents, the cemetery is still active and well maintained. It has leveled lawn terraces and a crushed stone drive and paths.

In 1853, the year Nahant was incorporated as a town, a committee was appointed to find a town cemetery. The following year they were empowered to purchase a "suitable piece of ground" for a cemetery. In 1856 the committee reported the purchase of about two acres from the heirs of Thomas A. Perkins. The parcel was set behind two private lots that fronted Nahant Road.

A street was laid out from Nahant Road to Greenlawn Cemetery in 1858 and improvements began. The committee, with John Q. Hammond as chair, laid out the cemetery into lots and pathways. The town provided money for graveled paths, cast iron gates on granite posts, a fence and ornamental tree plantings. Work was completed in 1859, the year of the formal dedication. Almost at once the forefathers of the town were moved from the old burial place near Pleasant Street, “which was practically private” in the early days, to the new cemetery. With them came the few pre-1850 slate grave markers found in the cemetery.

The land area of the cemetery expanded in 1879 with the incorporation of a town lot at northwest, in 1908 with a 100’ strip of land to the north and in 1918 to Nahant Road. About that time the town moved the Police Station across the street to its present location. A small parcel was added to the cemetery at the northeast corner along Nahant Road up to High Street in 1928.
Between 1918 and 1920 the generosity of Nahant’s citizens focused on the cemetery with three significant gifts: Ellingwood Chapel, Francis H. Johnson Memorial Gateway and Louisa Beal Memorial Gateway. In 1918 Mrs. Luther S. Johnson offered to build a cemetery chapel, carrying out the intentions of her late husband. The granite Norman Gothic Revival Ellingwood Chapel was designed by Cram and Ferguson. Construction began in 1919 and was completed and the building dedicated in 1920. Cram and Ferguson also designed the walls and gates on Nahant Road as part of the chapel plan as well as tree plantings and pathways. The perimeter stone walls as shown on the Cram and Ferguson plan were completed in stages between 1919 and 1940.

In 1919 Mrs. Francis H. Johnson gave the town the gateway on Nahant Road in memory of her husband. The granite gateway with a Norman arch and stone benches at each side of the entry has wrought iron gates with a spear pattern. Mrs. James H. [Louisa] Beal also donated funds to build the English Gothic Revival wood and stone gateway and fence at southeast corner, or old end of the cemetery on High Street. It is a dark green painted heavy wood rail fence with carved posts.

The oldest area of the cemetery is roughly the southern third and includes the 1866 Soldiers Monument honoring Civil War dead. Most of the cemetery’s few marble markers are found in this area as well as a number of modestly sized family obelisks. It is unified in a linear design of straight walkways connecting small oval green spaces where the principal monuments have been placed. The north section of the cemetery is open with grave markers set flush with the ground.

LANDSCAPE CHARACTER, LAWNS AND VEGETATION

Landscape Character

Issues

Although this cemetery was established during the rural cemetery movement, the typical lush planting, curvilinear paths and natural topographic features are absent. The only characteristic feature is the wooded rocky slope on the east side near the receiving tomb. The topography of the older southern section was apparently leveled. Influenced by the Memorial Park cemetery movement, the more recent north side is terraced with an open lawn character and flush grave markers.

Notations of the planting of trees and shrubs are found c. 1910 by Thomas Roland, an English gardener, trustee of the Massachusetts Horticultural Society and former President of the Society of American Florists. When Thomas P. O’Connor was the gardener in 1928, the town expressed pride in the cemetery because of its desirable location, and shrub and tree plantings.

A 1931 plan by Bradford and Weed indicates Maple trees along Nahant Road with space reserved for Elms and shrubs in an open space where the northeast wall now exists. The Maples must have been removed at some point because smaller scaled Crabapples and Cherries now occupy that location. The area west of Lawn Street is all Crabapples, while the area east of Lawn Street is predominantly Cherries with some Crabapples mixed in. Large Lindens line Lawn Street and the embankment separating the north part of the site from the rest of the cemetery. The large old Pines associated with the chapel provide an appropriate character for a “rural” seaside chapel.

Recommendations

The north half of the site should remain simply treated and cognizant of the ocean views. The older south half of the property would benefit from planned planting program that emphasizes planting treatments of rural cemetery movement. The Pine planting adjacent to the chapel should be reinforced.

Planting

Issues

The cemetery contains over 100 trees, not including wooded and volunteer areas. About 90% of the tree cover is deciduous and 10% evergreen. Maples, the most predominant tree species, account for about 1/3 of the total. Most of these are volunteer, located primarily along the southern boundary. Lindens were purposefully planted and comprise about 20% of the total. Other tree species include Sycamore Maple, Oak, Cherry, Crabapple, Pear, White Pine, Cedar, Blue Spruce and Japanese Black Pine. Shrubs include Azalea, Rhododendron, Rose, Forsythia, Running Euonymous, Juniper, Yew, Falsecypress and Arborvitae.

The Crabapples and Cherries are aging and will soon reach the end of their useful lives. Some sucker growth is evident at the Pears indicating that they have undergone some stress. Many trees exhibited evidence of recent pruning, another indication of the care that the cemetery is given.

Recommendations

Replacements for Crabapples and Cherries along Nahant Road should be considered. While the low scale of these trees allows views over them, larger scale trees like the Maples of the Bradford and Weed plan would direct views toward Long Beach.
Volunteer Growth

Issues
Most of the volunteer growth is at the west end in the apparent expansion area, and to a lesser degree along the south boundary and High Street edge. Species include Maple, Black Cherry and Sumac.

Recommendations
Remove all volunteer growth, particularly where it conflicts with perimeter fencing and walls.

Lawn

Issues
Lawns are generally in good condition with moss present in a few locations.

Recommendations
Restore deficient lawn areas.

ACCESS AND SECURITY

Pedestrian and Universal Access

Issues
There is one pedestrian point of access, not including open drive access points which are also used by pedestrians. A pedestrian entrance at the southeast corner from High Street at the Louisa Beal Memorial Gateway has a 6'-5" wide opening. Slopes related to the entrance are universally accessible, but surface materials are not.

Recommendations
No changes are recommended for pedestrian access. Universal access should continue to rely of vehicular access routes.

Vehicular Access

Issues
There are two points of vehicular access from Nahant Road. The main entrance through the Francis H. Johnson Memorial Gateway has a 12' wide clearance. A secondary entrance further east has an 11' wide opening and appears to have more of a service function than a visitor function. With no defined parking areas, parking occurs on or along the drive inside the cemetery or on public streets outside the cemetery.

Recommendations
This system appears sufficient for the visitation requirements and no changes are recommended.

Security

Issues
The site is not secured to prevent unauthorized vehicular or pedestrian access. While the main vehicular entrance has iron gates, the secondary entrance has eyebolts in the stone wall for a chain, but no chain is present. The High Street pedestrian entrance has a wood gate.

Recommendations
Security does not appear to be an issue in this burial ground and no changes are recommended.
VANDALISM

Issues
There is little evidence of vandalism. The presence and proximity of the police station as well as some residential development may have had much to do with the limited vandalism.

Recommendations
Vandalism is not a significant problem and no changes are recommended at this time.

CIRCULATION SYSTEMS AND MATERIALS

Circulation Systems

Issues
Lawn Street, the single two lane drive in from the main entrance on Nahant Road, passes by the chapel entrance and terminates in a cul de sac at the WWII Memorial. The remainder and majority of the circulation system is a rectangular grid of pathways radiating from the drive in the southern 2/3 of the cemetery. With a width of 3' to 4', paths extending from the drive are generally too narrow for vehicles. The main path extending east and west from the cul de sac is 8' to 10' wide with the east path punctuated by two oval spaces that contain two significant war memorials. Paths extending toward the south edge typically dead end. There is an anomalous curved path section at the southwest corner.

Recommendations
No changes to the circulation system are recommended except for consideration of changing the curved path section to correspond with the dominant path system, provided the change does not conflict with historic resources.

Steps

Issues
A set of wood railroad tie steps north and east of the chapel traverses the steep embankment with 7 risers and a tubular steel center rail.

Recommendations
The material and treatment of the steps and handrail are out of character with the overall development of the property. If steps are deemed necessary, they should be made of stone to complement the character of the chapel and perimeter stone walls. Handrails should have more of the character of the iron work associated with the chapel or Johnson gate.

Pavement Materials

Issues
Grey crushed stone is used for both drive and walk surfacing.

Recommendations
The selected material is very much in character with the historic nature and important visual features of the cemetery. No changes are recommended.

GRAVE MARKERS

Headstones and Footstones

Issues
The collection of markers is primarily granite with most of the older 19th century markers being marble. There are also some limestone and 2 pink quartz markers. In the newer section, inscribed granite plaques are set flush in the lawn. Marble surfaces exhibit a range of erosion, as would be expected for century old markers in a seaside location. All the upright stones are subjected to vibrant yellow-orange lichen populations. At least 6 of the marble markers have toppled or are leaning significantly as well as 1 large leaning granite marker. A few markers need to be reset on their bases and 2 of the marble markers are cracked.

Recommendations
Toppled and leaning marble markers should be reset as a first priority. Metal pins should be replaced with non-corroding attachments, either nylon, stainless steel, or aluminum, set in lead. The joint between the base stone and the inscribed stone should be filled with wedge lead strips, available from monument dealers, and tapped in place. Under no circumstances should caulk be used in resetting two part stones.
Cleaning is a second priority for the stones at Greenlawn. This work should be done under the supervision and instruction of a stone conservator. Unstable or sugaring marble surfaces should not be cleaned or otherwise treated. Biological growths on top of stable stone surfaces should be carefully removed with dry brushing during dormant seasons. Stubborn growths may be carefully removed with wooden or plastic scrapers. After brushing and/or scraping, a biocide solution may be brush applied to retard recolonization and to remove exceedingly stubborn growths. A few of the more legible marble stones should be conserved to reduce the impacts of acid rain.

