Evergreen Cemetery
Portland, Maine

Master Plan

Prepared by:
The City of Portland, Maine
The Friends of Evergreen Cemetery
The Halvorson Company, Inc.,
Landscape Architectural and Planning Consultants

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Master Plan Volunteers

This effort would not have been possible without the enormous dedication and professionalism of over fifty volunteers who worked for countless hours on this project conducting physical inventory, surveying cemetery visitors, doing archival research and documenting their findings. Thanks and admiration go to all of them.

Joe Delaney deserves special recognition for his role as leader of this effort. The project would not have succeeded without his leadership, commitment and intelligence.

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Mount Auburn Cemetery
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Background and Process of the Plan

BACKGROUND

Introduction

Evergreen Cemetery, created in 1855, was part of a remarkable rural cemetery movement in America that not only changed the way the country perceived its burial places, but also helped form a design philosophy about its public parks. This quote from Edward Elwell sums up the enthusiasm people felt for Evergreen and the attractions of a landscape in which nature and art were integrated:

"The beauty of these grounds, where the harmonies of art are blended with the wildness of nature, sheds the radiance of a heavenly light upon the gloom of death. Thousands come here - particularly on Sundays - for a quiet walk among the blended beauties of nature and art, where all the associations are conducive to meditative thought."

> Edward Elwell, Portland and Vicinity, Portland, Maine.
> Loring, Short and Harmon and W.J. Jones. 1876

Today, there is equal enthusiasm and affection for this cemetery as a place for burial and commemoration, for refuge and for recreation. It is Portland's largest open space, a sanctuary for wildlife and migratory birds, and site of the city's largest urban forest as well as an outstanding example of 19th century rural cemetery design.

Yet, the city faces many challenges as the developed areas of the cemetery are being filled and it looks to residual land for development potential. The 239-acre cemetery needs to accommodate a range of uses while protecting the needs of all visitors, particularly those who are mourning the loss of a loved one. Most importantly, the city must preserve and strengthen the beauty and integity of this landscape, and protect the cemetery from non-cemetery intrusions, in the face of dwindling municipal resources, competition for funds and demands for additional facilities to be provided by the city.

In recognition of these needs and pressures the Friends of Evergreen, with assistance from the city, wrote and were awarded a grant from the National Endowment for the Arts to "document, preserve and promote Maine's largest designed urban landscape as an example of a critical period in American park system development." The Friends of Evergreen was founded in September 1991 with a mission to preserve, protect and restore Evergreen for past, present and future generations. It has been through the efforts of the Friends that the cemetery has been admitted to the National Register of Historic Places, and has received protection under the city's Historic Preservation Ordinance.

The primary issues of the master plan have been the definition, preservation and strengthening of the cemetery's visual character; recommendation of burial and memorialization options that respect and enhance the character of the landscape; accommodation of appropriate forms of passive recreation; and strengthening of the cemetery's capabilities to maintain the site including the financial support needed to do so.

The Collaborative Master Plan Process

The notable aspect of this master planning effort has been a remarkable collaboration between the consultant team, the City of Portland, and the Friends. The terms of the NEA grant dictated that the city would provide in-kind planning and engineering services, the Friends would gather research material and conduct site inventory, and the consultants would guide the inventory effort, analyze the data and make master plan recommendations. The project was fortunate to have the services of a group of volunteers with an extraordinary collective expertise in landscape architecture, architecture, planning, historic preservation and computer mapping. The affection and commitment of over fifty people were demonstrated by the countless hours they spent on this project, and by the high quality of their work. Volunteers conducted a user survey, researched historical archives and screened and indexed data for significant information, reproduced historical visual documents, prepared computer-generated base maps, inventoried the site's roads, signs, monuments, drainage, vegetation and views, and documented their findings in map, pictorial and written form. A volunteer coordinator was critical to the success of this effort. In addition to many hours of his own labor, he oversaw the work of others and kept in close communication with the master planners, who initiated the inventory phase with detailed outlines and checklists regarding every inventory component.

The Evergreen project will become an important model for future master plans, as municipalities face funding shortages for increasingly important research and preservation efforts. A public that values a landscape the way the people of Portland value Evergreen can accomplish what this community has, and help construct a plan through which they are directly involved in the rejuvenation of a special place that ultimately belongs to them.

Historical Summary

Early Designed Landscapes in Maine

Maine became a state in 1820, marking a new era of civic pride and improvements. Optimism and prosperity were reflected in a growing economy, expanding industries, flourishing ports and rapidly increasing population. In 1820 the new state had almost 300,000 inhabitants, primarily rural residents. Portland was by far the largest town with 8,581 people.

In the early nineteenth century there was little tradition of public landscapes in Maine other than town commons, which were typically unimproved areas in the center of town used for market days or drilling the militia. Commons were sometimes used as burial grounds although graves were often plowed under or removed. By mid-century some commons had rudimentary improvements - primarily leveling, enclosing with a wooden fence and planting of a few trees. In 1827 Augusta was established as the state capitol and Capitol Park became the first designed public landscape in the state. It was soon followed by a series of squares and parks in Bangor.

Bangor was also the site of Maine's first rural cemetery, Mount Hope, created in 1834 based on ideals established at Mount Auburn Cemetery near Boston. The creation of a burial ground in a pastoral landscape which was soothing to the living was central to the idea. It was also in stark contrast with the unattractive, overcrowded urban burial grounds of the early nineteenth century. Key elements were the winding roads, family burial lots, extensive plantings and elaborate monuments. Unlike the few public parks of the time, which were laid out in a formal, rectilinear style, the rural cemeteries reflected a new style of pastoral and romantic landscape which was already popular in the design of private residences.

Open Space in Portland

Portland, unlike Augusta and Bangor, was well-established in 1820. By 1832 its population had grown to 13,000 and it was a flourishing commercial center whose fleet was the largest on the eastern seaboard. The rapidly growing city was quickly filling the peninsula on which it was located. Mount Joy Hill on the eastern edge of the peninsula overlooking Casco Bay had long been popular as a common ground for scenic enjoyment. Portions of the area were acquired by Portland in 1828 "for the ornament of the town as well as for the health and pleasure of its citizens" (NR Nomination).

By 1837 the city recognized the need to preserve the dramatic scenery of the site and constructed a pleasure drive around Mount Joy Hill, later known as Eastern Promenade. Improvements included grading, filling, constructing a 40-foot road and planting of trees. Similar improvements were made at Bramhall's Hill on the western end of the Portland peninsula, which became known as Western Promenade. These two areas are significant as the earliest public, designed landscapes in Portland and as precursors of the public park movement. It is noteworthy that this occurred two decades before the creation of Central Park in New York in 1858 and Boston's Public Garden in 1859.

Founding

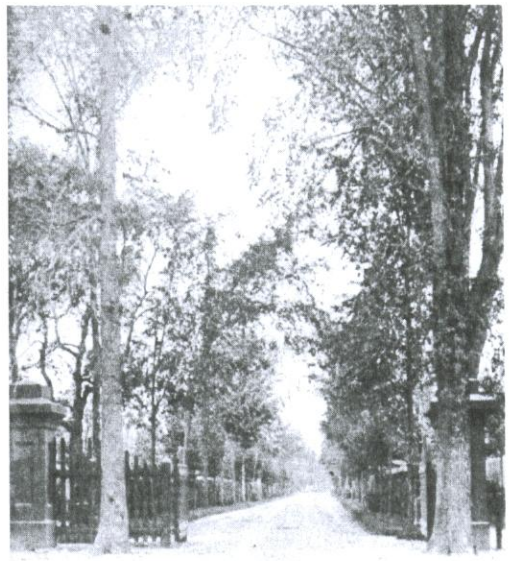
By the early 1850s the rapid growth of Portland and the lack of space in the city's two existing burial grounds, the Eastern and Western Cemeteries, prompted the search for a new cemetery site. Civic leaders such as Sylvester B. Beckett urged Portland to follow the precedent set by Boston, Bangor and other cities which had established rural cemeteries in the 1830s. The result was Evergreen Cemetery, which became the third major public landscape in Portland. Like Mount Hope in Bangor, Evergreen was based on ideals established at Mount Auburn Cemetery. However, Evergreen, developed 20 years after the early rural cemeteries, reflected a more formal, gardenesque approach to landscape design, particularly in the configuration of its roads.

In 1852 the city purchased 55 acres in Westbrook, located several miles from the city center. The city's Annual Report described the site. "A large part of it is covered with timber, and an evergreen growth and the whole may easily be made pleasant and attractive, as cities of the dead should be . . ." (PAR 1852). During the first several years, the major expenditure was for a fence around the perimeter of the property. There was also some early grading and clearing of the area and laying out of paths. In 1854 the new cemetery was consecrated and a superintendent was hired to oversee day-to-day operations.

Initial Design

Charles H. Howe, a civil engineer who frequently did work for the city, was commissioned to draw up a plan for the new cemetery. (Note: engineers, surveyors and architects often designed parks and cemeteries in the early nineteenth century as the practice of landscape architecture was not yet well established.) Howe's 1855 plan shows the parcel initially acquired by the city as roughly rectangular with a narrow connection to the main road (later Stevens Avenue). His sketch of the entrance shows a wooden gate with a straight tree-lined drive leading into the cemetery. This technique of setting the cemetery back from the main road was common at the time, possibly because land without frontage was less expensive and possibly because of a subliminal desire to remove the cemetery from public view and distance it from everyday life.

Howe's road system, the primary organizing feature of the cemetery, used a combination of curving and rectilinear roads. Although the plan responded to the topography, especially at the western end where slopes were steepest, it was an engineer's plan created with regular curves. Roads provided the primary circulation for carriages, with paths offering pedestrian access to burial lots which did not front on an avenue. Some sections were grid-like, especially at the northern edge where the topography was flat. Major avenues had descriptive names such as Western, Central or Summit Avenues while lesser streets had plant names such as Larch, Linden or Woodbine. Only major paths were named and these followed the rural cemetery tradition of using plant names.



Howe's 1855 plan showed a wooden entrance gate with a straight tree-lined drive leading into the cemetery.

Inside the cemetery, Howe proposed an office and a receiving tomb (a critical feature during winter months before the advent of mechanized digging equipment). He also suggested a location for a proposed chapel near the center with an adjacent fountain. Circles created at key points in the circulation system provided focal areas, one labelled as "mound" and the other as "strangers ground", a place for interment of paupers and others unable or unwilling to purchase a family lot. Howe noted the ponds on his plan but did not make specific recommendations for improving them.

Howe's plan was conceptual and did not include recommendations for grading or planting. Once the general organization of the cemetery was established and the major roads laid out, sections were graded and lots staked on the ground as they were needed. Planting decisions were also left largely to the superintendent. In most areas the major task was clearing trees and brush from the largely forested site. The one place where Howe did recommend trees was the formal allee along the entrance drive.

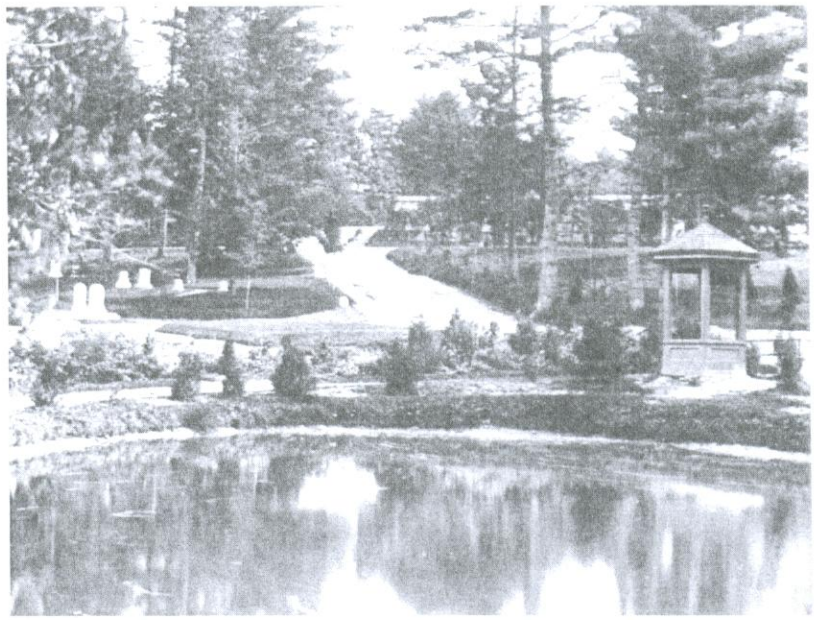
Burial and Monumentation

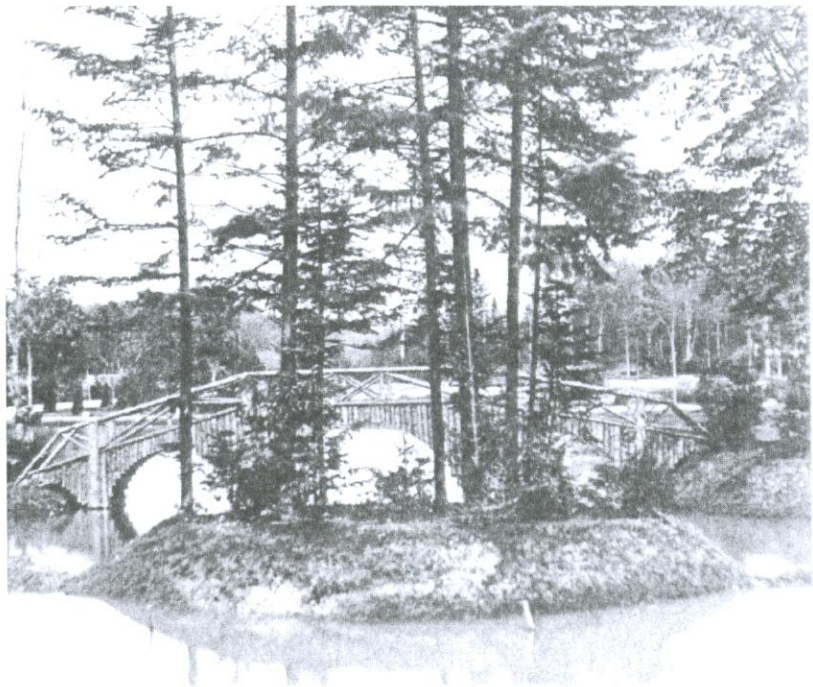
A key feature of the design of rural cemeteries was the concept of family burial lots (rather than individual graves) where a 300 square foot lot could be purchased so family members could be buried together in perpetuity. During the early years at Evergreen, lots were often enclosed by iron fencing to set them apart from the surrounding landscape which was largely forest. In the 1860s and 70s, granite curbing was used to enclose and define lots. Wooden monuments or fences were prohibited because they were considered too perishable in a cemetery intended for perpetuity.

Stereo views from the 1860s and 70s illustrate that despite the more rigid geometry, Evergreen initially looked much like its rural cemetery predecessors. Roads were rough and unfinished with no curbs or clearly defined edges (annual reports attest to the problems of maintaining them, especially on steeper slopes). Large portions of the site were forested, creating a tree canopy that was the predominant element in the landscape. Plants were primarily native species in natural associations, including many evergreens, although planting was done along major avenues and at the ponds.

Roads were rough and unfinished with no curbs or clearly defined edges.

The ponds were already a major focal point with bridges and gazebos - very rustic style initially - and more ornamental plantings, especially shrubs. Expenditures in the 1870s included white swans and geese. Views along the entrance drive show a straight, gravelled road lined on either side with regularly spaced deciduous trees (maples?), rough turf and hedge plantings in front of fences screening the adjacent property. The entrance gate was wooden picket. Later, substantial entrance pillars were built, the fence was replaced and as the trees grew, they formed an imposing and ceremonial entrance — a transition from the work-a-day world into a place of contemplation. There was a pedestrian walkway on the north side of entrance drive.





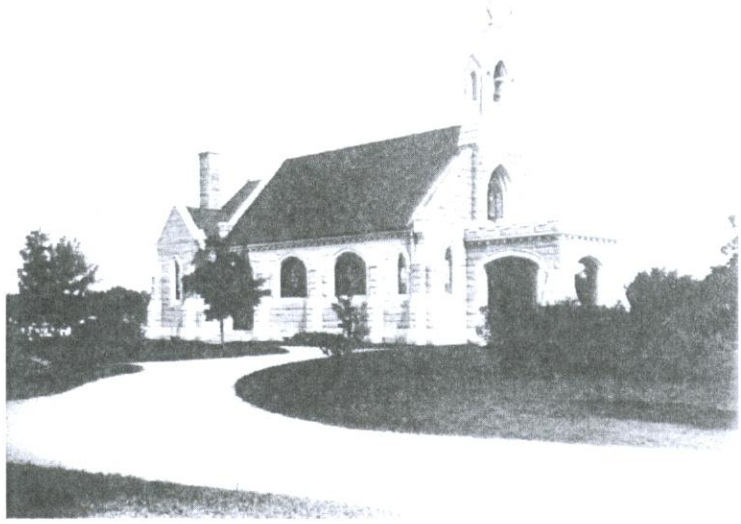
The ponds were major focal points with rustic style bridges and gazebos and ornamental shrub planting.

The Turn of the Century

The turn of the century period is well documented in a series of photographs and in the cemetery rules and regulations published at the time. The trustees stated the desired effect as "a quiet, beautiful resting place for the dead, where well-kept lawn and harmonious blending of trees, shrubbery and works of art, shall give a sense of repose." (Evergreen Cemetery, Portland, 1902)

The greatest visual difference was the openness of the landscape (especially in newer sections of the cemetery) with fewer and smaller trees and a far finer turf than existed in the early years. The roads were either gravel or macadam and had neat edges. In newer sections, cemetery policy discouraged the use of fences or curbs around a lot. By this time, these were considered unsightly intrusions which marred the unity of the more open landscape. An article in the February 1900 Portland Board of Trade Journal described Evergreen as an "old style burying ground in the course of transition to a modern cemetery." The new type of cemetery was known as a lawn cemetery based on ideals established at Spring Grove Cemetery in Cincinnati, Ohio in the 1870s.

A south entrance to the cemetery had been proposed as early as 1880 but was not implemented until 1901. In early photos, the flat, unplanted landscape looks particularly bleak. Architect Frederick A. Tompson designed the stone walls and pillars which marked the entrance and the adjacent waiting room. He was also responsible for the design of the Wilde Chapel, built in 1902 just inside the south entrance. This became the major focal point for the southern portion of the cemetery.



Frederick A. Tompson was also responsible for the design of the Wilde Chapel built in 1902 just inside the south entrance. This became a major focal point for the southern portion of the cemetery.

The interior of Wilde Chapel is a warm intimate space used over the years for funeral services and public gatherings.

During the early twentieth century, the cemetery was largely self-sufficient economically with substantial revenue provided by the Evergreen perpetual care fund and by services carried out for individual lot owners. A small city subsidy was provided for maintenance of the chapel and periodically for land acquisition or specific capital improvements. Road maintenance required a substantial portion of the budget.

By 1912, the large endowment had attracted the city's attention and the city borrowed $150,000 of the $234,000 fund to pay for a new high school and police station. Through the 1920s receipts gradually declined in relation to expenditures as many of the original lot owners died or lost interest in their lot. By this time there were also many public parks in Portland which provided more convenient recreational opportunities. Automobiles provided easy access to more distant rural areas.

Recent Years

Like all cemeteries, Evergreen faced difficult times during World War II and the years that followed. Labor shortages, followed by unprecedented inflation, prompted a complete re-evaluation of cemetery priorities. It was no longer possible to maintain the area to the previous high standards. Since there was relatively little public interest, many of the structures were removed when they deteriorated and were not replaced, including the receiving tomb as well as the small ornamental structures for visitors.

The most significant administrative change came in 1957 when Evergreen Cemetery was put under the Parks and Recreation Department, rather than existing as a separate authority. The trustees protested vehemently but were over-ruled.

Recent activities by the Friends of Evergreen and a new recognition of Evergreen's potential as open space have prompted renewed interest in the cemetery and served as a catalyst for programs and improvements.

Guiding Principles and Goals & Objectives

The guiding principles for Evergreen Cemetery build on the original design concept and purposes as clarified by historical research and by principles common to the rural cemetery movement of the nineteenth century. The guiding principles also recognize changed conditions and uses, and the contribution of maintenance and management toward the ability of Evergreen to fulfill its purpose as a beautiful and significant landscape for burial, commemoration and recreation.

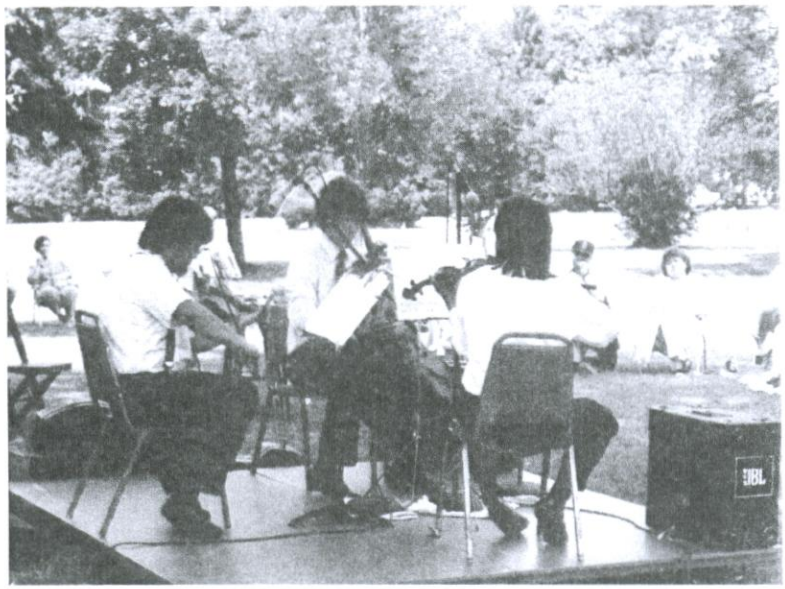
The goals of the master plan identify the major needs to be met by the plan's recommendations. The objectives within each goal spell out more specifically the means to achieve it. This ordering of needs has given focus to data gathering and analysis during the master plan process, and will provide a testing ground for proposals. It will also assist the city in its on-going process of long-range planning for Evergreen Cemetery, and should be re-evaluated as proposals are implemented and circumstances change.

