THE PHYSICAL TREATMENT OF CULTURAL AND HISTORIC RESOURCES: GUIDELINES FOR REHABILITATING DESIGNED HISTORIC LANDSCAPES

By

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Federal, state and local government agencies charged with the review of proposed public and private undertakings have the authority and responsibility to evaluate the potential impact of a project on cultural and historic resources. Professional staff involved in such reviews, and often those project proponents responsible for formulating the underlying concept and final details of a project, utilize the **Secretary of the Interior's Standards for Archeology and Historic Preservation** when assessing potential impact on cultural and historic resources. This document, although meant to be applied to all undertakings and all types of resources, is limited in the amount of assistance it provides professionals addressing non-architectural resources.

With the diversification of the American preservation movement and, in particular, the birth and recent growth of landscape preservation, the **Secretary of the Interior's Standards for Archeology and Historic Preservation** have been found cumbersome, if not ineffective, in providing advice to professionals dealing with projects involving historic landscape resources, as well as those responsible for reviewing such proposals.

The thesis specifically addresses the unique issues presented in the rehabilitation treatment of designed historic landscapes, a resource type identified by the National Park Service. And, in particular, focuses on the applicability of the **Secretary of the Interior's Standards for Archeology and Historic Preservation: Standards for Historic Preservation Projects** and accompanying **Guidelines.** Although the scope of the thesis addresses broad based philosophies and a significant portion of the existing federal document, the most detailed recommendations regarding the physical treatment of landscape resources is limited to one resource type, designed historic landscapes, and to one specific physical treatment, rehabilitation.

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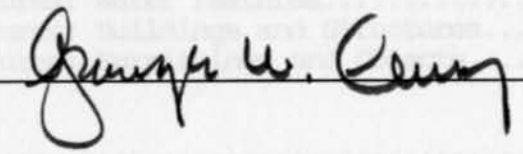
Signature of Major Professor 

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INTRODUCTION

Economic incentives available to the American public since the 1970s provide individuals and corporations alike with the opportunity to reep financial rewards for undertaking the rehabilitation of the nation's historic built environment. These incentive programs, in turn, have led to establishing federal, state and local government review processes to insure that those seeking financial gain are not doing so at the expense of the country's cultural and historic heritage. In addition, existing legislation at all levels calls for the review of government sanctioned activities which involve cultural and historic resources. The primary guide used by those public sector professionals charged with conducting any of these reviews to protect cultural and historic resources is the **Secretary of the Interior's Standards for Archeology and Historic Preservation.**

While the volume of private sector development and government sanctioned activities has centered on buildings and related architectural elements, an emerging interest in landscape resources has brought a greater variety of concerns into consideration during project or program evaluation or administration. In attempting to apply subsections of the **Secretary of the Interior's Standards for Archeology and Historic Preservation** to activities involving landscape resources, it becomes evident that a bias towards architecture underlies the entire document; application involving landscape resources is not explicit and requires interpretation--a realization shared by public and private sector practitioners, including the National Park Service. Those individuals and/or organizations responsible for project or program development, either by choice or mandate, interpret the federal standards

during project and program planning. With little or no direction from the author-agency, this interpretation varies. Similarly, those activities subject to regulatory review are judged by yet additional interpretations of the same federal standards: government staff responsible for conducting such reviews also apply the **Secretary of the Interior's Standards for Archeology and Historic Preservation**, with little advice from the National Park Service, to activities involving landscape resources.

This thesis is a response to the inconsistent interpretation of the **Secretary of the Interior's Standards for Archeology and Historic Preservation** as applied to historic landscape resources; and, to the 1987 National Park Service call for professional comment and input regarding the existing preservation philosophy and technical guidance offered by the federal government as it applies to these resource types.

The thesis specifically addresses the unique issues presented in the rehabilitation treatment of designed historic landscapes, a resource type defined by the National Park Service. And, in particular, focuses on the applicability of the **Secretary of the Interior's Standards for Archeology and Historic Preservation: Standards for Historic Preservation Projects.** Although the scope of the thesis addresses broad based philosophies and a significant portion of the existing federal document, the most detailed recommendations regarding the physical treatment of landscape resources is limited to one resource type, designed historic landscapes, and to one specific physical treatment, rehabilitation.

Methodology

Following a brief review of the history of the American preservation movement and the relationship of landscape preservation to that larger effort, three projects involving designed historic landscapes are examined. According to the respective project proponents, recommendations for the physical treatment of each of the subject historic landscape resources are in response to the **Standards for Historic Preservation Projects.** Both common and divergent interpretations of the these standards are discussed, illustrating by example the extreme latitude with which the federal document is used. A detailed analysis assessing the applicability of the philosophy and language of the **Standards for Historic Preservation Projects** to designed historic landscapes follows, along with recommendations for revisions. Finally, the most specific technical assistance offered in the federal document, the **Guidelines**, is evaluated for applicability to designed historic landscapes and accompanied by corresponding recommendations.

THE AMERICAN PRESERVATION MOVEMENT

The historic preservation movement in the United States began as an outgrowth of emerging nationalism following the American Revolution and struggling first decades of the country's growth. Unlike most other western nations, the United States was led by private citizens into a fight to recognize its own heritage and preserve it: an evolution which began as a genteel exercise in patriotic symbolism and continues today as a dynamic and powerful grassroots effort supported by a multi-disciplinary professional force.[1]

Although several individual events took place throughout the country prior to the first major thrust of preservation efforts in the nineteenth century, it was a latent post-Revolutionary War patriotism which started a tidal wave of preservation activity.[2] In 1850, the New York State legislature responded to vocal, popular public sentiment and purchased the Hasbrouck House in Newburgh (NY), General Washington's headquarters for that region during the Revolutionary War. Shortly thereafter, Ann Pamela Cunningham successfully established the Mount Vernon Ladies Association of the Union (1853) and embarked on a mission to protect and preserve Washington's home at Mount Vernon (VA). These two events are recognized as the beginnings of an identifiable preservation movement within the United States which focused on the historical associations of properties (i.e., buildings) and their transcendant importance. Federal, state and local government, although rather disengaged from these preservation activities, provided limited yet comparable efforts. Within two consecutive years, the federal government recognized the historic associative value of two properties, Casa Grande (AZ) and Chickamanga Battlefield (GA), in 1889 and 1890 respectively. This emphasis on

preservation due to historical association, by both the private and public sectors, was to last throughout the nineteenth century. Not until more time placed greater distance from the close of the Revolution would ardent preservationists begin to see that the aesthetic and cultural values of properties were reason enough for preserving tangible elements.

As industrial and other technological advances claimed the attention of the country during the last decades of the 1800s, people began to look beyond the real or implied relationship of artifacts to persons--and to recognize the significance of properties because of style, workmanship, materials and the like. With the excitement of scientific advancement came the threat of losing the old and, perhaps, obsolete. During this time, potential and actual loss of resources generated an interest in colonial period artifacts; so popular an interest as to justify their display and preservation as part of the Centennial Exposition in Philadelphia.[3] With time, individuals and organizations began to call for the preservation of properties because of aesthetic qualities, in addition to associative values. It is arguable that William Sumner Appelton and the organization he was instrumental in founding, the Society for the Preservation of New England Antiquities (SPNEA)(1895), championed this call for a more broadly defined preservation movement. Both the successes and failures of SPNEA to protect the rich architectural history of the northeastern states became well-known, spurring the formation of similar groups throughout the nation.[4] In addition, government, although still remaining outside the driving forces of preservation, responded to the changes of the movement. In 1906, the Antiquities Act was passed by Congress protecting pre-historic sites (in the southwest United States) and giving the President the power to declare historic landmarks, historic and pre-historic structures and objects of <u>scientific</u> interest as national monuments.[5] Thus,

defined by an interest in both the associative and intrinsic qualities of properties, the preservation movement entered into the twentieth century and towards an even more inclusive field of interest.

The American preservation movement had been led since inception by private citizens; and, in the early 1900s it was the private sector which continued to fight for preservation of the country's resources, as well as expand the definition of preservation. Specifically, it was through the philanthropic largesse of America's wealthy citizens that preservation continued to grow. With personal interests and finances supporting their actions, the nation's affluent class began to collect historic artifacts for preservation. Individual buildings, rooms and furnishings were purchased, saved and made available for public, as well as private, use and enjoyment. The American Wing at the Metropolitan Museum of Art in New York City (est. 1925) represents the preservation movement's success in capturing historic resources and placing them in a pristine setting: taking a portion of the house museum out of the house and putting it on display, largely through the financial support of influential benefactors.[6] In similar fashion, the gift of Fairmount Park's eighteenth and nineteenth century houses to the Philadelphia Museum of Art during the same decade further promoted this philanthropic form of preservation. But, as in the previous century with SPNEA, it was the effort of one organization and its conceptual and financial benefactors that can lay claim to birthing the next expression of America's preservation movement. The Colonial Williamsburg Foundation (est. 1926) provided the nation with the most holistic approach to the preservation of historic properties seen to that date. W.A.R. Goodwin's vision to not only preserve the collective physical resources of an entire community, but also to educate the public through such an act was unprecedented; his perseverance and enthusiasm led, in part, to personal and monetary support from J.D. Rockefeller, Jr. This collaborative

effort resulted in the first of many outdoor museums for the nation as well as the earliest attempts to recognize the importance of the organizational framework of the landscape which brought continuity to individual properties.[7] Such preservation of the planned or designed landscape was isolated and reserved for these hybrid, often reconstructed or contrived, historic communities. It would not be until the latter part of the 1960s that the American preservation movement would recognize the value of its everyday environments and, in turn, address landscape preservation as an identifiable segment of the overall preservation movement.[8]

Government activities of the nineteen teens, twenties and thirties reflected the preservation movement's shift towards broader concerns. In 1916, the National Park Service (NPS) was created, which although intended to focus on the country's natural resources, included programs that addressed cultural and historic properties. By placing the responsibility for identifying and protecting these diverse yet often integrally related resources within the new agency, the federal government made it possible for conservationists and preservationists to join forces--an opportunity which ultimately aided and advanced the preservation movement. In addition, with the formation of the NPS, the federal government was thrust to the forefront of the nation's preservation activities. For as the private sector was forced to decrease its philanthropic preservation efforts during the Depression years of the thirties, the NPS with its sister agencies and supportive programs allowed the preservation continuum to remain intact.

In the 1930s, the creation of the Historic American Buildings Survey and the Historic American Engineering Record programs (HABS/HAER) and the Civilian Conservation Corp (CCC) established a shared relationship of the country's preservation movement between the federal government and the private sector.

The government's call to record the nation's historic properties through the HABS/HAER extended federal preservation interests to all levels of community and for both public and private property. Further, these programs established consistent professional standards for documenting, recording and storing such information. The CCC, responding primarily to the economic and social problems of the Depression, also resulted in an aggressive, comprehensive approach to environmental conservation and cultural and historic preservation. Both the broad success of the CCC and its many individual projects legitimized the federal government's role in the preservation and management of the nation's natural and cultural resources.[9] This role was further defined by passage of the federal Historic Sites Act in 1935. The comprehensive nature of this legislation placed responsibility for collecting and storing information regarding cultural and historic resources undeniably with the federal government, as well as established its ability to own and operate historic properties and to engage in interpretation of and public education regarding cultural and historic resources. These notable, landmark activities on the part of Congress during the thirties were mirrored by local governments throughout the country: the nation's first local historic district was designated by the city of Charleston (SC) in 1931, and the state of Louisiana established the Vieux Carre Commission in 1936. As was the case with the philanthropic preservation efforts a decade earlier, federal, state and local government initiatives of the 1930s supported the ever-increasing definition and popularity of the nation's preservation movement.

It was the post World War II decades which brought another shift in both the parameters of the American preservation effort and the roles of the private and public sectors. Patriotism once again played a part in the destiny of America's cultural and historic resources. The economic and social changes brought about during and after the second world war prompted extensive growth

and development: as servicemen returned home, the suburban dream was realized through increased housing starts, unhindered acceptance of an automobile-based society and aggressive search for new technology. The federal government found itself entertaining policies and programs intended to both support burgeoning growth beyond traditional urban centers as well as catalyze renewal efforts intended to rejuvenate inner city cores. Two initiatives more than any others, the Interstate Highway Defense System (born under the Federal-Aid Highway Act of 1956) and the Urban Renewal Program (instituted by the Housing Act of 1956), had the greatest and most drastic effect on cultural and historic resources and the preservation movement.[10] In the name of progress, vast portions of urban areas were sacrificed either to advance the nation's most ambitious roadway system or to "reclaim" city centers through a slash-and-burn approach to new development. These well-funded and strongly promoted programs swept across the country during the fifties and into the sixties before the public sought and received a more preservation-conscious approach to government supported national growth.

While many preservation advocate groups fought to make government at all levels aware of the disastrous effects these unchecked growth programs were having on cultural and historic resources, it was the US Conference of Mayors' Committee on Historic Preservation that brought national attention to the issue.[11] Following the lead established in the Committee's proceedings and through exhaustive lobbying by a variety of individuals and organizations, including the National Trust for Historic Preservation (est. 1949), the federal government was forced to recognize its responsibilities in managing national growth and its administrative and regulatory duties related to the protection of cultural and historic resources. With the passage of the National Historic Preservation Act (NHPA) in 1966, the federal government established the nation's primary, comprehensive legislation concerned with the

protection and enhancement of the country's cultural and historic heritage. A series of regulatory mechanisms, identification procedures, and technical standards and guidelines related to preservation activities and properties were defined. Further, the NHPA established the types of resources that could be considered significant cultural or historic properties--buildings, structures, sites, objects and districts--and, thereby, placed the collective cultural and historic landscape of the the country within the realm of both popular and regulatory preservation undertakings.[12] In the years following adoption of the NHPA, the initial legislation has been strengthened through addenda, legal challenge and professional knowledge; in turn, the preservation community has become more diverse, sophisticated and discriminating in its efforts to adequately address all resource types--giving rise to special interest groups within the overall preservation movement. Evidence of this specialization through diversification can be found in the growing interest in historic landscape preservation.

PART OF THE CONTINUUM

As can be seen in an overview of preservation in the United States, a variety of resources always have been viewed as important elements worth protecting and preserving, and very often the contextural environment, immediate site or specific landscape has been the primary subject of a preservation undertaking. However, it only has been within the last two decades that both the private and public sectors have stepped forward and recognized that historic landscape resources deserve intense, comprehensive attention as the twenty-first century approaches. Several professional and not-for-profit organizations associated with the design disciplines and/or preservation concerns have adopted policies regarding historic landscape resources, established committees to provide on-going involvement in preservation of these resource types and supported educational meetings to further their cause. For example, the American Society of Landscape Architects (ASLA) not only has a long-standing position regarding the recognition and protection of historic landscape resources, but has used its committee structure to pursue broad-based efforts and specific projects.[13] Since 1987, the ASLA Open Committee on Historic Preservation, in conjunction with the National Park Service, has sponsored a Historic Landscape Preservation Symposium coinciding with the organization's annual meeting; the one/two-day event provides an opportunity for involved and interested professionals to discuss a wide selection of topics and case studies pertinent to the protection of historic landscape resources. A variety of not-for-profit organizations which deal with historic landscape resources provide

alternative vehicles for addressing preservation and protection of countless properties. The Alliance for Historic Landscape Preservation (est. 1978) and the National Association of Olmsted Parks (est. 1980) provide an opportunity for professionals and lay people from across the country to join efforts in responding to national historic landscape preservation concerns, as well as those directed towards specific (e.g., Olmsted-designed or influenced) landscape resources. Property-specific advocacy groups, such as the Central Park Conservancy (New York City, NY) (est.1980) or Thornden Park Association (Syracuse, NY) (est. 1985), offer concerned parties the occasion to become actively involved in the protection and enhancement of a particular historic landscape. Similarly, educational institutions, such as the University of Massachusetts at Amherst, have hosted seminars in historic landscape preservation--bringing together academicians, professional practitioners, government staff and citizens concerned with historic landscape resources. Once again and in compliment, government at all levels supports these specific preservation efforts through policies, programs and legislation.

Local communities have begun to recognize the need to identify historic landscape resources under local municipal preservation ordinances, affording these properties the same, far-reaching protection that most often has been extended to buildings and structures. By example, the Upper Onondaga Park (Syracuse, NY), a late nineteenth century picturesque park, was listed as a preservation district under the Syracuse (NY) Preservation Ordinance to both recognize the property's historic and landscape architectural significance and to insure advisory review by the city's Landmark Preservation Board of proposed alterations to the park's features and overall design.[14]

State governments, in addition to passing legislation mirroring the NHPA as in New York[15], have instituted programs which establish policies and funding

mechanisms for the protection and enhancement of historic landscape resources. The Olmsted Historic Landscape Preservation Program (1983) of Massachusetts is one such state program, offering both technical and financial support to the state's Olmsted legacy.