Monuments

Issues
There are three significant monuments. The 1866 Civil War Soldiers Monument is a white marble obelisk set on a square granite base and capped with a carved marble urn. The 1920/21 American Legion Monument commemorating Nahant’s WWI dead is a bronze memorial tablet set on a large ovoid boulder from the town shore. The gray granite 1951 Veterans’ Memorial recognizes WWII, Korean and Viet Nam war veterans.

Recommendations
The marble Civil War Soldiers Monument should be conserved to protect against further deterioration.

STRUCTURAL ELEMENTS

Perimeter Walls

Issues
Nahant Road wall: The 1919 Francis H. Johnson Memorial Gateway structure on Nahant Road is undergoing renovation. A 3’ high rubble stone wall along Nahant Road was recently repointed. On the cemetery side the wall varies in height from 3’ to 5’. Settlement of the grade on the inside of the wall east of the main entrance has exposed the top of the wall foundation which has a different stone character.

Kennedy Court wall: Constructed with large stones and heavily chinked, a few stones have fallen out of place. The top of the wall has been partially parged, indicating that there may have been stability problems at some point in the past. Regrading and filling were taking place above the wall, placing heavier loads on wall.

Recommendations
Provide earth fill to cover exposed stone rubble foundation on part of the Nahant Road wall to prevent undermining and destabilization. Because the Kennedy Court wall may not be designed to withstand the additional loading, it should be reviewed by a structural engineer. If the wall is found adequate, reset the fallen stones.

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Mound Tomb and Vault Structures

Issues
Built into the rocky hillside in the southeast corner of the site in 1856, the receiving tomb is constructed with randomly sized, rough hewn granite stones and heavy mortar joints. The light gray painted iron door did not appear to be locked.

Recommendations
The iron door should be painted black which is a historically more appropriate color and the door should be locked for public safety reasons.

Edging of Family Plots

Issues
One family plot has granite edging and it is in good condition.

Recommendations
No improvements are recommended.

BUILDINGS

Issues
The magnificent Chapel was not examined because it is beyond the scope of this undertaking. Nor was the small stone tool house that was designed to match the chapel. Set into the eastern side of the hill, the latter was built with random sized, rough hewn granite quarried in Nahant, and laid with thick white mortar joints. The building has cast stone trim and a slate roof.

Recommendations
No recommendations are offered.
FENCES AND GATES
Iron Fences and Gates
Issues
The wrought iron entrance gate at the Johnson Memorial Gateway has been reset, off the stone gate structure onto tubular steel support posts. It is assumed that this work is part of the overall gate restoration project that is underway.

Recommendations
No recommendations are offered.

Chain Link Fences
Issues
The southern border is defined with a 5' high chain link fence. Although rusted, it appears stable. With no horizontal rails and only a tension wire at the top, the top of the fence is slightly bent over at a point between the 1866 and WWII memorials, suggesting that it has been climbed over.

Recommendations
Consider replacing the fence using a vinyl coated fabric in the next ten years.

Wood Fences
Issues
The Louisa Beal Memorial Gateway and fence along the High Street side consists of a unique wood fence that is relatively open with 2’ square stone masonry posts at the ends and at the gate. The latter posts support a slate shingled roof over a wood gate. Well maintained, the fence and gate appear in good condition. One section of a similar fence is located on the west side.

Recommendations
No improvements are recommended.

SITE AMENITIES
Signs
Issues
Because the main entrance at the Johnson Memorial Gateway was sheathed in scaffolding due to a restoration project, it was difficult to determine if or what types of signs were in place. A regulatory sign prohibiting dogs and bicycles is attached to the High Street pedestrian entrance.

Recommendations
If there is no identification sign for the cemetery, one should be placed outside the Johnson Memorial Gateway. It would be beneficial to add informational and/or interpretive signs.

Trash Receptacles
Issues
A single 55 gallon drum receptacle with a plastic top is located near the main entrance.

Recommendations
Trash receptacles serve a necessary purpose in an active cemetery. The style should better complement the historic nature of the site.
GREENLAWN CEMETERY
PRESCRIPTION PLAN
NAHANT, MASSACHUSETTS

LEGEND

- Existing Evergreen/Deciduous Tree
- Existing Woods
- Remove Existing Vegetation
- Existing Stone Wall
- Vehicular/Pedestrian Entrance
- Flagpole
- Cr. Stone Path
- Monument
- Property Line
- Bench

NORTH

BY:
WALKER-KLUISING DESIGN GROUP, LANDSCAPE ARCHITECTS
JOYCE CLEMENTS, CONSULTING ARCHAEOLOGIST
OCMULGEE ASSOCIATES INC., CONSULTING STRUCTURAL ENGINEERS
CARL CATHCART, CONSULTING ARBORIST

PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE

NOVEMBER 1999
SARA B. CHASE, PRESERVATION CONSULTANT

1" = 100'
Seating

Issues
There are numerous styles of benches in the cemetery including 4 garden style wood benches, a park style bench with metal supports and wood slats, a Victorian style bench with cast iron supports and wood slats, a stone bench associated with a grave marker and 2 stone benches built into the main entry gate structure. Another bench with concrete supports and wood slats is located just outside the cemetery on Nahant Road.

Recommendations
It would be preferable to designate one bench style for use in the cemetery, one that is supportive of the historic nature and character of the site. Not counting the stone benches which are perfectly appropriate, both of the existing garden style and Victorian style benches meet the criteria in a broad sense.

Flagpoles

Issues
A 20' high fiberglass memorial flagpole is located at the end of the entrance drive adjacent to the WWII monument. It is in good condition.

Recommendations
No changes are recommended.

Planters

Issues
All planters are directly associated with grave markers.

Recommendations
No changes are recommended.

UTILITIES

Drainage

Issues
No drainage structures were found inside the cemetery. In general, the site drains on the surface and flows north and west. No problems were evident. The crushed stone drip strip around the perimeter of the chapel has exposed plastic edging that is out of character with the stone chapel.

Recommendations
No changes are recommended except changing the plastic edging to a material that compliments the character of the chapel.

Water Supply

Issues
Hose bibbs are provided throughout the cemetery.

Recommendations
No changes are recommended in terms of water supply.

Lighting

Issues
Except for security lights at each building, there is no night lighting in the site. There are street lights on the perimeter streets.

Recommendations
Do not provide additional lighting.

PRIORITIES

High Priority
• Stone conservation including resetting and repair of slate markers and pin replacement in marbles that are visibly cracked or spalled
• Vegetative removals
• Structural review and repair of Kennedy Court wall
• Repair of settlement adjacent to Nahant Road wall
• Lawn repairs
• Identification sign placement [if necessary]

Medium Priority
• Stone conservation including marbles with visible metal stains at the junction between marker and base

Low Priority
• Stone conservation including granite markers that have shifted or are leaning, and marbles currently in satisfactory condition
• Replacement of wood steps
• Chain link fence replacement
• Plastic edging replacement at chapel
• Informational and interpretive signs
• Additional planting
At its opening in 1858 as the second state hospital it was called the Northampton Lunatic Asylum. The institution was cofounded by Dorothea Dix, who led the reform movement to found asylums for more humane treatment of the insane. In a field survey of conditions in Massachusetts she found that the insane were chained or caged in basements or attics and often beaten and otherwise mistreated. She successfully campaigned for state asylums where the insane would be treated with more humane methods [Brown 1998].

The Northampton State Hospital burial ground was in use from the founding of the institution in 1858 until 1921. Patients who died and were not claimed by family or friends for burial elsewhere were buried there. The institution mortuary slip books contain several direct references to the "hospital cemetery" [12/25/1914; 6/11/1916], "hospital burial ground" [7/23/1915] or "hillside cemetery" [6/11/1916] in the section for disposition of the body. Research by Elizabeth Kroon for the Department of Mental Health [DMH] in June 1997 confirmed the presence of 181 burials on the hospital grounds by cross referencing death records in hospital casebooks with extant mortuary slips, death registers of the City of Northampton and local cemetery records.

Ms. Kroon further found 413 burials with unlisted or unclear dispositions such as "Northampton," which also could have been buried on the grounds of the State Hospital. In the late 19th century between one half and one third of patients who died in the hospital were buried on the grounds [McCarthy 1974: 70]. After 1921 patients not claimed for burial by family or friends were listed as "Chapter 113 of general law" or "Chapter 77 of regular law," which were new state laws permitting citizens who die in state hospitals, asylums or prisons to be sent as cadavers to medical schools. These laws are still in effect.
Northampton State Hospital [NSH] closed in 1993. The field on the hillside known as "cemetery hill" fell into disuse. The City of Northampton obtained a 99 year lease from the Department of Food and Agriculture and subleased the field to Smith Vocational Agricultural School for training in agriculture. Protected by a permanent restriction for agricultural use, the field is currently used for instruction in haying, which is beneficial for maintenance of the field. There are no grave markers in the 4 acre field of the former 530 acre site and records have been lost. The site is not recognizable as a burial ground and the specific extent and location of the burials has not been confirmed.

ARCHAEOLOGY

Issues

The location of the Northampton State Hospital burial ground was primarily identified through a strong oral tradition among grounds keepers at the institution. The plot was always referred to as a cemetery by them. A grounds keeper recollects finding two rectangular stones in the area in the 1950s that were believed to be marker stones of some sort. They were described as small squares with no legible inscriptions or metal on them. They might have had faded inscriptions on them.