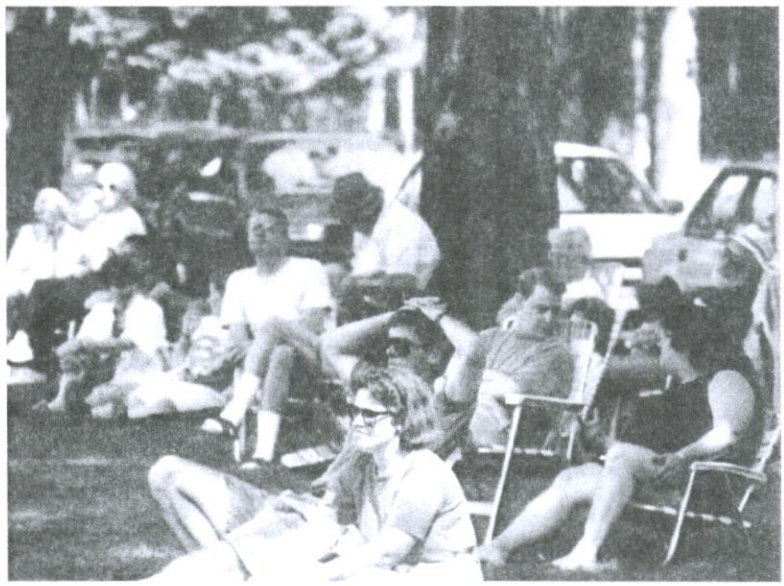
Because of the funding limitations of the master plan, there are a number of goals and objectives which, while essential for Evergreen's rehabilitation, will not be addressed within the scope of the plan. Examples of these are: evaluation of the condition of built structures; evaluation of the wetlands and drainage surrounding Evergreen; outlining of current and developing public tastes in burial options. They are included here in order to have a complete checklist of needs for Evergreen and to identify issues which should be addressed in the future.

1. The Dual Purpose of Evergreen Cemetery

A. As a public cemetery with the purchase of interment rights available to all. Evergreen is at once an active public cemetery and an important historic landscape carefully designed as a dignified and beautiful setting to commemorate the dead.

B. As a refuge for appropriate, low-impact recreational activities. In the same space residents of the city and the neighborhood find refuge in passive recreational activities. Evergreen's role as a place for recreation must be balanced with its primary purpose as a cemetery in order for these two purposes to co-exist and not conflict.





Musicians and audience gather on the lawn of Wilde Chapel for summer concerts.

2. *A City Park*

The significance of Evergreen Cemetery extends beyond its immediate neighborhood to all neighborhoods of Portland. It is a resource to the entire city and its management, maintenance, and improvements must reflect the needs of the larger public as well as those of the immediate neighborhood. Investment in the cemetery should be viewed in this light as well.

3. *Administration, Management and Maintenance*

The future of Evergreen Cemetery depends greatly on the city's commitment to state-of-the-art management and maintenance practices including: training of personnel to develop the additional skills and knowledge necessary for Evergreen's specialized care and for long-term infrastructure improvement, restoration and maintenance.

Maintenance and rehabilitation of the ponds are high priority project recommendations.

It is essential that funding be adequate for Evergreen's rehabilitation and maintenance, and that an administrative structure be developed able to champion the cemetery's needs to the City Council and in City Hall.

4. *Essential Design Elements and Spatial Relationships*

A. preservation of significant landscape elements and overall character in historic areas, with particular attention paid to open areas which are necessary for visual relief,

B. articulation of the entrance in response to historic design intent;

C. restoration of historically responsive design recommendations for focal areas such as the ponds, islands, and circles.

D. development and protection of naturalistic areas such as wildlife habitat and pedestrian trail links to Portland's greater open space network.

D. Continue to develop the recreational and educational aspect of Evergreen's use in ways that are appropriate with its function as an active cemetery.

E. Strengthen the diversity of landscape character, opportunity for focused views throughout the site, and interpretive potential with greater diversity of vegetation treatment.

F. Identify landscape character zones for the diverse areas of the cemetery and note the historic layering of the periods of the landscape's development.

G. Assess the original intent of the horticultural plan for the cemetery.

H. Research maintenance practices and their evolution over time.

I. Record historic landscape features such as bridges, gates, walls, gazebos, and their historic function.

J. Using archival materials and landscape research, identify historically significant landscape views.

2. ***Assess the Current Condition of the Landscape***

Time, maturation of the plantings, changing tastes, use and misuse, and maintenance practices have contributed to a changing cemetery appearance. The changes in the cemetery landscape need to be evaluated in light of Evergreen's original design.

A. Assess the current conditions of vegetation and landscape features.

B. Based on historic landscape information and assessment of current conditions, develop a plan that strengthens Evergreen's landscape.

C. Articulate maintenance policies which complement the historic character of the cemetery.

D. Establish guidelines governing the landscape character of the ponds, considering their original character and existing conditions.

E. Evaluate other landscape features such as the entry gates, stone walls, and the circles for possible restoration.

F. Strengthen and enhance vistas which reflect the historic intent of the cemetery's design.

G. Assess routine maintenance and its relation to desired aesthetic conditions.

3. *Plan for Interment in the 21st Century*

Evergreen's design has served the city's burial needs in two centuries. Its expansion for the 21st century must be planned with respect for its historic and contemporary role, with respect for the historic landscape and with respect for the environmental constraints of the site, to serve the public's needs within the reasonable maintenance expectations of the city.

A. Develop and evaluate plan alternatives for internal expansion in the developed areas of the cemetery. Unused land and former road beds should be considered, as well as abandoned lots.

B. Consider user needs for interment. Outline potential burial options suited to specific sites and current and developing public states.

C. Develop an expansion plan which respects the history and design of the developed cemetery and extends the active life of the cemetery.

D. Identify areas appropriate for further burial and memorialization and areas inappropriate area for further development.

4. *Plan and Define Evergreen's Function as a Public Park*

Planned as a public space for burial and commemoration of the dead and inspiration for the living, Evergreen continues to serve the varied interests of Portland. Current and future needs of leisure and grave-site visitors should be identified and become the basis for decisions about recreational use. The master plan should outline the nature and extent of current recreational use.

A. Identify areas in the active cemetery which can be managed to provide additional passive recreational activities for the public. Develop appropriate guidelines or regulations to facilitate co-existence of these uses.

B. Propose guidelines for recreational use of the undeveloped portions of the cemetery.

C. Develop additional interpretive information to enhance public enjoyment and understanding of the cemetery, including an improved sign system to provide better direction, orientation and interpretation.

D. Develop guidelines to establish parameters on vehicular and pedestrian access and use. Coordinate with other city open-space plans.

E. Develop a hierarchy of roads.

5. ***Enhance Evergreen's Natural Habitat***

Protect and enhance Evergreen's developed and undeveloped acreage for wildlife habitat.

A. Evaluate and protect wetlands and drainage surrounding Evergreen.

B. Identify Evergreen Cemetery's habitats and recommend measures to protect and enhance them, especially enhancing layers of vegetation now underrepresented, i.e. shrubs.

C. Recommend improvements to the ponds.

D. Evaluate stocking and culling practices for pond birds.

E. Consider wildlife habitat in the selection of new and replacement planting of trees, shrubs and forbs.

F. Integrate habitat considerations in recreational development and cemetery expansion.

6. ***Outline Restoration of Roads and Infrastructure***

Evaluate the condition of the cemetery's infrastructure and recommend improvements.

A. Inventory and evaluate the condition of roads, paths, water system, utilities, and drains.

B. Research historic character of roads and paths and recommend suitable techniques for their repair.

C. Research historic surface drainage systems, recommend suitable techniques for their repair, reconstruction and restoration, where feasible, and recommend drainage improvements where necessary.

7. ***Recommend Restoration of Built Features***

Protect and restore the functional integrity of Evergreen Cemetery's buildings, garden ornaments, and monuments.

A. Inventory and evaluate the condition of buildings, tombs, walls, gates, fences, statuary, and art within Evergreen.

B. Where feasible and desirable, restore elements such as gardens, walls, gates, bridges, gazebos and structures that have been lost.

C. Recommend improvements to deteriorated structures and outline state of the art maintenance practices.

8. ***Develop A Coordinated Approach to Maintenance***

Improve the maintenance of the cemetery to provide better service to lot owners and recreational users, and to enhance the landscape character and support the master plan goals.

A. Document and evaluate current maintenance practices, including equipment, finance, and staffing, and recommend improvements.

B. Adjust maintenance practices and training to support the goals of the master plan.

C. Outline a role for public input on implementation.

D. Evaluate the current organization for maintenance and improvement and suggest improvements where warranted.

E. Develop a system for continued impartial evaluation of maintenance practices and results.

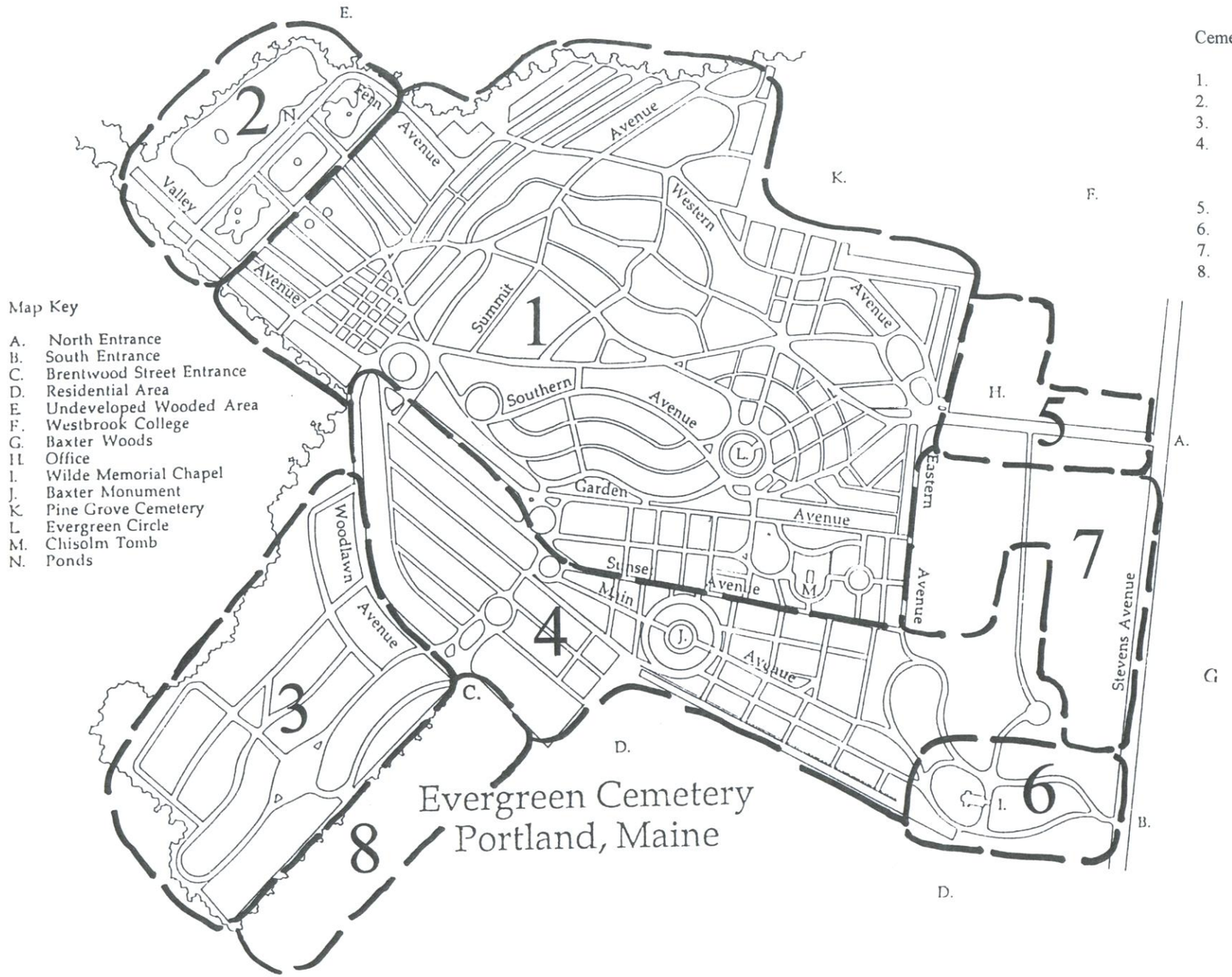
9. ***Enhance Funding and Cemetery Administration***

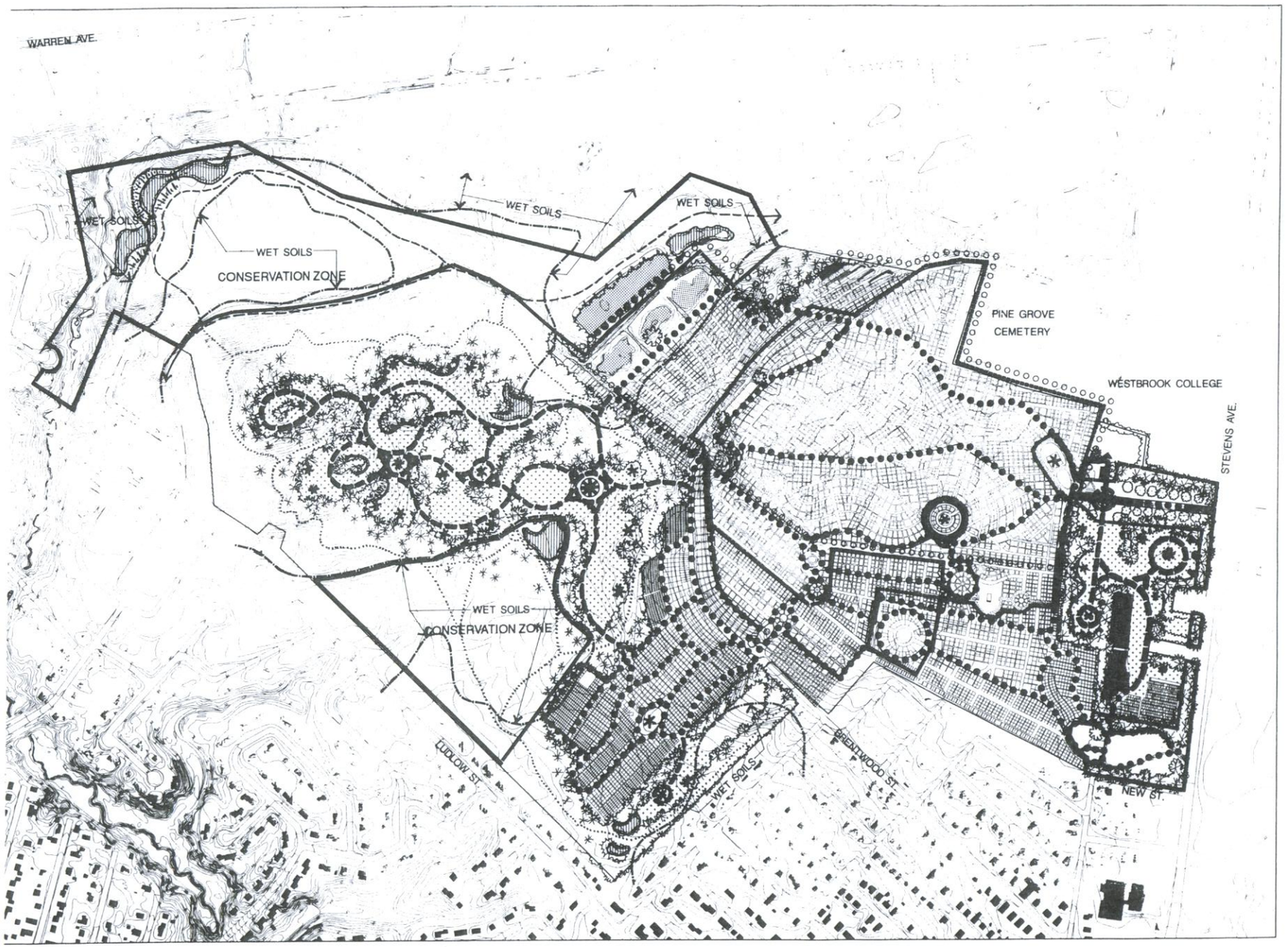
Review administration and financial condition of the cemetery.

A. Document and evaluate current administrative structure, including financial resources, plot sales and marketing, and staffing levels, and recommend improvements.

B. Recommended adjustment to administrative structure and finances to support the goals of the master plan.

Master Plan Maps


Evergreen Cemetery
Portland, Maine
Map Key
A. North Entrance
B. South Entrance
C. Brentwood Street Entrance
D. Residential Area
E. Undeveloped Wooded Area
F. Westbrook College
G. Baxter Woods
H. Office
I. Wilde Memorial Chapel
J. Baxter Monument
K. Pine Grove Cemetery
L. Evergreen Circle
M. Chisolm Tomb
N. Ponds
Cemetery Zone Key
1. Historic Zone
2. Ponds
3. Libby Field
4. Remaining Developed Acreage between Libby Field and the Chapel
5. Main Entrance Area
6. Chapel Entrance Area
7. Stevens Avenue, Phases I and II
8. Brentwood Parcel
Fern Avenue
Valley Avenue
Western Avenue
Summit
Southern Avenue
Garden Avenue
Sunset Avenue
Main Avenue
Eastern Avenue
Woodlawn Avenue
Stevens Avenue



EVERGREEN CEMETERY
Master Plan
Portland, Maine

Key

- Bituminous Concrete Road
- Gravel Road
- Grass Ways
- Proposed Roads
- Proposed 10' Bituminous Bicycle Path
- Proposed Walking Path (unpaved)
- Proposed Gathering Places
- Focal Features Without Burial
- Focal Features w/ burial (former receiving tomb site)
- Retaining Wall With Memorialization
- Retaining Wall With Hillside Crypts or Mausolea
- Mausolea
- Preservation Zone - No Infill Development Permitted
- Front Entrances/Edge Ceremonial Area
- Conservation Zone
- Proposed New Burial Areas
- Original Area of 1855 Development
- Proposed Ponds

The Halvorson Company, Inc.
in collaboration with the
City of Portland and the
Friends of Evergreen

Date: April, 1994

Scale: 0 150 450 900

Analysis and Recommendations

The analysis of Evergreen's visual character builds on the character-defining features of the design, relevant aspects of its historical development, and the cemetery's current conditions. There are critical elements of the site's design and development that have bearing on the character of the cemetery today and that should be protected in any future development.

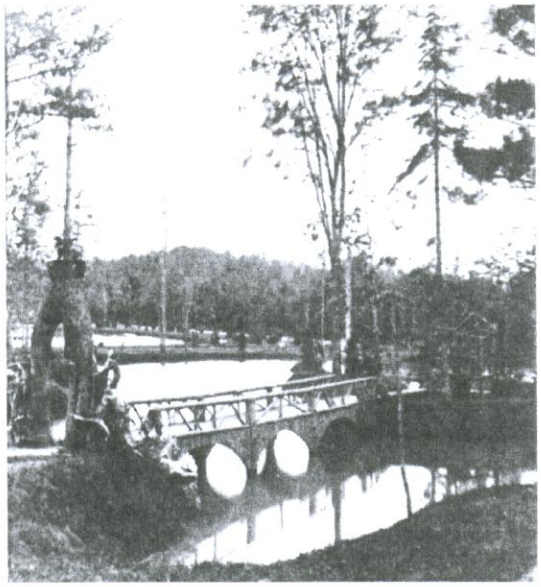
A. Historical Context

At the time of the establishment of the Evergreen Cemetery in 1855, a large part of the site was forested, predominantly with evergreens. During the first years, the major expenditure was for a fence around the perimeter which was considered a security need for the burial ground but which also served to visually identify the bounds of the cemetery.

The roads were the primary organizing feature. Where there was topography they responded to the landform, and in part it was a plan designed by an engineer (Charles Howe, civil engineer) so that linear roads, grid-like sections and regular curves are also evident. The circles were important aspects of the design, and provided focal points in the circulation pattern. The original design had two circles, and later expansions built on the feature with the addition of more circles. The site's roads have been a major maintenance issue and expenditure in the cemetery from the beginning.

The first acreage was purchased at the rear of properties fronting on Stevens Avenue. Consequently, the site was set back from the road, with the entry drive to serve as a transition between the world of commerce and the world of contemplation that was the cemetery. The drive, narrower than today and lined with an allee of trees and an underplanting of arborvitae hedge, established a strongly defined ceremonial approach to the cemetery.

The records indicate that attention was paid to embellishment of the cemetery, with major expenditures during the late nineteenth century for ornamental plantings of trees, shrubs, vines and bulbs. Data from historic archival sources does not give detail about specific locations of plantings, but it is clear from photographic documentation that focal areas such as the ponds and the circles were embellished with composed plantings. It is also clear that the landscape was a great deal more vegetated than it is today. The ponds were also the place for rustic structures in the form of gazebos and bridges, which were of several designs over the years. None of these exist today.



The ponds and entrances are the only areas within the cemetery that have enough historic documentation available to guide specific rehabilitation treatments.

What can be inferred from the historic documentation is that the original parcel is the area of greatest significance, and that the design structure of circuitous roads and paths punctuated by focal circles is a major element to be protected and rehabilitated in any new development. However, with the exception of photographic documentation of the ponds and the entrances, and illustrative photographs of various burial areas and roads within the early parcel, there is scant documentation currently available to guide specific treatment of various areas.

Recommendations, therefore, need to respond to whatever is known about the major focal areas of entrances, circles and ponds, and to build on an understanding of the design principles that govern the development of the rural cemetery in the nineteenth century - i.e., a balance of Art and Nature, where Nature was predominant; the importance of views and landmark structures; and the importance of recreational use within the cemetery landscape.

B. Current Conditions

1. Access, Circulation and Parking

The experience of entering Evergreen Cemetery has changed since the nineteenth century. Today, the main entrance drive is wider than it once was, its allee of trees has some vacant spots, and its hedge has been replaced by broad lawns along both sides of the entry drive. The drive terminates with a large pad of asphalt at the junction of five roads of three different road surfaces. This presents a diffuse and confusing point of arrival within the cemetery.

The original entrance created a ceremonial experience with focused views into the cemetery.

The 1994 entrance drive terminates at a confusing point of arrival.

The front edge of the cemetery is ill defined, with a variety of posts placed along Stevens Avenue apparently to prevent driving after hours into the cemetery. Two small privately-owned parcels separate the south gate from the main gate, and visually confuse the first-time visitor, as well as diffuse the strong presentation of Evergreen to the street. The development of the south gate in 1901 gave Evergreen two entrances of equal weight visually. There is a need to define and announce Evergreen more clearly and positively along its primary access route, and to more clearly establish the main entrance.

The circulation system remains an important design element and organizing feature in Evergreen, and expansions of the site over the years have generally followed the layout approach established in the original parcel, although linearity increased with the design of later parcels. Roads are the sight lines for the visitor, and therefore have a major impact on the perception of the landscape as well as on ease of movement and visitor orientation.