At the federal level, Congress has before it in the Olmsted Heritage Landscape Act, federal legislation which sets a national policy for the protection and preservation of designed historic landscapes. In addition, the National Park Service has assumed a leadership role in formulating definitions for specific landscape resource types, developing methods for identification and evaluation of these resources, and reviewing existing technical policies for applicability to landscapes.

In particular, the NPS, with input from private sector professionals, state and local government staff and academicians, has formalized the classification of historic landscape resource types. Under the umbrella term of cultural landscapes, the NPS defines five types of historic landscape resources, not mutually exclusive: historic scene, historic site, designed historic landscape, vernacular historic landscape and ethnographic landscape.[16] Specifically:

> Cultural landscape: A geographic area, including both cultural and natural resources, including the wildlife or domestic animals therein, that has been influenced by or reflects human activity or was the background for an event or person significant in human history.
>
> > Historic scene: A micro-environment where a significant historic event occurred, frequently with associated structures or other tangible remains. In historic areas, such remains are the most significant physical resource. . . .The cultural scene provides the context for understanding and interpreting the events, ideas, or persons associated with (the resource). The historic scene is always present. . .although its integrity may be severely diminished because of intrusions such as nearby developments, inappropriate plantings, or lack of maintenance.

> Historic site: A site where an event or activity has imbued a particular piece of ground with significance warranting preservation of the historic appearance of the landscape, i.e., battlefields, landing sites and historic routes.
>
> Designed historic landscape: A landscape where form, layout and/or designer, rather than significant events or persons, are the primary reasons for its preservation, although both may be relevant. With designed historic landscapes, as with historic structures, attention to detail is important. . . .
>
> Vernacular historic landscape: A landscape possessing a significant concentration, linkage, or continuity of natural and man-made components which are united by human use and past events or aesthetically by plan or physical development.
>
> Ethnographic landscape: A landscape characterized by use by contemporary peoples, including subsistence hunting and gathering, religious or sacred ceremonies, and traditional meetings. A difficult resource to manage because its significance derives from human interaction with or consumptive use of the natural environment. To effectively manage the area, . . .(one) must assure perpetuation of the resources, (and) should afford contemporary groups or individuals the opportunity to continue their traditional uses. . . .[17] [18]

Because the National Park Service, as per the NHPA, has the responsibility and authority to set policy and procedure regarding national preservation activities, these resource definitions carry both weight and credibility. In addition, the specific characteristics attributed to each cultural landscape type are consistent with both formal and popular definitions for landscape types employed by design and planning practitioners and scholars.[19] Further, the NPS has established criteria for identifying and evaluating cultural landscape properties to determine if they are eligible for listing in the National Register.[20] These criteria are based on broad philosophies germinated by an international community of professionals and incorporated into the American national preservation program[21], which, in turn, have been successfully employed for more than two decades and easily are applied to cultural landscape resources. These NPS actions, indeed responses to the concerns of landscape preservation advocates, are commendable, although incomplete. One major issue, that of providing technical assistance for

preservation projects involving landscape resources, needs to be addressed. The guidance provided regarding landscape resource identification and evaluation is straightforward, and, some might argue, unequivocal. The same degree of assistance and direction is necessary regarding the physical treatment of these resources.

CURRENT CONCERNS

In 1979, the Department of the Interior, **Secretary of the Interior's Standards for Archeology and Historic Preservation: Standards for Historic Preservation Projects** was published to provide broad policy regarding the physical alteration of cultural and historic resources.[22] This document also offers more specific technical assistance in the form of guidelines related to each of seven physical treatments.[23] Since its publication in the Federal Register, the **Standards for Historic Preservation Projects** (the **Standards**) have been used almost exclusively for activities involving historic buildings and structures; their application to other historic resources has been minimal. In addition, with the advent of the tax incentive programs offered by Congress and administered through the Internal Revenue Service beginning in 1976[24], knowledge and understanding of the **Standards** has become synonymous solely with historic buildings. With similar economic incentives offered through a variety of federal, state and local government programs, as well as continued nation-wide development trends, more recent preservation projects have created a need to apply the **Standards** to activities involving cultural landscape resources. As both development proponents and government officials strive to apply the **Standards** to achieve the appropriate treatment of landscape resources, different--and sometimes conflicting--interpretations of both general preservation philosophies and policies result.

Resources as different as Prospect Park in Brooklyn (NY), Lorenzo in Cazenovia (NY) and St. Mary's Circle in Syracuse (NY), and the subject of physical undertakings, generate concerns regarding a uniform approach to the physical treatment of landscape resources. At first glance, most landscape

preservation projects appear to interpret the **Standards** in relation to several key concerns: period of significance (i.e., that point in time which best defines the significance of the resource), type of treatment (i.e., the degree of physical intervention to be applied to the resource), resource features (i.e., those elements which contribute to the character of the resource), and maintenance (i.e., the long term treatment and care of the resource). Upon closer examination, however, it is clear that individual project proponents which reference the **Standards** interpret them differently. In turn, projects subject to government review are evaluated with yet another interpretation--for government staff responsible for regulatory reviews are not privy to any assistance from the NPS in applying the **Standards** to landscape resources and, therefore, must develop their own interpretation of stated preservation philosophies and policies. Hence any attempts to seek the appropriate treatment of landscape resources through the application of the **Standards** is twarted by a lack of clear direction from the National Park Service and the resulting variations in interpreting national preservation philosophy and policy.

The Ravine, Prospect Park: Brooklyn, New York

In November 1986, the New York City Department of Parks and Recreation published a comprehensive "park preservation program" for Prospect Park in Brooklyn.[25] This program was outlined in a Historic Landscape Report (HLR) and focuses on five features within the park--the Ravine, Long Meadow, Lake, Perimeter and Entrances, Litchfield Villa and Grace Hill--and offers recommendations for the physical treatment of each. In addition, these recommendations are based on the park's historic significance, existing conditions and use patterns; and work phases,

scopes and costs of reconstruction and future management are discussed for the entire property. The final recommendations relate to several broad policies, as seen in an examination of the HLR's section for the Ravine.

Prospect Park, established in 1859 and planned and designed by Frederick Law Olmsted and Calvert Vaux, was Brooklyn's response to the democratic planning process popularized in American urban areas during the mid 1800s. The park served local government's need to provide basic services to the citizens of the growing community as well as perpetuate the idiom of bringing the calm of the rustic landscape into the harsh urban environment. The overall park concept, as conceived by the principle designers, centers on natural elements integrated--not imposed--on the park site. Olmsted and Vaux employed the basic precepts of the three highly touted movements of the time: the Picturesque, the Beautiful and the Sublime.[26] Together, these aesthetic concepts form the basis of Prospect Park's original design and support uses popular during the park's early years.

From initial construction through the last decade, Prospect Park has been modified in design and use and through management and maintenance.[27] Some alterations are unobtrusive and supportive of the park's original plan and purpose; other changes, although not completely sympathetic with the initial design intent, have gained significance in their own right. Still others were, and are, inappropriate and detracting. For example, the Ravine--the inner most feature of the park and the one most reminiscent of the Picturesque and the Sublime[28]--exhibits modifications dating as early as the 1880s and as late as the 1970s: introduction of

exotic plant materials, abandonment of Music Island, standardization of elements, installation of playing fields.

A more informed and sensitive approach to future changes in the Ravine is expected as a result of the 1986 HLR. In turn, the specific recommendations respond to preservation policies established by the project proponents which, in summary, include:

> A narrow period of significance, related to the Olmsted and Vaux plan, dictates which landscape features are significant and how each will be treated. Although there appear to be exceptions to this rule of thumb (i.e., more recent features are "allowed" to remain), no consistent criteria are identified for such allowances. Further, replacement of extant features or materials is permissible, if they are not visible and/or fall outside of the period of significance. Construction of designed features which were never built is permissible, if utilizing original plans or designs; no apparent distinction between original and new "original" features is required. Introduction of contemporary elements is considered on a case by case basis, with no consistent criteria (e.g., use, cost) applied to each situation nor any requirement to distinguish historic features from contemporary ones. Reconstruction of missing features is permissible, with the new element responding to the original plans or designs and with allowances to accommodate contemporary needs.
>
> Most, if not all undertakings are considered "restoration" treatments. Although some work involves additions to or deletions from the resource, other items deal exclusively with extant historic features, and others call for interpretation of undocumented original or significant construction.
>
> Character defining features of the resource are identified as topography, geology, soils, hydrology, vegetation, wildlife, microclimate, structures, circulation, paving, furnishings, utilities, and spatial and visual organization. Treatment of all features is consistent; that is any perceived or defined hierarchy of significance of features is not mirrored by a hierarchy of treatment or degree of intervention.
>
> Maintenance of the resource is considered an essential portion of the overall preservation undertaking and recommendations for general long-term protection and specific tasks are offered.

Lorenzo: Cazenovia, New York

The New York State Office of Parks, Recreation and Historic Preservation, Division of Historic Preservation developed a "Statement of Structure and Land Use" for Lorenzo, a state historic site, in August 1985 which defines the State's policies for the continued physical treatment of the property.[29] This policy statement is supported by a number of individual studies and reports, including a Historic Landscape Report, and offers specific recommendations related to the property's designed historic landscape. These recommendations are based on the state's policies regarding the physical treatment of a cultural landscape resource.

Lorenzo, the family estate of the Lincklaen-Ledyard family from 1807-1968, represents the stylistic trends in both architecture and garden design pervasive in upstate New York during the early 1800s. The main house and its original support buildings reflect the refined classicism exhibited in the Federal style, while the estate's major garden repeats this formalism. The garden's geometric organization, as planned by John Lincklaen in 1807, is defined by a central axial path--a strong physical and visual link to the main hall of the house--and several perpendicular cross-paths, resulting in eight squares. Further, the garden is enclosed on two sides by the Dark Aisle, a shelter/screen planting which also serves as a transition zone between the formal garden and the adjacent, open agricultural fields.[30] The original formal design framework survives with a high degree of integrity, receiving modest modifications by the family during both the Picturesque Movement of the mid 1800s and the Colonial Revival period at the turn of the last century.

Not until the advent of state ownership did more intensive and divergent site uses pose possible problems for the historic landscape: automobile access and parking, high pedestrian use and feature/material abuse. As with its other historic properties, the State through its "Statement of Structure and Land Use," and in conjunction with the HLR, seeks to avoid future inappropriate or adverse modifications to the designed historic landscape. Specific proposals are based on general preservation policies defined by the State and, in summary, include:

A narrow period of significance, related specifically to the period of highest development at the estate, dictates which landscape features are significant and how each will be treated. Although there appear to be exceptions to this general rule of thumb (i.e., new "historic" elements may be added to the landscape), no consistent criteria are identified for such allowances. Further, replacement of extant features or materials is permissible, if they are beyond repair or fall outside the period of significance. Construction of designed features which were never built is not addressed. Introduction of contemporary elements is considered on a case by case basis, although generally discouraged, and with no consistent criteria (e.g., use, cost) applied to each situation nor any requirement to distinguish historic features from contemporary ones. Reconstruction of missing features is permissible, with the new element responding to original plans or designs and with allowances to accommodate contemporary needs.

All undertakings are considered "restoration" treatments. Although some work involves additions or deletions to the resource, other items deal exclusively with extant historic features, and others call for interpretation of undocumented original or significant construction.

Character defining features of the resource are identified as circulation, planting, views, vistas and visual effects. Treatment of all features of the resource is not consistent, that is the identified features are treated with varying degrees of intervention, with no apparent or stated relationship to a feature's level of significance.

Maintenance of the resource is considered an essential portion of the overall preservation undertaking and recommendations for general long-term protection are offered.

St. Mary's Circle: Syracuse, New York

Through an application for funding assistance pursuant to the New York State Environmental Quality Bond Act of 1986, the City of Syracuse Department of Parks and Recreation outlined its intentions to pursue a preservation project involving St. Mary's Circle, a dynamic urban space in the city's central business district.[31] The city, in responding to specific application questions, defines a work scope related to the resource's overall spatial organization, individual features and materials. These proposed activities respond to a series of general policies followed by the responsible city department in treating local publicly owned cultural landscape resources.

In 1894, the city's Public Works Commissioner was authorized to construct a circle at the confluence of three major downtown streets. The following year, the site officially was recognized as Library Circle, and then known in the 1920s alternately as Court House Circle and St. Mary's Circle--each name corresponding to one of the prominent adjacent civic or religious buildings. The small rather unobtrusive traffic circle became a more prominent local cultural feature in 1934, when the site was redesigned by Dwight James Baum to accommodate a larger-than-life bronze statue of Christopher Columbus.

The sculpture, donated by the city's Italian-American community, stands at the center of an elaborate fountain upon an impressive granite base. The original design of the supporting plaza area was simplistic yet classical--reflecting the latent romantic tastes reminiscent of the Italian garden and plaza, which were evident in American civic designs of the 1930s.[32] In 1968, vehicular circulation requirements resulted in

major alterations not only to the central feature, but to the overall organization of the urban space: one of three streets was closed to traffic and a pedestrian plaza created in its place, thereby connecting the highly modified Baum design to the adjacent sidewalk area.

The current space reflects these more recent changes and uses as well as the effect of inappropriate and damaging management and maintenance practices. The city's application for funding assistance and proposed scope of work is an attempt to correct past treatments as well as enhance the resource. Recommendations reflect the city's policies regarding the physical treatment of cultural landscapes which, in summary, include:

A narrow period of significance, related to the year Baum's design was installed, dictates which landscape features are significant and how each will be treated. Although there appear to be exceptions to this general rule of thumb (i.e., more recent features are "allowed" to remain), no consistent criteria are identified for such allowances. Further, replacement of extant features or materials is permissible, although no consistent criteria (e.g., use, cost) are applied to each situation. Construction of designed features which were never built is not addressed. Introduction of contemporary elements is considered permissible, with no consistent criteria (e.g., use, cost) applied to each situation nor any requirement to distinguish historic features from contemporary ones. Reconstruction of missing features is permissible, with the new element responding to original plans or designs and with allowances to accommodate contemporary needs.

Most, if not all, undertakings are considered "restoration" treatments. Although some work involves additions to or deletions from the resource, other items deal exclusively with extant historic features, and others call for interpretation of undocumented original or significant construction.

Character defining features of the resource are not identified by general categories; rather, individual site specific elements are discussed (e.g., the Columbus monument, annual plantings). Treatment of these features is not consistent, that is the identified features are treated with varying degrees of intervention, with no apparent relationship to a feature's level of significance.

Maintenance of the resource, although mentioned, is not considered an essential portion of the overall preservation undertaking.

These three examples illustrate the inconsistent interpretation of the **Standards** which occurs when existing federal preservation philosophies and policies are applied to undertakings involving landscape resources. Without specific direction from the author-agency, individual project proponents generate case-specific translations of broad preservation philosophy and policy, and equally limited interpretation regarding more technical issues--resulting in project recommendations which range from extremely conservative (e.g., the Ravine: period of significance) to fairly liberal (e.g., St. Mary's Circle: maintenance).

While each of the projects discussed above is said to respond to the **Standards**, no uniform application of existing federal preservation philosophies, broad policies or specific technical guidance is apparent. The inability to achieve consistent interpretation of the **Standards for Historic Preservation Projects** in dealing with landscape resources, when such application is required and/or desired, indicates the need to examine the **Standards** and evalute its validity in addressing the physical treatment of these--and all--resources. The following pages begin that analysis by examining the applicability of the **Standards** to undertakings involving designed historic landscapes.