Records at the hospital of burials and the layout of the cemetery have disappeared. The cemetery’s location is verified by the one documentary reference to the burial ground found to date in the institution’s records. A November 1933 entry in the Superintendent’s Reports 1932-36 described land that needed draining as "land at the foot of what used to be the hospital cemetery which borders on Mill River and runs up towards the spring in back of the barn." [NSHR 1933] This referenced piece of land is now called the "pumpkin patch," and is still known for poor drainage. The location of the hospital cemetery specified in the hospital record is congruent with the oral history of its location.

The burial ground is accessed by a series of dirt roads that start at Burts Pit Road and extend toward Mill River. The burial ground is an open field surrounded by a dirt road except on the south side, where the field ends in woods. There are no gravestones, paths, entranceways or fences in the field indicating the locations of graves or boundaries of the cemetery. There is an unmarked gravestone in woods across the dirt road to the north of the field. The grave is marked by a cobblestone covered north-south mound with a small upright gravestone at the south end that is flat on the north side but not engraved. It was reported that until recently an elderly woman had periodically visited and placed trinkets on the grave. A bit to the west there was another north-south cobblestone covered mound that might also be a grave, although it lacked a gravestone.

Archaeological reconnaissance survey of the site confirmed the location of the burial ground that was previously identified through oral history. Squarish soil deflations were found extending in 2 to 3 fairly straight nearly north-south rows from the woods on the south edge of the field northerly along the top of the hill. Further, very distinctive squarish to rectangular patches of very green ground cover about 1” high were found where the taller straw colored hay in the rest of the field did not grow. The long axis of the patches of low green vegetation extended roughly east-west, which is the traditional direction for Christian burials. Further, the patches roughly formed rows running north-south as is typical in Christian cemeteries.
There is little indication of underground disturbance in the pattern of deflations and patches of low green vegetation, except that some vegetation patches were longer or shorter than a typical adult burial would be. Some disturbance of the vegetation patches may have been caused by historic tilling of the field. A 1916 map labels the burial ground parcel as "Tillage." [Davis 1916] In addition, a grounds keeper reported that he planted corn in the field c 1943. The same person had heard that the field was a cemetery from his father and uncle who were grounds keepers in the 1920s. Since the 1950s the parcel has changed hands between various state departments and at one point in the 1950s was used for instruction in haying by the University of Massachusetts Agricultural Department as it is today by Smith Vocational Agricultural School.

**Recommendations**

The Northampton State Hospital burial ground is protected from development by a permanent agricultural use restriction on the property held by the city of Northampton. Further protective measures are recommended. If the location of the cemetery is forgotten, it is possible that the Smith Vocational School or a subsequent renter or owner of the property might use the field not only for instruction in haying but also for instruction in plowing and planting which would further disturb the soil deflations and patches of low vegetation that are the only marks of the locations of graves. Potential harmful or perhaps unintentionally disrespectful agricultural activities include tilling of the ground for crops, leveling off depressions in the field and grazing livestock.

A few long depressions were found running south-north across the hill that appear to have been made by large tires of a tractor or other agricultural equipment running across the field when the soil was wet and soft, thus displacing soil down the hill. It is strongly recommended that haying be conducted only when the ground is completely dry. The local Land Use Administrator for the Department of Food and Agriculture has agreed to draw up a regulation to this effect for the Smith Vocational Agricultural School.

Further archaeological reconnaissance and subsurface testing such as resistivity testing are recommended to identify the boundaries of the cemetery. Further archaeological reconnaissance in the area might also locate small unmarked gravestones of the types once seen in the burial ground. Further documentary research is recommended to find the cemetery plot records and map that were seen years ago at the Northampton State Hospital.

**LANDSCAPE CHARACTER, LAWNS AND VEGETATION**

**Landscape Character**

**Issues**

The site appears as an open sloping agricultural field bordered by woodlands and a river with views to the historic hospital complex.

**Recommendations**

No changes to this landscape image are recommended.

**ACCESS AND SECURITY**

**Pedestrian and Universal Access**

**Issues**

Access is provided on part of a network of unpaved trails across the hospital property, which is one of the most heavily used passive recreation areas in the city. Pedestrian access is provided through gated entrances from Burts Pit Road. Gradients along the drive in the north end of the site are too steep for universal access.

**Recommendations**

No changes are recommended for pedestrian access. Universal access should continue to rely on vehicular access routes.

**Vehicular Access**

**Issues**

There is one point of vehicular access from Burts Pit Road.

**Recommendations**

This system appears sufficient for the visitation requirements and no changes are recommended.
Security

Issues
The site is essentially open. Vehicular access points are gated but apparently never closed.

Recommendations
Security is apparently not a significant issue on this property and improved measures should not be pursued at this time.

VANDALISM

Issues
There is no evidence of vandalism.

Recommendations
Vandalism is not a significant problem and no changes are recommended at this time.

CIRCULATION SYSTEMS AND MATERIALS

Circulation Systems

Issues
There is a single unpaved gravel path or road connecting the site to Burts Pit Road. It is used primarily by pedestrians and occasional vehicles.

Recommendations
No changes to the circulation system are recommended at this time.

Pavement Materials

Issues
The one lane gravel drive is in fair condition despite the maintenance requirements.

Recommendations
Maintain the drive as is. It should not be widened because of the potential for intruding onto graves close to the road.

SITE AMENITIES

Signs

Issues
There is no identification sign for the burial ground. A small cluster of overgrown shrubs is prominently visible near the dirt road at the top of the hillside burial ground. Within the cluster of bushes are two large stones that could be mistaken for large gravestones, but are remnants of a bench. These are reputedly a memorial to four veterans buried on the hillside built about 1958. Each Veteran's Day after erection of the memorial, NSH employees planted a flag near it as noted in a 1967 NSH newsletter for employees.

Recommendations
The burial ground needs visible recognition which will also add a measure of protection. The addition of identification, interpretive and/or informational signs would be a minimal measure acknowledging the history of the site and the people buried there as well as the scenic landscape.

A memorial for the burial ground would be a more significant means of recognition and is recommended as a measure for preserving knowledge of the use of the site for the hospital cemetery.

The bench and shrubs are significant because they are the first memorial commemorating the field as a burial ground. This first memorial should be preserved and restored as an important part of the history of the site. It would be best to restore the bench without excavation or any other disturbance of the ground, if possible.

Consideration should be given to adding signs to the area such as a plaque mounted on one of the bench supports noting when the bench was built as a memorial to the burial ground. This effort would restore an important part of the history of the cemetery.

A second plaque could be mounted on the other bench support for the modern commemoration of the cemetery. This plaque could include the dates of use of the burial ground [1858-1921], the 181 confirmed burials, the 413 potential burials and a short commemorative statement or poem. It could also note the existence of at least 2 other burials in the woods across the trail to the north, and the fact that the boundaries of the cemetery have not been determined.

The vegetation surrounding the benches should be preserved but trimmed by hand above ground level to facilitate access to the bench while maintaining the arbor atmosphere created by the overgrown vegetation, which provides protection against the wind.

If another memorial is erected, it should have some form of relationship to the hospital and perhaps be in keeping with the rural and agricultural character of the area. It is recommended that an artist experienced in the execution of outdoor site specific art or a similarly experienced other design professional like a landscape architect or a combination of the two be retained to develop the ultimate expression of the memorial.
STATE HOSPITAL BURIAL GROUND
PRESERVATION PLAN
NORTHAMPTON, MASSACHUSETTS

LEGEND

Existing Evergreen/Deciduous Woods
Existing Drive
Vehicular/Pedestrian Entrance
Contour Line

NORTH

1" = 200'

BY:
WALKER-KLUESING DESIGN GROUP, LANDSCAPE ARCHITECTS
SUZANNE SPENCER-WOOD, CONSULTING ARCHAEOLOGIST

PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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CARL CATHCART, CONSULTING ARBORIST

MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE

November 1999
Because not all burials result in soil deflations or distinctions in vegetation, the location of subsurface remains cannot be completely accurately determined from surficial archaeological evidence. Thus, a new memorial should not disturb the ground to eliminate the possibility of disturbing elements beneath the surface. If the form of the memorial is such that ground disturbance is required, it should be located such that the anticipated disturbance is minimal, such as near or on the trail, and an archaeologist should be present during excavation work.

To minimize the possibility of disturbing burials, and provide a location of some prominence, any new memorial should preferably be sited near the intersection of the paths at the crest of the hill overlooking the open field where a distant view of the river and hospital complex is apparent. Some vista clearing may be desirable near the hospital complex to open up views to the building complex.

A possible memorial solution is a cairn of fieldstones or cobblestones constructed above ground level and either dry laid or mortared together. A dry laid cairn has the advantage of not requiring ground disturbance for a foundation. Some form of signage is also desirable to help explain the nature and significance of the memorial.

Another possible solution for the memorial is to utilize some of the materials salvaged from demolition of some of the hospital buildings. This may include stone, brick, iron work or other relevant durable materials. It has been suggested that it take the form of an open brick screen wall with windows or views through and perhaps a tower. The openness could be considered symbolic of "escape of spirit" from the remnants of the confines of the hospital. A solution of this type would require a foundation and consequent excavation. The assistance of an archaeologist in the development and execution of a memorial like this will be critical.

Trash Receptacles, Seating and other Amenities

Issues
Other than the memorial bench, there are no amenities of this type in the area of the cemetery.

Recommendations
Do not provide additional amenities of this type.

UTILITIES

Drainage

Issues
No drainage structures are evident. The site drains on the surface with a gentle slope toward the northeast and Mill River.

Recommendations
No changes are recommended.

Water Supply

Issues
Other than the nearby river, no source of water was found in the general area of the site.

Recommendations
No changes are recommended in terms of water supply.

Lighting

Issues
No light fixtures were found in the general area of the site.

Recommendations
Do not provide light fixtures.