The roads in Evergreen are in poor condition. Over 50% of the bituminous concrete roads on site are in fair to poor condition, and 70% of the gravel roads are in fair to poor condition. This means that movement through the site is affected, and the character of the landscape is severely impacted. The deteriorated condition of the roads is a function of deferred maintenance due to lack of adequate funding as well as the lack of system of drainage structures to control runoff. Too much uncontrolled water crosses roads and moves along the edges of roads, causing severe erosion in many places. Many roads are in need of better construction with crowns and swales to direct water, as well as hardened drainage channels, either curbs or subsurface.

The original cemetery roads were earthen carriage paths, which were improved over the years with the modernization of road construction and to response to changes in the form of vehicular travel. Today, there is a combination of road surfacing: asphalt roads including a loop circulation route through the cemetery, gravel roads, and roads that have been reverted to grass paths. This combination suggests a hierarchy which can act as an orienting device; a method to limit visitor motor vehicular movement and therefore vehicular/pedestrian conflicts, reclaiming more routes for the pedestrian; and to potentially provide residual space for infill burial.

The original cemetery roads were earthen carriage paths. Today, the deteriorated road condition severely impacts the overall landscape character.

The proposed hierarchy of roads will serve as an orienting device. Grass paths will reclaim more routes for the pedestrian.

There is a system of trails in the undeveloped woodland area of the cemetery, which have been enjoyed for years by residents seeking the woods for passive recreation. Portland Trails has developed a long-term plan for a regional system of trails that would connect Portland's open spaces and support alternative modes of transportation. Evergreen figures prominently in the plan, as a major destination where at least four trails under consideration are proposed to converge. Evergreen's trail system offers wonderful opportunities for hiking and nature study as well as for recreational bicycling, and could beautifully work with a larger vision of a connected system of open spaces.

The integration of Evergreen within a larger system, however, and one which encompasses commuter as well as recreational bicycling, needs to be carefully approached in order to enhance recreational visitors' enjoyment and appreciation of what Evergreen has to offer while protecting the site's natural and wildlife communities and being compatible with proposed burial expansion and the site's primary use as a place to honor and mourn the dead. New federal design standards for bicycle path development with federal funding require 10' wide pavement with a minimum radius of 100', a maximum grade of 5% and 5' shoulders on each side. Such a bicycle path would be inappropriate in Evergreen's woodland, a serious intrusion into that environment and landscape.

Parking occurs in a diffuse pattern throughout the cemetery. In addition, numbers of people park along the entry road for various reasons at different times of the week. People also park near the ponds to enjoy the water and feed the ducks, and by grave sites. A continuing pattern of diffuse parking is consistent with the design of the circulation, and with a few exceptions that will be identified, concentrated parking within the developed areas would not be appropriate.

2. Signage

The sign design in Evergreen is inconsistent and sign placement is haphazard. Approximately half of the site's roads have no signs, and in a landscape as confusing to navigate as Evergreen, road signs are essential. The quality and character of the signs also present an image of neglect, and represent a missed opportunity to reflect the richness of Evergreen's history and landscape in the design of its signs. The road signs are utilitarian green and white street-type designs, and some older signs are nailed to trees.

Signage design in Evergreen is inconsistent and sign placement is haphazard. Signage at the main gate is confined to regulatory signs.

The only identification sign for Evergreen Cemetery is at the locked south gate, and signage at the main gate is confined to regulatory signs. There is no sign to welcome the visitor here or at the Brentwood Gate.

There is a need for a coordinated sign system for Evergreen, including identification, directional, and regulatory signs as well as consideration for selectively placed interpretive signs and a site map exhibit at the main entrance. Such a system should be integrated into a larger, city-wide sign system for all historic parks and sites to reinforce the presence of an historic system of public spaces.

Signage design is a specific and challenging design problem, and should be approached professionally in order to successfully convey information, character, and historical significance within a unified system.

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An element that is related to signage as well as circulation is the hand-held map distributed by the cemetery to visitors. The present map is hard to read, and like the sign design a poor reflection of the character of the site. Here, too, that character can be expressed more positively while providing a more legible orientation device.

3. Vegetation

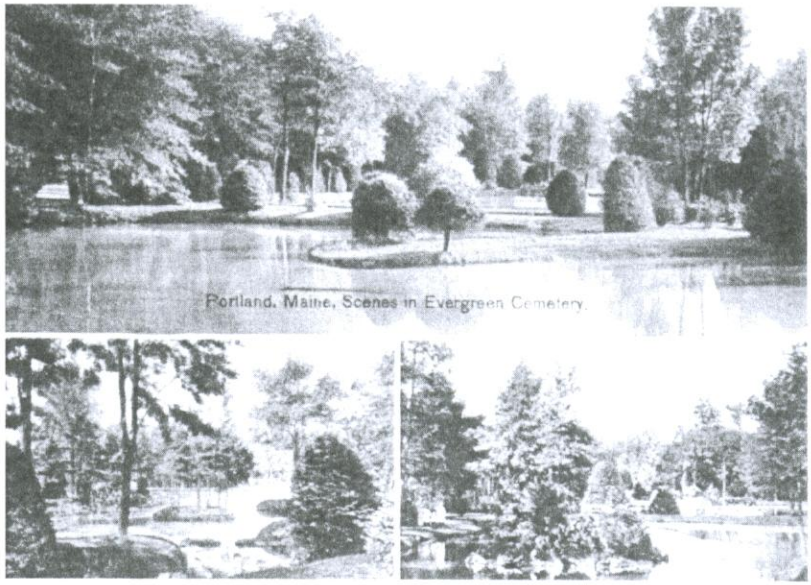
Vegetation condition and maintenance are discussed below under Maintenance and Management. The focus of discussion here will be on the impact of vegetation on Evergreen's landscape character.

Vegetation is a critical character-defining element in any landscape, and it is at Evergreen as well. Trees are Evergreen's primary natural feature, with shrubs confined to burial lots, the office building and the ponds.

The lack of diversity of tree species throughout the site, coupled with a fairly even topography over most of the historic area, has caused excessive homogeneity in the landscape and a lack of distinctiveness to particular areas. This homogeneity is heightened by the exclusive use of major canopy trees, rather than a combination of canopy and understory trees which could frame spaces and focus views.

Selective planting of shrubs as well as canopy and understory trees would add significantly to the character of the landscape by defining and containing spaces where flat topography is predominant.

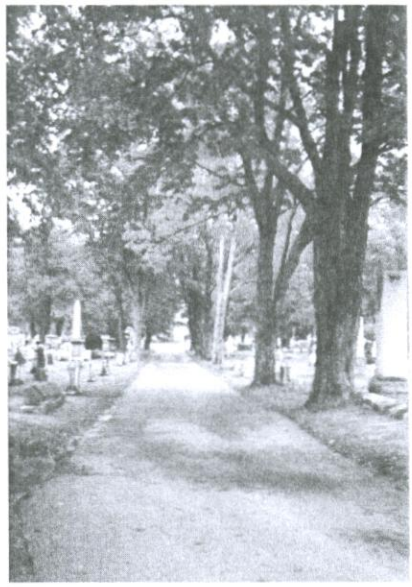
The historic record is not helpful in clarifying species used, or whether there was any significant shrub planting throughout the cemetery. It appears not to be the case. However, selective plantings of shrubs as well as canopy and understory trees would add significantly to the character of the landscape by defining and containing spaces where flat topography gives even, uninterrupted and uniform views across the site. Views were an essential component of the romantic English landscapes that inspired Evergreen's design, and vegetation is Evergreen's best tool for creating more focused views, as well as adding to the richness and diversity of the site and replacing mature, declining and lost trees.



Views were an essential component of the romantic English landscapes that inspired Evergreen's design, and vegetation is Evergreen's best tool for creating more focused and interesting views.

Specific investigation into potential tree locations was beyond the scope of this study, but it appears that there are a number of potential tree planting locations that would not impinge on burial lots. Consideration should also be given to contacting lot owners for permission to plant on lots, as a way of enhancing not only their individual lot but also of strengthening the character of the entire cemetery landscape as the best memorial to the deceased. The Portland Annual Report of 1937 defines a goal of the cemetery trustees "to make Evergreen a quiet, beautiful resting-place for the dead, where well-kept turf and varied foliage of trees and shrubbery shall give a sense of repose." (Italics added.)

Where trees have been used to strengthen the design - allees along roads, and grove plantings - they have had a very positive impact on the landscape. The focal areas of entrances, circles and ponds present major opportunities for embellishment of the site and strengthening of the design with plantings.



Tree allees along roads were used to strengthen the landscape design and focus views.

Shrubs have been used very little in the cemetery, with the exception of plantings at the office building and on lots in the Libby Field section. In the latter case, the use of only two choices, and ones which have compact, stiff forms, reinforces the uniformity and regimentation of the lot layout in these areas. A broader range of choices can satisfy the maintenance need for shrubs not to outgrow their lots, yet also enhance the character of the landscape with greater diversity.

In Libby Field, the choice of two shrubs with stiff compact forms reinforces the uniformity and regimentation of the lot layout.

Groundcovers have been discussed in Maintenance and Management as they affect maintenance efficiency. In terms of landscape character, the use of groundcovers as well as grass in places, such as on slopes, by the ponds, and within planting compositions at focal areas such as the entrance, will work with other vegetation to strengthen the character of the overall site and the diversity of particular areas.

4. Ponds

The ponds at Evergreen Cemetery are major elements in the site's design. They are the best visually documented site in the cemetery, and it appears that they received the greatest amount of design attention in terms of the addition of landscape elements such as bridges and gazebos as well as composed planting. As it was historically, the pond area today is a place of a great deal of visitation. Therefore, it is critical for many reasons that the physical condition of the ponds, the aesthetic character of their surrounding landscape, and opportunities for appropriate use be protected and improved.

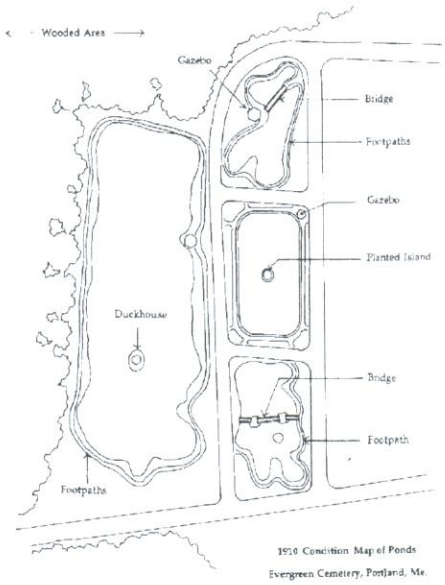
Issues relative to drainage and management are discussed in Vegetation and Maintenance and Management, below.

Historical photographs of the 1860s and 1870s as well as pictures from the turn of the century show a series of rustic bridge designs over time, connecting the pond shore with several of the islands. It is not clear exactly where all the bridges were. Photographs also show gazebos, a rustic-style swan house on the island in the large pond, and benches. Plantings were ornamental in style, including flowering shrubs, and a major focal point for embellishment during the nineteenth century. There was a flower bed on the island in one of the smaller ponds.

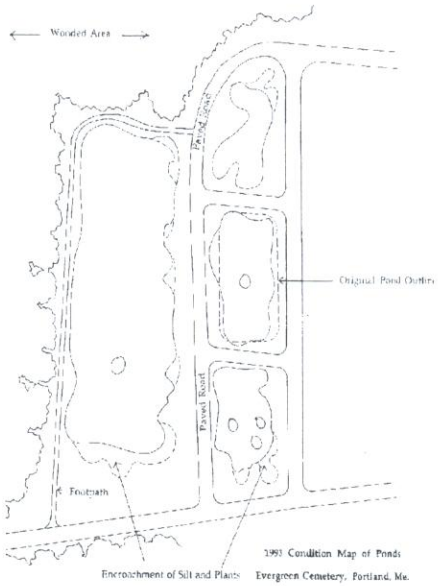
The duckhouse was the focal amenity in the large pond.

The composed planting at the ponds is gone, and there are large stretches of pond edge that are unvegetated. The native vegetation at the small ponds, with its stands of arborvitae, give them a woodsy character, particularly the northeasternmost one. Uncontrolled access to the ponds has degraded the pond edges in places, particularly along the edge of the large pond which is used for ice skating in winter. Today, there are no benches at this most popular use area.

When the current site map is overlayed on the 1855 map, it appears that the three small ponds are the original ones, and that the large pond is a later addition.



1910 Condition Map of Ponds



1994 Condition Map of Ponds

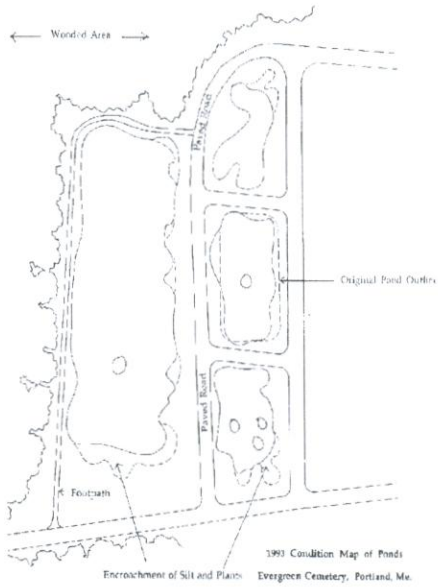
C. Landscape Character Zones

In order to define what constitutes Evergreen's beauty in order to preserve it, the character of the cemetery landscape was analyzed in terms of the physical elements of the site and their relationships to one another - topography, vegetation, monumentation, circulation. Zones were identified, some of whose landscapes best exemplify Evergreen's beauty, others of which have introduced a different burial system or landscape treatment and have lost the elements critical to Evergreen's beauty and ability to satisfy and heal the visitor. This analysis will also be helpful in extracting design principles to guide any new development within Evergreen.

H: Historic Zone. The largest zone of landscape character in the cemetery is termed the Historic Zone, and covers most of the land acquired in the 1850s through the 1880s, except for the land below Hillside Avenue and the ponds. It also includes a parcel of land acquired in the 1890s northwest of the chapel.

This zone represents the quintessential Evergreen Cemetery landscape, with a diversity of monuments integrated into a vegetated landscape throughout most of the zone. The specific elements of the zone are as follows:

> *Topography and Spatial Definition.* This zone is characterized by fairly uniform, flat topography, bounded by steep slopes that fall away from the zone on the north, southwest and northwest. This creates a homogeneous character to the landform with open views across the zone and minimal spatial definition. This characteristic can be modified by other landscape elements.



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Monumentation and Lot Layout. The Historic Zone is characterized by a diversity of monumentation, including many large-scale, distinctive pieces of funerary sculpture of high artistic quality. This is an important aspect of the character of the cemetery landscape, because it expresses the uniqueness and value of individuals within this larger community of the dead. The integration of monuments and vegetation in this zone is another important aspect of its visual success and the satisfaction of being within it, because it speaks of the integration of humans and the larger natural world.

The Historic Zone is characterized by many distinctive pieces of funerary sculpture of high artistic quality.

Marble was used for a time, because it was easy to carve into complex forms, but was later rejected because it eroded and stained too easily.

Graves are organized in family plots that permit greater open spaces within the zone and interesting, irregular relationships between monuments.

There are some monuments that stand out as landmarks or focal elements, because of their scale, design or location within the landscape. Examples of these are the Chisolm Tomb, the Baxter Monument, the Dole/Fuller Monument, the Elk, and the Civil War Memorial. The visual impact of some focal monuments, such as the Civil War Memorial, could be strengthened with embellishment of their surrounding landscape.

There are small sub-zones within the larger Historic Zone: small areas marked by numerous curbed lots; areas with a preponderance of marble markers; or areas with a concentration of sarcophagi-style monuments. These areas are small and at present insufficiently distinct visually because of the uniformity of vegetation treatment throughout the Historic Zone.

Circulation. The roads in the Historic Zone are a combination of curving and rectilinear layout, leading the visitor on a circuitous journey through the cemetery.

The layout of roads in the parcels acquired in the 1870s and 1880s is more linear than that of the original parcel, creating more rectilinear and grid-like burial lots.

The grass roads and many of the smaller gravel roads are a pleasing scale, and reinforce a rural character within the zone.

Vegetation. Areas within lots as well as along roads and between lots have been planted with trees, softening with vegetation a landscape that has thousands of monuments. The introduction of understory trees, additional allees, and groves of trees as well as and shrubs in places would help to frame spaces and create outdoor rooms, which are not created by topographic variation. It would also allow areas to become more distinctive within this larger zone, creating sub-zones that could reflect different decades of development, and different monument styles. Reinforcing the existing subtle distinctions of monumentation and topography with vegetation can greatly increase the visual interest of Evergreen's landscape. Vegetation should be predominantly native to reflect the original composition of the trees.

LF: Libby Field Zone. The Libby Field section was first laid out in 1892 with revisions in 1900. In 1900/1, the Portland Annual Report cites that a new single grave section was introduced into the cemetery, and in 1917 Rules and Regulations were published by the trustees which limited the size of headstones to 2'6", with no monuments permitted in the single grave section presumably because of space limitations.

Libby Field was the beginning of smaller burial lots, denser development, and a uniformity of monument size and style.

Shrubs flank many monuments in Libby Field, and the rigid sheared shrubs create rectangular rooms that reinforce the regimented character of this zone.

What this meant for the Libby Field area was the beginning of smaller burial lots and a denser development, a uniformity of monument size and style, and a radical departure from the older sections that characterized the cemetery. The specific elements of the zone are as follows:

Topography and Spatial Definition. This zone is fairly flat, bounded on the north by a sloping area along its border with the Historic Zone. As in that zone, topography creates open views and a homogeneous character to the landform.

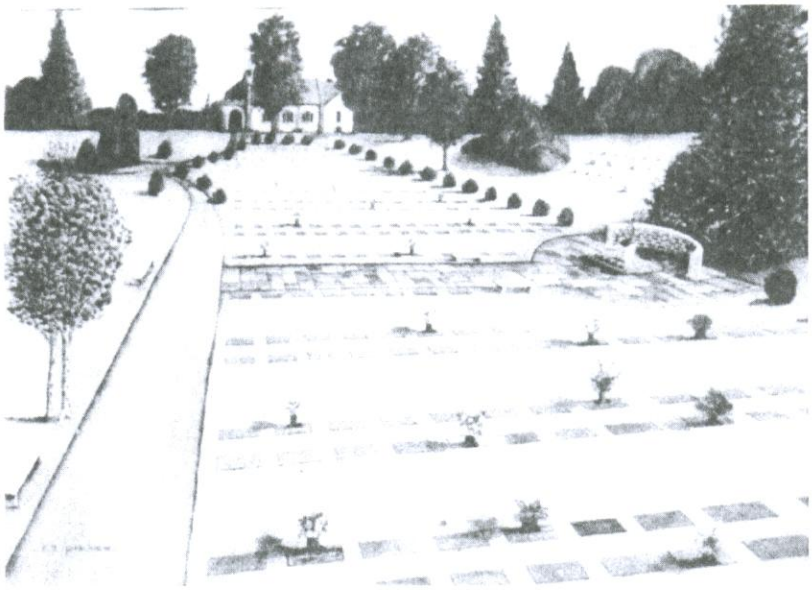
Monumentation and Lot Layout. Lots have been laid out in this zone in a dense grid pattern to maximize burial and facilitate maintenance. This design, coupled with a uniform size and design of monumentation, has caused a regimented landscape with little diversity of visual character. There are some exceptions to this in several larger monuments.

Circulation. The roads in the Libby Field zone are laid out in a pattern sympathetic with the circulation pattern of the Historic Zone, although they are wider than roads in that zone. The ellipse design acts as a focal element within the circulation in Libby Field, like the circles elsewhere in the cemetery. The landscape of the ellipse, however, does not take advantage of its potential as a focal landscape feature.

Vegetation. Where there has been sufficient space planned into lot development, trees have been added in this zone to soften the landscape. In some areas of the Libby Field zone, lots were so densely laid out that no space for trees was planned, and the landscape appears exposed and barren.

Shrubs flank many of the monuments in this zone, and hedges are used in some places to break up the larger space into smaller rooms. However, these rooms appear to be arbitrarily created, with no relationship to landform or other landscape features. The rigid, rectangular shape of these rooms with sheared shrubs on either side of colonial monuments reinforces the regimented character of this zone.

FM: Flat Marker Zone. Areas in the front of the cemetery near Wilde Chapel were laid out with a restriction of flat markers only for commemoration. The area east of Memorial Avenue, termed Memorial Park, was laid out in the 1940s. The area west of Memorial Avenue, termed Memorial Garden, was laid out in the 1960s. The topography of this zone is flat, and this combined with flat markers and no vegetation creates an open, barren character unconducive to contemplation. Although the restriction to flat markers here was a good attempt to minimize the intrusion of monumentation into an important open space, the presence of flat markers is still clearly evident, made more so by the addition of tokens such as flowers and flags at the graves. This burial zone appears as an intrusion into this area, and a clear departure from the visual complexity and interest of the nearby Historic Zone.



Early sketch of the Flat Marker Zone. This area was designed as a clear departure from the visual complexity and interest of the nearby Historic Zone.

Current view of the Flat Marker Zone. The open, barren character appears inconducive to contemplation.

E1: Main Entrance Zone. The Main Entrance Zone includes the north entrance gate, the entry drive, the lawns flanking the drive and the office building. As noted above, the main entrance is wider than it was in 1857, and the allee of trees and shrubs has been replaced by broad lawns not defined or framed by plantings . This changes the character of the entrance and prevents a focused, ceremonial experience of transition from the city to the cemetery.

The office building was built in the 1880s, and burned in 1961. Originally a distinctive wooden and stone structure with a gable roof and turret, the fire destroyed most of the building and the reconstructed structure is devoid of the architectural character of its predecessor. The roof profile of the present building recalls the original, but the historic integrity of the original structure has for the most part been lost. There is an attractive wooden sign identifying the building in front, but makeshift signs are found at the office door.

The office building built in the 1880's was a distinctive wooden and stone structure with a gable roof and turret.

The present office building is functional but lacks the historic integrity of the original structure.

Signage clearly conveys character, and the many signs at the front entrance are all regulatory, placed close to one another in haphazard fashion. There is no sign announcing and welcoming the visitor to Evergreen Cemetery. The sense conveyed here is lack of welcome and lack of care.

There is little sense of arrival at the end of the entry drive, where an overly large pad of asphalt bleeds into six avenues of differing sizes and surfaces. An experience of destination, arrival and orientation needs to be created, a role which the former receiving tomb performed to some extent.