PHYSICAL TREATMENT OF CULTURAL AND HISTORIC RESOURCES

THE USDOI STANDARDS FOR HISTORIC PRESERVATION PROJECTS

The Philosophy

In meeting its responsibilities to provide technical advice about archeological and historic preservation activities as defined in the National Historic Preservation Act, the US Department of the Interior, through the National Park Service, has created standards and guidelines for use and reference in dealing with the nation's cultural and historic resources: **The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation.** This DOI document contains sections dealing with various activities, from planning to professional qualifications; each section provides advice and direction in accordance with the NHPA intents.[33] The stated purposes of this document are:

> To organize the information gathered about preservation activities.
>
> To describe results to be achieved by Federal agencies, States, and others when planning for the identification, evaluation, registration and treatment of historic properties.
>
> To integrate the diverse efforts of many entities performing historic preservation into a systematic effort to preserve our nation's cultural heritage.[34]

The **Standards for Archeology and Historic Preservation** evolved from the decades of intensive preservation activities occurring at the federal, state and local levels; the underlying philosophies and comprehensive intent of this federal document provides a solid base for the entire gambit of preservation

activities in the nation. It is through the application of the various standards and guidelines within this federal document that users can appropriately deal with the preservation of cultural and historic resources. As this NPS document is used, its subsections are reviewed for clarity, effectiveness and timeliness; unsuccessful application, legal challenges and/or advances in technology can generate revisions in intent, policy and language. In addition, widespread interest in a broader variety of resource types can lead to the examination of terminology, examples and emphasis employed throughout the document. As discussed in the preceeding pages, the growing interest in the preservation of landscape resources calls for such an examination.

The DOI **Standards for Historic Preservation Projects** are only one set of standards within the larger federal document.[35] The **Standards** are organized in two major sections. The first section contains eight general standards which apply to all physical treatments undertaken on cultural and historic properties listed in the National Register; the second section consists of standards germane to each of seven specific types of treatments defined by the National Park Service and effecting National Register-listed resources.

Applicability to Designed Historic Landscapes

In the early 1980s, the NPS began a review of the **Standards** (i.e., the eight general standards and those specific to rehabilitation) to assess their effectiveness in dealing with all cultural and historic resources, and to analyze language and terminology for clarity and directness.[36] In the spring of 1990, the NPS issued revisions to the eight general **Standards**:

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of the deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical or pictorial evidence.

7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.[37]

Even a cursory review of the eight general **Standards** alone suggests that the general philosophies established by the NPS are applicable to all resources, including designed historic landscapes. However, while the revisions provide more authoritative and direct language to impart these basic philosophies, there remains, nevertheless, an emphasis on buildings and related architectural issues. This underlying, apparently unintentional, emphasis raises several concerns as the **Standards** are applied to undertakings involving designed historic landscapes.

The primary concern centers on the level of detail found within certain standards. By referencing particular resources (e.g., buildings) or activities (e.g., sandblasting), the **Standards** are limited in application. While a first inclination may be to provide additional references or examples, such detail should be illiminated altogether; the language employed should be as broad as possible while still conveying the intended preservation philosophy and/or policy. Yet another basic concern relates to terminology used. Several terms for which NPS definitions already exist are used in the **Standards** in ways which suggest new or alternative meaning. A list of definitions, appended to the **Standards** would insure universal understanding and applicability. Similarly, the **Standards** fail to adequately address biotic features which may be part of or constitute an entire resource. Such elements are tied to natural physical and time processes which often are independent of and beyond human control. Unlike buildings, structures and objects, which with time and little or no maintenance deteriorate or enter decline, biotic resources left unmanaged can first increase or intensify in character through growth associations and processes, followed by deterioration or decline, and culminate with complete loss and/or regeneration. The language of the **Standards** does not recognize the fluid, non-static nature of these features and, therefore, provides questionable guidance regarding the treatment of designed historic landscapes.

As mandated by the NHPA and orginally stated by the NPS, the intent of the **Standards** is to clearly illustrate broad policies regarding the physical treatment of cultural and historic resources. In order to allow such broad based application of the **Standards** then, amendments and modifications must occur.

Recommendations: Amendments and Modifications
The Eight General Standards

By initiating one fundamental modification to the language used in the eight general standards, the **Standards** immediately gain more widespread applicability. Presumably in response to the definitions put forth within the National Register program[38], the term "property" is used as the basic unit to which the **Standards** are applied. However, the implied western cultural bias associated with "property"[39] reinforces a narrow interpretation of the **Standards** and undermines applicability to more than architectural elements. The term "resource," owing in part to the resurgent environmental movement witnessed in the 1980s and into the current decade, suggests unlimited types and numbers of elements. The more inclusive and universal connotations associated with "resource" support its use within the **Standards**, in place of "property." This and other terms used throughout the **Standards** are defined in Appendix A.

Added to this basic modification is the deletion of specific references to buildings and related architectural elements throughout the eight general standards. Beginning with standard #1, which advocates continuation of historic uses or introduction of compatible uses, omitting the reference to buildings only allows the basic philosophy to apply to all resource types:

> **1. A resource shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the resource.**

Standard #2 refers to historic character--that which gives the resource its significance--as something worth identifying and protecting. However, the language used begins to define what might constitute character and, in doing

so, omits a range of features associated with other resource types, in particular designed historic landscapes. For example, while a designed historic landscape's character is defined by its materials, features and spaces, it is also identified by its natural systems and landform. Yet, literal interpretation of standard #2 fails to address these characteristics. By offering a more comprehensive list of generic resource components, standard #2 can be made more applicable to other resource types:

2. The historic character of a resource shall be retained and preserved. The removal of historic materials, finishes or features or the alteration of physical, visual or intrinsic associations which characterize a resource shall be avoided.

Quite often in preservation undertakings, there is an overwhelming attraction to that which is thought to be "historic;" such zeal can lead to blurring the distinction between what is historically part of a resource and what has been added to re-inforce or "improve" the resource. Standard #3 establishes the policy that a preservation undertaking does not create history; the language used, however, seems to limit that policy only to architectural elements. In application, standard #3 equally applies to designed historic landscapes--for just as one would be discouraged from removing stylistic features of one development period in favor of establishing a pristine earlier building type, one should be discouraged from introducing "historic" street furnishings within a later planned community. Therefore, standard #3 should be revised to more adequately address all resource types:

3. Each resource shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical

development, such as adding conjectural features from other resources, shall not be undertaken.

The belief that all resources are a product of time and that the effects of time are important in defining historic significance is appropriate to all resource types. Just as many development programs reflect the significant changes and characteristics of a particular building and/or architectural style, so too do the changes associated with the evolution of designed historic landscapes. Standard #4 which addresses this issue should be revised to include all resource types:

4. **Most resources change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.**

While standard #5 is intended to address the features of resources, the use of the term "craftsmanship"--most commonly associated with architectural elements--appears to narrow the applicability of the standard. Although other resource types may be said to be the product of distinctive craftsmanship or execution (e.g., structures such as bridges, objects such as monuments), designed historic landscapes are not readily associated with craftsmanship. Rather, landscapes are associated with overall visual quality and the character defining features which they contain or include. The formality of a parterre, interpretive nature of a botanic garden or pastoral setting of a golf course can all be the result of exceptional execution--or craftsmanship--of a particular trade, art or skill, but not be recognized as such by the average observer. Therefore, in order to lessen the indirect emphasis on architectural elements without deleting the issue of craftsmanship, standard #5 should be revised to better address all resource types:

5. **Distinctive features, finishes, construction techniques, craftsmanship and other physical, visual and intrinsic associations that characterize a historic resource shall be retained and preserved.**

Standard #6 attempts to formulate a policy for the preservation of a resource's distinctive features, but through listing of specific characteristics infers applicability to a limited set of resources. While distinctive features of buildings may be more easily recognized and/or identified by preservation professionals and non-professionals alike, features of designed historic landscapes are equally important and distinguishable. When dealing with designed historic landscapes and their associated features, each component and its respective design, color, texture, and other physical, visual and intrinsic qualities should be identified, retained and preserved. In addition, composition and associations of features (e.g., natural systems), can often be the most important factors worth noting; the language of the Standards does not acknowledge this possibility. As with all resource types, replacement of landscape features should occur only when deterioration is severe; conjectural features and/or elements from other designed historic landscapes should not be utilized if replacement is necessary. In order to better address these concerns, standard #6 should be revised:

6. **Deteriorated historic features, materials and finishes and physical, visual and intrinsic associations shall be repaired or reinforced rather than replaced. Where the severity of deterioration or degradation requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, composition, association and other physical, visual and intrinsic qualities.**

Replacement of missing elements shall be substantiated by documentary, physical, or pictorial evidence.

Unlike standards #1 through 6, standard #7 fails to readily convey a policy regarding a broad preservation issue. The language used focuses on a concern specific to buildings and building materials: cleaning of exterior surfaces. Although past transgressions in preservation projects may warrant a specific caution regarding the appropriate treatment of building materials, it is the larger issue of proper maintenance of all resources and the avoidance of deferred maintenance that must be clearly stated--rather than inferred. This standard should illustrate that other resource types also can be damaged by chemical or mechanical treatments as well as the lack of maintenance in general.

Materials, and entire features, of designed historic landscapes are susceptible to severe, yet often undetected, damage due to chemical and mechanical treatments. Use of herbicides, insecticides, road salts and petroleum products often have detrimental effects on biotic communities; mechanical treatments such as regrading of topography, resurfacing and/or replanting of base plane materials, and pruning/shearing of vegetation can adversely effect--even destroy--important landscape features. As in the case of building cleaning techniques, these activities may be intended as improvements but result in damage or loss of the resource. In addition, deferred maintenance can often lead to accelerated decline of vegetation, establishment of invasive plant or animal communities, or loss of slope/surface integrity. Therefore, rather than delete standard #7 because of its narrow focus, the language should be revised to give recognition to the inferred statement regarding maintenance of historic resources:

7. **Maintenance measures, whether short or long term, shall be undertaken using non-destructive and/or non-abrasive methods and shall respond to a comprehensive program, eliminating the potential for deferred maintenance. Chemical or mechanical treatments which cause damage to historic features, materials or finishes or to physical, visual or intrinsic associations shall not be used.**

As currently presented, standard #8 offers language which shows no bias towards architectural elements: its statement regarding the particular care due archeological artifacts is presented in a manner which applies equally to all undertakings involving any range of resource types, including designed historic landscapes. The general nature of this standard, taken in conjunction with the revisions presented for general standards #1 through 7, present the basic philosophies that should be applied in any historic preservation project.

Recommendations: Amendments and Modifications
Seven Treatments and Related Standards

The National Park Service identifies seven treatments which may be undertaken on properties listed in the National Register; specifically:

acquisition	rehabilitation
protection	restoration
stabilization	reconstruction
preservation	

Specific standards for each treatment are provided and are to be used in conjunction with the eight general standards (therefore, in each case the

specific standards begin with the number 9). The list of treatments does not indicate a prejudice towards any specific resource type nor does it appear incomplete--that is, in need of additional categories to adequately address additional treatments or resource types.[40] However, the definition for the treatments and the specific standards for each contain the same underlying emphasis on buildings and architectural elements found in the existing language of the **Standards**. Therefore, in order to reinforce the founding principle that the **Standards** are germain to all resource types, amendments and modifications are proposed for the seven specific treatments and corresponding standards.

Acquisition

> Acquisition: the act or process of acquiring fee title or interest other than fee title or real property (including acquisition of development rights or remainder interest).[41]

Standards for Acquisition

> 9. Careful consideration shall be given to the type and extent of property rights which are required to assure the preservation of the historic resource. The preservation objectives shall determine the exact property rights to be acquired.
>
> 10. Properties shall be acquired in fee simple when absolute ownership is required to insure their preservation.
>
> 11. The purchase of less-than-fee-simple interests, such as open space or facade easements, shall be undertaken when a limited interest achieves the preservation objective.
>
> 12. Every reasonable effort shall be made to acquire a sufficient property with the historic resource to protect its historical, archeological, architectural or cultural significance.[42]

The definition for acquisition is the description of a treatment which holds no bias or exclusionary language; in addition, of the standards developed for the seven specific treatments, only those statements relating to acquisition put forth general policies applicable to all resource types. The underlying

emphasis on buildings and architectural elements which is present in the general standards is absent here, with one minor exception. The importance of views to and from a resource is receiving increased attention as more extensive undertakings are proposed for cultural and historic resources. When the primary treatment is acquisition, careful consideration should be given to the subject resource's associated views and vistas, as these features are often important in defining the resource's historic character and significance. Therefore, both the definition and specific standard #10 for acquisition should be modified:

> **Acquisition: the act or process of acquiring fee title or interest other than fee title of real property (including acquisition of development rights, easements, view sheds or remainder interest).**
>
> **10. Resources shall be acquired in fee simple when absolute ownership is required to insure their preservation.**

Protection

> Protection: the act or process of applying measures designed to affect the physical condition of a property by defending or guarding it from deterioration, loss or attack, or to cover or shield the property from danger or injury. In the case of buildings and structures, such treatment is generally of a temporary nature and anticipates future historic preservation treatment; in the case of archeological sites, the protective measure may be temporary or permanent.[43]

Standards for Protection

> 9. Before applying protective measures which are generally of a temporary nature and imply future historic preservation work, an analysis of the actual or anticipated threats to the property shall be made.
>
> 10. Protection shall safeguard the physical condition or environment of a property or archeological site from further deterioration or damage caused by weather or other natural, animal, or human intrusions.

11. If any historic material or architectural features are removed, they shall be properly recorded and, if possible, stored for future study or reuse.[44]

Both the definition for protection and the three related standards display a particular emphasis towards buildings and architectural elements. Therefore, in order to convey a comprehensive message regarding the protection of all resource types, including designed historic landscapes, the definition should be amended first. Rather than add to the list of resource types found in the definition, all specific references should be deleted:

> **Protection: the act or process of applying measures designed to affect the physical condition of a resource by defending or guarding it from deterioration, loss or attack, or to cover or shield the resource from danger or injury. Such treatment is generally of a temporary nature and anticipates future historic preservation treatment.**

The language and structure of standard #9, while not hampered by an emphasis towards specific resource types, does fail to strongly favor complete, thorough analysis of threats to a resource; the standard should be modified to include such an emphasis:

> **9. Before applying protective measures which are generally of a temporary nature and imply future historic preservation work, a comprehensive analysis of the actual or anticipated threats, along with current and historic conditions, shall be made.**

Neither standard #10 nor 11 is of the same inclusive nature as standard #9. Standard #10 addresses protection of resources by guarding against certain processes or elements. The language utilized infers that natural, animal or human activities always are intrusive to historic resources. This inference

may not be true when the resource is a designed historic landscape. The original design intent of a planned community, estate or park may center on natural events or human activities (e.g., community population growth, maturation of vegetation, or seasonal enframement of a view or vista). In order to present a clear statement regarding detrimental processes and all resource types, standard #10 should be revised; specifically:

10. Protection shall safeguard the physical condition, immediate site or setting and/or environment of a resource from destructive or intrusive natural or human activities which cause deterioration or damage of the resource.

Standard #11, intended to address dismantling and temporary storage of all or a portion of a resource to achieve protection, appears specific to buildings. Although features of designed historic landscapes may not be readily seen as removable, the possibility does exist that specific features of these resources would be removed as part of a protection undertaking. Removal of landscape furnishings, vegetation or circulation (e.g., lighting, specimen plants, roadways) may be necessary to protect both the individual features and the entire resource. Similarly, individual features (e.g., beach, shoreline) may be removed temporarily as part of a larger preservation treatment (e.g., lake reclamation). Therefore, in order to convey the broad philosophy regarding the protection of all resources and their respective components through recordation and unavoidable removal, standard #11 should be revised:

11. If any historic features are to be removed, they shall be properly recorded prior to removal and, if possible, stored for future study, reuse and/or re-installation.

Stabilization

> Stabilization: the act or process of applying measures designed to re-establish a weather resistant enclosure and the structural stability of an unsafe or deteriorated property while maintaining the essential form as it exists at present.[45]

Standards for Stabilization

9. Stabilization shall re-establish the structural stability of a property through reinforcement of loadbearing members or by arresting deterioration leading to structural failure. Stabilization shall also re-establish weather resistant conditions for a property.

10. Stabilization shall be accomplished in such a manner that it detracts as little as possible from the property's appearance and significance. When reinforcement is required to re-establish structural stability, such work shall be concealed wherever possible so as not to intrude upon or detract from the aesthetic and historical or archeological quality of the property, except where concealment would result in the alteration or destruction of historically or archeologically significant material or spaces. Accurate documentation of stabilization procedures shall be kept and made available for future needs.

11. Stabilization work that will result in ground disturbance shall be preceded by sufficient archeological investigation to determine whether significant subsurface features or artifacts will be affected. Recovery, curation and documentation of archeological features and specimens shall be undertaken in accordance with appropriate professional methods and techniques.[46]

Inherent in the language used to define stabilization is an emphasis towards buildings and architectural elements. While many historic buildings, structures or objects do face destabilization from exposure to natural systems and processes, many other historic resources--designed historic landscapes, for example--may not need weather resistant enclosures to achieve stabilization. Indeed, the effects of weather may be the basis for the resource's significance. In addition, "structural" stability does not encompass all possible types of support systems which may be associated with a particular resource. For example, soil or slope stability may be more important issues when assessing stabilization of designed historic landscapes.