PRIORITIES

High Priority:
- Identification sign placement
- Restoration of the c. 1958 memorial
- Development of restrictive regulations pertaining to agricultural use of the site

Medium Priority
- Erection of a more broadly encompassing memorial with informational and interpretive signs
Glenwood Cemetery was one of the first significant civic efforts for the newly incorporated town. In 1871, when the town of Maynard was established, a piece of land between 6 and 8 acres in size at the intersection of the old Marlborough Road [Parker Street, route 27] and the Great Road [route 117] was offered by Amory Maynard, founder of Assabet Mills, for the Town’s cemetery and named Glenwood Cemetery at a cost of $1,032. A small portion of the cemetery land had been previously used as a private burial ground between 1750 and 1820. Prominent Maynard citizens contributed to the maintenance and care of the cemetery beginning with $250 that was the beginning of the perpetual care fund established in 1880. They also assisted in the expansion of the cemetery. In 1903 additional land was acquired from Lorenzo Maynard [buried in Mount Auburn Cemetery]. In 1928, 11 more acres were purchased from the heirs of William Taylor. In 1975, 2 additional parcels were acquired, 4.39 acres and 7.24 acres.

The overall cemetery property is now 50-55 acres, about 30-35 of which are developed. Only the older part of this cemetery was examined, which is about 15 acres in size and contains 700 lots. This relatively flat area is separated from the newer area by a pond and deep, wooded valley. It is a bordered on the west by Parker Street [Route 27], on the south by Great Road [Route 117], on the north by private property and on the east by the new area of the cemetery.

The design of the cemetery may be considered a municipal version of the lawn park style with a large single marker sited in each plot. The more classic private cemeteries of this style have larger plots.
Glenwood contains the remains of prominent residents of town including relatives of Abraham Lincoln, Franklin Pierce, Isaac Davis, members of the original Secret Service and the founder of the local soda company "Maydale" as well as Spanish American and Civil War veterans. In 1876 a lot was granted to the Henry Wilson Post, No. 86, Grand Army of the Republic for the burial of deceased soldiers. Thomas H. Brooks was the first person interred after the land officially became a cemetery.

On the town walking tour, Glenwood is adjacent to St. Bridget’s Cemetery, the only other cemetery in town. St. Bridget’s was established in 1869 as a Catholic cemetery.

LANDSCAPE CHARACTER, LAWNS AND VEGETATION
Landscape Character
Relatively evenly spaced maturing trees alternate along drives. The regular pattern has numerous gaps due to lost trees that have not been replaced, giving a somewhat random pattern appearance.

Some old, poorly formed Mountain Laurel line the Parker Street edge. It appears that many have been lost over time. Old photographs indicate that trees had been planted along Parker Street, flanking the stone entrance gate.

Just inside the Parker Street entrance, the circular island has become overgrown, reducing visibility. The outer edge is primarily Yew with some Arborvitae and Catawba Rhododendron at pedestrian entrances. Inside there is a ring of Azaleas with 4 clumps of Euonymous or larger Azalea in the center. The scale of the planting in old photographs was such that one could see over it.

The interior of the cemetery has many Yews planted adjacent to markers. Quite a few had been removed about 3 years ago, yielding mostly positive comments from patrons. The current policy regarding shrubs at grave sites is that they be placed a certain minimum distance from the marker and that they be maintained by the lot owner. The town retains the right to remove them if deemed necessary.

The cemetery has 2 significant wetland areas, one an overgrown pond that is filling in with sediment adjacent to old part of the cemetery.

Recommendations
Replace the missing trees in the interior of the cemetery and along the Parker Street edge. Scale down the planting at the entrance circle.

Planting
Issues
There are 111 trees in the maintained area of the historic part of the cemetery with Sugar Maples making up over 80% of the total population. There are also 15 Norway Maples, 2 Red Maples, 3 White Ash, 1 Norway Spruce, 1 White Spruce and 1 Flowering Cherry. The Sugar Maples are the most mature as indicated by their trunk diameter measured approximately 4.5’ above the ground. The largest tree in diameter is the Sugar Maple near the Maynard family tomb.

The Sugar Maples appear to have been planted around the turn of the century with some replacements in the last 50 years. The Norway Maples are not more than 30 to 45 years old. The large Norway Spruce near the tomb appears to be a volunteer that was seeded naturally, approximately 50 years ago.

Most of the trees are exhibiting some decline especially the Sugar Maple and White Ash. Only one tree is recommended for removal because of location and decay in the main stem. Located at the left rear of the tomb, it leans toward the neighboring property. Two Sugar Maples have crowns that exhibit more than 30% decline. They should be removed at some later date. Many trees have cavities in the lower and upper stems. Some of them should be further examined to determine how much sound wood is present in and around open cavities. This procedure is known as a “Hazardous Tree Assessment” [HTA].

Girdling roots and root damage from equipment also was noted. Eighteen trees have multi upper stem structures that may fail in storms with winds exceeding 55 miles per hour. No disease or insects were noted at this time.

The condition of the Sugar Maples is poor to fair which is evident by small buds, annual elongation growth, thinning out of the crowns and dieback of the crowns. From 1990 to the present, this area has been in a drought and most of the trees are exhibiting decline from this condition. It takes about 5 years of normal rainfall for trees to recover from drought stress.
The cavities and wounds in these trees have developed from branch failure in past storms, maintenance equipment and funeral vehicles. Trees can survive many years with small cavities. As they mature the development of wood is slowed to contain the size of the wounds. As this happens fungus takes advantage with increased activity and the shell of the wood gets thinner. Guidelines to evaluate wood soundness have been developed in the last 10 years that provide indications and information on potential tree failure. Research from hurricane storms and the type and amount of decay in different species of trees have enabled an arborist trained in hazardous tree assessment to recognize and evaluate conditions that lead to tree failure. The level of risk for tree failure is determined by the frequency of people or vehicles in the area, the potential to fail, and an environment that may contribute to that failure. In other words, if there is no target there is no hazard, regardless of the condition of the tree.

**Recommendations**

These trees need help to survive in the coming years. Improving the health of these trees is most important at this time. Because the large deadwood has been removed from most of the trees in this area, concentrating on improving the health of the oldest Sugar Maples should be the next priority. Pruning out of dead branches 1" in diameter and larger is all that is needed to maintain tree health and a safer environment. Pruning of live branches from any tree is not recommended unless it is broken and in a possibly hazardous condition. These trees need as much leaf surface as possible for photosynthesizing so the development of nutrients and carbohydrates meet or exceed current needs for future health.

To help ensure the longevity of multistem trees, the installation of support cables helps prevent large branch failure. Properly placed 1/2 to 2/3 of the remaining height of the tree above the main fork or forks with eyebolts through the branches, and cables attached to the eyebolt eyes, these cables will not harm the health of a tree. Posting to alert people that during high winds large old trees are subject to failure and could cause injury may help protect the town and people visiting the cemetery.

Trees that are important to the cemetery would benefit with the addition of organic mulch material to the existing soil beneath their canopy. This will help retain any fertilizer and moisture in the soil. Mulching areas also reduces mowing areas and tree roots do not have to compete with grass roots for nutrients and moisture. If possible within the historic character of the cemetery, a 3-4" depth of mulch should be applied beneath the tree canopies. Composted wood chips or other composted material would be very beneficial together with fertilizer. A granular fertilizer could be applied first and then mulched over.

The soil in this cemetery is coarse in texture, mostly sand and gravel. Water and nutrients leach very quickly from soil like this. Soil tests should be taken throughout different sections of the historic part of the cemetery to determine soil acidity [pH]. From these analyses, pH adjustment and fertilizer requirements can be determined. Requirements for Sugar Maple and Norway Maple are different, so liming requirements to adjust pH will vary from one area to another. Grass will survive in a wide pH range and do sufficiently well for the intended purpose in this cemetery. Especially during dry periods, a lime and fertilization program is recommended, starting with the old Sugar Maples.

If irrigation can be provided from the pond or other source, it should be done during the dry periods of July and August. One inch of water a week would help sustain trees until the fall and winter rains commence.

**Volunteer Growth**

This type of growth is generally under control in the tended portion of the cemetery. Ailanthus was observed adjacent to the receiving tomb and at the wetland edge of the cemetery.

**Recommendations**

Continue to keep volunteer growth under control. Work with the Conservation Commission to eliminate the Ailanthus.

**Lawns**

The topsoil layer appears thin and the soils in general are rapid draining such that they do not retain much moisture or nutrients. A significant amount of herbaceous weeds and moss is present, indicating that the soils are highly acidic. A fertilizer program had been started in past few years, with the hope of beginning a lime program.

Lawn conditions on both mound tombs are similar in that each exhibits sloughing of earth on the south side. The receiving tomb also has some moss growth.

**Recommendations**

Undertake pH tests as described above and initiate an acidity correction program with lime. Consider adding organic matter to the soil to assist with moisture and nutrient retention and continue with a fertilization program.
ACCESS AND SECURITY

Pedestrian and Universal Access

Issues
Most visitors arrive by vehicle through the Parker Street gate. A pedestrian entrance near the Maynard tomb is defined by 2 rusting, acorn capped iron bollards with a step down into the cemetery. Another pedestrian entrance is located adjacent to the receiving tomb. The Maynard tomb has pedestrian entrances on each side of the vehicular gate. All walking surfaces inside the cemetery other than drives are lawn and slopes are relatively gentle.

Recommendations
No changes are recommended for pedestrian access. Universal access should continue to rely on vehicular access routes.

Vehicular Access

Issues
The primary vehicular entrance to this part of the cemetery is through the stone gateway on Parker Street which has a 10-11’ clear opening. A secondary entrance on Great Road is used primarily for the newer part of the cemetery.

Recommendations
No changes are recommended.

Security

Issues
The cemetery perimeter forms a fenced enclosure. Vehicular entrances are chained closed at night. The Maynard family tomb gates are always locked. Pedestrian entrances are always open.