E2: South Gate/Chapel Entrance Zone. The south entrance into the cemetery was constructed in 1901 and Wilde Chapel built in 1902, which became the focal point for the southern portion of the cemetery. This zone covers the entrance, chapel and roads and lawns surrounding the chapel.

This entrance gate is locked. The only identification sign for Evergreen Cemetery is over this locked gate, a mixed message of welcome and unwelcome. The existence of two gates of equal scale along Stevens Avenue creates confusion about access.

The chapel is a beautiful, dignified Gothic style structure of gray granite and yellow brick, with stained glass windows. The building was neglected for years, and is in very poor condition. It is currently undergoing a restoration intended to make the building water-tight.

The plantings around this entry landscape are effective to a degree in defining the zone, but more composed plantings are needed.

The dignified Gothic style chapel is currently undergoing restoration to make the building water-tight.

Edge: Stevens Avenue/Abutting Residences Zone. This zone consists of the flat residual undeveloped land between the two entrance zones at the front of the cemetery. There are patches of trees along the edge and one very dense stand of regenerating trees. The zone is presently undistinguished, and appears as a leftover space. The abutting residences break up the cohesiveness and limit development of the front edge of the cemetery.

W: Wet Hillside Zone. This zone marks the transition between the Historic Zone and the ponds, defined at the southeastern edge of the zone by the distinctive design of a retaining wall of mausolea. This sloping area is marked by a low density of monuments, where burial has been limited because of soil conditions. Erosion is evident because of wet conditions. The paths within the zone are all grass.

P: Pond Zone. The ponds, described above, are major elements in the cemetery's design and important visual amenities on the site. Today they appear more woodsy and less ornamental in character than the pond images of the late nineteenth century and the turn of the century. The degraded pond edges and fluctuations in water levels have negatively affected the edge character of the ponds. The roads at the ponds are in poor condition, and also contribute to the worn appearance of an otherwise special place in the cemetery.

UN: Undeveloped Zone. This large zone is a pleasant and inviting refuge of undeveloped woodland, undulating ground and rock outcroppings in the city. It is a delightful counterpoint to the developed cemetery landscape of thousands of pieces of funerary sculpture and a web of roads.

The Undeveloped Zone primarily consists of two landscapes. One is a high central area of exposed bedrock vegetated with small trees. The other is a lower, more level and somewhat poorly drained woodland with larger trees and an open groundplane. The tree cover in the Undeveloped Zone is mixed deciduous and evergreen consisting largely of White and Red Oak species, White Pine and Hemlock, with some Birch and Red Maple.

The Undeveloped Zone is an inviting refuge with undulating ground, rock outcroppings and small woodland trees.

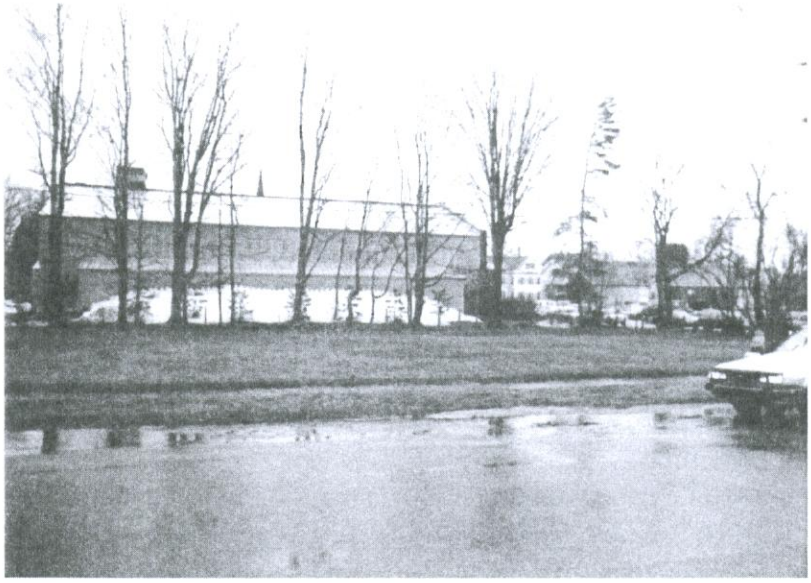
(See Plan for site-specific recommendations, page 26)

1. Access, Circulation and Parking

- *Maintain width of the entrance drive Established in 1880 and define the main entrance by strengthening the existing tree allee,* similar to the original landscape treatment of the entrance, while allowing views under the tree canopy of broad lawns along either side. Define the edge of the lawn to the south without blocking the view. Establish plantings along the north property line to strengthen the character of the edge and screen views into Westbrook College.

- *Design an arrival/orientation circle at the office building to provide a terminating focal element at the end of the drive.*

- *The Cemetery Entrance and the Chapel Entrance should clearly indicate their uses* with appropriate signage. The Chapel Entrance should accommodate both vehicular and pedestrian entrances. Open the vehicular entrance when needed at particular times, while making this point of access welcoming by keeping the pedestrian entrance open.



Plantings are recommended along the northern property line to strengthen the character of the edge and screen views into Westbrook College.

- *Strengthen the character of the front edge and visually connect the south and main entrances with massed evergreen plantings along the entire edge and a low memorial wall.* Investigate the possibility of continuing the wall across the boundaries of the two private parcels that currently break up the cemetery's front edge. The wall should be of a compatible design to strengthen the character of the front edge and to deter automobiles.

- *Investigate the future potential to acquire the non-historic private parcel along Stevens Avenue, and possibly the historic one as well.*

- *Improve the character of the Brentwood Street entrance consistent in character with the Stevens Avenue entrances.* Indicate in scale that this is a secondary point of access. Develop both vehicular and pedestrian entrances, opening the vehicular entrance when needed at particular times while making this point of access welcoming by keeping the pedestrian entrance open. Narrow the expanse of asphalt in front of the entrance and inside the cemetery.

- *Improve the character of the cemetery access point into the western woodland from the adjacent housing development* with a simple bollard design that visually connects this entrance with Evergreen Cemetery, welcomes the visitor, and indicates in scale that this is a secondary entrance to the property for pedestrians and bicyclists.

- *Interpret the 1855 circulation system with gravel surfacing of most of the roads within that acreage,* with the exception of several historic roads to be paved in bituminous concrete to support visitor and maintenance vehicular circulation.

- *Limit visitor vehicular circulation to bituminous roads,* in order to prevent degradation of gravel roads particularly during wet weather, limit pedestrian/vehicular conflicts, and open up the possibility of using the edges of selected grass paths for burial. Scale down the gravel roads to appear as pedestrian corridors, while maintaining sufficient width for maintenance and graveside vehicular circulation. Control vehicles with the use of bollards and chains, or curbing and signage.

- *Make provisions for visits to graves by the elderly and handicapped that would be made inaccessible by proposed limitations of vehicles to bituminous roads only.*

- *Improve the condition of the roads with crowns and swales as well as the addition of drainage structures.*

- *Revert some paved roads to grass paths for prevention of erosion, ease of maintenance, and separation of pedestrian and vehicular traffic.*

- *Provide a well-distributed network of bituminous concrete paved roads to facilitate visitor and maintenance circulation and minimize the amount of bituminous concrete on site.* Where bituminous concrete roads abut circles, pave the entire edge of the circle to articulate and strengthen the design. Revert the road between the ponds to gravel, preventing visitor vehicular circulation to control erosion and protect this area for use by the pedestrian. Establish Shore Avenue as the bituminous pond access road and connection to the cemetery loop road.

- *Accentuate the presence of the circles as focal elements within the circulation pattern* by the use of a combination of plantings, curbing and central monuments. (See Cemetery Development for further discussion.)

- *Incorporate Evergreen's trail system into the proposed burial expansion plan for the undeveloped acreage*, expanding the trail system to connect around Libby Field to the Brentwood gate and above the ponds to Westbrook College.

- *Limit commuter bicycling to the western woodland*, maintaining one improved trail for commuters that moves between proposed burial sites, behind the ponds and into the Westbrook College property to the north.

- *Maintain dispersed parking throughout the cemetery*, with the exception of a small bituminous parking area for the office building and a small gravel parking area southwest of the ponds, for visitors to the ponds as well as for access to the trails.

2. Signage

- *Express the richness of Evergreen's history and landscape with the design of a consistent signage system for the cemetery that is distinct yet integrated with a city-wide system for Portland's historic parks.*

- *Design an entrance sign that clearly welcomes, informs, directs and regulates.* Install it at all entrances, using a small-scale sign for the woodland access point.

- *Develop a site map exhibit for visitor orientation, to be installed near the office building.*

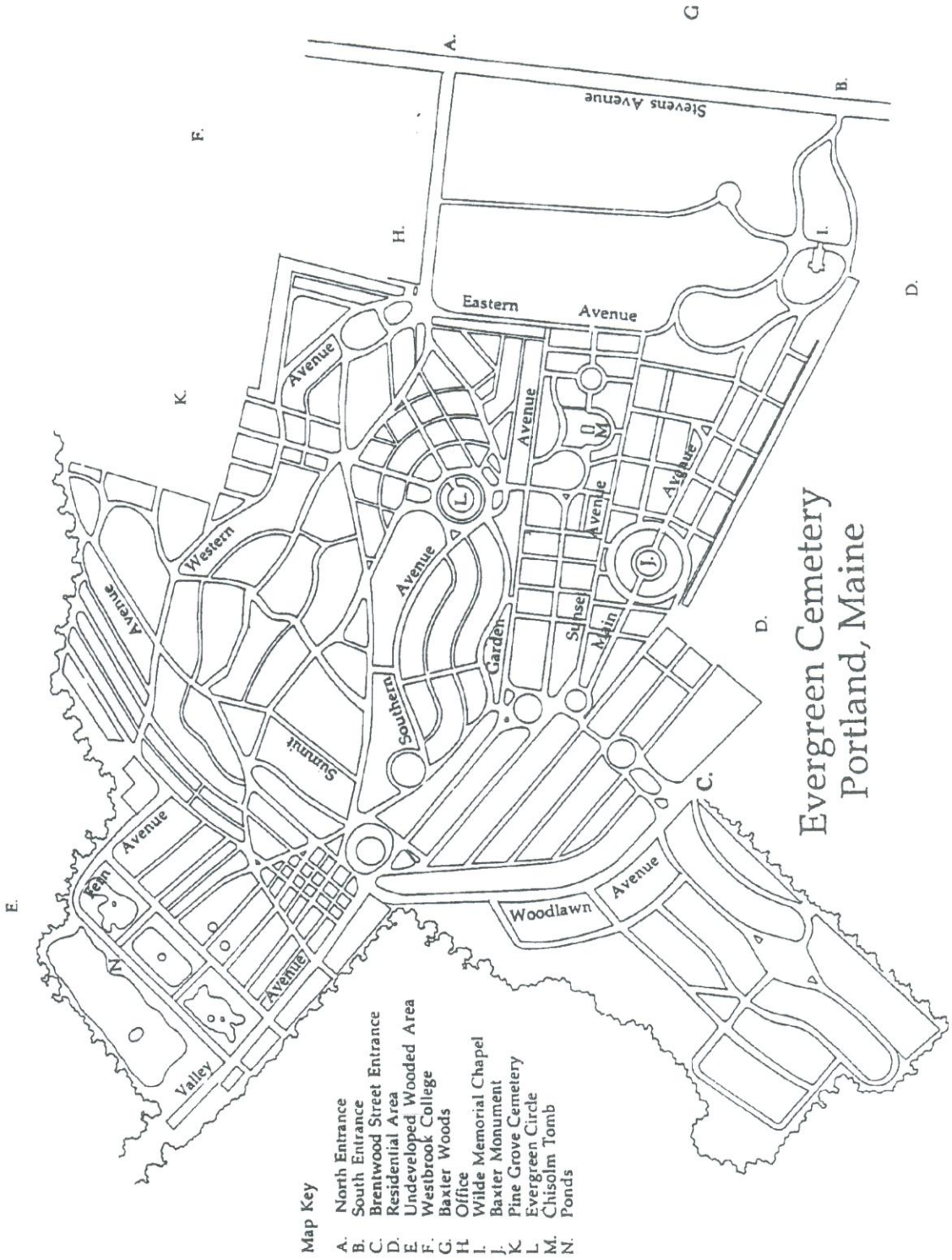
- *Install a minimum number of interpretive signs at key places to convey the history and significance of Evergreen, and improve public understanding and appreciation of the place.*

- *Install discreetly-designed regulatory signs in popularly used public areas* (i.e. the ponds; the proposed sitting areas by the five-chamber tomb and by the chapel).

- *Replace all road signs with newly designed signs, adding signs for every road.*

- *Improve the design and legibility of the hand-held site map.* Use color coding to indicate guidelines concerning use.

- *Integrate trail information for Portland Trails into Evergreen's signs*, possibly using the Portland Trails logo to indicate trail locations on Evergreen road signs.


Evergreen Cemetery
Portland, Maine
Stevens Avenue
Eastern Avenue
Western Avenue
Southern Avenue
Summit Avenue
Garden Avenue
Sunset Avenue
Main Avenue
Avenue
Woodlawn Avenue
Fern Avenue
Valley Avenue
A.
B.
C.
D.
E.
F.
G.
H.
I.
J.
K.
L.
M.
N.
Map Key
A. North Entrance
B. South Entrance
C. Brentwood Street Entrance
D. Residential Area
E. Undeveloped Wooded Area
F. Westbrook College
G. Baxter Woods
H. Office
I. Wilde Memorial Chapel
J. Baxter Monument
K. Pine Grove Cemetery
L. Evergreen Circle
M. Chisolm Tomb
N. Ponds

3. Vegetation

(See Vegetation and Maintenance and Management for recommendations relative to vegetation condition and maintenance.)

- *Increase the quantity and diversity of tree species throughout the developed cemetery areas, particularly increasing the presence of evergreens and flowering trees.* Concentrate on the use of native species in natural associations, including an increased use of evergreens, to reestablish a primary visual element within the historic landscapes. Use some exotic species in the newer areas (with the exception of the woodlands) to add diversity and distinctiveness.

- *Research and develop a period plant list, and introduce period plantings in the historic area of the cemetery.*

- *Utilize trees to strengthen the presence of designs features and linkages between design features.* Examples are allees of trees along linear roads and between circles; and groves and other design compositions in open spaces and at important features such as the Civil War monument.

- *Increase the use of shrubs and groundcovers as well as trees throughout the site to better define spaces, frame views and embellish the landscape.*

- *Expand the palette of acceptable shrubs on lots to increase diversity and the potential for flowering plants.*

- *Plan to maintain plantings through maturity to reinforce the idea of the rural garden cemetery.*

- *Utilize vegetation to distinguish different cemetery areas,* highlighting differences in character and age of various areas to interpret the site's history and make areas distinctive and less homogeneous.

- *Develop special planting compositions of trees, shrubs and groundcovers to announce the site's entrances and welcome the visitor.* Include costs for maintenance in initial estimates of development costs.

- *Strengthen the recreational and educational potential of the landscape by labeling some of the site's trees and shrubs.*

- *Screen the cemetery from its neighboring context with planting along its boundaries.* Replace the Hemlock trees that were removed along the southern edge, plant a buffer between the undeveloped parcel south of Libby Field and the neighborhood, and plant along the edges by the chapel and by Westbrook College and along the Stevens Avenue edge.

- *Reestablish the presence of flowers throughout the site, particularly the beds within circles and flowers at entrances.*

4. Ponds

(See Vegetation and Maintenance and Management for recommendations relative to the physical condition of the ponds.)

- *Rehabilitate the pond landscape with plant compositions similar to those documented in photographs of the late nineteenth century.* Use primarily native plant material in ornamental compositions, using the photographs as design guides. Maintain some open pond edges and some vegetated edges to control and guide human access while providing cover for animals.

- *Reestablish the bridges and a gazebo at the ponds,* developing them as memorial structures to secure a source of funding for the restoration and offer a special memorial product at the cemetery.

- *Restore the flower bed on the island in the large pond.*

- *Convert the road between the three small ponds and the larger pond to gravel,* as well as surfacing the paths between the three small ponds with gravel. Edge gravel ways with cobbles for erosion control and historic restoration.

The potential for development of additional burial space in Evergreen Cemetery can be divided into two broad categories: available areas within the fabric of the existing acreage of the cemetery; and areas available within the undeveloped acreage of the property.

Development for burial within the latter should be designed with an understanding that the undeveloped acreage is also an important recreational space, with existing trails and the potential for new ones. Trail layouts can be sensitively integrated with new burial development in this area, in order to protect and maximize the recreational values of this land while recognizing the role of this undeveloped acreage for ensuring that Evergreen remain an active cemetery into the next century.

1. Available areas within the fabric of the existing developed cemetery

There is a significant amount of undeveloped land within the existing developed acreage of the cemetery. The largest undeveloped site lies along the eastern edge of the property, extending from the main entrance to the flat marker area, and around the chapel, an area of approximately 13.5 acres. In addition to this area, there are many small remnant areas such as the "islands" at the junction of roads and/or paths, land within circles, areas along the edges of roads and paths, areas between existing lots, unused areas within existing lots. There are also some areas that are currently poorly suited to burial because of high water table in the Wet Hillside Zone to the east of the ponds.

1a. Undeveloped Land at Front of Cemetery. The largest undeveloped area, at the front of the cemetery, consists of land adjacent to the main entrance and extending along the eastern edge of the property to the chapel (the Edge and Entrance Zones defined in Landscape Character Zones). The configuration of the flat marker development has created some small pockets of undeveloped land at the front of the cemetery, as well as constrained the location of future roads needed if this acreage were to be developed. Two small privately owned parcels with buildings abutting Stevens Avenue further constrain development by creating a very irregularly shaped edge along the eastern boundary of this land.

If these properties become available, it is recommended that the use of the property be compatible with cemetery uses (such as a caretaker's house and/or interpretive center), and that the zoning should reflect that compatibility. If possible, access should be from the back of the properties so the continuity of the cemetery edge can be maintained.

According to Soil Conservation Service soils mapping and experience of the cemetery interment staff, this area has deep sandy soils. The ponding experienced in the spring in the northern portion of this acreage adjacent to the main entrance seems to be caused by the lack of positive drainage of the surface. Percolation of surface water through the soil at this time of the year is most likely impeded by a layer of frost lying immediately below the surface.

Two other contextual issues are very important to consider in design of any development of burial space in this area. The land immediately adjacent to Stevens Avenue should be reserved from development in order to create a much stronger visual presence of the cemetery along the road, as well as a

buffer between the road and burial areas to maintain the contemplative character of the burial spaces. In addition, the two entrances each have important ceremonial functions which mark the transition into the cemetery from the city. Therefore a significant area at these locations should be reserved from burial and developed to better support the important ceremonial and welcoming functions of the entrances.

The remaining area at the front- approximately 7.6 acres - is available to consider for development. It is critical that there be control over the character and density of any development in this most visible and important area of the cemetery. The layout of roads and paths should build on that of the existing design.

1b. Development in Roads and Paths. There is residual land throughout the developed cemetery within the corridors of paths and roads. It would be appropriate, where the traveled way was clearly pedestrian, to accommodate some amount of burial and commemoration along these corridors. The critical element in any such development is the sensitive insertion of monumentation into the existing architectural fabric of development, particularly in the Historic Zone. Density should be carefully controlled in order to preserve the open space character of the landscape.

1c. Circles. There is undeveloped land within many of the cemetery's circles. Where space is available, development of additional burial lots in these focal areas would afford the opportunity to provide additional interment space as well as introduce monumentation in some of the circles to strengthen their presence within the site's circulation design. Increasing their visual impact can be done with structure as well as with planting.

1d. Islands. The several islands formed by the juncture of roads and paths presently serve as areas of "visual rest" where there is no monumentation. Some of these were apparently the sites of former ornamental plantings, and this function of enlivening the grounds and leaving undeveloped space within the cemetery is an important one which should be reinstituted. The largest of these islands - such as the site of the former receiving tomb and the ellipse in Libby Field - can be considered for development without negative visual impact on the landscape. Restrictions in terms of density and compatible style of memorialization would be critical to any successful development of these spaces.

1e. Wet Hillside Zone. The slope from the hillside tombs to the ponds has only been partially used for burial because of the presence of "springs". Further subsurface investigation is needed to determine the cause of this high water table and whether any subsurface drainage measures can be instituted which will relieve this saturated condition. Without better drainage, this area is not well suited to burial.

1f. Guidelines Governing Development. In general, all development within the Historic Zone should be implemented with great care and sensitivity toward the existing character of this historic site. New monumentation should be designed with historic motifs and shapes to integrate with the existing fabric of the architecture. The density of monumentation is another

important factor. If all remnant areas and unused portions of existing family lots were infilled with new burials with accompanying memorials, the cemetery could easily be overwhelmed with memorialization and the visual character of the landscape seriously diminished.

2. ***Areas available within the undeveloped acreage of the property***

The soils information gained during Inventory, as well as site visits to the cemetery, have provided an overall picture of the character, potential and constraints for development of the undeveloped acreage within Evergreen Cemetery. This formed the basis for developing conceptual proposals for development. However, the exact location and size of development areas will require more detailed soils information including soil borings, and is beyond the scope of the current effort.

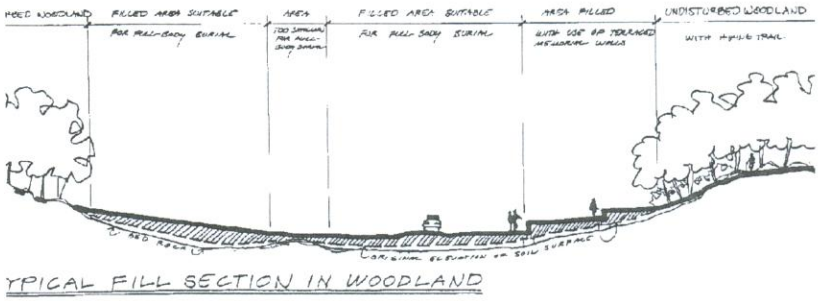
Most of the undeveloped acreage - approximately 103 acres - is located to the west of the developed area of the cemetery This western woodland has many significant constraints on its use as burial land. There are two other undeveloped areas in Evergreen. Approximately 6 acres of land is located in a long, narrow strip to the southeast of Libby Field along the property line abutting adjacent housing: the Brentwood parcel. This area has been used as a soil dump by the city. A second area is located north and northeast of the ponds, consisting of approximately 6 acres: the pond parcel.

The main contextual issue in these areas relative to the functioning of the cemetery is that they serve as buffers between the cemetery and abutting housing. In aesthetic terms, any development in undeveloped land needs to be responsive to the principles that govern the cemetery's design, wildlife values, and recreational use. The exact configuration of burial areas will need to respond to site-specific conditions and constraints.