Therefore, the definition for stabilization should be modified to more appropriately describe stabilization as a treatment applied to any resource:

Stabilization: the act or process of applying measures designed to remove or prevent debilitating activities and re-establish stability of an unsafe or deteriorated resource while maintaining the resource's essential historic character as exists at present.

Examination of standard #9 yields a similar narrow view of that which can be stabilized and the methods which can be used. Revisions should be employed to encompass a greater range of potential stabilization measures responsive to the needs of all resource types:

9. **Stabilization shall re-establish stability of a resource through reinforcement of existing support systems or by arresting deterioration, damage or intervention leading to failure.**

Standard #10 shows an underlying prejudice towards particular resource by making specific references or citing resource components. Language which avoids such categorization allows the basic philosophy to be more readily identified and applied to a specific undertaking:

10. **Stabilization shall be accomplished in such a manner that it detracts as little as possible from the resource's historic character and significance. When reinforcement is required to re-establish stability, such work shall be concealed wherever possible so as not to intrude upon or detract from the historic character or significance of the resource, except where concealment would result in the alteration or destruction of resource features.**

Comprehensive documentation of stabilization procedures shall be made part of the resource's historic record.

Unlike standards #9 and 10, standard #11 provides a clear, general policy for stabilization activities involving all resources and requires no modifications or amendments.

Preservation

> Preservation: the act or process of applying measures to sustain the existing form, integrity and material of a building or structure, and the existing form and vegetative cover of a site. It may include initial stabilization work, where necessary, as well as ongoing maintenance of the historic building materials.[47]

Standards for Preservation

9. Preservation shall maintain the existing form, integrity,and materials of a building, structure, or site. Archeological sites shall be preserved undisturbed whenever feasible and practical. Substantial reconstruction or restoration of lost features generally are not included in a preservation undertaking.

10. Preservation shall include techniques of arresting or retarding the deterioration of a property through a program of ongoing maintenance.

11. Use of destructive techniques, such as archeological excavation, shall be limited to providing sufficient information for research, interpretation and management needs.[48]

Perhaps the most obvious emphasis towards buildings and architectural elements is present in the definition for preservation. The language employed strongly implies that only buildings and structures can possess integrity and materials, and that sites have only qualities of form and vegetative cover. Sites, whether part of a resource (e.g., the setting for a building, structure or object) or resources themselves (e.g., designed historic landscapes), can possess integrity of location, design, setting, materials, workmanship, feeling and association.[49] In addition, the character defining features of

sites, and all historic resource types, are equally important elements worth recognizing and preserving; on-going maintenance of materials and features may be part of a range of preservation treatments. The exclusive nature of this definition should be altered to convey a more inclusive description of preservation activities.

> **Preservation: the act or process of applying measures to sustain existing integrity of a resource. Preservation may include initial stabilization work, where necessary, as well as ongoing maintenance of a resource.**

Of the three preservation standards, only the first contains a bias towards buildings and related architectural elements. In addition, standard #9 identifies those elements which should be maintained--however, this list fails to enumerate those qualities of integrity already defined by the NPS as being necessary to convey a resource's significance. Therefore, by both referencing "resources" rather than buildings and by listing the NPS-defined types of integrity, the standard becomes applicable to all resources:

> **9. Preservation shall maintain the existing physical, visual and intrinsic qualities which define the resource's extant location, design, setting, materials, workmanship, feeling and association. All resources, in particular archeological sites, shall be preserved undisturbed whenever feasible and practical. Substantial reconstruction or restoration of lost features or properties are not included in a preservation undertaking.**

Both standard #10 and 11 convey broad policy regarding the relationship of the preservation of resources to maintenance activities; these standards show no

apparent emphasis towards architectural elements but should be modified to include "resource:"

10. **Preservation shall include techniques of arresting or retarding deterioration of a resource through a program of on-going maintenance.**

11. **Use of destructive or abrasive techniques, methods or materials to achieve preservation of a resource, such as archeological excavation, shall be limited to providing sufficient information for research, interpretation and management needs.**

Rehabilitation

> Rehabilitation: the act or process of returning a property to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those portions of features of the property which are significant to its historical, architectural and cultural values.[50]

Standards for Rehabilitation

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.[51]

Although the definition for this treatment does not focus on buildings and architectural elements, there is an inconsistency in referring to a resource's significance. Elsewhere in the **Standards** significance is related to a host of contexts[52]; the definition for rehabilitation should be modified to remove a

focus on particular types or constexts of significance and, therefore, remove any inferred bias towards specific resources:

> **Rehabilitation: the act or process of returning a resource to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those features which are important in defining the resource's historic significance.**

The most recent revisions to the eight general standards included modifications to the rehabilitation standards. However, the current language continues to show an indirect emphasis on architectural elements. In standard #9, the use of "new additions, exterior additions. . . .(and)architectural features" inferrs building appendages alone. Although not readily associated with the term "additions," expanded surface parking lots, enlarged stadium seating and extended circulation systems can all be "additions" to a designed historic landscape. Further, not only should rehabilitation stress compatibility of size and scale, but also that of composition and association. Standard #9 should be amended to reflect these issues:

> 9. **New additions, alterations or related new construction shall not destroy features which define the resource's historic character. The new work shall be differentiated from the old and shall be compatible with the size, scale, composition and association of the resource's features, overall historic character, and general and immediate environment.**

It is important to note that there is an inherent difficulty in the interpretation of standard #9 in relation to biotic features of historic resources. Although a good faith effort can be made to provide a visual

distinction between old and new "living" features (e.g., natural systems features, landform, vegetation) at the time of installation or construction, both natural physical and time processes ultimately will alter these elements --blurring any distinguishing characteristics between original features and new additions. For example, growth of newly installed plant material will lead to mature vegetation that would be undistinguishable from original/older plantings, or fill provided for re-grading will be unidentifiable after finished surface treatment. Therefore, because biotic features are not static and can not be made discernable from the original resource features indefinitely, the distinction between old and new shall need to be accomplished other than in material alone (i.e., through design, construction or installation techniques, interpretation).

Standard #10 focuses on the effect of future removal of new additions or construction; form and integrity are cited as the two issues of concern. As stated earlier in this document, this reference to integrity should be amended to reflect the extent of the NPS-definition for this term:

> **10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the resource's existing integrity of location, design, setting, materials, workmanship, feeling and association would be unimpaired.**

Restoration

> Restoration: the act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time by means of the removal of later work or by the replacement of missing earlier work.[53]

Standards for Restoration

9. Every reasonable effort shall be made to use a property for its originally intended purpose or to provide a compatible use that will require minimum alteration to the property and its environment.

10. Reinforcement required for structural stability or the installation of protective or code required mechanical systems shall be concealed wherever possible so as not to intrude or detract from the property's aesthetic and historical qualities, except where concealment would result in the alteration or destruction of historically significant materials or spaces.

11. Restoration work such as the demolition of non-contributing additions that will result in ground or structural disturbance shall be preceeded by sufficient archeological investigation to determine whether significant subsurface or structural features or artifacts will be affected. Recovery, curation and documentation of archeological features and specimens shall be undertaken in accordance with appropriate professional methods.[54]

Because restoration is tied directly to an identified time period, the definition for this treatment fails to address the changes effected over time inherent in biotic features and, therefore, the implications that removal or replacement can have on some historic resources, especially designed historic landscapes. For example, when a designed historic landscape is part of a larger resource which has a narrow period of significance (e.g., a district with a +/- 30 year period of significance), the potential exists for the character of mature vegetation within the landscape resource to represent a much longer continuum (e.g., +/-100 years for mature shade trees)--suggesting that the extant landscape falls beyond the period of significance. Restoration of the larger resource, therefore, would call for recovering the form and details of the district by removing and replacing the mature vegetation within the landscape. Similarly, if a particular cultivar or species of vegetation, originally used in a designed historic landscape, was no longer available due to environmental conditions, restoration of the landscape would not be possible. In both these examples, the non-static nature of biotic resources suggests that restoration of designed historic landscapes is not possible. However, it should be noted that many (arguably all) designed landscapes were created with the knowledge of and interest in

the changing nature of biotic resources; and, it is the intent of the original design as applied to biotic features that is important to identify and restore. Therefore, the definition for restoration should be amended to allow applicability to all resource types, in particular those in which biotic features are critical to the resource's historic character and significance:

> **Restoration: the act or process of accurately recovering the form and details of a resource and its environment as it appeared at a particular period of time or as intended by its original design. Such treatment can be achieved by removal of elements outside of the period of significance or no longer existing as intended by original design; or by the replacement in-kind of missing or altered features from the period of significance or central to the original executed design.**

Of the three restoration standards, only standard #9 provides a clear, non-biased policy regarding restoration; minor modification is required to include the use of "resource:"

> 9. **Every reasonable effort shall be made to use a resource for its originally intended purpose or to provide a compatible use that will require minimum alteration to the resource and its environment.**

Standard 10, addressing structural stabilization and code compliance, applies to selective resources, most notably buildings; the language utilized implies that only architectural-related structural support systems or building mechanical systems are likely to be affected. As discussed earlier in this document, other stabilizing methods are equally important and can impact the effectiveness of a restoration activity. Therefore, standard #10 should be

revised to identify other possible required activities which can effect restoration treatments:

> 10. **Required reinforcement of support systems or the installation of code compliance elements shall be concealed wherever possible so as not to intrude or detract from a resource's historic character, except where concealment would result in the alteration or destruction of all or part of a resource.**

Although the primary focus of standard #11 is the impact of restoration on archeological elements, the example of treatment activities which may occur limits the standard's applicability. The standard should be modified to remove this restrictive language:

> 11. **Any restoration work that will result in ground disturbance shall be preceded by sufficient archeological investigation to determine whether any significant features or artifacts will be affected. Recovery, curation and documentation of archeological features and artifacts shall be undertaken in accordance with appropriate professional methods and techniques.**

Reconstruction

> Reconstruction: the act or process of reproducing by new construction the exact form and detail of a vanished building, structure, or object, or any part thereof, as it appeared at a specific period of time.[55]

Standards for Reconstruction

> 9. Reconstruction of part or all of a property shall be undertaken only when such work is essential to reproduce a significant missing feature in a historic district or scene, and when a contemporary design solution is not acceptable. Reconstruction of archeological sites generally is not appropriate.

10. Reconstruction of all or a part of a historic property shall be appropriate when the reconstruction is essential for understanding and interpreting the value of a historic district, or when no other building, structure, object or landscape feature with the same associative value has survived and sufficient historical or archeological documentation exists to insure an accurate reproduction of the original.

11. The reproduction of missing elements accomplished with new materials shall duplicate the composition, design, color, texture, and other visual qualities of the missing element. Reconstruction of missing architectural or archeological features shall be based upon accurate duplication of original features substantiated by physical or documentary evidence rather than upon conjectural designs or the availability of different architectural features from other buildings.

12. Reconstruction of a building or structure on an original site shall be preceded by a thorough archeological investigation to locate and identify all subsurface features and artifacts. Recovery, curation and documentation of archeological features and specimens shall be undertaken in accordance with professional methods and techniques.

13. Reconstruction shall include measures to preserve any remaining original fabric, including foundations, subsurface, and ancillary elements. The reconstruction of missing elements and features shall be done in such a manner that the essential form and integrity of the original surviving features are unimpaired.[56]

By listing only certain resource types within this definition, it appears as though other resources, such as designed historic landscapes, cannot undergo reconstruction. In addition, to limit reconstruction to "new construction"--implying the act of building--the definition fails to address methods available to recreate a wide variety of resource features. For example, both reclamation and replanting are activities which would be employed to aid in reconstructing a designed historic landscape. Further, this definition fails to address the non-static nature of biotic features, as discussed previously in this document: both a particular period of significance and the original design intent of a resource should be considered when approaching a reconstruction activity. Therefore, the definition for reconstruction should be modified to describe a more comprehensive approach to such undertakings:

Reconstruction: the act or process of reproducing by new construction, installation or reclamation the exact form and detail of a non-extant historic resource, or any part thereof, as it appeared at a specific period of time or as intended by its original executed design.

As with the other specific standards, the five reconstruction standards place an emphasis on specific resource types and, therefore, particular methods of reconstruction. Standards #9 and 10 are incongruous with the existing NPS-definition for reconstruction. The definition does not limit reconstruction to elements within a district or scene, but both standards do impose such a restriction. The exclusive nature of these two standards should be removed by using broader terminology:

9. **Reconstruction of all or part of a historic resource shall be undertaken only when such work is essential to reproduce a significant missing feature of the resource, and when a contemporary design solution is not acceptable. Reconstruction of archeological sites generally is not appropriate.**

10. **Reconstruction of all or part of a historic resource shall be appropriate when the reconstruction is essential for interpreting the value of the resource, or when no other historic resource with the same associative value has survived and sufficient documentation exists to insure an accurate reproduction of the original.**

Standard #11 discusses the use of new, rather than original or in-kind, materials during reconstruction of a resource, but does not adequately recognize all resource types and their individual features. Revised language

should remove any references to specific resource types, allowing broader applicability of the basic philosophy intended by standard #11:

> **11. The reproduction of a resource's missing features, or an entire resource, accomplished with new materials or associations shall duplicate the visual and physical qualities of the missing feature or entire resource. Reconstruction shall be based upon accurate duplication of original resource features, or the entire resource, substantiated by physical or documentary evidence rather than upon conjectural designs or the availability of similar features from other resources.**

The emphasis on the protection of archeological elements during reconstruction activities conveyed in standard #12 appears limited to reconstruction of buildings or structures. This inference fails to warn of the potential adverse impacts that reconstruction of a designed historic landscape also can have on archeological elements. Reconstruction of a lost circulation system, replanting of a missing garden or re-installation of a water feature can greatly disturb archeological elements, particularly if current contemporary technologies are used in an insensitive or haphazard manner. In order to broaden the policy so that it adequately addresses a wider range of potential reconstruction activities and their relationship to archeological elements, standard #12 should be revised:

> **12. Reconstruction of an entire resource, or portion thereof, on an original location shall be preceeded by a thorough archeological investigation to locate and identify all subsurface features and artifacts. Recovery, curation and documentation of archeological**

features and artifacts shall be undertaken in accordance with professional methods and techniques.

A weak reference to buildings and related architectural features clouds the message standard #13 imparts regarding the interface of original and reconstructed features. By listing only foundations, subsurface and ancillary elements, a wide range of other resource features are not accounted for. In addition, the specific listing fails to include or even infer the need to protect the integrity of historic biotic associations or individual features. Standard #13 should be amended to indicate a broader variety of original features to be considered during reconstruction:

13. **Reconstruction shall include measures to preserve any remaining original feature of a historic resource and its greater and immediate environmental setting. The reconstruction of missing features, or an entire resource, shall be done in such a manner that the integrity of the original surviving resource features, or associated other resources, is unimpaired.**

A cursory review of the **Standards** implies broad based policies regarding the treatment of all historic resources. Upon closer examination, however, bias towards particular resource types, inconsistency in language and the use of selective examples combine to diminish the apparent applicability and effectiveness of the **Standards.**

The preceeding examination of both the general and specific standards points out those statements which fail to adequately address all historic resource types and parts thereof; and, in particular, examines the effectiveness of the

Standards in addressing designed historic landscapes--leading to the suggested amendments and modifications. These revisions are based on a number of fundamental issues:

> Any reference to resources affected by or subject to the **Standards** should be accomplished by the use of the broadest, all-inclusive terminology--that is, as a "historic resource."
>
> Any reference to a particular historic resource type should be eliminated in order to clearly convey the intended general preservation philosophy or policy.
>
> Any reference to the parts or sub-parts of a historic resource should be comprehensive, thereby acknowledging that all physical, visual and intrinsic qualities of all resources are equally important in defining historic character and significance.
>
> Any reference to a resource's historic character and significance should be comprehensive, acknowledging all potential physical, visual and intrinsic ramifications of, from or by a particular context of significance.