Recommendations
No changes are recommended.

VANDALISM

Issues
No vandalism of consequence was reported or evident.

Recommendations
No changes are recommended.

CIRCULATION SYSTEMS AND MATERIALS

Circulation Systems

Issues
The vehicular system has a geometric layout with a radial central area set within an overall rectangular grid. There is a perimeter concrete sidewalk on Parker Street, but no separate formal walk system in the developed portion of the cemetery other than the path by the pond.

Recommendations
No changes are recommended.

Steps

Issues
Most steps are generally associated with family burial plots and plot edging.

Recommendations
Refer to the recommendations pertaining to the edging of family plots.

Roads

Issues
Drives are not edged and widths vary from 16’ at the central road and entrance to 12’ around the planted circle. Drives perpendicular to the central drive are 11’ wide and gravel drives are about 10’ wide.

Adjacent to the older part of the cemetery, it was reported that the road going between the pond and the swamp on Great Road was constructed during the Works Progress Administration [WPA]. It was reputedly rebuilt a few times because it sank.

Recommendations
Refer to recommendations pertaining to pavement materials.

Pavement Materials

Issues
Old photographs indicate that there were gravel drives set in neatly edged lawns. Today the main drives are bituminous concrete in varying conditions. New paving has been installed at the entrance and around the rotary. Secondary drives are paved with ground asphalt aggregate and those less used have reverted to lawn.

Recommendations
As long as this part of the cemetery continues to have burials, it is advantageous to maintain the current pavement materials. Once this section becomes inactive, the central and perimeter drives should remain paved for maintenance reasons while the secondary drives should become lawn.
GRAVE MARKERS
Headstones and Footstones
Issues
The majority of the over 700 grave markers are granite [74%] with some marble [25%], 2 zinc and 1 boulder. Most of the older marble markers tend to be in the northwest quadrant.

Stone surfaces are for the most part in good to excellent condition, as would be expected for a predominantly granite collection. Some of the marble markers exhibit varying degrees of erosion caused by acid rain deposition.

Recommendations
Priority work relates to conservation of significant marble markers to protect them from the detrimental effects of atmospheric pollution.

STRUCTURAL ELEMENTS
Perimeter Walls
Issues
The original vehicular gate at the Parker Street entrance was replaced in 1928 with a monumental stone arch. This gate was the gift of William F. Litchfield, a leading local businessman. It is a flat arch consisting of tapered stones and a center keystone. The side columns supporting the arch consist of 30" by 36" by 18" stacked units. Most of the joints are tightly fitted, being less than 1/8" thick, but the joints on both sides of the keystone are about 3/4" wide. The stonework is intact, plumb and flush. Some of the mortar joints need minor repointing where they have cracked or efflorescence staining indicative of water infiltration.

The arch has no gate hinges, but does have eyebolts on the cemetery side with a rusted chain which can be used to close the cemetery. A bollard is located on each side of the arch between the ends of the fence and the stone pillars.

Recommendations
The stone entrance arch is in excellent condition but needs minor maintenance work on the mortar joints. Repoint obviously deteriorated joints.

Mound Tomb and Vault Structures
Issues
There are two mound tombs in the old part of the cemetery, each with separate entrances to Parker Street. A massive structure called the Maynard Tomb is in a separate, side lot at the northwest corner of the cemetery. The other one, with only the date 1888 etched into its lintel stone is close to Parker Street just south of the entrance to the cemetery. The mound tombs are in good condition but need minor maintenance work on the mortar joints.

Recommendations
Although the wall construction is intact, straight and flush, the surface of the stone at the top of the wall is affected by surface scaling. The hard finish on the stone has peeled off and a scaly, mildewed texture is present. Scaling such as this is usually related to the formation of calcium sulfate [gypsum] salt on the surface of the stone. The gypsum is formed from calcium carbonate naturally in the granite and sulfur dioxide in the air. The formation of gypsum requires about twice the volume of calcium carbonate, which leads to distress and disruption of the granite surface. While sulfur dioxide emissions have been reduced in modern times, they were more extensive when coal was the most common fuel. Oddly though, only one other stone in the entire wall has this condition. It should be noted, however, that the surface damage on these two stones is superficial and only cosmetic. Therefore, no remedial action is necessary to maintain the future structural integrity of these massive stones.

Maynard Tomb: The Maynard family tomb, erected in 1880 by Amory Maynard and now owned by the town, is a large mound retained by a granite facade with curved wing walls made up of large Chelmsford granite units. A typical stone is 8’ long, 2’ thick and 2’ high. The lintel over the entrance doors is an impressive 11’ long and 3’ high. In spite of the size of the units, the joints between stones are tightly fitted and only 1/8” thick. The surfaces of the joints appear to be sealed with lead. Although the lead has dried, cracked and shifted, the stone units have not shifted or moved. Undoubtedly due to the large stone sizes, they have resisted any water and ice pressure from the earth backfill and infiltration into the joints.

The Maynard Tomb has a double leaf marble door with carved latticework allowing air into the tomb. Each leaf has bronze hinges and pivots on bronze pins. One door has a horizontal break and the other is cracked with a partial horizontal fracture.

The tomb contains 8 vaults. The construction of the interior walls and roof of the vault could not be observed. No signs of settlement or movement were seen and the interior was reported to be in good condition by the town. At the top, in the center of the vault, is a skylight [glass with wire] with a perforated iron cap on a stone base. The iron is rusted.
Receiving Tomb: The 1888 tomb was a receiving or holding tomb for the cemetery. It has not been used in the past 7 years and is now empty. The front wall consists of four vertical panels of 9" thick, 27" wide and 6' high granite. Rough granite units form buttresses on each side of the front wall. A thin stone lintel spans across the four panels and iron door and is capped with a tapered pediment. Although the stone units have not moved or shifted, the 3/8" mortar joints are deteriorated and need to be repointed. The iron door is rusted.

At some point in time work along Parker Street raised the level of the edge in relation to the tomb such that there is now a slope down to the receiving tomb door from the perimeter sidewalk. Nearby catch basins collect storm water.

**Recommendations**
The two mound tombs are in good to excellent condition. At the Maynard Tomb, reset the lead joints between stone units. Repair the marble doors with epoxy and stainless steel pins. At the 1888 receiving tomb, repoint the mortar joints between stone units. The Maynard tomb door cracks and breaks can be repaired with epoxy and stainless steel pins set into the broken surfaces. Consultation with an epoxy manufacturer is necessary to select an epoxy formulated for the marble material and the exposure conditions.

Clean and paint the iron door at the receiving tomb and the iron cap at the Maynard tomb.

Edging of Family Plots
**Issues**
A few of the plots have stone edging, primarily granite [Brigham, Brooks, Greer, Maynard, Redfearn and Whitney] with some marble [Hall, Turner and Willis]. Most of them are more or less intact, but several have rotated, settled at one end, or separated at the corners. Movements are caused by earth pressures between high and low grades and from saturated, freezing earth, i.e., frost heaving.

**Recommendations**
The edging needs routine maintenance work including resetting the stones. In order to prevent untimely displacement in the future, the corners can be stapled with stainless steel "dogs" or epoxy coated pins. The ground under and behind any reset stone should be good draining material. That is, if the ground behind the edging is found to be saturated or heavy with organic material, that material should be removed and replaced with gravel or crushed stone before covering with lawn. Likewise, if the foundation under the edging is disturbed or contaminated with saturated earth, it should be rebuilt with a foundation of compacted gravel or crushed stone.

BUILDINGS
**Issues**
A blue painted concrete block maintenance building has a prominent location at the end of the central drive from the Parker Street entrance. The building has a relatively new roof of gray asphalt shingles because of a recent fire. It is used for the storage of maintenance equipment and burial records. It also has a fenced in yard for maintenance purposes.

In the center of the rotary near the Parker Street entrance once stood a "summer house." It was described as "a neat artistic summer house near the well" and a variety of trees and flowering shrubs were planted with it. During the hurricane of 1938 a 76' high Spruce blew over, damaging the house so badly that it had to be torn down.

**Recommendations**
In the future planning for expansion of the cemetery, consideration should be given to finding a less prominent location for the maintenance facility. In the meantime, some planting on the west side of the building would reduce the visual impact of this structure.

If funding permits, consideration should be given to replacement of the "summer house."

FENCES AND GATES
**Iron Fences and Gates**
**Issues**
The original stone wall around the cemetery was replaced during the Works Progress Administration [WPA] with the current iron fence along the perimeter streets. The picket fences along Parker Street and a short section of Great Road are heavily damaged and need extensive repairs or replacement. The free standing stone pillars within the picket fences are intact and need no work.

Fence at Parker Street and Great Road: The picket fence along Parker Street and a short distance along Great Road is made up of vertical pickets spaced 4" apart with angles for the top and bottom rail. Although the fence appears to be the same along the entire street, it actually consists of 3 subtly different sections.
The fence in front of the Maynard Tomb has 3/4" square pickets turned at 45 degrees. This fence is in short sections separated by six 18" square stone pillars at the 2 pedestrian gates and at the corners of the Maynard Tomb lot. Two 30" square stone pillars support vehicle gates adjacent to the pedestrian gates directly in front of the Maynard Tomb. Because these larger pillars are set back from the sidewalk, the picket fence curves back to meet them. The south section of curved fence is bent and wrinkled. The beveled and sculpted granite pillars are in excellent condition, partly because the iron picket fences are not physically attached to the granite. That is, there are no embedded metal fasteners to corrode and crack the stones. The stones have been slotted so that the fence rails are simply inserted loosely into the faces of the pillars. The slots prevent the fence rails from shifting up or down and from side to side but allow them to move in and out as they expand and contract from temperature changes.