2a. The Western Woodland. The large western woodland - approximately 103 acres - abuts the Capisic Brook and a cleared right-of-way (R.O.W.) for Central Maine Power's high voltage transmission lines. Industrial/ commercial development, located north of a railroad embankment, is visible from the cemetery property across the cleared R.O.W. Any cemetery development of this large area should leave a significant wooded buffer to visually screen these incompatible uses to the north. This western portion of the property has no road frontage, although informal paths link this area with the ends of one cul-du-sac, the railroad and a nearby pavement plant. Other informal access points have developed as well.

The soils which cover the western woodland present significant constraints for its development as burial space. A relatively small area of deep, well-drained soils suitable for cemetery development are located in the far northwestern portion of the site near Capisic Brook. However, their lack of easy access because of their remote location within the property as well as the visual impact of adjacent transmission lines are significant constraints. The central area (approximately 58.5 acres) consists of undulating topography having well-drained, very shallow soils and numerous rock outcroppings. Usually soils such as these include some small scattered pockets of deeper soils which may be suitable for burial. A detailed soil depth survey would be needed to establish the exact location and extent of areas suitable for cemetery

use. In general, however, an approach of dispersed development, particularly dedicated cremation (urn burial) space which requires less soil depth than full-body burial, is the best development approach here. The placement of additional fill in areas is another way to make this area suitable for development of burial space to serve Portland's citizens in the future.



The placement of additional fill in selected areas of the western woodland is an alternative for making this area suitable for development of burial space.

To the northwest and southeast of the central undulating area of shallow soils are two areas with hydric soils, or areas with poor drainage characteristics. To the northwest of the area of deep, well-drained soils there is an area of approximately 16 acres, and to the southeast there is an area of approximately 22 acres. Depending upon hydrological functioning and types of plant communities within these areas, they may be largely or entirely undevelopable because of environmental regulations.

Wet or hydric soils are recommended as conservation zones. These, if designed sensitively with respect for cemetery use, could be compatible with the development of storm water retention areas recommended in the Capisic Brook Study if the water retention areas are designed as amenities.

2b. The Brentwood Parcel. The long, narrow area of approximately 6.2 acres (3 usable acres) located southeast of Libby Field and parallel to Hamlin Avenue presently serves as a buffer between the cemetery and the adjacent residential neighborhood. The use of this site as a dump complicates development here. According to Soil Conservation Service soils mapping, approximately half of this site should be suitable for cemetery development. Additional soils information along with topographic mapping and identification of dumped material are all important additional information needed to make a specific determination of development potential here.

This land has the potential for development of gravesites, and for above ground burial with a design layout that would visually make the area an extension of Libby Field. If this was done, the area could provide additional inventory for quite a number of years. Because of its relatively flat topography, location at the periphery of the cemetery, and proximity to an entrance, part or all of the area could also serve as the site for any future maintenance support facilities including stockpiling or a nursery holding area and greenhouses, if this were deemed necessary.

An important contextual issue is the proximity of the neighboring houses to this site. The first phase of any development determined to be appropriate here should be the development of proper grading and drainage and the planting of a vegetation buffer between the cemetery and the neighborhood. In addition, an inviting entrance should be developed.

2c. The Pond Parcel. The undeveloped area located to the north and northeast of the ponds consists of steep sloping woodland with some rock outcroppings and more level areas adjacent to the pond outflow and Capisic Brook. The proximity of the pavement plant and transmission lines and the need to screen these views make most of this area not well-suited for development of additional burial space. The location of a leaf and brush dump immediately at the edge of the burial grounds is another constraint. Removing this debris should be considered. The wooded edge immediately adjacent to the existing cemetery grounds might be developed with some small "pockets" for urn burial space, or with some filling, the development of some large family lots. Given the proximity with the ponds this development would presumably be very desirable.

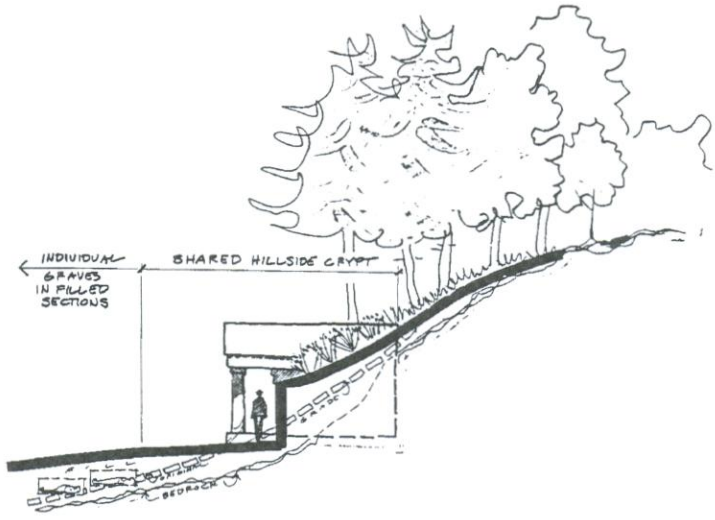
The woodland edge may be developed with some small "pockets" for urn burial, or with additional filling, the development of some larger family lots.

2d. Establish a system of design review and design development when implementing proposals for new burial and commemoration. The recommendations that follow are guidelines for the critical and complex issue of continued development at Evergreen. Parameters are set herein, but there are many design details that will need to be worked out as each recommendation is implemented. It is critical, therefore, that design review be an integral part of decision making and implementation. Design professionals should be involved in the on-going implementation of the plan, for design development as well as review.

Since monuments are a critical character-defining element of the cemetery landscape, and since the older areas could be significantly altered with additions of incompatible-style monuments, it is recommended that the cemetery assume greater control over monument design, including more detailed guidelines and restrictions than are currently spelled out in the Rules and Regulations. One recommendation is for Evergreen to produce a notebook of acceptable or preferred designs for lot owners to consider. Such an approach was considered by the creators of rural cemeteries, and proposed to be used at Mount Auburn Cemetery. In addition, a committee of design professionals should be considered to develop specific guidelines and review proposed monuments.

- *Reserve land for cemetery use or conservation use only.* Over the years, land within Evergreen has been considered for non-cemetery development. Not only would that have been a significant intrusion into this historic landscape, but it would have taken land away from the cemetery for future burial development. The listing of Evergreen on the National Register of Historic Places has ensured a greater measure of protection from such threats. However, it should be stated specifically that land within the borders of the cemetery shall be for cemetery-related development, for appropriate recreational use spelled out in this plan, or for conservation, also spelled out herein.

- *Establish conservation zones in the woodland acreage not appropriate for development* (see master plan map). Land that is unsuitable for development should be designated as conservation land, for low-intensity passive use or for the development of retention ponds in association with cemetery development and/or the Capisic River watershed study and recommendations. Depending on how this land should be managed, the city may wish to retain it as conservation land, or deed it with conservation restrictions to an appropriate organization as steward.



HILLSIDE CRYPTS WITH MEMORIAL WALL

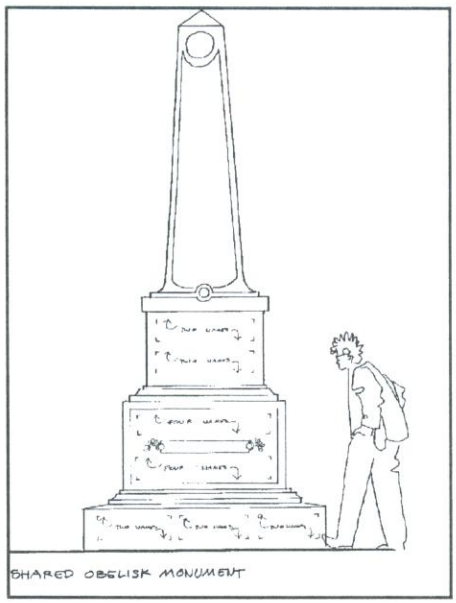
- *Reserve from development the following areas for historical, visual and ceremonial reasons:*

  - the land between the chapel and Stevens Avenue;
  - the land around the main entrance;
  - the land around the ponds;
  - the land within the original 1855 parcel, except for potential development below Pleasant Avenue, potential development within circles, and development at the site of the former receiving tomb;
  - the land immediately surrounding the landmark structures of the Baxter monument and the Chisolm Tomb;
  - the land between Highland and Garden Avenues which expresses a period of cemetery development exemplified by curb lots.

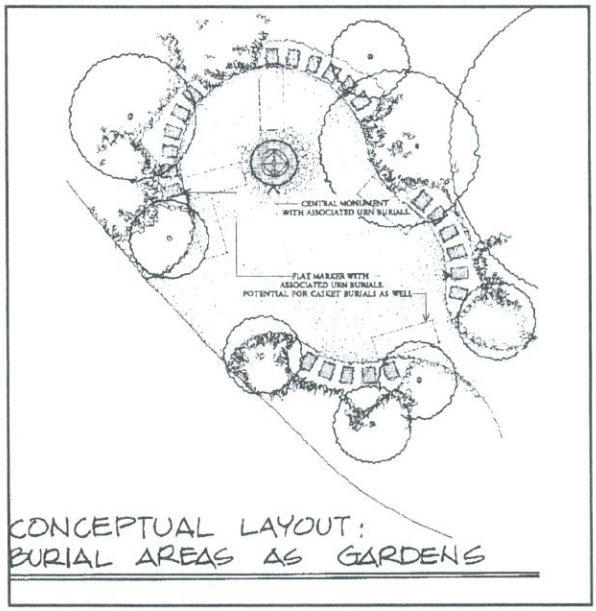
- *Make use of alternative as well as conventional forms of memorialization to extend the cemetery's active life while protecting the visual character of the landscape.*

The master plan calls for developing new burial areas as well as infill in developed areas. The limiting factor in further development is not so much land as it is the number of memorials that can be added to the landscape without seriously damaging its character. In Landscape Character, above, the landscape is discussed in terms of character zones defined in large part by the layout of graves and the type of monumentation. Large family lots are in great measure a thing of the past. However, the pattern they create on the landscape, and the visual relief they offer, can be replicated with the use of a number of design devices:

- central monuments that could accommodate large numbers of burials with the addition of only one monument that could also serve as a focal feature, as exist in many family lots in the historic zone. The layout of names on the marker should be done in such a way as to express the individuality of each person honored.
- flat markers that are laid out in clusters or "ensembles", replicating the pattern of small stones found in family lots;
- layout of burial areas as gardens, with clusters of markers, focal features, and generous planting.



A central monument could accommodate large numbers of burials and could also serve as a focal feature similar to what exists in many family lots in the Historic Zone.



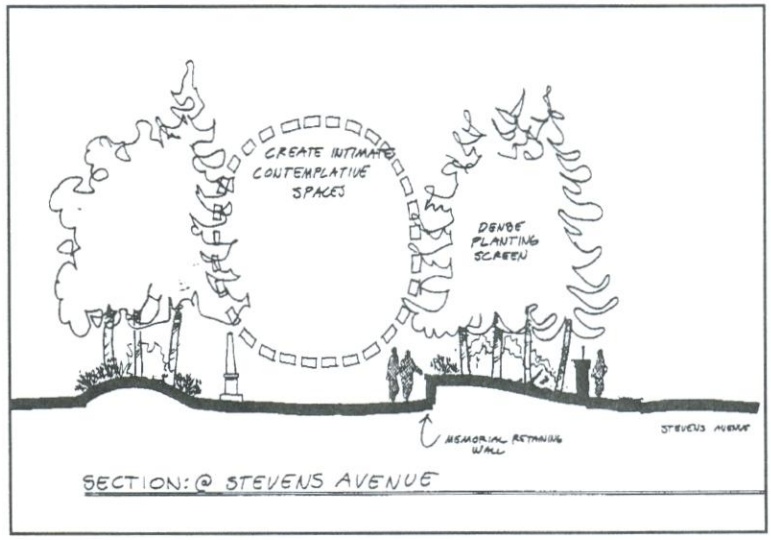
It is recommended that the residential acreage in front of the cemetery between the two entrances be developed as a series of interconnecting rooms, having an intimate scale and inward focus.

- *Propose cremation to conserve land.*

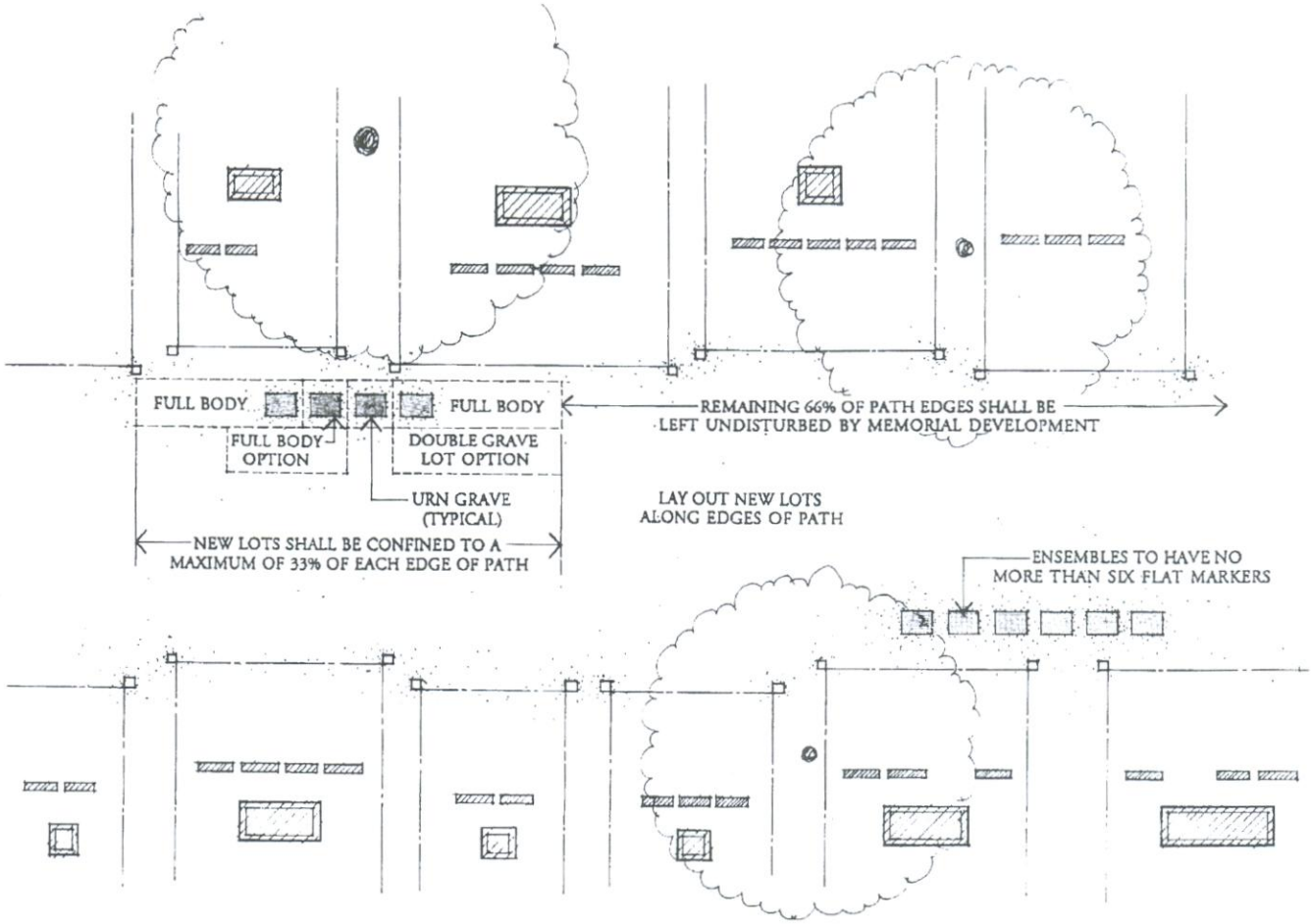
- *Develop the residual acreage in front of the cemetery between the two entrances as a series of interconnecting rooms,* having an imitate scale and inward focus to foster contemplation. Design the road layouts in sympathy with the original circulation design, with curvilinear alignments and focal circles.

In keeping with the diversity of architecture within the older sections of the cemetery, devise site-specific zoning for markers to encourage a mix of commemoration sizes and types.

Utilize proposed bermed plantings at the main entrance to develop memorial retaining walls. Utilize the wall along Stevens Avenue to define the cemetery, prevent cars from entering the site after hours, and serve as a memorial wall.



Planted berms are recommended along the front area at Stevens Avenue in combination with memorial retaining walls.



DEVELOPMENT OF GRASS ROADS

- *In developed cemetery areas not proposed for reservation, add clusters of graves along some grass paths in keeping with the existing arrangement of graves in family groups.* The density of infill development in paths should be dispersed, not continuous, with new lots confined to a maximum of 33% of each edge of a path and clusters of graves to contain no more than six flat markers each. Maintain a minimum of five feet for a walking way.

- *Where there is space available, add burials in circles and islands with appropriate memorialization.* There are circles within the developed areas of the cemetery with space available for further burial. There is also a need to strengthen the presence of the circles as important focal features within the landscape, and to restore their historical character as embellished landmarks in the circulation system. Both ends can be accomplished with the use of alternative forms of memorialization, particularly the use of central monuments (Evergreen Circle in particular would be an excellent place for a significant central marker), or the use of memorial curbs to mark the perimeter of a circle and have names of the deceased. Historically, the circles were ornamented with flower beds. This can be incorporated with central memorialization as well.

Some islands also have the potential for burial and memorialization, the largest being the site of the former receiving tomb. This could be the site of a central monument, with the possible addition of flat markers organized as clusters and the area richly planted. Because of its location at the terminus of the main entry drive, whatever is done should be carefully designed and considered to be a focal feature as well as a burial site.

Another large island in the cemetery is the ellipse in Libby Field. This also could be the site of a central, focal monument embellished with plantings, treated as a landmark feature within this cemetery area.

- *Reserve the acreage southeast of Libby Field for future above and below ground burial development and possible maintenance support facilities.* If it is determined to use a portion of this site for burial development, the portion of the site furthest from the Brentwood gate should be developed first, leaving the eastern half of the site open pending future determination of the need for additional or relocated maintenance support facilities including stockpiling, a nursery holding yard or greenhouses. A significant screen of vegetation should be planted along the property line to serve as a visual buffer for all future uses as a first phase of any development of this site. Further study should also be done to determine if this is the best location for such facilities.

- *Utilize existing and new site elements for memorialization.* There are many innovative ways to increase the cemetery's range of commemorative options that serve the bereaved and also benefit the landscape and the general visitor. One is the endowment of existing site elements and the addition of new elements to serve as memorials to the deceased. These would offer people a dignified way of remembering their loved ones with elements that are an integral part of the landscape. The endowment price of these options can also be less costly than a stone memorial. Proposals include:

  - Memorial groves of trees
  - Individual trees as memorials
  - Gardens or flower beds as memorials
  - Memorial benches
  - Restoration of the bridges and gazebo at the ponds, dedicated as memorials

Discreet plaques should be designed for site elements used as memorials. When the proposal to label the cemetery's trees is implemented, if a tree is dedicated, the name of the deceased should be incorporated into the tree label, and not added as a separate plaque on the tree.

A special memorials program should be developed to encourage people to see the entire landscape as a memorial, and to contribute to the cemetery's horticulture in memory of a loved one. If this is done, there should be a plaque of names installed for view in the chapel.

- *After all other burial options are developed, examine the possibility*

of clearing openings within the existing woodland in the western part of the cemetery in areas suitable for development. (Additional soils investigation is critical.) Bring in well-draining fill to provide a minimum of five feet of depth for body burial (or seven feet of depth for body burial double deep, which would be more space efficient). Shallower areas would be used for urn burial or would remain as undeveloped woodlands. Use retaining walls to create terraces for burials and provide space for memorialization. Organize development as dispersed fingers through the woodland (see master plan map.)

Retaining walls are recommended to create terraces for burial and to provide space for memorialization.

A series of curving roads intersecting at circles is proposed. The circles would reflect the pattern of roads within the existing developed areas of the cemetery. Roads would be more curvilinear to respond to the varied topography of the site. The transition between the developed historical areas and this new development will be very important. Although this area should be designed in some ways as an extension of the developed cemetery, the woodland character of the site and the topography with rock outcroppings dictate a distinct character as well. In some ways, this suggests the development of the area more in keeping with the original rural cemetery concept: clusters of graves within the forest, a balance of art and nature in which nature predominated.

This development is shown on the plan to cover less than twenty acres over the 110 undeveloped acres in the western woodland area. It is proposed to be implemented incrementally over time. Rough projections indicate that the proposed development would take over 100 years to be developed and sold. Development of this area should be preceded by a wildlife study in order to minimize disruption of wildlife habitats, and to develop a plan which best integrates habitat considerations and burial needs. This is one of the largest untouched areas in Portland, and host to 178 species of birds in the area.

Although the costs of development will be greatest in this area of the cemetery, the value of grave space will vastly exceed the costs of development, even when development is organized to provide a great deal of spaciousness.

The woodland character of the undeveloped site and the topography with rock outcroppings dictate a distinct character which represents a balance of art and nature, with nature predominating.

Background

The founding purpose of Evergreen Cemetery and one which endures today was to provide a contemplative place for burial and commemoration which, because of the beauty of its surroundings, would have a healing and inspiring effect on the living. Rural cemeteries were never conceived solely as repositories for the dead. They were intended as recreational places and, in nineteenth century terms, places to edify the populace.

Until the advent of Central Park in 1857, there were few outdoor places in or near cities in the nineteenth century that could be enjoyed by the public. As Puritanism declined, Calvinistic fears of death were replaced with a more sentimental romanticism about death, one which was well served by a visit to a beautiful cemetery. Therefore, Evergreen Cemetery served as a pleasure grounds as much as it served as a burial grounds, and it became a very popular place to spend time.

Dual Purpose of Cemetery

Today, that dual purpose continues as the cemetery is sought by grave-site visitors as well as scores of people for recreation and retreat. The forms of recreation have changed over time, and today the public enjoys the cemetery grounds for a wide variety of recreational activities.

A survey was conducted of the public's use and perception of Evergreen. It is clear from this data that, in addition to its value as a place to bury and visit the deceased, the cemetery is an extremely popular recreational place for the city and particularly for the neighborhood, since a large proportion of visitors come by foot. A significant percentage of visitors also come by bicycle. Many who responded to the survey visit the cemetery once or twice a week.

There is a broad range of passive and active recreational activities that visitors engage in at Evergreen: walking, jogging, bicycling, walking a dog, cross country skiing, ice skating, picnicking, feeding the ducks, enjoying nature, enjoying the cemetery landscape, attending organized cemetery walks, attending an annual hay ride, attending an annual road race.