In addition, the clarity of the message (as described in the stated purposes of the **Secretary of the Interior's Standards for Archeology and Historic Preservation**), would be best served by a consistency of terms, phrases, definitions and sentence structure employed throughout the **Standards.** The proposed revisions, presented in their entirety as Appendix B, emphasize and strengthen the overall importance of the **Standards.** This analysis of the underlying philosophy for the treatment of historic resources serves as a prelude to the examination of the additional technical assistance provided by the guidelines which accompany the **Standards.**

THE USDOI GUIDELINES FOR HISTORIC PRESERVATION PROJECTS

The Philosophy

While the **Standards for Historic Preservation Projects** are codified as program requirements pursuant to the National Historic Preservation Act of 1966 and set the broad philosophical base for the physical treatment of all resources, the companion **Guidelines** provide specific supportive technical assistance and respond directly to each of the seven special treatments. The **Guidelines** provide a comparative view of both appropriate and inappropriate approaches, treatments and techniques both in text and document format.

As with the **Standards**, the **Guidelines**, although originally intended to apply to all resource types, were written utilizing language and terminology which suggest an emphasis on buildings and related architectural elements. As presented earlier, with the advent of the IRS-administered rehabilitation tax credit programs begun in the 1970s, the then-existing **Guidelines** proved inadequate to effectively address the diverse rehabilitation projects occurring across the nation. In 1981, the NPS, in an attempt to facilitate reviews of these projects, expanded the original guidelines for rehabilitation treatments and titled the document the "Guidelines for Rehabilitating Historic Buildings" (GRHB). Since that time, the GRHB have been amended and/or modified reflecting changes in technology, understanding of historic methods and materials, and introduction of new products. It should be noted that at that time no attempt was made by the NPS to either further develop the existing guidelines for each of the other six treatments or to develop complimentary rehabilitation guidelines pertaining to other specific resource types. Over time, however, individuals and organizations, as well as the NPS,

have generated such documents.[57] In most cases, the original general purpose and organizational framework of the **Guidelines** and the GRHB serve as model for these--and future--documents.

Examination of the GRHB shows that these guidelines pertain to all historic buildings, their interiors and exteriors, regardless of size, materials, occupancy and construction type.[58] Because the treatment "rehabilitation" assumes that some repair or alteration is necessary to accommodate a contemporary use and that such work must not damage or destroy a resource's historic character or significance, the GRHB establish an evaluation process for all proposed historic building rehabilitations which addresses these concerns. The process focuses on the resource and its features, materials and finishes which contribute to its historic character and significance; the evaluation also considers the impact of the work proposed to accommodate a new contemporary use. This evaluation process can be defined as sequential. The first step involves identifying, retaining and preserving those features important to the historic character and significance of the resource and likely to be affected by a proposed undertaking. Having identified such elements, the process next calls for defining methods to protect and maintain them as part of the overall rehabilitation. If the evaluation process indicates a need for more extensive treatment, first repair and then replacement are recommended as part of the undertaking. The evaluation process concludes by offering specific advice regarding the design of missing features and additions or alterations to accommodate a new use.

The adaptive re-use of historic buildings--and all historic resources--implies an inherent requirement to "impose" upon the involved historic resource. Such potential imposition warrants the pointed guidance offered within the GRHB.

Applicability to Designed Historic Landscapes

The hierarchical evaluation process established in the GRHB provides a clear outline of those steps necessary to undertake the sensitive and sympathetic rehabilitation of a historic building. Moreover, the process is based on a sound analytical procedure which begins with identification and continues through a sequence of work methods ranging from the most limited/least intrusive to the most extensive or involved. Building resources are dissected into discreet parts and sub-parts recognized by architectural theorists and practitioners: building exterior, building interior, building site, district/neighborhood, health and safety code requirements, energy retrofitting and new additions.[59] Specific guidance is offered for each category and sub-category; both appropriate and inappropriate treatments are presented under the headings of "recommended" and "not recommended." The organization of the material--with appropriate technical advice juxtaposed to inappropriate work scopes in a vertical, two column format--allows for quick comparisons and easy reference.

Both the philosophy behind the process and its organizational format make the GRHB an acceptable model for developing guidelines for the rehabilitation of other resource types. Therefore, by utilizing this existing document, guidelines for the rehabilitation of designed historic landscapes can be created.

Recommendations: Guidelines for the Rehabilitation of Designed Historic Landscapes

The primary technical advice provided in guidelines for the rehabilitation of designed historic landscapes lies in identifying, retaining and preserving

those features which define the historic character of the resource or contribute to its historic significance. Identification encompasses the type, location, design, composition and condition of individual features, materials, finishes and associations. Once identified, these elements must be retained--for the cumulative effect of a series of removals or insensitive modifications is the diminution of the resource's historic character and significance. It is inherent in retaining these elements, then, that measures must be applied to sustain their extant integrity, that is they must be preserved.

Having identified a resource's elements and committed to their retention and preservation, further technical guidance addresses specific measures necessary for protecting and maintaining them. Protection involves the limited treatment of a resource, often temporary in nature and as a prelude to a more involved scope of work. Protective measures include comprehensive analysis of actual and anticipated threats, safeguarding from destructive activities, and, removal of resources or their features for study and re-use.

While protection centers on stop-gap measures, maintenance involves both routine and extended treatment of a resource. These measures include daily, seasonal and cyclical tasks and are based on established professional technology, methods and materials. The result of comprehensive proper maintenance insures that the features, materials, finishes and associations of a designed historic landscape--and therefore its historic character and significance--can be retained and preserved.

When protection and proper, preventative maintenance of a resource fails to adequately accommodate a proposed contemporary use, more extensive guidance is provided which suggests repair or reclamation be undertaken. Repair or reclamation, the physical improvement or recovery of a resource, always begins

with the methods involving the least degree of intervention. Methods such as consolidation or reinforcement of extant features, materials, finishes and associations are solutions which enhance a resource's physical condition with minimal intervention. More extensive repair or reclamation methods involve limited in-kind replacement, where the majority of the extant feature is retained. All repair or reclamation guidance responds to established professional techniques.

If in evaluating the physical condition of a resource, the degree of damage or deterioration is so extensive as to preclude repair or reclamation, guidance is offered regarding complete replacement of an entire feature. Replacement always begins with methods which have the least degree of intervention. In a replacement activity, such a method calls for in-kind replacement of the entire feature--that is, in-kind in terms of overall design, detail, material, finish and association. More extensive replacement methods involve replacement of a feature with one of new detail, material or finish as long as the essential overall design and associations of the original feature or element are still evident. It should be noted that not all features of designed historic landscapes can be considered the subject of replacement activities. No matter how severe the degree of deterioration or damage, natural systems, landform and other biotic features should never be completely removed and replaced. Rather, these features or elements should be affected by intensive reclamation efforts.

As with the GRHB, guidelines for the rehabilitation of designed historic landscapes offer technical assistance via the evaluation process outlined above and in reference to parts and sub-parts which constitute such resources. Specifically:

Environment/District/Neighborhood: the larger physical and visual setting which contains or encompasses a designed historic landscape; the context beyond a resource's historic and current legal property limits.

Landscape site/setting: the most immediate physical and visual context for a designed historic landscape, with site relating to a resource's current legal property limits and setting to its historic property limits.

Natural systems: the geologic, hydrologic, ecologic and weather systems (and their individual features) which characterized the site prior to the execution of the original design and the designer's executed response to these elements.

Landform: the inextractable framework of a designed historic landscape; the three dimensional configuration of the earth surface characterized by features (ground slope, configuration of contours and visual forms) and orientation (elevation and solar aspect).

Vegetation: the most commonly used material in creating landscape features, whether idigenous or introduced; including individual and associated trees, shrubs and herbaceous material.

Spatial relationships: the structure or order of a designed historic landscape; the three dimensional organization of physical and visual associations as executed from the original design intent.

Landscape features: those systems or features within a designed historic landscape which, through the original executed design, respond directly to environment, site/setting, natural systems, landform and spatial relationships.

> Circulation systems: the spaces, features and applied material finishes which constitute the movement systems of a designed historic landscape.
>
> Mechanical systems: the features and materials which combine to provide utility service to a designed historic landscape.
>
> Site engineering support systems: the systems and individual features which provide a physically stabilizing factor to all or a portion of a landscape; the landscape equivalent of a building's structural system.
>
> Water features: the designed features and elements which utilize water to create thematic or aesthetic elements within a designed historic landscape.
>
> Buildings and structures: those elements built primarily for sheltering human activity (buildings) and those built for functions other than human shelter (structures).
>
> Furnishings and objects: those elements within a designed landscape which provide detail and diversity while addressing functional needs (furnishings) and aesthetic concerns (objects).

The evaluation process and specific technical guidance for rehabilitating designed historic landscapes responds to each of these categories, presenting both recommended (appropriate) and not recommended (inappropriate) approaches, treatments and techniques. In addition, a particular phase of rehabilitation work may be addressed in guidelines provided for more than one category. For example, guidance regarding the treatment of a water feature obviously falls under "Landscape features: water features;" however, additional assistance also can be obtained from "Natural systems" since that section addresses natural hydrologic systems--often the basis of a designed water feature. Similarly, some work items--primarily those involving buildings and structures--should be evaluated according to both the GRHB and the guidelines specific to designed historic landscapes. There is no need to duplicate or supplant the guidance provided in the GRHB; rather there is a desire to reference existing, sound technical preservation advice where appropriate.

The "Guidelines for Rehabilitating Designed Historic Landscapes" which appear on the following pages are to be used in conjunction with the **Standards for Historic Preservation Projects** (as revised in this document). Together the **Standards** and the Guidelines provide a sound philosophical base and specific technical advice for the appropriate rehabilitation of designed historic landscapes.

ENVIRONMENT/DISTRICT/NEIGHBORHOOD

The relationship between a designed historic landscape and other resources or features within a historic district, neighborhood or greater environmental setting--that is, beyond its current and historic legal property limits--helps to define the historic character of the landscape resource. Placing a designed historic landscape within the larger visual and physical context always should be part of the rehabilitation plans. Thus, the identification, retention and preservation of features of a resource's environment, district or neighborhood which contribute to its historic character and significance should be a consideration in any rehabilitation project.

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining and preserving features which are important in defining the overall historic character of a designed historic landscape's environment, district or neighborhood. Such features can include natural systems, landform, vegetation, spatial relationships, land use and built forms.	Removing or radically changing those features of the environment, district or neighborhood which are important in defining the overall historic character of the designed historic landscape and its larger physical context so that, as a result, the historic character is diminished.
Identifying the features which are important in defining the overall historic character of a designed historic landscape's environment, district or neighborhood through comprehensive documentation of historic and existing conditions, such as found in a Historic Landscape Report, Environmental Impact Statement or Master Plan.	Failing to adequately compile a comprehensive record of historic and existing conditions prior to rehabilitation work beginning.
Retaining and preserving the historic relationship between the designed historic landscape and its larger environment, district or neighborhood context such as the relationship of a town green to abutting streets and surrounding buildings; industrial grounds to contiguous rail or water ways; or rustic camps to surrounding wilderness.	Destroying relationships between a designed historic landscape and its larger physical context by radically changing land use patterns, development density or natural systems' processes. For example, rezoning a community; increasing FAR ratios within an area; or diverting a waterway.
	Destroying relationships between a designed historic landscape and its larger physical context by even minor or limited changes in physical forms, materials, finishes or associations. For example, constructing obtrusive elements within a view or vista; changing paving materials of access routes to landscape resources; or re-orienting an approach to a designed landscape

	from an original main access to a secondary or tertiary one.
	Removing or relocating features and/or materials of the environment, district or neighborhood which destroys the historic relationship between the designed historic landscape and its larger physical context, such as relocating an entrance ramp to a parkway; removing one/all buildings surrounding a plaza; prohibiting water access at a water side resort.
Protecting and maintaining the features which contribute to the historic character of a designed historic landscape's larger physical context through effective legislation and legal mechanisms, such as land use controls; property easements; or deed restrictions.	Failing to provide adequate protection of the features of a designed historic landscape's larger physical context through less than comprehensive legislative or legal actions, such as spot zoning or takings for ROWs.
Protecting features of the resource's larger physical context from destructive activities such as deterioration or vandalism. For, example, installing security systems; controlling vehicular and/ or pedestrian traffic; or utilizing anti-siltation devices in waterways.	Employing protective measures which are not comprehensive in nature, such as limiting rather than prohibiting access.
	Employing measures intended to protect the designed historic landscape but which adversely effect significant features of the resource's larger physical context.
Protecting features of the resource's larger physical context by temporarily removing them in anticipation of rehabilitation work and re-installing or re-using them following the completion of or included in the undertaking. For example, removing structures or objects, paving materials or specimen plants.	Removing significant features in an inappropriate or destructive manner so as to preclude re-installation or re-use.
	Relocating features to an inappropriate setting within the resource's larger physical context, such as relocating historic light standards to previously non-illuminated spaces.
	Re-installing or re-using features in an inappropriate manner, such as re-orienting historic directional signage to accommodate a non-historic route.
Maintaining the features of the resource's larger physical context by use of non-destructive or non-abrasive methods and/or materials	Failing to undertake preventative maintenance of the features of the resource's larger physical context.

in daily, seasonal and cyclical tasks.

Utilizing maintenance methods and/or materials which destroy or obscure the features of the resource's larger physical context, such as shearing plant material or excessive use of road salts.

Evaluating the overall condition of the features of a resource's larger physical context to determine whether more than protection and maintenance are required, that is, if repairs will be necessary.

Failing to identify those features which require more extensive treatment than protection and maintenance.

Repairing features of the resource's larger physical context by reinforcing historic materials and relationships. Limited in-kind replacement, such as in-kind replacement of a timber guardrail, constitutes repair when the replacement is predicated by extensive deterioration or damage and the feature is a significant prototype or sole survivor. Repair also may include limited replacement utilizing a compatible material or relationship when existing conditions prohibit retention of historic fabric and limited in-kind replacement is not technically or economically feasible.

Replacing an entire significant feature of the resource's larger physical context when repair and/or limited in-kind replacement is possible.

Utilizing a substitute material for limited replacement when the new material fails to convey the same visual characteristics as the historic material.

Replacing in-kind an entire feature of the resource's larger physical context that is too deteriorated or damaged to repair, when the overall form, detail and associations still are evident--and the physical evidence is used to guide the new work. Compatible materials or associations may be utilized if the historic materials and associations are not technically or economically feasible.

Replacing a feature of the resource's larger physical context that is not beyond repair.

Replacing a feature of the resource's larger physical context with a new feature that does not convey the same visual characteristics as the historic feature.

Removing an entire feature of the resource's larger physical context that is beyond repair and not replacing it.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the concerns listed above have been addressed.

Design for Missing Features

Designing and constructing a new feature in the resource's larger

Creating a false historic appearance by constructing, through

physical context when the historic feature is completely missing, such as a building on a town square or a boat dock at a waterfront resort. The new feature may be an accurate reconstruction based on historical, pictorial or physical documentation, or should be a new design which is compatible with the significant historic features and character of the resource's larger physical context.

the use of original historic plans and specifications, a feature that was planned/designed but never built.

Introducing a new feature, in place of a missing historic feature, that is not compatible with the historic character of the resource's larger physical context.

Preparing comprehensive written and graphic documentation of the new design feature as a means of adding to the historic record of the designed historic landscape.

Failing to provide an adequate, accurate record of the new design.

Alterations/Additions for the New Use

Removing non-contributing features within the resource's larger physical context which detract from the historic character of the environment, district or neighborhood, such as changing zoning to reverse land us trends which are not compatible with the historic resource or its larger physical context.

Removing historic features from the resource's environment, district or neighborhood which contribute to the resource's historic character.

Removing existing non-contributing, but non-obtrusive features from the larger physical context and replacing them with new elements which detract from the historic character.

Designing and constructing new additions to the environment, district or neighborhood required to support the new use; such additions should be compatible with the historic character of the designed historic landscape and its larger physical context. Particular attention should be given to scale, form, design, materials, texture and color of the new addition.

Introducing new additions within the resource's larger physical context which replace or radically alter historic features and, therefore, diminish the overall character of the environment, district or neighborhood.

Introducing new features within the resource's larger physical context are not visually and/or physically compatible with the historic character of the environment, district or neighborhood.

Preparing comprehensive written and graphic documentation of the new addition as a means of adding to the historic record of the designed historic landscape.

Failing to provide an adequate, accurate record of the new addition.

LANDSCAPE SITE/SETTING

The relationship between a designed historic landscape and other features or elements within its current (site) and historic (setting) property limits helps to define the historic character of the landscape resource. Placing a designed historic landscape within the immediate visual and physical context always should be part of the rehabilitation plans. Thus, the identification, retention and preservation of the features and associations of the resource's site and setting which contribute to its historic character and significance should be a consideration in any rehabilitation project.