Further down Parker Street, between the Maynard Tomb and receiving tomb, the pickets are 7/8" diameter rods and the fence is about 3'-1" high. In this length of fence, the bottom rail is generally covered with earth and the sidewalk. Work on Parker Street raised the elevation of the sidewalk such that it is higher than the base of the fence. Because the bottom rails and stanchion pipe posts have corroded at the ground surface, the fence has leaned inward and would probably have fallen over except for the contemporary T-posts driven into the ground to brace the fence. Besides the damage from moisture along the bottom of the fence, there is occasional damage from vehicle impact. Lost splice plates along the rails have been replaced with welds and individual pickets have been bent. Cast iron cannon barrel style bollards at a pedestrian entrance have been broken off at their bases and have been crudely welded back together.

An iron pipe rail at the receiving tomb is 24" high with 2 horizontal rails set on top of a low stone wall. The 2" OD rail is hidden by a Yew hedge.

From the receiving tomb to Great Road the bottom rail is generally raised above the ground surface. Although this 2'-11" high fence is in better condition than the other sections along Parker Street, the bottom rails have random corrosion due to road salt spray and snow banks. In this section there are 11 missing pickets and some traffic damage.

Fence at North and East Sides of Maynard Family Tomb Lot: An older iron picket fence defines the property lines along the north and east sides of the Maynard Tomb lot. The west and south sides were reportedly given to support the WWI effort. The fence is in good to excellent condition. Pickets are 7/8" diameter rods spaced about 4" apart and the fence is about 4'-8" high. Stanchion pipes have apparently corroded at the ground surface but have been replaced with 1-1/4" square bars attached on the outside of the top rail. At the east side, diagonal rods also brace the top of the fence. Although the bottom rails are flush with the ground or overlain with leaves, there is little corrosion present, a condition probably due to the location of the fence away from the street and road salts. At one location along the north side, the fence has been distorted vertically by the roots of a large tree.

The town has tested the paint on the fences and determined that it is lead based.

Recommendations

The street fencing needs to be extensively rebuilt. Although the street fencing can be replaced, two of the three conditions that caused its deterioration cannot be readily changed. The conditions causing deterioration are: contact with the moist ground; exposure to corrosive salts; and exposure to traffic accidents. While parts of the street fencing could probably be salvaged, the components are so common that it may be more efficient to reconstruct the entire fence profile from new steel materials rather than trying to integrate salvaged materials with new materials.

By rebuilding the fences, they can be set higher so that the bottom rails and pickets are above the ground. The fences could be protected from traffic with bollards but some of the damage may actually be from sidewalk snowplows. Because of the proximity to two busy streets, protective coatings would be the only way to block the corrosive effects of the salts.

Although wrought and cast iron are corrosion resistant when exposed to moisture, they cannot withstand the assault of corrosive salts. However, uncoated steel is even worse for resistance and even stainless steel can become pitted from constant attacks from salt. Therefore, if the fences are rebuilt, they should be fabricated and galvanized in short sections. Galvanizing is a near permanent protection against “normal” exposure to moisture and moderately corrosive atmosphere, but being a sacrificial zinc coating embedded molecularly with the surface of the steel, it will not survive against aggressive corrosion. Therefore, additional coatings of paint formulated for hostile environments should be used on top of galvanized steel.
Based on the above discussion, the following for maintenance, repairs and replacement of the fences is recommended:

Replace the fencing along Parker Street and Great Road. Replicate the existing fencing with steel components. Fabricate and galvanize the fencing in short panels. Bolt rather than weld the panels together in order to allow some movement from thermal contractions and expansions. Replacement fencing should be designed to be above the ground surface and resistant to corrosion from winter salts and accidental vehicle impacts. Set the fencing high enough to be out of the ground. Paint the fencing with a coating system designed for corrosive environments.

At the west side of the Maynard Tomb replicate the fence on the north and east sides of the tomb. At the north and east sides of the Maynard Tomb lot, lower the earth grade or raise the fencing so that the bottom rails are above the ground. Replace the occasional missing splice plate or damaged rail. Reset the section at the tree roots. Replace corroded stanchion pipes. Clean and paint the fencing.

Chains Link Fences and Gates

Issues
The north and south boundaries of the cemetery are defined by galvanized steel chain link fence. The north fence includes 2 heights, 5’ along the south side of the Maynard tomb lot, and 4’ extending along the rest of the property line. A maintenance vehicle access gate has been provided for the Maynard tomb lot. It is kept padlocked and closed. Both fences are in good condition without any damage. They are straight and plumb.

Recommendations
No changes are recommended at this time.

SITE AMENITIES

Signs
Issues
The is no sign identifying the cemetery other than a small bronze plaque at the Parker Street entrance gate which also has a small metal sign on a chain stating “Cemetery Closed.”

Two regulatory signs were seen, including a fading metal sign with red letters on a white background stating “Notice - No planting or other work on lots without authorization from Cemetery Department - No dogs allowed.” A fading metal traffic control sign with black letters on a white background states “Speed Limit 10.”

Recommendations
Regulatory signs should be replaced and consolidated. Interpretive signs would help provide an informative experience for visitors.

Trash Receptacles and Seating

Issues
There are no benches in the older part of the cemetery. There are a number of green painted, blue plastic trash receptacles of about 55 gallon capacity which reportedly were donated to the town by a local pickle factory.

Recommendations
Do not add benches, except perhaps in relation to the pond walk which is separate from the main part of the cemetery. Consider reducing the quantity of trash receptacles and placing them only near the entrance and maintenance building.

Flagpoles

Issues
One flagpole, associated with a burial plot, was found inside the cemetery. It is about 20’ high, painted white, and in good condition. No flag was flying.

Recommendations
No changes are recommended at this time because of the flagpole’s association a burial plot. However, if the flagpole should deteriorate significantly, it should be removed.
GLENWOOD CEMETERY
PRESERVATION PLAN
MAYNARD, MASSACHUSETTS

LEGEND

- Existing Evergreen/Deciduous Tree
- Gravel Drive
- Remove Tree
- Lawn Drive
- New Tree
- Vehicular Entry
- Paved Drive
- Pedestrian Entry

NORTH
MAY 2001
1" = 200'

BY:
WALKER-KLUESING DESIGN GROUP, LANDSCAPE ARCHITECTS
SUZANNE SPENCER-WOOD, CONSULTING ARCHAEOLOGIST
SARA B. CHASE, PRESERVATION CONSULTANT
OCMULGEÈ ASSOCIATES INC., CONSULTING STRUCTURAL ENGINEERS
CARL CATHCART, CONSULTING ARBORIST

PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE

Maynard- 309
UTILITIES

Drainage

Issues
Storm drainage is directed over the ground surface either to a storm drainage system or the adjacent wetland. A few catch basins were noted, primarily near the Parker Street edge. Recent work related to Parker Street raised that edge in relation to the cemetery, making the storm drainage system essential.

Recommendations
No changes are recommended.

Water Supply

Issues
Although reported to be in poor condition, the cemetery has a water supply. A water meter manhole is located in the center of the entrance island and some hose bibbs were observed. A town wide water ban prohibits irrigation of lawn areas.

Recommendations
The water supply system should be replaced if the system evaluation supports this conclusion.

Lighting

Issues
No lights were seen inside the cemetery. There may be some ambient light from adjacent street lights.

Recommendations
No additional lighting is recommended.

PRIORITIES

High Priority
- Trees with large cavities, leaning into the cemetery, drives or grave markers.
- Tree replacements on west side.
- Lawn repairs on west side.
- Restore grave markers that present public safety hazards or are structurally unsound.
- Replace dowels in multipart stones that are visibly cracked or spalled.
- Conserve historically significant marble markers that are in danger of becoming illegible.
- Repair broken stones if the inscriptions are legible and at least 75% of the stone is available.
- Repair Maynard tomb doors.
- Repair perimeter iron picket fence.

Medium Priority
- Trees with large cavities, leaning away from drives and grave markers and not located in the front area where vehicles may drive.
- Tree replacements on east side.
- Lawn repairs on east side.
- Replace dowels in multipart stones with visible metal stains at the junction between stones.
- Clean legible markers.
- Repoint Parker Street arch.
- Repoint Maynard and receiving tombs.
- Paint Maynard and receiving iron work.

Low Priority
- Trees with a small amount of dead wood and branches, and trees protected from the winds in close to the edge or other trees.
- Reset markers that have shifted or are leaning.
- Reevaluate and conserve marble markers that are currently in satisfactory condition, as necessary.
- Reset family plot edging.
- Maynard tomb iron picket fence repairs.
- Provide interpretive signs.

PRIORITIZED COST ESTIMATES

High Priority
- Tree removals $1,000
- Tree pruning 1,600
- Tree support systems and fertilization 4,400
- Tree replacements 20,000
- Lawn repairs 75,000
- Repair Maynard tomb doors 3,000
- Perimeter iron picket fence repairs 275,000

Medium Priority
- Tree pruning 1,300
- Tree support systems and fertilization 2,000
- Tree replacements 11,700
- Lawn repairs 75,000
- Repoint Parker Street arch 3,000
- Repoint tombs 4,000
- Paint tomb iron work 3,000

Low Priority
- Tree pruning 600
- Tree fertilization 3,400
- Maynard tomb iron fence repairs 40,000
- Interpretive signs 10,000

Costs associated with grave marker work have not been included. Refer to the General Recommendations section for approximate costs of various types of repair.
As an active 22.5 acre rural style cemetery, this is considered the last of the remaining open spaces in Everett. Glenwood Cemetery is sited on a large trapezoidal lot with about 1,300' of frontage on Washington Street and 900 along Fuller Street. It abuts Woodlawn Cemetery on the other two sides and gently slopes towards Washington Street. There are a number of military components in the cemetery including the first burial, a Civil War veteran on 3 June 1890, as well as veterans of the Spanish American War, World War I, World War II, and the Korean and Viet Nam Wars.