Organized cemetery walks aid in introducing visitors to the site and in interpreting the many levels of information contained in the cemetery.

The master plan's guiding principles state that Evergreen is both a public cemetery and "a refuge for appropriate, low-impact recreational activities. In the same space residents of the city and the neighborhood find refuge in passive recreational activities. Evergreen's role as a place of recreation must be balanced with its primary purpose as a cemetery in order for these two purposes to co-exist and not conflict."

It is important to recognize that Evergreen has had a tradition of affectionate use over many years, and as a public space the nature of that use is broader than it might be if the cemetery were privately owned. An example of a cemetery at the other end of the spectrum of recreational use is privately owned Mount Auburn Cemetery, where bicycling, jogging and dog walking are prohibited.

However, there needs to be a recognition that Evergreen is an active cemetery serving people at one of the most difficult and intimate times of their life, the burial and mourning of their lost loved ones. Both constituencies can be heard and a balance struck through the identification of specific places where particular uses are permitted, and other places where they are not permitted out of respect for the bereaved.

Visitor's Amenities

The cemetery provides very few amenities to serve the visiting public. The only place where there are benches is along the main entrance road. Specific sites need to be identified for gathering, and benches provided to support use by recreational visitors.

Education and Interpretation

Since the organization's founding in 1991, the Friends of Evergreen have accomplished a tremendous amount in galvanizing public awareness, appreciation and support for Evergreen. In addition to their tireless efforts on behalf of securing the cemetery's place on the National Register of Historic Places and the initiation of the master plan, an important aspect of their work has been the development of walking tours of the cemetery. This is an important service for visitors, and should be supported and expanded in order to bring greater understanding and respect for this significant place in the city" history and open space network.

Visitor Orientation

Recommendations have been made under Landscape Character, above, for improvements to the site's signage and circulation system. Those proposals for more signs throughout the cemetery, and for circulation changes that clearly delineate paths from roads and minimize pedestrian/motorist conflict, will serve to improve visitor orientation and safety as well as improve the character of the landscape.

Portland Trails

The Portland Trails plan to incorporate Evergreen within a regional transportation scheme linking open spaces can work well within the goals of the cemetery's master plan. The location and scale of trails needs to be spelled out, in order to provide a positive recreational experience while working within the proposed plan for expansion of burial sites, minimizing conflict with grave-site visitors in the developed areas of the cemetery, and protecting the woodland character of the western cemetery land and its ecological values.

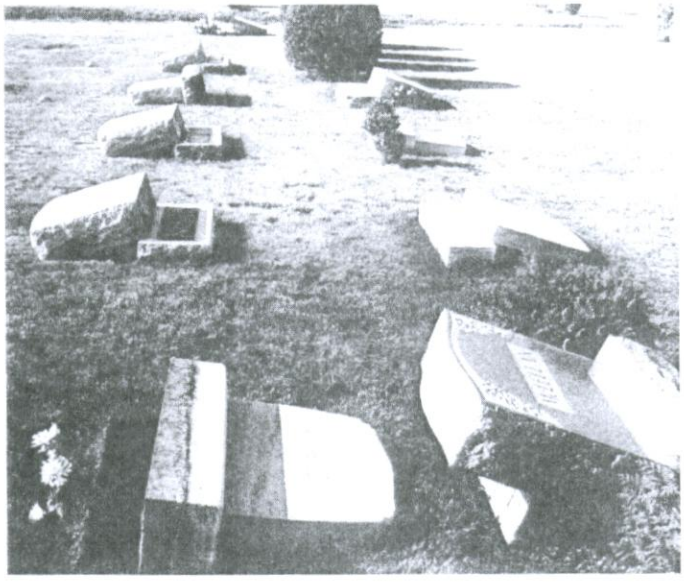
Evergreen is distinctive in having within its boundaries one of the largest undeveloped parcels of land in the city, where over 160 species of birds and many kinds of animals are attracted. The property encompasses marshes, wooded areas, fields and ponds that form a valuable and attractive place for passive recreation and nature study. The values of this land as a haven for wildlife and nature study should be taken into consideration when implementing burial recommendations in the undeveloped woodland, as well as recommendations for trail development and use, particularly commuter routes.

Inappropriate Uses and Vandalism

There are certain uses of the grounds that are offensive to both grave-site visitors and other recreational visitors. One is bringing a dog into the cemetery without a leash and also not cleaning up after the dog, something that was cited as bothersome in the user survey. Another is cross-country skiing across graves, which has brought complaints from lot owners each winter. Both are prohibited in the Rules and Regulations of the cemetery.

Evergreen has suffered over the years from bouts of vandalism, particularly the turning over of gravestones at night. The cemetery staff has responded immediately to the problem by resetting the stones as soon as the damage is done, but it is difficult to police a place as large and full of structures as a cemetery. However, immediate response is one excellent way to deter future abuses.

A city function that helped deter vandalism and inappropriate use of the grounds in the past was enforcement of regulations with the use of patrols. Police patrols were used at Evergreen in the 60s and 70s, and eliminated because of budget reasons. However, the presence of people charged with reinforcing appropriate behavior in a positive way, such as park rangers, would be a great asset and support to the cemetery staff.



Evergreen Cemetery continues to suffer from bouts of vandalism. The presence of a caretaker or park rangers could reinforce appropriate behavior in a positive way.

- *Implement the following zoning recommendations for active recreational use:*

  - Active recreational uses-running, bicycling, cross country skiing-in non-active cemetery areas (where burials are at least five years old).

  - Recreational bicycling on bituminous concrete roads only in the developed cemetery areas, on soft-surface trails in the woodland area.

  - Commuter bicycling along the designated commuter route (see plan).

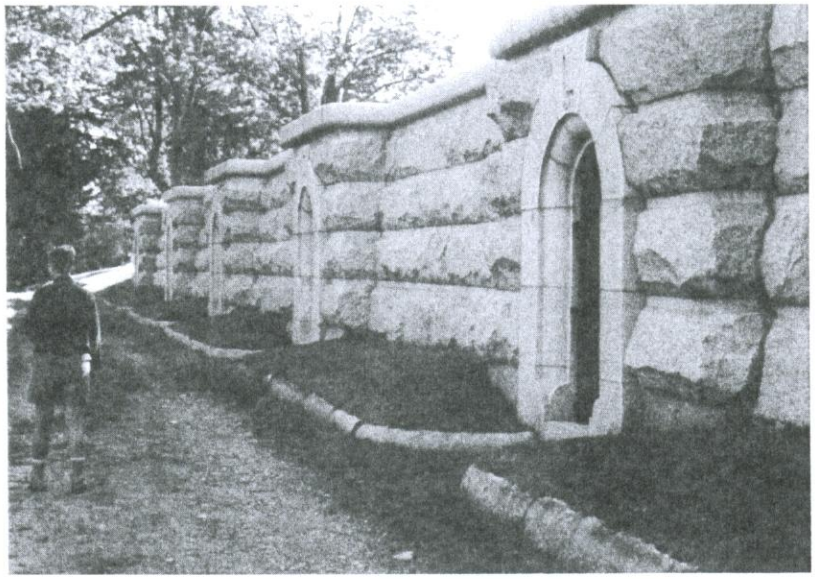
  - A designated landing area, possibly a pier, at the large pond for controlled access for ice skating, to provide for the use while preventing erosion and compaction.

- *Develop the following specific sites for passive recreational uses such as sitting, picnicking, gathering of groups:*

  - The ponds: benches, gazebo, no vehicular circulation between the ponds, a small parking area to the south of the ponds.

  - The sunken circle: a series of terraced walls for sitting and gathering. An historic picture of this feature shows circular paths. Walls will also discourage bicycling in the summer which damages the grass.

  - By the five-chamber granite mausoleum: two sitting areas with benches on either side of the mausoleum complex, to take advantage of one of the only long-distance views in the cemetery while preventing visitors from sitting on the private lots.



A sitting area with benches is recommended for each side of the five-chamber granite mausoleum complex. This is intended to take advantage of one of the only long-distance views in the cemetery.

- At Wilde Chapel: a sitting garden area with benches to support potential future use of the chapel as a place for educational activities and special compatible events, extending the function of the building to the surrounding landscape.

- At the site of the former receiving tomb: this area is proposed for burial and memorialization, but is large enough that a sitting area could be incorporated into the design. Since it is situated at the front entrance and office, it could be a desirable place to sit and relax.

• *Support and expand the educational efforts of the Friends* through the establishment of a Friends office in the cemetery, continued publications, lectures, walking tours and the possible future development of a visitor information center at the chapel. Use the educational vehicle of Friends publications and events to educate the public about master plan recommendations including innovative burial and memorialization options and landscape rehabilitation.

• *Enforce regulations governing appropriate uses of the cemetery.* Reestablish patrols in the cemetery, in the form of park rangers in collaboration with citizen patrols to regulate, inform and assist visitors. Reinforce their function as rangers more than security forces.

• *Work with Portland Trails to establish a system of trails through Evergreen connected with the larger open space network.* (See plan for proposed corridors.) Place the Portland trails logo on Evergreen road signs within the developed cemetery areas to indicate the trail corridor through the historic areas. Keep designated trails to the peripheral roads of the cemetery.

Develop unpaved trails in the woodland areas compatible with the layout of proposed burial sites.

Develop an improved commuter route through the woodland area, as shown on the plan, connecting to the Westbrook College land. Keep commuter routes out of the developed cemetery areas.

An evaluation of the horticultural and grounds maintenance practices at Evergreen Cemetery was made by Paul Rogers, consulting horticulturist to The Halvorson Company, Inc. This evaluation is based on interviews with cemetery staff, review of budget material, review of vegetation inventory summaries, and one site visit.

What follows is a summary of the major observations and recommendations regarding grounds maintenance and management to support the master plan goals and ensure the healthy future of Evergreen's environment and landscape character.

1. Trees

An assessment was made of the data on species and size of the site's trees within the developed cemetery acreage. It was found that the tree mix at Evergreen is currently very homogeneous. Of the total tree population of 1241 trees in the developed cemetery acreage, 49.6% are maples, ten species are represented by only one specimen, and twenty-two species are represented by five or fewer specimens. This lack of diversity not only affects the character of the landscape, contributing to a lack of visual diversity throughout the developed cemetery, but it creates horticultural problems as well. Monocrops are vulnerable to crippling damage caused by insects and disease, creating a more widespread problem with a greater percentage of one species. Pear thrips, which attack maples, are increasingly reaching damaging levels in northern New England.

In terms of size, 85% of the trees in the developed acreage are over 12" in diameter. This indicates a mature, even-aged population of trees, with relatively few smaller trees growing up to take the place of the mature stand when those trees die. The city's Forestry Division focuses on removing dead or dangerous trees, at an average of five per year. They also do pruning and cabling. With the Forestry Division's cycle, it takes three to four years to move through the entire site.

85% of the trees in the developed acreage are over 12 inches in diameter. This indicates a mature, even-aged population of trees, with relatively few smaller trees growiing up to take the place of the mature stand.

There is no tree replacement program for the cemetery, nor a dedicated budget for cemetery vegetation. There is also no fertilizing or pesticide program. The trees, particularly the maples, are showing clear indications of decline, with thin foliage on many specimens, yellow foliage and a significant amount of dead wood.

The tree population of the wooded sections of the site, on the other hand, is a fairly healthy mix and typical of the New England hardwood forest: maples, white pine, red pine, white oak, and birch.

2. Shrubs and Groundcovers

There is very little use of shrubs and groundcovers other than grass at Evergreen. There are shrubs at the office building, at the ponds, and on burial lots in the newer areas. There are at present two shrubs permitted to be planted on burial lots: Dwarf Alberta Spruce and Dwarf Arborvitae. The cemetery has limited the choice of shrubs because of use of plant materials in the past that have proven difficult to maintain. Yews are no longer allowed, since they have in many places overgrown their space and are impinging on other lots. However, as with the trees the development of monocrops of shrubs have visual and horticultural problems. Lack of a range of choice creates excessive uniformity in the landscape, and disease that attacks one species can threaten a large proportion of the shrub population. In particular, Globe Arborvitae has many pest problems, and is subject to breakage during ice storms. Shrubs on lots are trimmed yearly.

Judicious use of groundcovers to replace grass in places can decrease maintenance in difficult-to-mow areas such as on steep banks.

3. Grass

Grass serves an important aesthetic role in a cemetery, and an important functional and ceremonial role as a covering for the thousands of graves on the site. However, it is a difficult crop to culture well, and requires a significant amount of maintenance to keep it in good condition. It is also difficult to maintain in a cemetery, where the thousands of monuments present obstacles to grass mowing and require trimming or herbicide applications.

Areas A through M are higher, dryer and shady, and the grass grows more slowly there. The grass in the "doubles" areas and in the front grows faster. The grass in the wet area uphill from the ponds grows so fast that it is necessary to cut it once a week.

The ground throughout the older section of the cemetery is uneven, with sinkholes in many places. There is a need for grading, leveling and re-seeding.

There is no fertilizing of the grass. It has become standard practice at other public sites, and notably at Gettysburg Military Park which includes the cemetery, to subdivide and prioritize the maintenance of grass areas in order to make the best use of manpower. The expectations of grave-site visitors need to be taken into consideration, and whatever is done in terms of differential treatment of grass must look deliberate. However, the cemetery's grass historically was a much rougher-looking turf, seen in photographs of the cemetery's first decades. The need to improve the grass condition in high-visibility or ceremonial areas can be balanced by a different treatment in other areas.

Grass is cut at the cemetery when it is short enough to allow the clippings to remain on the ground, unless they are wet. The crew does weed whacking whenever it can, using two or three people daily for the task. The management staff estimates that there should be five or six people to do weed whacking in a timely manner. In the spring, the crew repairs winter damage caused by winter interments and plowing. The ground is re-loamed and re-seeded where needed.

4. Flowers

There used to be up to 20 flower beds at Evergreen - in circles, at the office building, at the pond, and in other selected locations. Today there are two, one at the office building and one near the Brentwood gate.

The cemetery has specifications for flowers on lots covered by trust funds, identifying species and containers. The cemetery plants 3000 plants in the spring. Flowers and other decorations on lots need to be moved in order to mow. The city has arrangements with two or three large greenhouse suppliers for their supply, and the orders are sent out to bid and reserved. The major effort is to get flowers on lots by Memorial Day. When flowers have died, they are taken off lots. Summer decorations are removed from lots during the first half of November.

5. Leaf Removal

Leaf removal occurs from mid-October until the first snowfall, for 8-10 weeks. The work usually does not get completed, and in April when the snow melts the rest of the leaves are raked up, which have become matted down by snow.

For the last four years, when money for seasonal help was cut, the city organized a "Rake 'N Bake" day on which the city department heads let their staff go to work at Evergreen on Halloween Day to rake leaves. City staff work 6 hours and get paid for 8. The day not only gets a tremendous amount of work completed at Evergreen, it also fosters team spirit among city personnel. The first year it was instituted, 250 people raked 85 acres of leaves, a task which would have take n the cemetery crew 5 weeks to accomplish.

Leaves are hauled to the cemetery's vegetation dump, the site of the old quarry near the ponds. The city is starting a municipal compost, where leaves from the cemetery will be brought in the future.

6. Management and Personnel

The city has instituted umbrella management, a cooperative arrangement under which crews and equipment from the various departments are available to one another, thereby increasing efficiency. The city's road crew plows Evergreen's roads in the winter, and the Forestry Division prunes the cemetery's trees. What it also means, however, is less control by Evergreen staff over site maintenance decisions. The process of reinventing government that Portland is currently undertaking will be addressing the issues of management structure and maintenance control.

The cemetery's full-time crew numbers five people, with one supervisor whose job it is to head the crew as well as sell lots. There are 8-11 seasonal workers from April to November. Three years ago, Evergreen had $165,000 in the budget for seasonal workers, and this year they had

$50,000. The cemetery supplements its seasonal force with Work Fare, a program which requires people on welfare to work 16 hours a week while looking for a job. People are assigned to different areas of the city on a daily basis. The welfare office tries to bring continuity by assigning the same people to the same public job sites, but this is often not possible. As a result, there is a lack of skill development, with 2 or 3 Work Fare people filling one cemetery position. The cemetery has to use more Work Fare people per day because they are untrained and therefore less efficient. Also, some tasks cannot be done by Work Fare crews because of union contracts. There is concern that if the economy improves, there will be less Work Fare people available for use, and funds would have to be increased in the seasonal account. Since this cannot be forecasted with enough advance notice to make an adjusted budget request, it is probable that at some point insufficient funds could be allocated for seasonal work at the cemetery.

7. Support Facilities

Assessment of the maintenance buildings was beyond the scope of this study. However, general information was obtained from cemetery personnel. There are three working buildings and one old storage area dating from the 1880s. Two of the buildings are less than 30 years old, and in good condition. One apparently needs heat, because there is not enough heated storage to work on vehicles. A seven-bay maintenance building, also dating from the 1880s, is in poor condition and needs to be replaced.

Potential changes in the management structure of the cemetery, the implementation of maintenance and horticultural recommendations of the master plan, and the development of new grave sites may all necessitate additions to or relocation of the current maintenance facilities. A detailed study of the need for ancillary facilities to support improved maintenance, relocation of the current maintenance yard, or the addition of new services such as a nursery to facilitate an expanded planting program, was also beyond the scope of the master plan. However, all of these scenarios are possible and some may be necessary in the future.

One location that has the characteristics desirable for support facilities is the six acre undeveloped parcel next to Libby Field: extensive open land that is relatively flat, allowing space for development as well as for a wide planted buffer; proximity to the site's periphery; and proximity to an entry road. It did not appear, from an initial reconnaissance, that there was another undeveloped parcel that satisfied the needs for building development and access that a maintenance facility would have. Before any such development were to occur, however, a study should be made to determine if this is the best location, and if there are any other sites within the cemetery suited for development. If this land were to be used, it is very important that there be visual separation from the neighborhood, and as much audial separation as a dense planting of vegetation can provide. There is enough land here to plant a 100' buffer, if deemed necessary, which would provide a considerable separation from the neighborhood.

8. Equipment

There is cooperative distribution of equipment and staff in the city, as well as some equipment that is dedicated to the cemetery. The city system has two 16' mowers, which are used for the big open front area. There are

three 48" riders, one 52" rider, one 60" rider and 18-20 hand mowers dedicated to Evergreen. The cemetery never uses more than 9 or 10 hand mowers at one time, to accommodate breakdowns. The cemetery also has three pick-up trucks, one yard car for funerals, one rack-bodied truck, one 1 1/2 ton dump truck in good condition, and one 1 1/2 ton dump truck in poor condition. Every year the budget request for a new truck is cut in order to meet the city budget.

9. Monuments

The maintenance of monuments is the individual family's responsibility, paid for through trust funds. The cemetery cleans monuments with a 50/50 solution of bleach and water, using a hand brush and a tank of water. No high pressure wash equipment is used. The cemetery's monuments are cleaned on a five year cycle, 20% per year.

10. Roads, Burial and Drainage

The Department of Public Works fills the potholes on the cemetery's asphalt roads. The Evergreen crew drags and scrapes the gravel roads, and fills them with new gravel each spring. The superintendent estimates that Evergreen needs $50,000 for overlaying roads with new asphalt. However, maintenance of the city roads are a higher priority for city funds, and get funded before Evergreen's roads.

Drainage is an enormous issue for the cemetery. Because of the lack of a drainage system throughout Evergreen along with the lack of adequate road construction in the form of crowns and swales, there is a great deal of uncontrolled water in the cemetery. This in conjunction with deferred maintenance of the site's roads has contributed to a condition in which the majority of the cemetery's roads are in fair to poor condition. If the grade of a road is less than 5%, grassy swales are sufficient to handle runoff. Anything steeper than that requires some form of drainage structure to handle the water.

Deferred maintenance of the cemetery's roads has contributed to a condition in which the majority of the site's roads are in fair to poor condition. There is a lack of adequate road construction in the form of crowns and swales.

There are also several areas of the cemetery—most particularly, the hillside above the ponds—that, because of the high water table, currently cannot be developed for graves. More investigation is necessary in places to determine site-specific problems and recommend solutions.

Because of the lack of a comprehensive drainage system throughout Evergreen, there is a great deal of uncontrolled water in the cemetery.

11. Ponds

There are old brick culverts in the ponds. New PVC drains were installed in the three small ponds during the fall of 1992, all of which empty into the large pond. One of the drains is clogged. A second drain pipe is set too high, and is visible above the water.

The condition of underground and surface drainage systems are contributing to problems of eutrophication and sedimentation of the ponds, as well as erosion of the banks. Uncontrolled runoff from the hillside above the ponds has deposited a significant amount of soil at the pond edges, changing pond contours. Pond edges have also been altered by fluctuations in water levels due to changes in the ponds' drains, causing formerly wet areas to dry up with accompanying changes in pondside vegetation.

An assessment of the water quality of the ponds was beyond the scope of this master plan. However, comments made during a site walk in the fall of 1992 by Richard Eakin, Professor of Biology at Westbrook College confirm a concern about overpopulation of waterfowl in the ponds, which are befouling the water to such a degree that the ponds are overloaded with nutrients and close to being rendered sterile, as well as contributing to the excessive growth of algae. Feeding the waterfowl is a popular activity for young and old visitors to the cemetery, the benefits of which should be weighed against the health of the pond environment.

About fifteen years ago, the area to the northwest of the large pond was also filled with water. Succession is filling it in and turning it into a much drier area, but there is a channel running through the middle of it. Apparently, when this area was connected to the larger pond, the ducks would have their young there.

It is hoped by the city that the association of the ponds with stormwater management and the Capisic River watershed can leverage funding for maintenance and improvements to the ponds.

1. Trees

- *Institute a regular program of fertilization, pruning and planting for the site's trees:*

  - fertilize and prune trees on a cycle of 20% a year to start, 33% a year once program is established. Fertilize with organic fertilizer, and add lime first in order to not lose the benefits of the fertilizer.

  - anticipate increased growth and maintenance needs in response to fertilization, to be supported by increased budget support for maintenance.

  - develop a planting schedule that responds to the need for regular tree replacement as well as new planting in areas with little tree cover, particularly southeast sections near the Chisolm Tomb.

  - consider tree planting on lots, contacting lot owners for permission particularly in older areas where there are inactive lots.

- *Prioritize planting program by areas of cemetery,* identifying one area at a time for development, i.e. front entrances; circles; ponds.