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining and preserving features which are important in defining the overall historic character of a designed historic landscape's current and historic property limits. Such features can include natural systems, landform, vegetation, spatial relationships, land use and built forms.	Removing or radically changing those features of the site or setting which are important in defining the overall historic character of the designed historic landscape and its immediate physical context so that, as a result, the historic character is diminished.
Identifying the features which are important in defining the overall historic character of a designed historic landscape's site or setting through comprehensive documentation of historic and existing conditions, such as found in a Historic Landscape Report, Environmental Impact Statement or Master Plan.	Failing to adequately compile a comprehensive record of historic and existing conditions prior to rehabilitation work beginning.
Retaining and preserving the historic relationship between the designed historic landscape and its immediate site or setting context such as the relationship of a golf course to a clubhouse or bridal trails to a farmstead.	Destroying relationships between a designed historic landscape and its immediate physical context by radically changing site use, property density or natural systems' processes and features such as converting memorial grounds into active recreation areas or creating high building density through infill construction on a historically low density site.
	Destroying relationships between a designed historic landscape and its immediate physical context by even minor or limited changes to features, materials or associations, such as modifying vehicular access; installing fencing; or obscuring views or vistas.
	Removing or relocating features and/or materials of the site or setting which destroy the historic relationship between the designed

	historic landscape and its immediate physical context, such as removing support facilities or relocating property entries/exits.
Protecting and maintaining the features which contribute to the historic character of a designed historic landscape's immediate physical context through effective legislation and legal mechanisms, such as land use controls; property easements; or deed restrictions.	Failing to provide adequate protection of the features of a designed historic landscape's immediate physical context through less than comprehensive legislation or legal actions, such as spot zoning, incompatible variances or provisions for ROWs.
Protecting features of the resource's immediate physical context from destructive activities such as deterioration or vandalism. For example, installing security systems; controlling vehicular and/or pedestrian traffic; or utilizing anti-siltation devices in waterways.	Employing protective measures which are not comprehensive in nature, such as limiting rather than prohibiting access.
	Employing measures intended to protect the designed historic landscape, but which adversely effect features of the resource's immediate physical context. For example, planning and designing temporary construction routes which protect the resource, but negatively affect the surrounding site or setting.
Protecting features of the resource's immediate physical context by temporarily removing them in anticipation of rehabilitation work and re-installing or re-using them following the completion of or included in the undertaking. For example, removing structures or objects, paving materials or individual plants.	Removing features in an inappropriate or destructive manner so as to preclude re-installation or re-use.
	Relocating features to an inappropriate place or position within the resource's immediate physical context, such as relocating a fountain, from its basin or pool to a non-water based feature.
	Re-installing or re-using features in an inappropriate manner, such as re-orienting historic directional signage to accommodate a non-historic route.
Maintaining the features of the resource's immediate physical context by use of non-destructive or non-abrasive methods and/or materials in daily, seasonal and cyclical tasks.	Failing to undertake preventative maintenance of the features of the resource's immediate physical context.
	Utilizing maintenance methods and/or materials which destroy or obscure the features of the resource's immediate physical context, such as shearing of plant material or excessive use of road salts.

Evaluating the overall condition of the features of a resource's immediate physical context to determine whether more than protection and maintenance are required, that is, if repairs will be necessary.

Failing to identify those features which require more extensive treatment than protection and maintenance.

Repairing features of the resource's immediate physical context by reinforcing historic materials and relationships. Limited in-kind replacement, such as in-kind replacement of one shrub in a hedge, constitutes repair when the replacement is predicated by extensive deterioration or damage and the feature is a significant prototype or sole survivor. Repair also may include limited replacement utilizing a compatible material or association when existing conditions prohibit retention of historic fabric and limited in-kind replacement is **not technically or economically** feasible.

Replacing an entire feature of the resource's immediate physical context when repair and/or limited in-kind replacement is possible.

Utilizing a substitute material for limited replacement when the new material fails to convey the same characteristics as the historic material.

Replacing in-kind an entire feature of the resource's immediate physical context that is too deteriorated or damaged to repair, when the overall form, detail and associations still are evident--and the physical evidence is used to guide the new work. Compatible materials or associations may be utilized if the historic materials and associations are not technically or economically feasible.

Replacing a feature of the resource's immediate physical context that is not beyond repair.

Replacing a feature of the resource's immediate physical context with a new feature that does not convey the same visual characteristics as the historic feature.

Removing an entire feature of the resource's immediate physical context that is beyond repair and not replacing it.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the concerns listed above have been addressed.

Design for Missing Features

Designing and constructing a new feature in the resource's immediate physical context when the historic feature is completely missing, such as the main building in a residential or estate landscape. The new feature should be a new design which is

Creating a false historic appearance by constructing, through the use of original historic plans and specifications, a feature that was planned/designed but never built.

compatible with the significant historic features and character of the resource's immediate physical context.	Introducing a new feature, in place of a missing feature that is not compatible with the significant historic features and character of the resource's immediate physical context.
Preparing comprehensive written and graphic documentation of the new design feature as a means of adding to the historic record of the designed historic landscape.	Failing to provide an adequate, accurate record of the new design.
Alterations/Additions for the New Use	
Removing non-contributing features within the resource's immediate physical context which detract from the historic character of the site or setting, such as removing above ground utility vaults.	Removing significant historic features from the resource's site or setting which contribute to the resource's historic character. Removing existing non-contributing, but non-obtrusive features from the immediate physical context and replacing them with new elements which detract from the historic character.
Designing and constructing new additions to the site or setting required to support the new use; such additions should be compatible with the significant historic features and character of the designed historic landscape and its immediate physical context. Particular attention should be given to scale, form, design, materials, texture and color of the new addition.	Introducing new additions within the resource's immediate physical context which replace or radically alter significant historic features and, therefore, diminish the overall historic character of the site or setting. Introducing new features within the resource's immediate physical context which are not visually and/or physically compatible with the historic character of the site or setting.
Preparing comprehensive written and graphic documentation of the new addition as a means of adding to the historic record of the designed historic landscape.	Failing to provide an adequate, accurate record of the new addition.

Natural Systems

The original state of a designed historic landscape's natural systems and their features--that is geologic, hydrologic, ecologic and weather systems--and the designer's response to these systems may define the overall historic character of the resource and thus should be retained and supported whenever possible. Quite frequently, individual portions of a system or an entire system play a major role in the historic significance of the designed historic landscape. Due to their inherent variable quality, natural systems generally will reflect the effects of time and change; careful consideration must be given to this dynamic characteristic when pursuing plans to accommodate the new use. Therefore, the identification, retention and preservation of natural systems, their features and associations, which contribute to the resource's historic character and significance should be a primary initiative in any rehabilitation project.

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining and preserving natural systems, their features and associations, which are important in defining the overall historic character of a designed historic landscape. Such features can include surficial deposits, artesian wells, resident wildlife populations and micro-climate patterns.	Removing, radically changing or overtaxing natural systems, their features and associations, which are important in defining the overall historic character of the designed historic landscape so that, as a result, the historic character is diminished. Removing or radically changing geological features or associations which contribute to the resource's historic character, such as removing rock outcroppings, de-stabilizing slopes or stripping topsoil. Overtaxing features or associations of the hydrologic system by depleting the zone of saturation, disturbing the watertable, increasing run-off or decreasing percolation. Introducing radical changes to features or associations of the ecosystem, such as disturbing the habitat of endangered species; overpopulating with a particular species; or establishing an artificial environment to support a previously non-represented species. Removing features which define historically significant micro-climates, such as wind breaks or sun/shade patterns; or removing significant features which aid in protecting the resource and its components and/or users from

	excessive temperatures, winds or precipitation.
Identifying natural systems, their features and associations, which are important in defining the overall historic character of a designed historic landscape through comprehensive documentation of historic and existing conditions, such as found in a Historic Landscape Report, Environmental Impact Statement or Master Plan.	Failing to adequately compile a comprehensive record of historic and existing conditions prior to rehabilitation work beginning.
Protecting natural systems, their features and associations, from destructive activities such as deterioration or vandalism. For example, restricting access to dunes or wetlands or installing temporary barriers during construction.	Employing protective measures which are not comprehensive in nature, such as limiting rather than prohibiting access. Employing measures intended to protect the designed historic landscape but which adversely effect the resource's natural systems, their features or associations.
Maintaining natural systems, their features and associations, by use of non-destructive or non-abrasive methods and/or materials in daily, seasonal and cyclical tasks.	Failing to undertake preventative maintenance of natural systems, their features and associations. Utilizing maintenance methods and/or materials which destroy or obscure natural systems, their features or associations, such as shearing plant material or excessive use of road salts.
Evaluating the overall condition of natural systems, their features and associations, to determine whether more than protection and maintenance are required, that is, if repairs will be necessary.	Failing to identify those natural systems, their features and associations which require more extensive treatment than protection and maintenance.
Repairing natural systems, their features and associations, by reinforcing or strengthening naturally occurring materials and relationships, such as stabilizing slopes or aerating soils.	Replacing or destroying an entire natural system feature or association when repair is possible. Repairing a natural system feature or association which has been altered due to the dynamics of natural change rather than human manipulation or intervention when the original design intent was based on that impending natural change.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the concerns listed above have been addressed.

Alterations/Additions for the New Use

Designing and constructing or installing additions to the designed historic landscape required to support the new use; such additions should be compatible with the natural systems, their features and associations which contribute to the historic character of the resources. Particular attention should be given to the scale, form design, materials, texture, color and associations of the new addition.

Introducing new additions to a designed historic landscape which replace or radically alter natural systems, their features or associations and, therefore, diminish the overall historic character of the resource.

Introducing new additions to a designed historic landscape which are not visually and/or physically compatible with the resource's natural systems, their features and associations and, therefore, the overall historic character.

Preparing comprehensive written and graphic documentation of the new addition as a means of adding to the historic record of the designed historic landscape.

Failing to provide an adequate, accurate record of the new addition.

LANDFORM

Landform, the three dimensional configuration of the earth surface, constitutes the framework of the landscape and, therefore, is an essential component of the overall historic character of a designed historic landscape. Integral to a resource's natural systems, landform--its features (ground slope, configuration of contours, visual forms) and its orientation (elevation and solar aspect)--will reflect the effects of time and change; careful consideration must be given to this dynamic characteristic when pursuing plans to accommodate the new use. The identification, retention and preservation of landform, its features and orientation, which contributes to the resource's historic character and significance should be a primary initiative in any rehabilitation project.

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining and preserving landform, its features and orientation, which is important in defining the overall historic character of a designed historic landscape. Such elements can include deltas, jetties, knolls or ravines.	Removing or radically changing landform, its features or orientation, which is important in defining the overall historic character of a designed historic landscape so that, as a result, the historic character is diminished.
	Radically changing ground slope conditions such as surface materials or treatments which contribute to the resource's historic character, such as paving a historically planted slope.
	Radically changing patterns of contours which contribute to the resource's historic character. For example, terracing a continuous sloping hillside or radically excavating an open meadow.
	Removing or radically changing distinct three dimensional visual forms which contribute to the resource's historic character. For example, altering the shape of bunkers, quadrangles or grottos.
	Radically changing landform elevation or solar aspect so that, as a result, historic character is diminished. For example, altering site elevations through insensitive cut and fill procedures.
Identifying landform features and orientation that is important in defining the overall historic character of the designed historic landscape through comprehensive documentation of historic and existing conditions, such as found	Failing to adequately compile a comprehensive record of historic and existing conditions prior to rehabilitation work beginning.

in a Historic Landscape Report, Environmental Impact Statement or Master Plan.

Protecting landform features and orientation from destructive activities such as deterioration or vandalism. For example, installing erosion control mechanisms on unstable slopes.	Employing protective measures which are not comprehensive in nature, such as utilizing bank stabilization methods to address increased run off rather than addressing upstream/ watershed retention needs.
	Employing measures intended to protect the designed historic landscape but which adversely effect landform features and/or orientation. For example, establishing an on-site borrow pit which alters one landform feature to reclaim another damaged or eroding one.
Maintaining landform features and orientation by use of non-destructive or non-abrasive methods and/or materials in daily, seasonal and cyclical tasks.	Failing to undertake preventative maintenance of landform features and orientation.
	Utilizing maintenance methods and/or materials which destroy or obscure landform features or orientation such as using heavily weighted and deeply tread tires on maintenance equipment when working on slopes.
Evaluating the overall condition of landform features and orientation to determine whether more than protection and maintenance are required that is, if repairs will be necessary.	Failing to identify landform features and orientation which require more extensive treatment than protection and maintenance.
Repairing or reclaiming landform by reinforcing historic materials. Limited in-kind replacement constitutes repair when the replacement is predicated by extensive deterioration or damage and the landform feature or orientation is a significant element within the designed historic landscape. Repair or reclamation also may include limited replacement utilizing a compatible material when existing conditions prohibit retention of historic material, or if in-kind replacement is not technically, environmentally or economically feasible.	Destroying landform, its features or orientation, when repair or reclamation is possible.
	Utilizing a substitute material for limited replacement when the new material fails to convey the same visual characteristics as the historic material.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects

and should only be considered after the concerns listed above have been addressed.

Design for Missing Features

Designing and constructing a new landform when the historic feature is completely missing, such as a berm or knoll. The new landform, both its features (ground slope, configuration of contours and visual form) and orientation (elevation and solar orientation), should be compatible with the resource's historic character.	Introducing a new landform, in place of a missing feature, that is not compatible with the historic character of the designed historic landscape.
Preparing comprehensive written and graphic documentation of the new design which is compatible with the historic character of the designed historic landscape.	Failing to provide an adequate, accurate record of the new design.

Alterations/Additions for the New Use

Designing and constructing new landforms to the designed historic landscape required to support the new use; such additions should be compatible with the resource's overall historic character. Particular attention should be given to the extent of cut and/or fill required to support construction of the new landform as well as location and overall mass, scale and form.	Introducing new landforms to the designed historic landscape which destroy or obscure the resource's landform and, as a result, diminish the overall historic character. Introducing new landforms to the designed historic landscape which are not visually and/or physically compatible with the resource's historic character.
Preparing comprehensive written and graphic documentation of the new addition as a means of adding to the historic record of the designed historic landscape.	Failing to provide an adequate, accurate record of the new addition.

VEGETATION

Because it is seen as an intrinsic part of the landscape, vegetation--both indigenous and introduced trees, shrubs and herbaceous material--is the most commonly used material in creating landscape features and, therefore, is a major component of the overall historic character of the designed historic landscape. As with the resource's natural systems and landform, vegetation is inherently subject to change and exhibits the effects of time linked to seasonal responses, maturation, disease, maintenance or neglect. Careful consideration must be given to this dynamic characteristic when pursuing plans to accommodate the new use. The identification, retention and preservation of vegetation--individual and groupings of plant material whether introduced or naturally occurring--which contribute to the resource's historic character and significance should be a primary initiative in any rehabilitation project.

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining and preserving vegetation which is important in defining the overall historic character of a designed historic landscape, such as an individual specimen plant or an entire hedge row planting.	Removing vegetation which is important in defining the overall historic character of the designed historic landscape so that, as a result, the historic character is diminished.
	Radically changing the natural habit of vegetation used specifically for its naturally occurring form. For example, shearing branch ends of a weeping species/cultivar to give it a more regular form.
	Radically changing indigenous material utilized/retained for its naturally occurring associations so that, as a result, the historic character is diminished.
	Radically changing mass plantings so that, as a result, the composite form, texture and/or color is altered.
Identifying vegetation which is important in defining the overall historic character of the designed historic landscape through comprehensive documentation of historic and existing conditions, such as found in a Historic Landscape Report, Environmental Impact Statement or Master Plan.	Failing to adequately compile a comprehensive record of historic and existing conditions prior to rehabilitation work beginning.
Retaining and preserving vegetation important to the overall historic character of the resource through propagation of extant on-site plant materials. Primary consideration should be given to propagation of	Failing to propagate plant materials from extant on-site vegetation when few/no sources for replacement are readily available.

materials which are difficult to obtain commercially or from collected stock.	
Protecting vegetation from destructive activities such as deterioration or vandalism. For example, utilizing temporary irrigation or installing protective fencing during construction work.	Employing protective measures which are not comprehensive in nature, such as installing a tree guard to protect against trunk damage, but failing to monitor tree growth and expand the guard accordingly.
	Employing measures intended to protect the designed historic landscape, but which adversely effect vegetation.
Protecting vegetation by temporarily removing individual plants or entire plantings in anticipation of rehabilitation work and re-installing or replanting them following completion of or included in the undertaking. For example, removing a vine from a trellis during rehabilitation of the structure and re-installing the vine upon completion of work.	Removing vegetation in an inappropriate or destructive manner so as to preclude re-installation or replanting.
	Relocating vegetation to an alternate, inappropriate setting within the designed historic landscape.
Maintaining vegetation by use of non-destructive or non-abrasive methods and/or materials in daily, seasonal and cyclical tasks.	Failing to undertake preventative maintenance of vegetation.
	Utilizing maintenance methods and/or materials which destroy or obscure vegetation, such as shearing of plant materials or over/under watering.
Utilizing maintenance methods and/or materials which respect either the naturally occurring habit or the trained form of the plant material, as prescribed by the original design intent.	Utilizing maintenance methods and/or materials which alter vegetation form and the original design intent and, as a result, diminish the historic character. For example, mowing lawns to a manicured appearance when the original intent was to maintain a tall grass, wildflower meadow.
Utilizing maintenance methods and/or materials which respect the flower and fruit production of vegetation important in defining the resource's overall historic character.	Utilizing maintenance methods and/or materials which alter flower and fruit production and the original design intent and, as a result, diminish the historic character. For example, utilizing soil amendments which may alter flower color; and poorly timed pruning and/or application of insecticide which may alter fruit production.
Evaluating the overall condition of the resource's vegetation to	Failing to identify vegetation which requires more than protection and

determine whether more than protection and maintenance are required, that is, if repairs will be necessary.