Until 1890 the only cemetery in Everett was Woodlawn Cemetery, a privately owned and maintained burial ground in the northeast corner of the city. Woodlawn, founded in 1850, is one of the notable "rural" cemeteries in greater Boston, comparing favorably with Mount Auburn and Forest Hills.

Desiring a public burial spot that would be an affordable alternative to the high prices at the adjacent Woodlawn Cemetery, the city first seriously investigated setting aside land in 1889. The following year a 12 acre field was purchased from Wellington Towe. James E. Stone was paid $390 for "surveying, engineering and staking out lots and avenues". Seven main avenues, mostly 20' in width, and many 10' wide cross avenues were laid out and the first burial was that same year. Only Everett residents were allowed to purchase lots and be buried here. Lot enclosures were not permitted.
In 1894 an additional tract of land was purchased, allowing a grand entrance to be constructed on Washington Avenue. Plans for Glenwood were developed late in the rural cemetery movement. Two plans prepared by the city engineer Christopher Harrison in 1899 show different approaches to the cemetery’s layout. The first, dated September 1899, is a grid plan enclosed by an undulating drive. The second, dated 2 months later, is a gracious curvilinear plan based on the rural cemetery ideal.

Apparently, the earlier plan was preferred, as the east side of the cemetery is regular and angular today. The western half of the property was developed first and has more of a rural cemetery style with some curvilinear road layout. However, the cemetery does not have the topographic variety of the adjacent Woodlawn Cemetery that is another primary characteristic of a rural cemetery.

**LANDSCAPE CHARACTER, LAWNS AND VEGETATION**

**Landscape Character**

**Issues**

Dominated by large deciduous shade trees and lawn, the ornamental plantings of a rural cemetery of this type are missing, as well as the vegetated buffers separating the cemetery from adjacent streets. Most of the flower beds that once existed are also gone, presumably lost about the same time the greenhouse was removed. The vast majority of trees are related to road edges.

**Recommendations**

The general composition should be maintained with the addition of more ornamental plantings at the entrance and along the south and west edges where possible.

**Planting**

**Issues**

There are approximately 317 trees in the cemetery not including arborvitae hedges. Tree cover is about 98% deciduous with Maples accounting for 82% of the total. Honeylocusts represent the next most frequent occurrence with 6% of the total.

Large deciduous shade trees include 250 Maples [including 7 Red Maple and 3 Fastigiate Maple], 19 Honeylocusts, 7 European Beech [including a State Champion], 3 Tuliptree, 3 Ash, 2 Linden and 2 Black Locust. Small deciduous trees include 7 Cherry [including 3 Black Cherry], 4 Dogwood, a Crabapple and a Redbud. Evergreen trees include 7 Spruce and 1 Cedar as well as a number of Arborvitae. Most of the older Maples have dead wood and cavities and should be examined by an arborist.

Other types of planting are limited and include Yews, Falsecypress, Azalea and Rhododendron as well as flower beds along entrance drive composed of bulbs and other perennials.

**Recommendations**

Immediate priorities include pruning and cabling as necessary. Tree conditions should be monitored annually with removals when necessary. Additional large shade trees should be planted where trees are missing or have been lost in locations where they will not impact grave markers, walls or views.

**Volunteer Growth**

**Issues**

While there is no new volunteer growth, some old growth is apparent along shared fence lines that is now growing into and around iron fencing.

**Recommendations**

Work with Woodlawn Cemetery to remove all volunteer growth.

**Lawns**

**Issues**

Lawn areas are generally in fair condition with a few bare spots. Maintenance is provided by the Parks Department.

**Recommendations**

Repair lawn areas as required. Lawns should receive an annual application of fertilizer to sustain a reasonable level of health.
ACCESS AND SECURITY
Pedestrian and Universal Access
Issues
The cemetery is accessible to pedestrians with sidewalks and entrances on Washington and Fuller Streets. The latter entrance has one step up into the site. While there is no on street parking, there is vehicular access into the site and parking inside. Although there are few paved walks inside the cemetery, gradients are gentle allowing free access throughout except for the steps up to each pavilion.

Recommendations
No changes are recommended for pedestrian access. Universal access should continue to rely on vehicular access routes.

Vehicular Access
Issues
The large main entrance, no longer gated, is on Washington Avenue. A secondary gated entrance, which was the original main entrance, is on Fuller Street. It is assumed to function now as a service access point.

Recommendations
This system appears sufficient for the visitation requirements and no changes are recommended.

Security
Issues
There is no security because there is no night watchman and open access at both entrance points, day and night.

Recommendations
Because of the active day time visitation, securing access points may not be necessary. Glenwood appears to be an important part of the lives of many local residents.

VANDALISM
Issues
With little evidence of vandalism, this does not appear to be an issue in this cemetery.

Recommendations
Vandalism is not a significant problem and no changes are recommended.

CIRCULATION SYSTEMS AND MATERIALS
Circulation Systems
Issues
While the road system is well developed, the path system is not as complete. Drives on the west side of the site are more curvilinear in nature while those on the east side are straight and functional.
Recommendations
No changes to the road system are recommended at this time. Consideration should be given to adding paved walks to important destination points. Path alignment characteristics should be sensitive to which part of the site they are being placed in, so as not to detract from historic integrity.

Walks
Issues
There are very few paved walks including about 200 linear feet of concrete walks primarily related to the office building and a few selected monuments, and about 900 linear feet of bituminous concrete walks. Many of the latter are very narrow and deteriorating.

Recommendations
New and replacement walks should be 4’ wide.

Steps
Issues
Because the site is gently sloping there are few steps. Those that exist are concrete and related to some monuments and the two open air pavilions.

Recommendations
Given the requirements of the Federal American Disability Act, efforts should be made to make these few facilities accessible.

Roads
Issues
There are almost 12,000 linear feet of bituminous concrete roads in the cemetery. The main roads are 20’ wide and secondary routes are 10’ wide. Most exhibit minor cracking. Some are in very poor condition including Alpine Avenue which may be the worst.

Recommendations
Remove and replace deteriorated drives. Repair cracks and resurface less deteriorated drives.

Road Edging
Issues
Related to the roads are about 9,300 linear feet of concrete curbs which have a quarter round profile. It appears that the curb is being removed in some sections of the cemetery. While most of it is in fair to good condition, the worst is along a stretch of Evergreen Avenue near Mayflower Center.

Recommendations
Although it impedes universal access, the concrete edging provides one of the character defining elements of the site. This edging should be maintained, particularly on the older west side.

Pavement Materials
Issues
Most paved surfaces are bituminous concrete with a limited number of concrete walks.

Recommendations
Assuming that the site is heavily snow plowed because it is an active cemetery, paved surfaces should remain bituminous pavement.

GRAVE MARKERS
Headstones and Footstones
Issues
Glenwood Cemetery has over 7,000 markers that appear relatively densely distributed. Most are modest rectangular markers composed of two parts, an inscribed stone set on a granite base and attached with metal pins. There are also a number of more monumental sculptural stones, most of which are early 20th century, as well as memorials for veterans and public service groups like GAR [1938], VFW [1936], Marine Corps, Korean War Veterans, American Legion, Everett Firemen [1933] and Everett Police [1939]. About 80-90% of the inscribed stones are granite with those before 1920 usually marble. The collection includes several white bronze [pressed zinc] monuments, recognizable by a bluish tint and hollow sound when tapped.

Stone surfaces are for the most part in good to excellent condition, as would be expected for a predominantly granite collection. Subsurface biological growths, mostly green algae, are seen in areas near trees. Marble markers are in fair condition, suffering from the deteriorating effects of atmospheric pollution. There is little or no evidence of mower damage, particularly impressive considering the tight placement of stones in recent sections. Many of the markers are splattered with soil near the base, and several exposed foundations were observed. Both of these conditions indicate a loss of ground cover which if unattended to will lead to structural destabilization.
The primary issue is shifting and toppled stones. In most cases the two stones have come cleanly apart, although cracks and splits around metal pins are also evident. Some of the monuments have applied metal elements like bronze plaques and figures. The bronzes are either unmaintained, where a typical green-black "patina of time" has formed, or over cleaned with surfaces regularly polished "penny bright" and lacquered. This removes the foundry applied patina and prevents a deeper tone to develop by oxidation.

**Recommendations**

Priority work relates to resetting of leaning and toppled markers. Marble markers should be conserved. New markers should have proper foundations to keep markers from shifting. The ground cover should be surveyed annually in each section and exposed foundations should be covered.

Unmaintained bronze elements should be allowed to remain as is. Owners of the "penny bright" bronzes should be engaged in a discussion of aesthetic desires. If acceptable, a deeper bronze patina might be reestablished and maintained with cyclic application of lacquer or wax coatings.

**STRUCTURAL ELEMENTS**

*Perimeter Walls*

**Issues**

Fuller Street Wall: Constructed in 1894 using stone salvaged from the site, this mortared fieldstone retaining wall is 20' wide. The height varies from 30' near Washington Street to about 44' high halfway along the cemetery and then reducing as it approaches the service entrance. Although sections of the stonework are in good condition, most of the mortar work is cracked or missing and several stones are missing. The concrete cap is also broken, spalled and missing. However, even where the mortar and smaller stones are missing, the main stones are large, well seated and stable. The wall does not need much rebuilding but it does need 100% repointing.

Fuller Street Entrance: This entrance has a modern barrier gate attached to old 32" square brick piers. An attempt has been made to waterproof the piers with a parget coating, but cracking on the surfaces indicates that the piers are severely disrupted by water intrusion and internal moisture movements. They need to be dismantled down to sound masonry and rebuilt, or demolished in their entirety and replaced.