- *Generate plant lists for specific areas and purposes,* and find sponsors to implement planting. Incorporate maintenance costs into initial purchase costs. Examples of lists:

  Focal Areas
  Ceremonial Areas
  Historic Zone (may be subdivided into several subzones)
  Areas with Space Limitations
  Plants for Wildlife

2. Shrubs and Groundcovers

- *Expand the list of shrubs appropriate to be used on lots.*

- *Remove overgrown shrubs, contacting lot owners first.* Do not prune overgrown shrubs beyond what can be reached from the ground. Consider billing lot owners for work if no trust funds to cover it.

- *Institute a regular program of fertilization, pruning and planting for the site's shrubs:*

  - fertilize and prune shrubs on a cycle of 20% a year to start, 33% a year once program is established. Fertilize with organic fertilizer, and add lime first in order to not lose the benefits of the fertilizer.

  - anticipate increased growth and maintenance needs in response to fertilization, to be supported by increased budget support for maintenance.

- *Make use of groundcovers to replace grass in particular areas,* such as steep banks, curbed or fenced lots, and in association with shrub

planting compositions. Reduce maintenance and add character with the use of sustainable native species.

- *Commit to the increased maintenance necessary to culture new groundcover plantings* and establish ground coverage for two to three years: weeding, watering, mulching.

- *Consider wildlife habitat in the selection and location of shrubs.*

3. Grass

- *Re-grade and re-seed localized areas where there is undulating turf.*

- *Establish a hierarchy of grass areas* - primary, secondary and tertiary - according to the following criteria: high visibility, ceremonial, and active burial areas to be primary; the Historic Zone to be tertiary (to reflect the rougher turf of the nineteenth century); and the balance of the cemetery to be secondary.

- *Fertilize grass according to identified hierarchy, following the schedule below:*

Primary: Apply ground limestone at the rate of sixty pounds per one thousand square feet in the spring, and fertilize once to stimulate greening of the turf. Fertilize twice in the fall, once about October 1 and again about November 10, with 12-8-20 or similar fertilizer.

These recommendations are based on current research which shows fall to be the ideal time to fertilize turf. Feeding at this time makes grass more cold resistant; reduces disease and winter injury; keeps the grass growing later in the fall, thus shortening its dormant season; provides a residue of nutrients for spring green-up of the grass; and suppresses weed growth by promoting grass health.

Secondary: Apply ground limestone at the rate of fifty pounds per one thousand square feet in the spring, and fertilize. Fertilize once in the fall with 12-8-20 or similar fertilizer about October 15.

Tertiary: Do not fertilize or lime except as a specific response to a given problem.

4. Flowers

- *Increase the use of flowers in identified ceremonial areas, such as the front entrance and the circles.*

- *Consider the development of memorial gardens to supplement income and support the maintenance of flower beds.*

5. Leaf Removal

- *Compost and re-use leaves on site.*

6. Management and Personnel

- *Establish a budget with dedicated line items* in order to plan, manage effectively, quantify the budget need and effectively advocate for increased funding.

- *Maintain present level of staff until such time as other recommended tasks are implemented with the support of additional funding.*

- *Develop job descriptions for cemetery staff.*

- *Identify routine tasks that can be accomplished by volunteer labor,* with a volunteer coordinator overseeing the work.

7. Support Facilities

- *As master plan recommendations are being implemented and potential changes in management structure are devised, assess the need for improved, expanded or relocated maintenance facilities.* Investigate all possible locations for such facilities, in addition to the parcel southeast of Libby Field.

8. Equipment

- *Maintain the present equipment, which appears to be satisfactory for the cemetery's needs, with the addition of a new truck.*

9. Monuments

- *Consider assuming responsibility for the care of monuments of historic and artistic significance, if no trust funds to cover such care.*

10. Drainage

- *Improve drainage throughout the site* with improvements to the construction of roads (swales, crowns) and a commitment to the phased development of a drainage system. Conduct further study to determine the site-specific causes of particular drainage problems.

11. Ponds

- *Make any necessary changes to drainage structures in the ponds,* restoring brick culverts and constructing new concrete culverts as necessary to control fluctuations in water levels, and to restore water to pond areas that have dried up. Dredge accumulated soil that has eroded and deposited in the ponds.

- *Control runoff from hillside to prevent deposition of soil along pond edges.*

- *Conduct a water quality study* to determine the condition of the water, and develop a plan to improve water quality.

- *Investigate ways to control the waterfowl population.* Encourage the public to feed cracked corn rather than bread, which is less problematic if it settles to the pond bottom. Consider selling corn to the public.

- *Expand the larger pond to the northwest, returning water to the area that is presently filling in.*

V. ADMINISTRATION AND FINANCES

A detailed assessment of Evergreen's finances and administrative structure was beyond the scope of the master plan. However, this is an issue of utmost importance for the future well-being of the cemetery. It is important that some general observations and assessments be made in the context of the master plan, because the management and financial strength of the cemetery have historically affected its ability to carry out its mission, and will continue to do so in the future.

Administration

The Trustees of Evergreen were first appointed in 1869 as the cemetery was becoming too large and active to be administered with other public grounds. The trustees brought increased structure and fiscal accountability to the governance of the cemetery. In 1957 the cemetery was placed under the Parks and Recreation Department, rather than existing as a separate department. There are efficiencies that are realized by the city with this management structure. However, Evergreen must compete with the needs of other city spaces and infrastructure for scheduling of maintenance and budget priorities.

The issue of governance of the cemetery should be evaluated in order for Evergreen to receive the best guidance and advocacy possible within the municipal structure.

The Friends of Evergreen serves in an important advocacy and stewardship role.

Finances

The master plan analysis indicates that maintenance must be upgraded if Evergreen is to survive as a vegetated landscape, let alone enjoy any improvements to its landscape character. Care of the grounds is wholly dependent upon securing an adequate source of money for maintenance and capital expenditures each year relative to the many legitimate competing needs in the city. At the time when Evergreen ceases to be an active cemetery, continued maintenance even at the present inadequate levels will become increasingly difficult to justify within the city budgeting process.

In order to do effective long-term planning, funding needs to be more consistent than it has been up to now, particularly if the maintenance and capital improvements recommendations contained herein are to be implemented. It is critical that the city investigate the potential advantages and disadvantages of establishing some form of independent financial organization to sustain maintenance and improvement of the cemetery into the future. Moreover, the city has some fiduciary responsibility to care for graves which have been sold to its citizens over the years. Burial rights were sold with the expectation of ongoing care of the grounds. Fifty percent of income from grave sales has gone to the cemeterys' account in the general fund and fifty percent has gone to perpetual care.

Capital expenditures over the years have been very irregular, and subject to the vagaries of the budget process. There is no indication of a consistent commitment of funds to Evergreen. The budget philosophy appears to be based on doing the absolute minimum to the cemetery grounds to keep it neat and clean, and satisfy the terms and conditions of perpetual care. It is felt that the open space value of Evergreen to the City of Portland should be better reflected in its tax support. The substantial use of the cemetery by

recreational visitors indicated by the user survey needs to be financially supported in kind by the city.

The management and fiscal strength of the cemetery has had peaks and valleys throughout its history. In the early twentieth century, the cemetery was largely self-sufficient economically with a substantial revenue provided by the perpetual care fund and services to lot owners. In 1911, the historic record indicates that trust accounts were transferred to city's general fund to balance the city books. In 1912, Evergreen's large endowment attracted the city's attention, and over one-half of it was borrowed to construct a new high school and police station.

The schedule of costs for interments should be assessed in order for the cemetery, as a municipal facility, to provide reasonable burial and memorialization services while at the same time realistically reflecting the costs of providing those services. Interment costs appear to be low. The actual costs of upkeep and improvement of the cemetery grounds needs to be quantified as well. At present, the consolidation of city divisions means that efficiencies are realized, but the real costs of maintenance and capital expenditures in Evergreen is not clearly spelled out, to serve as a basis for more effective negotiations during the budget process. It is thought by cemetery maintenance staff that maintenance costs may be somewhat higher than reflected on paper because of the way Public Works crews are deployed.

The financial problems associated with Evergreen are linked with governance and management issues which have not been reconsidered since 1957 when the Board of Trustees was dissolved. Management of the cemetery is part of the broader responsibilities of the city's reorganized Department of Parks and Recreation. It is critical that the city undertake a feasibility study to investigate the potential advantages of establishing some form of independent financial organization to sustain maintenance and improvement of the cemetery in the future.

Public/Private Partnership

As pressures for finite municipal resources grow and the needs of historic landscapes become more pronounced, and better understood, it is essential that the private sector become an active participant in stewardship of treasures like Evergreen. The Friends of Evergreen regards its function as that of an advocate and steward that would continue under governance and operating mechanisms that are developed as a result of the proposed feasibility study.

There is a way for the city to build on experience with other public enterprise entities that combine fulfillment of public purposes with flexible and entrepreneurial use of existing and potential resources in implementing the Evergreen Cemetery Master Plan and in setting the stage for creative governance, management, conservation and use of the city's municipal cemeteries. In other words, Evergreen can be a model for the kind of restructuring and reinventing of selected municipal institutions that the City Council and the City Manager are fostering today.

- *A Feasibility Study should be undertaken to explore options for alternative management and/or economic structures* that ensure the future independent financial functioning of Evergreen as a publicly owned cemetery which can directly benefit from the revenues it raises, both in terms of operations and long-term trust accounts for perpetual care dedicated to cemetery maintenance and capital improvement. The Feasibility Study is an opportunity to explore models of and build on the City's experience with other public enterprise entities that are currently operating in the city (i.e. the Public Library, Fish Pier, Jetport etc.). The study would use the data gathered to develop a "business plan" and to refine the governance and management plan.

- *Review the schedule of interment costs* and measure them against the costs of comparable cemeteries. Revise costs if necessary to reflect the true cost of services.

- *Quantify the actual costs of maintaining Evergreen* in order to make a more effective case for adequate funding.

- As soon as possible, long range master plans should be developed for Forest City and the other municipal cemeteries, to be followed by financial and management studies that would support development of "business plans" for those cemeteries as suggested by the Open Space Plan, Green Spaces, Blue Edges.

Summary
Recommendations

Access, Circulation and Parking

Recommendations are intended to separate pedestrian and vehicular traffic, facilitate recreational use, interpret the historic zone, accentuate important design elements of the circulation system, facilitate maintenance and good road condition, and open opportunities for future limited infill burial.

- Define main entrance with an allee of trees and plantings to restore original character. Develop arrival circle near administration building along main entrance to focus, orient and announce arrival at Evergreen.
- Reduce scale of chapel entrance to emphasize main entrance.
- Improve character of Brentwood Street entrance.
- Interpret 1855 circulation system with gravel surfacing of most roads in that acreage. Limit visitor vehicular traffic to bituminous roads only. Make provisions for elderly and handicapped visitation of graves where necessary.
- Make changes to bituminous concrete road network to facilitate visitor and maintenance circulation while limiting amount of bituminous on site.
- Revert selected paved roads to grass paths.
- Make road surfacing around circles consistent and use plantings, curbing and/or central monuments to emphasize their presence.
- Integrate Evergreen's trail system with proposed burial development.
- Develop an improved trail in woodlands for commuter use.
- Maintain dispersed parking except for a small parking node near ponds.

Vegetation

Recommendations are intended to restore the "evergreen" character of the cemetery, strengthen site design and particular features, increase the richness and diversity of character throughout the site, define spaces and frame views, and increase the landscape's educational and recreational potential:

- Increase tree species diversity and quantity, particularly increasing the use of evergreens and flowering trees. Concentrate on native trees in natural associations.
- Substantially increase use of shrubs and groundcovers as well as trees.
- Embellish site's entrances and circles with special planting.
- Label trees and shrubs in selected areas.
- Expand palette of acceptable shrubs on lots.
- Screen cemetery with plantings along its boundaries.

SUMMARY RECOMMENDATIONS

Ponds

Recommendations are intended to restore the original character of the pond landscape, limit vehicular intrusion, improve water quality and stabilize water levels:

- Embellish pond landscape with plant compositions similar to those documented in photographs of late nineteenth century.
- Reestablish bridges and gazebo, developing them as memorial structures.
- Convert road between ponds to gravel and prevent vehicular circulation.
- Restore brick culverts and construct new ones to control water levels. Dredge accumulated soil from ponds.
- Conduct water quality study to determine water condition and methods to improve it.
- Expand larger pond to northwest, to an area formerly filled in with water.

Cemetery Development

Recommendations are intended to plan for interment into the 21st century while protecting and strengthening the cemetery's historic character:

- Reserve particular areas from development for historical, visual and ceremonial reasons.
- Develop residual acreage near Stevens Avenue as a series of garden rooms.
- Replicate the circulation pattern in the historic zone.
- Conduct wildlife habitat study prior to development in woodlands.
- Develop limited infill graves in some grass paths, circles and islands in the developed acreage.

Use

Recommendations are intended to support and increase recreational opportunities while protecting the needs of grave site visitors:

- Implement zoning recommendations that identify appropriate areas for active recreational uses.
- Develop specific sites for passive recreational uses at the ponds; the sunken circle; by the 5-chamber tomb at Ash Avenue; and behind Wilde Chapel.
- Support and expand the educational efforts of the Friends of Evergreen.
- Enforce regulations governing appropriate cemetery use.
- Work with Portland Trails to establish a trail system through Evergreen linked with the large open-space system.

Maintenance and Management

Recommendations are intended to support and improve maintenance and management of the cemetery:

- Institute regular program of fertilization, pruning and planting for site's trees and shrubs.
- Make use of groundcovers to replace grass in particular areas.
- Consider wildlife habitat in shrub selection and location.
- Establish hierarchy of grass areas according to visibility, active status of burial areas, and historic or natural character of landscape. Fertilize grass accordingly.
- Consider development of memorial gardens and groves to supplement income and support maintenance.
- Compost and re-use leaves on site.
- Establish budget with dedicated line items.
- Develop staff job descriptions, and identify tasks for volunteer labor.
- Assess need for improved, expanded or relocated maintenance facilities.
- Improve drainage throughout site.
- Cemetery warrants the close attention of an arborist until the horticultural health of the cemetery is stabilized.

Administration and Finances

Recommendations are intended to strengthen the administration and financial strength of the cemetery in order for it to successfully carry out its mission and implement master plan recommendations:

- Evaluate relative merits of centralized and decentralized management structures for Evergreen.
- Define respective roles of the City and the Friends to maximize value of Friends to City.
- Explore options for alternative management and/or economic structures that ensure Evergreen's financial health and independence within the municipal structure.
- Review management of Evergreen's trust funds to guarantee maximum return.
- Review interment costs and adjust as necessary to reflect true cost of services.
- Quantify the actual costs of maintaining Evergreen to make a more effective case for adequate funding.

Phased Implementation

The following phased plan for implementation has been organized according to master plan issues and needs. Improvement projects, cemetery development and studies have been included here. All proposals being implemented imply a design component. On-going needs (maintenance and management) and recommendations for structural changes (administration and finances) have not been included. They need to be attended to immediately, as well as over the long-term.

The cost estimates for the master plan have been organized differently - according to areas of the cemetery - because of the relationship between costs for improvements and income generated from sale of burial lots developed in various cemetery areas. Some circulation recommendations are prioritized below in terms of their relationship to cemetery development recommendations.

The proposals for time frame of priority categories are exclusive of cemetery development recommendations and the circulation recommendations associated with them. Recommendations for cemetery development will be phased in over many years, as identified in the cost estimate.

High Priority Projects are those which are most critical for satisfying the needs of the cemetery and supporting the plan's goals, in terms of use, character, functioning and cemetery development. High priority projects are proposed to be implemented within the next five years.

Moderate Priority Projects are projects that, although not an immediate need, are desirable to be implemented in the near term. They are significant for the long-term success and impact of the master plan and incrementally achieve the plan's goals. Some projects are continuations of work begun in high priority projects. Moderate priority projects are proposed to be implemented within the next five to ten years.

Long-Range Priority Projects can only be implemented over the long term, can be done as funds become available, or are low priority relative to other cemetery needs. Most long-range priority projects are proposed to be cemetery needs. Most long-range priority projects are proposed to be implemented after ten years. Some projects, because of their scale, are proposed in this category because they are desirable to be initiated in the short term but can only be completed over the course of many years.

High Priority Projects

1. Access, Circulation and Parking*

Improve gates for Main and Chapel Entrances
Create orientation/arrival circle at Main Entrance Road
Develop new maintenance yard access road
Repair Loop Road
Change road between ponds to gravel; close to vehicles
Establish small parking area at ponds
Improve Brentwood gate design and narrow pavement inside of Brentwood gate
Develop roads in association with Phase 1 Stevens Avenue grave development

2. Use

Develop sitting areas on either side of 5-chamber Mausoleum
Install signs for orientation at gates and other selected locations

3. Cemetery Development

Develop a governance and management plan
Plan for cemetery expansion at front of cemetery, at Brentwood parcel, and at receiving tomb site
Develop drainage plan for front, flat marker and pond areas

4. Landscape Character: Vegetation

Plant allee of trees and other planting at Main Entrance
Establish ornamental plantings Brentwood gate
Plant buffer along Brentwood parcel

5. Ponds

Conduct water quality study
Dredge ponds and repair and add culverts as needed to control water levels
Establish Phase 1 planting
Add benches at ponds
Develop small access landing at pond

Moderate Priority Projects

1. Access, Circulation and Parking*

Change some paved roads to grass paths
Close some gravel roads to vehicular traffic
Develop consistent appearance across front cemetery edge
Redesign gate at entrance to woodlands from ponds
Establish trail system in association with Portland Trails
Establish commuter path in woods

2. Use

Develop sitting/garden area behind Wilde Chapel
Design and install street signs
Develop proposals for infill burial and for new methods of memorialization

3. Cemetery Development

Begin development of front of cemetery, receiving tomb site and Brentwood gate parcel for burials

4. Landscape Character: Vegetation

Establish ornamental plantings at some circles
Establish Phase 2 planting at Main Entrance

5. Ponds

Restore bridges and gazebo at ponds
Establish Phase 2 planting

Long-Term Priority Projects

1. Access, Circulation and Parking*

Surface selected roads in gravel; reduce the scale of gravel roads
Establish a small-scale entrance design into woodlands from neighborhoods

2. Use

Develop sitting walls at sunken circle
Label selected trees and shrubs in specified areas

3. Cemetery Development

Conduct wildlife habitat study in woodlands
Implement variety of development proposals in selected locations within developed cemetery
Use existing and new site elements for memorialization

4. Landscape Character: Vegetation

Plant boundaries between neighborhoods and streets
Establish a hierarchy of grass areas

5. Ponds

Establish Phase 3 plantings
Restore duck house

* Drainage recommendations are intended to be implemented whenever circulation recommendations are implemented.

SUMMARY OF PROJECT PHASING AND COSTS FOR PRIORITY PROJECTS

HIGH PRIORITY PROJECTS

1.	**Improve Entrances:**	**$ 107,392**
	Main Chapel and Brentwood ornamental gates; orientation/arrival circle at main entrance road; allee of trees and other plantings at main entrance; maintenance yard access road; narrowing of pavement inside of Brentwood gates; orientation signs at gates and selected locations.	
2.	**Pond Improvements:**	**73,973**
	Develop a water quality study and design plan for ponds, dredge ponds and repair as needed, establish plantings, add benches, develop small access landing at pond, change roads between ponds to gravel and close to vehicles, establish small parking area at ponds, redesign and install gates at entrance to woodlands from ponds.	
3.	**Site Amenities:**	**77,000**
	Develop sitting areas on either site of 5-chamber mausoleum, plant buffer along Brentwood parcel, establish trail system in association with Portland Trails, establish commuter path in woods.	
4.	**Road and Drainage Improvements within Developed Cemetery:**	**267,670**
	Repair Loop Road, change gravel roads to bituminous concrete, add bollards and chains.	
5.	**Road Development in New Cemetery Areas:**	**96,025**
	Develop roads in association with Phase 1 Stevens Avenue grave development.	
	Sub-Total:	**$ 622,060**

MODERATE PRIORITY PROJECTS

1.	**Site Amenities:**	$ 116,051
	Design and install street signs, establish Phase 1 tree and shrub plantings at the Historic Zone, Libby Field, chapel entrance, and main entrance; Phase 1 restoration of bridges and gazebos.	
2.	**Site Amenities:**	106,051
	Establish Phase 2 tree and shrub plantings at the Historic Zone, Libby Field, chapel entrance and main entrance; Phase 2 restoration of bridges and gazebos.	
3.	**Front of Cemetery Development:**	82,100
	Develop consistent appearance across front of cemetery (low stone wall), develop sitting/garden area behind Wilde Chapel.	
4.	**Circulation Development:**	62,747
	Change recommended gravel and paved roads to grass paths.	
5.	**Cemetery Development:**	171,068
	Begin development of front of cemetery (Stevens Avenue Phase 1), receiving tomb site and Brentwood gate parcel for burials.	
6.	**Cemetery Development:**	171,068
	Continuation of number 5 above.	
	Sub-Total:	$ 709,085

LONG-TERM PRIORITY PROJECTS

1.	**Site Amenities:**	$ 26,500
	Develop signage for new development areas, establish a small-scale entrance design into woodlands from neighborhood, label selected trees and shrubs in specified areas, restore the duck house, additional pond planting.	
2.	**Road Improvements:**	136,645
	Reconstruct gravel roads and reduce their scale.	
3.	**Memorializations:**	195,000
	Use existing and develop new site elements for memorialization.	
4.	**Begin Cemetery Development of Stevens Avenue, Phase 2**	111,502
	Sub-Total:	$ 469,647

Cost and Income Estimates

EVERGREEN CEMETERY MASTER PLAN COST AND INCOME ESTIMATE

Overview

Evergreen Cemetery is in a state of physical decline. There is no replacement and no fertilizing program for the site's trees, which are mature and nearing the end of their life cycle. The roads are in poor condition; and there is a fundamental need for a fully integrated drainage system. The ponds need attention. There is no fertilizing program for the grass. The current budget only allows the minimum to keep the cemetery neat, cleaned and mowed. Unfortunately, this does not prevent inevitable degradation of the landscape. It is imperative to secure the long-term financial health of the cemetery in order to reverse this trend. There are also many small and large-scale master plan recommendations to be implemented over the years, which will immeasurably improve the character, enjoyment and functioning of this public place for burial and recreation. They need to be funded.

The cost/income exercise has established an order of magnitude of costs for master plan recommendations as well as income potential for grave development. The estimate has proposed discreet phases of development that can yield money for operations and for the cemetery's trust funds. The estimate shows that the proposed development scenarios are financially feasible. Needless to say, much more work is needed to develop a specific financial plan to guide development of new burial areas (as well as other important improvements). Design development must respond to this financial plan as well as create new burial areas that are responsive to the quality of the cemetery landscape. Further design studies are critical not only to determine specific costs but also to ensure that high quality development is carried out. This is a planning document. It is not a marketing study. All costs are in today's dollars.