Repairing vegetation by reinforcing or supporting plant habit through pruning, cabling and bracing.

Repairing a plant's root system by aerating soil, deep root fertilization and root pruning/removal.

Repairing or regaining flower or fruit production through nutrient feedings, timely pruning and maintenance of microclimate.

Repairing or reinforcing naturally occurring vegetation associations or introduced plantings through limited in-kind replacement, when the replacement is predicated by extensive deterioration or damage and an individual specimen or cultivar/species is significant within the association or planting. Limited in-kind replacement should match to the cultivar and be compatible in size, scale and habit to the association or planting. Repair also may include limited replacement with an alternative cultivar within the species or an alternative genus when the extant plant is beyond repair and the historic plant material is no longer available commercially or from collected stock. The replacement material must be compatible in habit, texture, color, flower and fruit.

Replacing in-kind a single specimen, entire natural occurring association or introduced planting that is too deteriorated or damaged to be repaired and no longer conveys the original design intent. In-kind replacement should match to the cultivar and be compatible in size, scale and habit with the resource's extant conditions. An alternative cultivar within a species or an alternative genus may be used when the historic plant material is no longer available commercially or from collected stock, or when the maintenance.

Replacing or destroying vegetation when repair is possible.

Removing a damaged limb when corrective pruning, cabling or bracing can be employed.

Failing to address damaged roots through remedial work.

Failing to remedy or enhance conditions which contribute to successful flower and fruit production.

Replacing an entire naturally occurring association or introduced planting when repair or limited in-kind replacement is possible.

Utilizing an in-kind replacement plant material of size, scale or habit that is not compatible with the extant planting.

Utilizing a substitute cultivar, species or genus when the historic plant material is available and is not threatened by environmental conditions.

Utilizing a substitute cultivar, species or genus that is not compatible with the historic plant or the extant planting.

Replacing a single specimen, entire natural occurring association or introduced planting that is not beyond repair.

Replacing vegetation that is beyond repair with a new cultivar, species or genus when the historic plant material is available.

Replacing vegetation that is beyond repair with a new cultivar, species or genus that is not compatible with the form, texture, color, flower or

historic material is not technically, environmentally or economically feasible.	fruit of the historic material. Removing vegetation that is beyond repair but not replacing it.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the concerns listed above have been addressed.

Design for Missing Features

Designing for and installing new vegetation when the historic plant material is completely missing, such as re-establishing a lost perennial garden. The new plant material should be compatible with the overall historic character of the resource. Particular attention should be given to the form, texture, color, flower and fruit of the new vegetation.	Introducing new vegetation, in place of missing historic plant material, that is not compatible with the original design intent or the resource's historic character.
Preparing comprehensive written and graphic documentation of the new planting as a means of adding to the historic record of the designed historic landscape.	Failing to provide an adequate, accurate record of the new design.

Alterations/Additions for the New Use

Removing non-contributing vegetation within the designed historic landscape which detracts from the resource's historic character.	Removing vegetation which contributes to the resource's historic character. Removing existing non-contributing, but non-obtrusive vegetation from the designed historic landscape and replacing it with a new planting which detracts from the historic character.
Adding vegetation to support the new use. Such planting should be compatible with the historic character of the designed historic landscape; particular attention should be given to the form, texture, color, flower and fruit of the new plantings.	Introducing new plantings which radically alter the resource's historic character. Introducing new plantings which are not visually and/or physically compatible with the resource's historic character.
Preparing comprehensive written and graphic documentation of the new addition as a means of adding to the historic record of the designed historic landscape.	Failing to provide an adequate, accurate record of the new addition.

SPATIAL RELATIONSHIPS

The organizational framework or plan, the physical and visual associations of and among spaces, and the views and vistas to or from the landscape are individually and/or collectively important in defining the historic character of the landscape. Caution should be exercised in pursuing any plan that would radically change character defining individual spaces, overall spatial organization and original design intent or obscure, damage or destroy views within, to or from the landscape. Thus, the identification, retention and preservation of the landscape's spatial relationships should be a primary initiative in any rehabilitation project.

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining and preserving the spatial relationships which are important in defining the overall historic character of a designed historic landscape, including forms, lines, colors, textures, sounds and odors which contribute to the overall spatial organization.	Radically changing the spatial relationships which are important in defining the overall historic character of the designed historic landscape so that, as a result, the historic character is diminished. Removing or relocating features within the designed historic landscape which, in turn, radically change the resource's spatial relationships. For example, removing the focal point (object, plant) of a sequence of views experienced along a corridor.
Identifying the spatial relationships which are important in defining the overall historic character of a designed historic landscape through comprehensive documentation of historic and existing conditions, such as found in a Historic Landscape Report, Environmental Impact Statement or Master Plan.	Failing to adequately compile a comprehensive record of historic and existing conditions prior to rehabilitation work beginning.
Retaining and preserving type, size and arrangement of spaces within the designed historic landscape. For example, spaces which are linear or open in form; small, enclosed or open, expansive in scale; and axial or sequential in order. Particular attention should be given to retaining and preserving the overhead, base and vertical planes which form both individual spaces and the entire spatial organization of the resource.	Radically changing type, size and arrangement of spaces within the resource, such as converting a gathering space to a corridor or reducing a monumental space to a series of smaller spaces.
Retaining and preserving views within, to or from the designed historic landscape. Particular attention should be given to orientation and	Radically changing views within, to or from the resource by altering orientation of/to the view or changing the method and/or materials

enframement.

which enframe the view. For example, foreshortening a vista; interrupting a progression of views; or removing landform, vegetation or built forms which enframe the view.

Protecting the spatial relationships of the designed historic landscape from destructive activities such as deterioration or vandalism. For example, purchase of viewshed or air-rights easements.

Employing protective measures which are not comprehensive in nature.

Employing measures intended to protect the designed historic landscape but which adversely effect the resource's spatial relationships. For example, installing a visual/physical barrier to shield the designed historic landscape from adverse or incompatible adjacent uses, but thereby terminating a historic view or vista from the resource.

Maintaining the resource's spatial relationships by use of non-destructive or non-abrasive methods and/or materials in daily, seasonal and cyclical tasks. For example, maintaining the landform, vegetation and/or built forms which comprise the overhead, base and vertical planes of individual spaces or the overall spatial framework of the designed historic landscape.

Failing to undertake preventative maintenance of the resource's spatial relationships.

Utilizing maintenance methods and/or materials which destroy or obscure the resource's spatial relationships and the original design intent and, as a result, diminish the historic character.

Evaluating the overall condition of the resource's spatial relationships to determine whether more than protection and maintenance are required, that is, if repairs will be necessary.

Failing to identify those features which require more extensive treatment than protection and maintenance.

Repairing or reclaiming features of the resource's spatial relationships by reinforcing historic materials and associations. Limited in-kind replacement constitutes repair when the replacement is predicated by extensive deterioration or damage and the feature is a significant element within the overall spatial framework of the designed historic landscape. For example, repairing a lookout structure which enframes a view/vista --including limited in-kind replacement of the structure's materials; or reclaiming a lost sequence of spaces through remedial cut and fill procedures which re-establish historic landforms.

Replacing all materials and/or associations of a feature within the resource's spatial framework when repair or limited in-kind replacement is possible. For example, replacing all extant plant material which forms the edges of a space when only one/some of the plants are beyond repair.

Utilizing a substitute material or association for limited replacement when the historic material is available.

Utilizing a substitute material or association for limited replacement when the new material or association

Repair may also include limited replacement utilizing a compatible material when existing conditions prohibit retention of historic fabric and limited in-kind replacement is not technically, environmentally or economically feasible. (Refer to the guidelines for **Vegetation** for more specific recommendations regarding in-kind replacement of plant materials.)

fails to convey the same visual characteristics as the historic material or association. For example, substituting built forms for historic plantings to serve as a backdrop.

Repairing or reclaiming a spatial relationship that has been altered due to the dynamics of change rather than human manipulation or intervention, when the original design intent was based on that impending natural change. For example, removing understory plant material to regain a view that, although present during the resource's historic period, was meant to be lost in favor of gaining a sense of enclosure.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the concerns listed above have been addressed.

Design for Missing Features

Designing and recreating a new feature of the resource's spatial relationships when the historic feature is completely missing, such as a pathway lost to unmanaged plant growth. The new feature should be compatible with the original design intent and the overall historic character of the resource.

Introducing a new feature, in place of a missing feature within the resource's spatial framework, that is not compatible with the original design intent and the overall historic character of the resource.

Preparing comprehensive written and graphic documentation of the new design feature as a means of adding to the historic record of the designed historic landscape.

Failing to provide an adequate, accurate record of the new design.

Alterations/Additions for the New Use

Removing non-contributing features from the designed historic landscape which detract from the resource's spatial framework and overall historic character. For example, removing contemporary, over-head utility lines from historic corridors.

Removing features which contribute to the resource's spatial relationships and overall historic character.

Removing non-contributing, but non-obtrusive features from the designed historic landscape and replacing them with new elements

which detract from the historic character.

Designing and constructing new additions within the resource's spatial framework, to support the new use; such additions should be compatible with the resource's spatial relationships and overall historic character. Particular attention should be given to the location, orientation, scale, massing, color and texture of the new addition.

Introducing new additions within the resource's spatial framework which replace or radically alter spatial relationships and, as a result, diminish the overall historic character. For example, constructing buildings within historic open meadows, lawns or gardens.

Introducing new additions within the resource's spatial framework which are not visually and/or physically compatible with the historic character, such as installing permanent bleacher seating in a playing field historically void of any structures.

Preparing comprehensive written and graphic documentation of the new addition as a means of adding to the historic record of the designed historic landscape.

Failing to provide an adequate, accurate record of the new addition.

LANDSCAPE FEATURES: CIRCULATION SYSTEMS—paths, walks, plazas, squares, roads, parking facilities and other related movement corridors and spaces.

Circulation systems, the alignment of their corridors and organization of related gathering or storage places as well as support features (steps, ramps) and applied material finishes (compacted soils, paving), may be important in defining the overall historic character of the resource. Often, it is through the circulation systems that the user best experiences the designed historic landscape. Therefore, the identification, retention and preservation of the landscape's circulation systems, their alignment, features and materials, which contribute to the resource's historic character and significance should be a consideration in any rehabilitation project.

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining and preserving circulation systems, their alignment, features and materials, which are important in defining the overall historic character of a designed historic landscape. For example, nature trails within parks or campgrounds, trolley routes servicing **a subdivision, or pathways of a rural** cemetery.	Removing circulation systems which are important in defining the overall historic character of the designed historic landscape so that, as a result, the historic character is diminished.
	Radically changing the alignment of **all or a portion of a circulation** system, such as altering roadway vertical and horizontal curves, grades, overall dimensions or cross section.
	Removing or radically changing features of circulation systems. For example, removing historic traffic control devices such as traffic signals, medians or bollards; altering points of entry/exit; or obscuring transit tracks or corridors.
	Removing or radically changing gathering or storage spaces within circulation systems, such as changing a pedestrian plaza into a vehicular parking lot.
	Removing or radically changing signage of and lighting for circulation systems or system features. For example, removing historic markers from a scenic trail or historic lighting from a parkway.
	Removing or radically changing circulation systems' materials, such as removing historic paving materials or obscuring them with an overlay new material.
Identifying circulation systems, their	Failing to adequately compile a

features and materials, which are important in defining the overall historic character of a designed historic landscape through comprehensive documentation of historic and existing conditions, such as found in a Historic Landscape Report, Environmental Impact Statement or Master Plan.	comprehensive record of historic and existing conditions prior to rehabilitation work beginning.
Protecting circulation systems, their alignment, features and materials, from destructive activities such as deterioration and vandalism. For example, utilizing temporary routes rather than historic roads/paths during construction.	Employing protective measures which are not comprehensive in nature, such as limiting rather than prohibiting vehicular use on low tolerance historic paving materials. Employing measures intended to protect the designed historic landscape but which adversely effect the resource's circulation systems.
Protecting features or materials of circulation systems by temporarily removing them in anticipation of rehabilitation work and re-installing them following completion of or included in the undertaking. For example, removing historic signage or lighting during rehabilitation of a corridor and re-installing the signage or lighting upon completion of work.	Removing features or materials of circulation systems in an inappropriate or destructive manner so as to preclude re-installation. Relocating features or materials to an alternate, inappropriate setting within the designed historic landscape. For example, relocating historic site lighting to a previously non-illuminated portion of the circulation system.
Maintaining circulation systems, their alignment, features and materials, by use of non-destructive or non-abrasive methods and/or materials in daily, seasonal and cyclical tasks.	Failing to undertake preventative maintenance of circulation systems, their alignment, features and materials. Utilizing maintenance methods and/or materials which destroy or obscure circulation systems, their alignment, features or materials. For example, machine plowing snow from coarse textured pavements such as cobble.
Evaluating the overall condition of the resource's circulation systems to determine whether more than protection and maintenance are required, that is, if repairs will be necessary.	Failing to identify circulation systems which require more than protection and maintenance.
Repairing circulation systems by reinforcing historic materials. Limited in-kind replacement, such as in-kind replacement of a section of paving, constitutes repair when the	Replacing an entire circulation system or system feature when repair or limited in-kind replacement is possible.

replacement is predicated by extensive deterioration or damage and the system feature or material is a significant prototype or sole the survivor. For example, regaining the cross-slope or crown of a road by repairing damaged pavement or subgrade--including limited in-kind replacement of either surface or subsurface materials; or repair of support features such as stairs, ramps or bridges through reinforcement of historic materials--including limited in-kind replacement of treads, stringers or decking. Repair also may include limited replacement utilizing a compatible material when existing conditions prohibit retention of historic fabric and limited in-kind replacement is not technically or economically feasible.

Utilizing a substitute material for limited replacement when the historic material is available.

Utilizing a substitute material for limited replacement when the new material fails to convey the same visual characteristics as the historic material.

Replacing in-kind an entire circulation system or system feature that is too deteriorated or damaged to repair, when the overall system intent and function still is evident--and the physical evidence is used to guide the new work. Compatible materials may be utilized if the historic materials and associations are not technically or economically feasible.

Replacing an entire circulation system or system feature that is not beyond repair or limited in-kind replacement.

Replacing an entire system with new alignment, features or materials that do not convey the same visual characteristics as the historic system.

Replacing a system feature or material with a new feature or material that does not convey the same visual characteristics as the historic feature or material.

Removing an entire system or system feature that is beyond repair and not replacing it.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the concerns listed above have been addressed.

Design for Missing Features

Designing and constructing a new circulation system or system features when the historic system or feature is completely missing, such as an entry way at a historic access point. The new system or system feature may be an accurate

Creating a false historic appearance by constructing, through the use of original historic plans and/or specifications, a feature that was planned/designed but never built.

reconstruction based on historic, pictorial or physical documentation, or should be a new design which is compatible with the overall historic character of the resource. In the case of an entire new system, particular attention should be given to alignment (grades, vertical and horizontal curves, dimensions), features (number, location, scale) and materials (color, texture). New individual features should be compatible with the location, scale and materials of extant historic features.