Washington Street Entrance: This entrance, an important goal of the 1894-1899 expansion, is characterized by 4 granite piers consisting of stone bases, shafts and capstones. Only 1 of the piers is assembled with mortar beds. The stone units of the other 3 piers are set dry. It appears that they may have been knocked over and simply straightened without resetting them in mortar. Mortar plugged holes in the sides of the gates are evidence of former gate hinges.

**Recommendations**

Repoint the entire stone wall on Fuller Street and rebuild missing stone work and cap where required. Provide weepholes at the bottom of the wall at four foot intervals. Rebuild the service gate piers. Reset the main entrance piers in mortar beds.
BUILDINGS

Issues
Once containing a greenhouse and a stable on the west edge, as well as a receiving tomb designed by George Wallis, the cemetery now has an office and service building on the east side that appear to date to the turn of the century, along with two open air pavilions. The receiving tomb and other buildings were removed for additional burial space. The office building is a small wood frame structure and the service building has a concrete block first story and wood frame second story. The latter is used for cemetery equipment storage. The 2 pavilions are generally in sound condition structurally but need urgent maintenance including new roof shingles, paint and general repairs.

The octagonal pavilion’s rafters and rot resistant oak posts are in good condition but there is some animal and moisture damage in the seating and wainscoting supports. Some of the lattice work is loose and broken. Paint is flaking and peeling. Some old paint graffiti is located on the concrete floor and painted wood. There are 2 steps up at the 2 entrances to the concrete platform which is spalling at the edges. The other 6 sides have benches.

The square pavilion needs new valley flashing on the roof as evidenced by rot in the valley rafters and cracked concrete at the tie down anchors. Otherwise it is in good condition with some minor rust on the iron cross ties. There is 1 step up at the accessible side to the concrete platform. The other 3 sides have benches and railings.

Recommendations

FENCES AND GATES

Iron Fences and Gates
Issues
The entire site is enclosed with iron picket fencing of different styles. The Washington Street edge is characterized by an iron picket fence set on a low curb while the Fuller Street edge has an iron picket fence set on top of a low stone retaining wall. The Woodlawn boundaries have picket fences characteristic of the Woodlawn perimeter and appear to belong to Woodlawn Cemetery based upon the location of fence supports.

Washington Street Fencing: The 4’-6” high fencing consists of 3/4" square pickets oriented 45 degrees to the direction of the fence with decorative spiral twists about midheight. The top and bottom rails are 2" x 2" angles. The pickets and rails are assembled in panels and attached to 1/2" x 2-1/2" stanchion bars with pointed tops. Panel lengths vary between 3’-5” to 6’-9”, but average about 6’-0”. At the entrance to the cemetery, where the fencing turns corners, the corners are anchored by decorative cast iron posts. Considering the total length of the Washington Street fencing, it is in fairly good condition overall, but there are individual sections or panels that need to be replaced or extensively rebuilt.

Three of the seven panels south of the main entrance are heavily corroded at the bottom. The corrosion affects the bottom rail and the bottoms of the pickets. The gates are missing at the main entrance. On the north side of the entrance there is some corrosion on the bottom tips of the pickets, but many of the pickets [about 20%] are bent or broken. Most of the damaged pickets here can be salvaged, but some must be replaced.
Once the fencing turns and runs down Washington Street, the bottom 14” has been buried in a concrete curb which changes the appearance of the fencing and has led to corrosion where the pickets enter the concrete. There is also some corrosion where the pickets meet the top rail. There is no other damage to the pickets or rails in the 17 panels between the cemetery entrance and the service yard. There are 19 panels running along the service yard that have been affected in one way or another by careless activities in the yard. Sections are leaning outward, pickets and rails are bent, rail connections are broken, and 3 or 4 panels are missing and replaced with chain link. The remaining 144 panels down to the corner of Washington and Fuller Streets have localized damage. The concrete curb height reduces to 6”. Many of the top rails are modern replacements and several entire panels are new toward the north end of the fencing. The concrete curb is also damaged at 3 or 4 locations, especially near Sargent Street. It is obvious that road salt is attacking the concrete and metal and there are certain locations, such as at intersections, where salt spray may be more concentrated.

Fuller Street Fencing: The fencing style changes at the corner of Washington and Fuller Streets. The Washington Street fencing curves around the corner and terminates at a 30” square granite pillar. On the other side of the pillar, a low fence with curved, pointed pickets is mounted on top of the wall. The pickets are lightly corroded at the joints and several pickets are bent. About 5% of the fencing needs some repair. The gate has been replaced with a contemporary bar swing gate.

Recommendations
Replace severely damaged bent, broken, corroded and missing pickets, rails and stanchions. Provide continuing annual maintenance on the picket fencing to prevent corrosion from advancing. This should include annual cleaning and painting on a rotating basis, and repairs to any damaged pickets and curbing.

Consideration should be given to replacing both gates with replications of the historic gates based on historic photographs or drawings, if available.

Chain Link Fences
Issues
Located on the yard side the perimeter fence, there is a short segment of 8’ high galvanized chain link along Washington Street near the maintenance building with green plastic privacy strips inserted into the fence to conceal the service yard from public view on the street. It is in fair condition.

Recommendations
Although it serves an important screening function, this fence is visually incompatible with the adjacent iron picket fence primarily because of the bright galvanizing and green plastic. The fence should be replaced with black vinyl coated posts and fabric, and matching privacy slats. Consideration should also be given to planting vines on it.

Wood Fences
Issues
Installed in 1994, a wood stockade type fence shields two sides of the service yard from public view inside the cemetery. A section of 8’ high fence is unpainted, weathered and in good condition. An adjacent 6’ high painted section is leaning and in fair to poor condition.

Recommendations
The wood fencing calls too much attention to itself for the screening function that it serves. It should be replaced with chain link fence as described above.

SITE AMENITIES

Signs
Issues
There are three relatively new wood identification signs, one at Fuller Street which appears older and two at the Washington Avenue main entrance where the cemetery name is also carved into the granite entrance posts. There are several different types of directional and avenue signs. The former tend to be painted wood hanging on wood posts and the latter are typically simple metal signs secured to trees. Most are in fair to poor condition. There are no informational or interpretive signs.

Recommendations
Directional and avenue signs should be replaced with a uniform system that compliments the historic nature of the cemetery. Informational and interpretive signs should also be added.

Everett - 317
Trash Receptacles
Issues
Trash receptacles consist of a number of green painted 55 gallon drums.

Recommendations
Trash receptacles serve a necessary purpose in an active cemetery. The style should better complement the historic nature of the site.

Seating
Issues
In addition to seating at the pavilions, there are 6 cast stone benches sited in various locations.

Recommendations
The existing benches are appropriate and no changes are recommended.

Flagpoles
Issues
This cemetery has 8 flagpoles. Six of them are steel, generally 20 to 25' high. Most exhibit some rust or have exposed galvanizing. An aluminum pole in the island near the American Legion Monument needs repairs at the base where the mosaic tiles are beginning to separate from the base. It appears in good condition otherwise. The wood flagpole at the U. S. War Veterans plot is about 20' high and needs to be scraped and painted.

Recommendations
Prepare, prime and paint the steel and wood flagpoles. Repair the mosaic tiles at the aluminum flagpole.

Planters
Issues
There are 2 painted wood half barrel planters near the square open air pavilion, 2 cast stone planters at the office and a few other small cast stone planters related to grave sites.

Recommendations
Except for the cast stone planters related to grave sites, all other planters should be removed in favor of flower beds which are more in character with the historic nature of the cemetery.

Cannon
Issues
The Phoenix Iron cannon at the GAR plot is painted black and in good condition. Some of the wood components are rotted and need replacement. The two concrete supports are painted white and need a fresh coat of paint.

Recommendations
Restore the wood components of the cannon, and clean and paint the concrete supports.

UTILITIES
Drainage
Issues
Most of the site surface drains toward the northeast corner of the site, the intersection of Washington and Fuller Streets. A few catch basins related to roadways are located primarily in the eastern third of the property.

Recommendations
There does not appear to be any problems with the current system and no changes are recommended.

Water Supply
Issues
Hose bibbs are provided throughout the cemetery.

Recommendations
No changes are recommended in terms of water supply.

Lighting
Issues
Except for security lights at each building, there is no night lighting in the site. There are street lights on the 2 perimeter streets and electric service has been provided to the square open air pavilion.

Recommendations
Do not provide additional lighting.
LEGEND

- Existing Evergreen/Deciduous Tree
- New Tree
- Remove Existing Tree
- Existing Stone Wall w/Iron Picket Fence
- Existing Iron Picket Fence
- Flagpole
- Open Air Pavillion
- Vehicular Entrance

GLENWOOD CEMETERY
PRESERVATION PLAN
EVERETT, MASSACHUSETTS

BY:
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NOVEMBER 1999
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PREPARED FOR:
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

MASSACHUSETTS HISTORIC CEMETERIES PRESERVATION INITIATIVE

Everett - 319
PRIORITIES

High Priority
• Stone conservation including pin replacement in marble markers that are visibly cracked or spalled
• Marker foundation restoration
• Vegetative removals and pruning
• Perimeter fence restoration
• Repair of structural items like perimeter walls
• Pavilion repair
• Cannon restoration
• Lawn repairs

Medium Priority
• Stone conservation including marble markers with visible metal stains at the junction between marker and base
• Accessibility improvements
• Drive and edging repairs
• Chain link and wood fence replacement
• Directional and avenue sign replacement
• Repair of flagpoles
• Fertilization of trees
• Consideration of future options with this, the only public cemetery in the city, nearing capacity.

Low Priority
• Stone conservation including granite markers that have shifted or are leaning, and marbles currently in satisfactory condition
• Bronze restoration
• Replacement of deteriorated walks
• Additional walks to important destinations
• Informational and interpretive signs
• Trash receptacle replacement
• Additional planting
• Consideration of replacing gates.