Introduction

The cost and income estimate for implementation of the Evergreen Cemetery Master Plan has been organized under two major categories, with subcategories in each: I.) Repair and Upgrading of Developed Cemetery, and II.) New Cemetery Development Areas. The Woodlands area is not a part of the cost estimate because development in that area will not take place in the foreseeable future.

I. Repair and Upgrading of Developed Cemetery

- A. Main Entrance Treatment
- B. Historic Zone
- C. Ponds

D. Libby Field

E. Acreage between Libby Field and Chapel

F. Chapel Entrance and Burial Areas North

II. New Cemetery Development Areas

A. Stevens Avenue Phase I

B. Stevens Avenue Phase II

C. Brentwood Parcel

III. Signage

Development Costs and Income Generation

Developed Cemetery:

In the areas of the Developed Cemetery category income from burials has not been estimated. The Ponds area is reserved from development, although proposals for bridge and gazebo restorations and the entrance focal circle feature are recommended to be memorial structures in order for the city to provide a special memorial product and to cover the funding of these restorations. There are very few locations identified in the 1855 parcel (most of which are categorized herein as the Historic Zone) and in Libby Field as appropriate for infill development. In the Remaining Developed Acreage, the master plan proposals recommend approaches to limited infill development that would extend the cemetery's active life while preserving its historic character. Site-specific burial areas and quantities of acreage for burial have not been identified.

New Development:

In the New Cemetery Development Area, there is undeveloped land that has been recommended to be developed with clusters of grave sites. The income from this development has been estimated within each subcategory and shown in association with costs for landscape rehabilitation, infrastructure improvements and grave development.

In order to support proposed master plan recommendations and develop new grave areas that reflect the quality of the original cemetery design, income from sales of graves needs to be increased over current receipts. These estimates are based on the current cost of $500. per grave. It is felt that this is adequate compensation for the value of the product, and in line with costs in other cemeteries. It has been assumed that 100 graves per year will be sold over the next 90 years. This is an amount slightly higher than the current average.

It is recommended that no more than half of the cemetery's income from the sale of lots be used to support on-going cemetery operations, with the remaining half applied to paying off the development costs or to increase the perpetual care trust funds. Given the magnitude of funds required for the developments proposed herein, it is recommended that bonds be issued for capital improvements. The phasing of the development incorporates the following objectives:

- ***Size of Development Parcels***

  Development has been divided into phases, each of a scale sufficient to achieve design integrity and to function well. Given the scale of Evergreen, the size of each phase has been identified as two to four acres. It is recommended that graves be laid out in new areas within a landscape which has been graded and planted in a pleasing manner, and which has a complete road system and drainage. This is crucial for the beauty and workability of future development in the cemetery, and for that development to complement the cemetery landscape as well as become a desirable place to which to purchase interment space.

  These estimates were based on using 60% of the gross area for graves and 40% for roads, paths and plantings. The current standard in the cemetery industry is 80% for grave development and 20% for amenities.

- ***Landscape Improvements***

  The magnitude of grading and planting should establish a high quality landscape character harmonious with the beauty of the historic areas of the cemetery. This is critical because the beauty of these new development areas will be the basis on which higher income and increased grave sales can be achieved, in addition to adding to the visual character of the cemetery.

- ***Approach to Drainage***

  A detailed study of site drainage was not conducted, but site-wide improvements to the drainage system are being recommended to rectify the problem of erosion of roadways and accumulations of large volumes of water from snow melt and seasonal rainfall. Subsurface drainage is being proposed in all new development areas. Within the existing developed area of the cemetery, catchbasins and drain lines are proposed near the ponds and the slopes above the pond, in Libby Field and in the areas near the Administration Building and Chapel. In order to limit the costs for drainage improvements, leaching catchbasins are proposed in most areas of the existing cemetery. The sandy soils here should allow their use. Detention ponds are also proposed as part of the improvements in order to limit the impact of this

stormwater runoff on Capisic Brook. Costs have not been estimated for dealing with the problem of springs in the hillside southeast of the ponds because of lack of subsurface information about this outflow.

- ***Specific and Conceptual Costs***

  Some master plan recommendations are specific enough to assign reasonably accurate costs, such as the narrowing of specific gravel roads or the converting of specific roads from bituminous concrete to gravel. In other cases, master plan recommendations are conceptual in nature. For instance, the specific design to be used for closing gravel roads to vehicular traffic has not been determined. In these cases, reasonable solutions have been used and noted for estimating purposes.

- ***Funding of Improvements and Development***

  Improvements are proposed to be paid by CIP funds, HCD funds, and the operating budget. The possibility of borrowing from the perpetual care fund should also be considered. Currently, the City bonds projects over five years. Given the current level of the cemetery's income, proposed developments cannot be repaid within this limited time period. For the purpose of this estimate, a much longer period of financing was allowed, up to 25 years.

  The key finding of this cost and income study is that the development appears to be financially feasible and that further study is both necessary and justifiable in order to prepare a financial plan to guide the development of new burial areas in a manner which is sympathetic with the recommendation of the master plan.

I. REPAIR AND UPGRADING OF DEVELOPED CEMETERY

A. Main Entrance Treatment

1. Circulation Recommendations/Improved Maintenance Access (375' x 14' x 3")

Sub-Total: **$2,916**

2. Landscape Improvements

* 200 L.F. consistent edge treatment allowance:
* Ornamental gate allowance
* Tree planting (40)
* 75 shrubs
* Arrival circle allowance (Remove existing road-4,100 sq. ft.; radius curb-574 L.F.; bituminous pavement-7,500 sq. ft.)
* Focal feature (memorial opportunity)

Sub-Total: **$96,190**

B. Historic Zone (excluding front entrance and ponds)

1. Circulation Recommendations

* Change gravel roads to bituminous concrete (14' width x 3" depth x 2,925 L.F.)
* Resurface existing bituminous concrete roads (14' width x 1.5" x 2,175 L.F.)
* Add metal bollards and chains (64 bollards and chains)
* Change gravel roads to grass paths (8' width x 1,800 L.F.)
* Reconstruct gravel road w/crowns and unpaved gutters (8,300 L.F., 14' wide)
* Drainage allowance (6 catchbasins, 28 leaching catchbasins and 8"-12" drain lines 1,500 L.F.)

Sub-Total: **$221,339**

2. Landscape Improvements

* 2 sitting areas @ Ash Avenue
  (30 L.F. of wall, 100 sq. ft. pavement, benches & landscaping)

* Sitting wall @ Sunken Circle allowance
  (100 L.F. wall, 150 L.F. of path)

* Tree planting
  (318 trees)

* Shrub planting
  (265 shrubs)

Sub-Total: **$126,950**

C. <u>Ponds and Landscape Immediately Surrounding Ponds</u>

1. Circulation Recommendation

* Remove bituminous concrete road & walks, grading, and gravel surface installation (1,200 L.F.)

* Add metal bollards and chains (4)

* Change gravel road to bituminous concrete
  (750 L.F. x 14' x 3")

* Gravel parking area for 5 cars and gravel drive
  (4,680 sq. ft. x 1.5' deep)

* Wood guardrail @ parking area
  (85 L.F.)

* Gate for Woodlands Road

* Drainage allowance
  (7 catchbasins, 8"-12" drain lines 525 L.F.)

Sub-Total: **$48,573**

2. Landscape Improvements

* 6 wooden benches @ ponds

* Landing at pond

* Gazebo reconstruction allowance

* Bridge reconstruction allowance (3)

* Tree planting
  (30 trees)

* Shrub planting
  (200 shrubs)

Sub-Total: **$116,400**

D. Libby Field

1. Circulation Recommendations

* Change gravel road to bituminous concrete
(14' width x 3" depth x 450 L.F.)

* Drainage allowance
(7 catchbasins, 1,500 L.F. of 8"-12" drain lines)

Sub-Total: **$59,000**

2. Landscape Improvements

* Tree planting
(84 trees)

Sub-Total: **$16,800**

E. Developed acreage between Libby Field and Chapel

1. Circulation Recommendations

* Change gravel road to bituminous concrete
(14' x 3" x 6,250 L.F.)

* Change bituminous concrete to grass path
(1,800 L.F.)

* Add metal bollards and chains (4)

* Reconstruct gravel road
(675 L.F.)

* Drainage allowance
(48 leaching catchbasins)

Sub-Total: **$168,336**

2. Landscape Improvements

* Tree planting
(183 trees)

* Shrub planting
(150 shrubs)

* Brentwood gate improvement allowance
(2,700 sq. ft. pavement removal, 2,700 sq. ft. lawn,
5 trees, 20 shrubs, new gate and posts)

Sub-Total: **$60,350**

F. Chapel Entrance and Burial Areas North

1. Landscape Improvements

* 150 L.F. consistent edge treatment
* Ornamental gate
* Trees along front edge (50)
* Shrub planting (250)
* Sitting area behind chapel allowance (4 benches, 300 sq. ft. pavement and planting)

Sub-Total: **$69,600**

III. Signage Allowance

(Assume 3 large entrance signs, 1 small entrance sign, 1 site map, 3 regulatory signs, 3 interpretive signs, 6 directional signs, 150 road signs)

Sub-Total: **$30,000**

Total Cost for Repairs and Upgrading of Developed Cemetery

1.	Circulation Recommendations	500,164
2.	Landscape Improvements	485,890
	Total:	**$986,054**

II. NEW CEMETERY DEVELOPMENT AREAS

A. Stevens Avenue Phase I Grave Development (4.7 acres)

Grave development in this area has been recommended as a series of interconnected garden rooms embellished with plantings. Road layouts reflect the original circulatin design, with curvilinear alignments and focal circles. Recommendations include changing the alignment of Eastern Avenue for aesthetic purposes and to maximize burial options. Grading is recommended to create planted berms that can separate areas. Memorial retaining walls are recommended along some berms. Drainage is also included.

1. Circulation Recommendations

   * New bituminous concrete roads
     (1,575 L.F. x 3" x 14' and gravel base)

   * Drainage allowance
     (14 catchbasins, 1,725 L.F. drain lines)

Sub-Total: **$96,025**

2. Landscape Improvements

   * Memorial wall allowance
     (450 L.F. wall, assumes mortared stones w/coping set on 4' concrete foundations)

   * Strip top soil and respread over berms
     (900 C.Y.)

   * Grading berms: 450 L.F. of berm
     (1,485 C.Y.)

   * New lawns: 4" top soil, stripped, placed, fine graded & seeded
     (202,600 sq. ft.)

   * Tree planting
     (100 trees)

   * Evergreen planting along Stevens Avenue
     (75 trees)

   * Shrub planting
     (490 shrubs)

Sub-Total: **$251,075**

Total cost for Phase 1 Stevens Avenue Grave Development: **$347,100**

Income from Phase 1 Stevens Avenue Grave Development:

* Number of graves: 4,052 @ 30 sq. ft. each @ $500 each (assume 60% of gross area of development equals net useable area) **$2,026,000**

* Number of years to sell graves created in development (assume 100 grave sales per year) **40 years**

B. Stevens Avenue Phase 2 Grave Development (2.4 acres)

1. Circulation Recommendations

* New bituminous concrete road
  (825 L.F. x 3" x 14' and gravel base)

* Drainage allowance
  (6 catch basins, 725 L.f. drain lines)

Sub-Total **$42,942**

2. Landscape Improvements

* Memorial wall allowance
  (200 L.F. wall, assume mortared stones with coping set on 4' foundation)

* Strip top soil and respread over berms
  (440 C.Y.)

* Grading berms
  (1,320 C.Y.)

* New lawns: 4" top soil, stripped, placed, fine graded and seeded
  (105,000 sq. ft.)

* Tree planting
  (36 trees)

Sub-Total: **$128,560**

Total Costs for Phase 2 Stevens Avenue Grave Development: **$171,502**

Income from Phase 2 Stevens Avenue Grave Development:

* Number of Graves: 2,100 @ 30 sq. ft. each @ $500
  (assume 60% of gross area of development equals net useable area) **$1,050,000**

* Number of years to sell graves created in development (assume 100 grave sales/year) **21 years**

C. Brentwood Parccel (approximately 3.4 acres)

The long, narrow area southeast of Libby Field serves as a buffer between the cemetery and the adjacent residential neighborhood. The use of the site as a dump at one time necessitates additional soils investigation before any development proposals are made in the future. Costs for soils investigation are not included here.

The master plan proposes that this parcel be reserved for future burial development and possible maintenance support facilities. It has the potential for development of gravesites. It was also identified as having characteristics suitable for ancillary maintenance facilities, if this were deemed necessary in the future. Any development here needs to be screened from the neighborhood, which is included in the cost estimate.

1. Circulation Recommendation

* New butuminous concrete roads
  (960 L.F. x 3" x 14' and gravel base)

* Drainage allowance
  (6 catch basins, 960 L.F. of drain lines)

Sub-Total: **$45,986**

2. Landscape Improvement

* Clearing and Grading
  (15,900 C.Y. of soil borrow placed and rough graded)

* New lawns
  (143,000 S.F. of seeded lawn)

* Tree planting
  (39 trees)

* Evergreen screen planting
  (400 trees)

* Shrub planting
  (345 shrubs)

Sub-Total: **$220,150**

Total Costs for Brentwood Parcel Grave Development: **$266,136**

Income from Brentwood Parcel Grave Development:

* Number of graves: 2,860 @ 30 S.F., each @ $500 (assume 60% of gross area of development equals net useable area) **$1,430,000**

* Number of years to sell graves created in development (assume 100 grave sales/year) **29 years**

III. Signage Allowance

(Assume 3 large entrance signs, 1 small entrance sign, 1 site map, 3 regulatory signs, 3 interpretive signs, 6 directional signs, 150 road signs)

Sub-Total: **$30,000**

I. Sub-Total Costs of Repair and Upgrading of Developed Cemetery

1.	Circulation Recommendations	500,164
2.	Landscape Improvements	485,890
3.	Signage	20,000
	Sub-Total:	**$1,006,054**

II. Sub-Total Costs of New Cemetery Development Areas

1.	Circulation Recommendations	184,953
2.	Landscape Improvements	599,785
3.	Signage	10,000
	Sub-Total:	**$ 794,738**

TOTAL COSTS	**$1,800,792**
Total Income from Grave Development:	**$4,506,000**
Number of years to sell graves:	**90**

Appendices

Evergreen Cemetery
Landscape Chronology

circa 1850	Need for new cemetery identified as existing city cemeteries (Eastern and Western) were almost full.
1852	City purchased 55 acres for rural cemetery. "A large part of it is covered with timber, and an evergreen growth and the whole may easily be made pleasant and attractive, as cities of the dead should be. . ." Expenditures: $1,355.10; $1,196.60 for fence around perimeter; $158.50 for labor. (PAR 1852)
1854	Evergreen Cemetery consecrated. Expenditures: $1,588.35 for grading paths, new gate, etc.; $15 to Charles H. Howe for plan of cemetery. Receipts: $850 for lots sold. (PAR 1854)
1854/5	Expenditures: $1880.93 for grading avenues and paths; $100 for plans. (PAR 1854/5? - date on photocopy unclear).
1854-62	James R. Mitchell was superintendent.
1855	First plan of Evergreen by civil engineer Charles H. Howe.
1856/7	Expenditures: $1,441.88 for labor, superintendent's salary, trees and ornamental well house on well lot over pump, including design. "By the City Ordinances all monies received from the sale of lots in Evergreen Cemetery are constituted a fund to be appropriated exclusively for the purpose of improving and ornamenting the Cemetery." (PAR 1856/7)
1857/8	Expenditures: $1,190.03 included building toolhouse, painting gate and fences, trees, labor and superintendent's salary. Receipts: $1,463.00 from sale of lots and wood. (PAR 1857/8)
1858/9	Expenditures: $1,192.81 for building toolhouse and office, hedge fence, trees, labor for walks and paths, plans and superintendent's salary (increased from $150 to $200). Receipts: $1,463.00 from sale of 146 lots and sale of wood. (PAR 1858/9)
1859/60	Expenditures: $1,298.81 for labor on walks and avenues, planting of trees, stones for fenders and gate attendance. Receipts: $1,213 from sale of 122 lots. (PAR 1859/60)
1860/61	Expenditures: $2,515.31 for labor and materials for reception house, lots rebought for improvements and watering equipment. Receipts: $2,000 from sale of 200 lots. (PAR 1860/61)
1862/3	Expenditures: $1,820.34 for fender stone, trees, plants and shrubbery as well as large expense for labor for grading and ornamenting walks and paths and for clearing Chapel Hill. Receipts: $1,580 from sale of 158 lots. (PAR 1862/3)
1862-69	Charles Strayton was superintendent.
1863/4	Expenditures: $2,048.58 included 595 trees and 508 plants (shrubs?). Receiving tomb built (contract with J. T. Emery for design and construction). Total cost: $3,655.26. Receipts: $2,070 from sale of 207 lots. (PAR 1863/4)

1864/5	Expenditures: $2,056.69 included railroad tickets for committee, iron work and shovelling snow, all new categories. Receipts: $2,980 for 298 lots. Note in annual report: "By an ordinance of the city it is required that a certain portion of the receipts from sale of lots in Evergreen Cemetery "shall be reserved to constitute a fund, the interest of which shall be used for the keeping the grounds and neglected lots in good order." (PAR 1864/5)
1866/67	Expenditures: $2,050.66, mostly for labor. Committee still active in policy. Receipts: $2,835 - cost of some lots increased to $20. (PAR 1866/67)
1867-68	Expenditures: $3,985.72 mostly for labor for grading and ornamenting walks and paths; included special appropriation of $2,000. Receipts: $2,745. (PAR 1867/68)
1868/9	Expenditures: $2,341.60. Receipts: $2,490. (PAR 1868/9)
1869	Plan and directory of Evergreen published by John Russell including list of lot holders.
1869/5/10	City council removed responsibility for Evergreen from the Committee on Cemeteries and Public Grounds and appointed three separate trustees. Few ordinances and little structure existed. See PAR for full text of ordinance.
1869/70	Expenditures: $9,356.36, about $1,500 for fence (lumber, labor and painting); $1,075 for land acquisition; and $5,7800 for labor, a dramatic increase over previous years. Receipts: $6,729.42; $3,700 from sale of lots; over $3,000 for annual care at $1/lot; $200 for perpetual care at $25/lot. Note: by ordinance, 25% of the money received from sale of lots was put into the Evergreen Fund for operating costs. (PAR 1869/70)
1869-71	Eleazer F. Fobes was superintendent. He also sold land to cemetery in 1869.
1870	Plan made by city civil engineer's office of additions to Evergreen Cemetery. (PAR 1870)
1870s	Another major round of development in a more grid-like style south of the original cemetery area. Five additional circular features added.
1870-71	Expenditures: $11,243.52, mostly for labor. $5,000 authorized for improvement of grounds and fences and general operating costs under direction of trustees. New method of calculating revenues - 25% transferred to Evergreen Fund, net $3,060; payments from individuals for making, grading lots, burials, setting of tombstones etc. $5,743.18. Still only very small number in perpetual care. (PAR 1970/71)
1871	Plan of cemetery included in city atlas showing original 55 acres laid out plus Garden Avenue at southern end.
1871-2	Expenditures: $11,540.18 included a pair of white swans and a pair of white geese as well as furniture for superintendent's office and for stuffing of swan (!?!). Receipts: $7,181.22 mostly from services provided to individuals. Still only a few lots in perpetual care. City appropriation was $5,000 for Evergreen as opposed to only $200 for Forest City Cemetery. 177 acres owned. (PAR 1871/2)
1871-81	Charles Ramsay was superintendent. He was fired when new trustees were appointed, later went to Bath where he was active as town employee (parks, cemeteries?) and nursery owner.

1872/3	Expenditures: $9,034.72. Receipts: $6,190.20 with lots at varied prices from $10 to $50. (PAR 1872/3)
1873/4	Expenditures: $10,254.78 included over $200 for seven swans. Plan of whole cemetery made, including additions. Division lines set out in section K. Valley Avenue extended to reach ledge bluffs. Tracing of sections K and Q. Receipts: net income of $6398.36. (PAR 1873/4)
1874	Evergreen was described in a popular guidebook: "full of attractions, with trees, waters, plentiful shrubbery and the varying undulations of surface, which render natural scenery so attractive. . . winding paths and carriage-roads, with hedges and monuments, and beautiful enclosures, of such a character, that the grounds have become a great attraction to visitors, and are often crowded with strangers . . . " (PI 1874)
1874/5	Expenditures: $9,672.43 included labor for turf, loam, foundation rock, dressing plants, flowers etc. Receipts: (net) $6,583.09. Plan begun for section O south of Garden and Valley Avenues at head of Libby Field section. (PAR 1874/5)
1875/6	Expenditures: $9,327.73. Receipts: net $6,840.20. New plans of cemetery made in seven sections at 1" = 40'. Plan also made of cemetery chapel. (PAR 1875/6)
1876	Engravings published in local guidebook illustrate early character. (P and V)
1876/7	Expenditures: $10,161.11 included purchase of land as well as ornamental vases. Receipts: $6,068.75. City appropriation: $4,800. Land totaled about 190 acres. More work done at Primrose Circle and on sections A, O and Q. (PAR 1876/7)
1877/8	Expenditures: $7,655.75. Receipts: $6,138.25. By this time the Evergreen Fund was yielding nearly $1,000/year interest. Western Avenue near Section N laid out. Area described as having "varied and and striking natural topography capable of affording the finest effects of landscape gardening." (PAR 1877/8)
1878/9	Expenditures: $6,821.74 included drain pipe and lawn mower. Receipts: $5,534.88. Lots sold for as much as $100. More lots laid in sections O and Q. Plans made of new areas in section N. (PAR 1878/9)
1879/80	Expenditures: $8,189.85. Receipts: $6,259.09. Additional work in section N. (PAR 1879/80)
1880	From Mayor's address: "The large additions made to Evergreen cemetery from time to time, without correspondingly improved methods in management to meet the conditions, led to considerable confusion in its affairs. During the past year, the ordinances relating to it have been revised and changed to meet present and future needs. The maps of the grounds have been made complete in every respect by our city engineer. The whole business management has been revised by the trustees. Order and system mark its present condition. The great improvement in the grounds and their marked good order, with the addition of the much needed water supply, are most creditable and well appreciated. This institution receives more gratuitous labor than any other branch of city affairs. It is to be hoped that the demands upon the city for aid will soon cease, and that this department will be self-supporting." (PAR 1880/1)