Introducing a new system or system feature, in place of a missing system or system feature, that is not visually compatible with the resource's historic character.

Preparing comprehensive written and graphic documentation of the new design system or feature as a means of adding to the historic record of the designed historic landscape.

Failing to provide an adequate, accurate record of the new design.

Alterations/Additions for the New Use

Removing non-contributing circulation systems or system features which detract from the resource's historic character.

Removing circulation systems or system features which contribute to the resource's historic character.

Removing existing non-contributing, but non-obtrusive systems or system features from the designed historic landscape and replacing them with systems or features which detract from the historic character.

Designing and constructing new circulation systems or system features required to support the new use; such new systems/features should be compatible with the historic character of the designed historic landscape. Particular attention should be given to location, alignment, scale and materials of the new system/feature.

Introducing new systems or system features which replace or radically alter existing circulation systems or system features and, as a result, diminish the overall historic character.

Introducing new systems or system features which are not visually and/or physically compatible with the historic character.

Creating a false historic appearance because the addition is not easily distinguishable from extant historic features as a product of contemporary construction efforts.

Preparing comprehensive written and graphic documentation of the new system or feature as a means of adding to the historic record of the designed

Failing to provide an adequate, accurate record of the new addition.

LANDSCAPE FEATURES: MECHANICAL SYSTEMS

Mechanical systems--that is, those systems which help bring a utility service to a resource--may help define the overall historic character of the landscape. Less frequently, individual portions of a system or an entire system are significant in the history of site construction or mechanical technology. Although the features of historic electrical, water and drainage systems (power lines, hydrants and culverts) generally may need to be upgraded, augmented or replaced in part in order to accommodate the new use and to meet current regulatory requirements, the role these systems play in defining a landscape's historic character and significance must be recognized. Therefore, the identification, retention and preservation of mechanical systems and their features which contribute to the resource's historic character and significance should be a consideration in any rehabilitation project.

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining and preserving mechanical systems and their features which are important in defining the overall historic character of a designed historic landscape, such as a site drainage system or an individual retentiture or control feature.	Removing mechanical systems or their features which are important in defining the overall historic character of the designed historic landscape so that, as a result, the historic character is diminished. Removing or radically changing electrical systems or features, such as removing historic transmission towers, light standards or power generators. Removing or radically changing water systems or features. For example, removing water storage facilities, covering wells or infilling cisterns. Overtaxing or radically changing the drainage system by altering the quality, quantity and/or course of surface run off; or removing features such as retention structures, flow channels or controls.
Identifying mechanical systems and their features which are important in defining the overall historic character of the designed historic landscape through comprehensive documentation of historic and existing conditions, such as found in a Historic Landscape Report, Environmental Impact Statement or Master Plan.	Failing to adequately compile a comprehensive record of historic and existing conditions prior to rehabilitation work beginning.
Protecting mechanical systems and their features from destructive activities such as deterioration or vandalism.	Employing protective measures which are not comprehensive in nature, such as limiting rather than

For example, utilizing erosion controls during construction to limit or prevent siltation of water or drainage systems.	prohibiting access to utility boxes or vaults.
	Employing measures intended to protect the designed historic landscape but which adversely effect mechanical systems or system features.
Maintaining mechanical systems and their features by use of non-destructive or non-abrasive methods and/or materials in daily, seasonal and cyclical tasks.	Failing to undertake preventative maintenance of mechanical systems or system features.
	Utilizing maintenance methods and/or materials which destroy or obscure mechanical systems or system features, such as failing to mow grass culverts.
Evaluating the overall condition of mechanical systems and their features to determine whether more than protection and maintenance are required, that is, if repairs will be necessary.	Failing to identify mechanical systems or system features which require more than protection and maintenance.
Repairing mechanical systems and their features by reinforcing historic materials or parts. Limited in-kind replacement, such as in-kind replacement of a waterline section or electrical circuit line, constitutes repair when the replacement is predicated by extensive deterioration or damage. Repair also may include limited replacement utilizing a compatible material or part when existing conditions prohibit retention of historic fabric and limited in-kind replacement is not technically or economically feasible.	Replacing an entire mechanical system or system feature when repair or limited in-kind replacement is possible.
	Utilizing a substitute material or part for limited replacement when the new material or part fails to convey the same visual characteristics and physical operation/function as the historic material or part. For example, utilizing a new bib or nozzel opening which alters the quantity and/or direction of flow in a water or drainage system or feature.
Replacing in-kind an entire mechanical system or system feature that is too deteriorated or damaged to repair, when the overall system intent and function still is evident--and the physical evidence is used to guide the new work. Compatible materials or parts may be utilized if the historic materials or parts are not technically or economically feasible.	Replacing an entire mechanical system or system feature that is not beyond repair.
	Replacing a mechanical system or system feature with a new system or feature that does not convey the visual characteristics and physical operation/function as the historic system or feature.
	Removing an entire mechanical system or system feature that is beyond repair and not replacing it.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the concerns listed above have been addressed.

Design for Missing Features

Designing and installing new mechanical systems or system features, such as missing site lighting, waterlines or drainage culverts. The new mechanical system or system feature may be an accurate reconstruction based on historic, pictorial or physical documentation; or should be a new design which is compatible with the overall historic character of the resource. In the case of an entire new mechanical system, particular attention should be given to location of transmission lines, piping and/or channels; location, number and scale of features; and materials. New individual system features should be compatible with the location, scale and materials of extant historic features.	Creating a false historic appearance by constructing, through the use of original historic plans and specifications, a feature that was planned/designed but never built. Introducing a new system or system feature, in place of a missing system or system feature, that is not compatible with the original function or the resource's historic character.
Preparing comprehensive written and graphic documentation of the new feature as a means of adding to the historic record of the designed historic landscape.	Failing to provide an adequate, accurate record of the new design.

Alterations/Additions for the New Use

Removing non-contributing mechanical systems or system features within the designed historic landscape which detract from the resource's historic character.	Removing mechanical systems or system features which contribute to the resource's historic character. Removing existing non-contributing, but non-obtrusive systems or system features from the designed historic landscape and replacing them with systems or features which detract from the historic character.
Designing and installing new mechanical systems or system features to support the new use. Such systems or features should be compatible with the historic character of the designed historic landscape; particular attention should be given to the location, scale and material of the new system or feature.	Introducing new systems or system features which replace or radically alter existing mechanical systems or system features and, as a result, diminish the overall historic character. Introducing new systems or system features which are not visually

and/or physically compatible with the historic character.

Creating a false historic appearance because the new addition is not easily distinguishable from extant historic features as a product of contemporary construction efforts.

Failing to provide an adequate, accurate record of the new addition.

Preparing comprehensive written and graphic documentation of the new system or feature as a means of adding to the historic record of the designed historic landscape.

LANDSCAPE FEATURES: SITE ENGINEERING SUPPORT SYSTEMS

Engineering support systems and features--that is, systems and features which offer a physically stabilizing factor to all or a portion of a landscape--may help define the overall historic character of the designed historic landscape. Entire systems (interrelated terraces or reservoirs and associated dams) or individual features (retaining walls, dikes, foundations), whether visible or hidden from view, also may be significant in the history of site construction or engineering technology. Although it may be necessary to upgrade, augment or replace, in part, a site engineering system or feature in order to accommodate the new use, the role these elements play in defining the resource's historic character and significance must be recognized. Therefore, the identification, retention and preservation of site engineering support systems and features which contribute to the resource's historic character and significance should be a consideration in any rehabilitation project.

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining and preserving site engineering support systems and features which are important in **defining the overall historic** character of a designed historic landscape. For example, walls, grade stabilization structures, retention structures, channels, foundations or edging/curbing.	Removing or radically changing site engineering systems or features which are important in defining the **overall historic character of the** designed historic landscape so that, as a result, the historic character is diminished.
	Overtaxing retaining walls, headwalls or seawalls by destabilizing upslope conditions or by radically changing the design or materials of the structures.
	Removing or radically changing grade stabilizing structures such as gabions, rip rap or revetments.
	Overtaxing dikes, dams or diversions by altering upstream/watershed use patterns or surface run off quantities or paths.
	Radically changing launching ramps or channels through excessive dredging or filling.
	Overtaxing foundations or footings by introducing excessive loads.
	Removing or radically changing curbing or edging which stabilizes plantings, circulation corridors, mechanical channels or water features.
Identifying site engineering support systems and features which are important in defining the overall historic character of the designed	Failing to adequately compile a comprehensive record of historic and existing conditions prior to rehabilitation work beginning.

historic landscape through comprehensive documentation of historic and existing conditions, such as a Historic Landscape Report, Environmental Impact Statement or Master Plan.

Protecting site engineering support systems and features from destructive activities such as deterioration or vandalism. For example, installing a temporary swale to protect a retaining wall during construction or restricting access to an earth dike.

Employing protective measures which are not comprehensive in nature, such as installing a temporary swale rather than a permanent channel as a means of supporting a circulation corridor.

Employing measures intended to protect the designed historic landscape but which adversely effect site engineering support systems or features.

Protecting site engineering support features by temporarily removing them in anticipation of rehabilitation work and re-installing them following completion of or included in the undertaking. For example, removing edging during rehabilitation of a planting and re-installing it upon completion of the work.

Removing site engineering support features in an inappropriate or destructive manner so as to preclude re-installation.

Relocating features to an alternate, inappropriate setting within the designed historic landscape.

Maintaining site engineering support systems and features by use of non-destructive or non-abrasive methods and/or materials in daily, seasonal and cyclical tasks.

Failing to undertake preventative maintenance of site engineering support systems and features.

Utilizing maintenance methods and/or materials which destroy or obscure site engineering support systems or features.

Evaluating the overall condition of the resource's site engineering support systems and features to determine whether more than protection and maintenance are required, that is, if repairs will be necessary.

Failing to identify site engineering support systems or features which require more than protection and maintenance.

Repairing site engineering support systems and features by reinforcing historic materials. Limited in-kind replacement, such as in-kind replacement of a section of curbing, constitutes repair when replacement is predicated by extensive deterioration or damage. Repair also may include limited replacement utilizing a compatible material when existing conditions prohibit retention of historic fabric and limited in-kind

Replacing an entire site engineering support system or feature when repair or limited in-kind replacement is possible.

Utilizing a substitute material for limited replacement when the new material fails to convey the same visual characteristics as the historic material.

replacement is not technically or economically feasible.

Replacing in-kind an entire site engineering support system or feature that is too deteriorated or damaged to repair, when the overall system or feature intent and function still are evident--and the physical evidence is used to guide the new work. Compatible materials may be utilized if the historic materials are not technically or economically feasible.

Replacing an entire site engineering support system or feature that is not beyond repair.

Replacing a site engineering support system or feature with a new system or feature that does not convey the same visual characteristics or physical operation/function as the historic system or feature.

Removing a site entire engineering support system or feature that is beyond repair and not replacing it.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the concerns listed above have been addressed.

Design for Missing Features

Designing and constructing new site engineering support systems or features when a historic system or feature is completely missing, such as a missing headwall, abuttment or terrace. The new site engineering support system or feature may be an accurate reconstruction based on historical, pictorial or physical documentation or should be a new design which is compatible with the overall historic character of the resource. Particular attention should be given to location, scale, form and materials of the new system or feature.

Creating a false historic appearance by constructing, through the use of original historic plans and specifications, a feature that was planned/designed but never built.

Introducing a new system or feature, in place of a missing system or feature, that is not compatible with the original function or the resource's historic character.

Preparing comprehensive written and graphic documentation of the new design feature as a means of adding to the historic record of the designed historic landscape.

Failing to provide an adequate, accurate record of the new design.

Alterations/Additions for the New Use

Removing non-contributing site engineering support systems or features within the designed historic landscape which detract from the resource's historic character.

Removing site engineering support systems or features which contribute to the resource's historic character.

Removing existing non-contributing, but non-obtrusive site engineering support systems or features from the designed historic landscape and replacing them with new systems or features which detract from the historic character.

Designing and constructing new site engineering support systems or features to support the new use. Such systems or features should be compatible with the historic character of the designed historic landscape; particular attention should be given to location, scale, form and materials of the new system or feature.

Introducing new systems or features which replace or radically alter existing site engineering support systems or features and, as a result, diminish the historic character.

Introducing new systems or features which are are not visually and/or physically compatible with the resource's historic character.

Creating a false historic appearance because the new addition is not easily distinguishable from extant historic features as a product of contemporary efforts.

Preparing comprehensive written and graphic documentation of the new addition as a means of adding to the historic record of the designed historic landscape.

Failing to provide an adequate, accurate record of the new addition.

LANDSCAPE FEATURES: WATER FEATURES—Fountains, pools, ponds, lakes, cascades, canals, streams and other designed water-based elements.

Designed water features and elements--whether entirely the result of human efforts or the human manipulation of natural water systems--often are seen as thematic or aesthetic elements as well as functional components of a landscape, and may be important in defining the overall historic character of the resource. In addition, water features may be significant in terms of site engineering or construction, or as part of the landscape's natural systems. Therefore, the identification, retention and preservation of water features which contribute to the resource's historic character and significance should be a consideration in any rehabilitation project.

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining and preserving water features which are important in defining the overall historic character of a designed historic landscape, such as spray fountains, waterfalls, reflecting pools or water courses.	Removing or radically changing water features which are important in defining the overall historic character of the designed historic landscape so that, as a result, the historic character is diminished. Radically changing the form of water features, such as altering a formal, geometric shaped pool to a more organic or curvilinear form. Radically changing the depth or level of water in a feature. For example, altering the outflow rate of fountains or pools to lower the average/perceived water level in a basin. Removing or radically changing the bottom or edge treatments of a water feature, such as removing historic cobble from a basin or channel edge, or paving a naturalistic, planted pond or lake edge. Preventing or radically changing water flow, thereby altering the direction, quantity, sound and/or reflective qualities of water. For example, changing historic plumbing systems of a fountain to achieve more or less water spray; removing outlets/inlets of ponds or lakes; or adding spray/bubbler mechanisms to reflecting pools. Radically changing light or reflective qualities of water features, such as removing shading elements to brighten an otherwise dark, highly reflective water surface, or adding artificial

Identifying water features which are important in defining the overall historic character of the designed historic landscape through comprehensive documentation of historic and existing conditions, such as found in a Historic Landscape Report, Environmental Impact Statement or Master Plan.

Protecting water features from destructive activities such as deterioration or vandalism. For example, installing protective fencing or siltation screens during construction.

Protecting water features by temporarily removing individual features or the water supply in anticipation of rehabilitation work and re-installing the feature or re-introducing water following completion of or included in the undertaking. For example, removing the water supply, fountain and basin during rehabilitation and re-installing the feature and its water supply upon completion of work.

lighting to a feature historically illuminated only by natural light.

Radically changing flora or fauna associated with a water feature or, conversely, adding plant or animal life to a water feature that historically had none associated with it.

Radically changing water quality by introducing toxic or hazardous materials, wastes or other pollutants directly to the water feature or its water supply/source.

Failing to adequately compile a comprehensive record of historic and existing conditions prior to rehabilitation work beginning.

Employing protective measures which are not comprehensive in nature, such as utilizing chemical additives to enhance water quality but which damage the materials of the feature; or utilizing chemical additives which may either damage or destroy flora or fauna associated with the feature or, conversely, encourage plant growth or animal use of the feature when historically there was no such association with the feature.

Employing measures intended to protect the designed historic landscape but which adversely effect water features.

Removing a water feature in an inappropriate or destructive manner so as to preclude re-installation.

Relocating a water feature to an alternate, inappropriate setting within the designed historic landscape.

Maintaining water features by use of non-destructive or non-abrasive methods and/or materials in daily, seasonal and cyclical tasks.

Failing to undertake preventative maintenance of water features.

Utilizing maintenance methods and/or materials which destroy or obscure water features, such as the use of harsh chemical additives for maintaining water quality or grit blasting of masonry elements of pools, fountains or channels.

Evaluating the overall condition of the resource's water features to determine whether more than protection and maintenance are required, that is, if repairs will be necessary.

Failing to identify water features which require more than protection and maintenance.

Repairing water features by reinforcing historic materials and water sources, quality and quantity of water flow. Limited in-kind replacement of materials, such as in-kind replacement of a section of basin or pool coping, constitutes repair when replacement is predicated by extensive deterioration or damage. Repair also may include limited replacement utilizing a compatible material when existing conditions prohibit retention of historic fabric and limited in-kind replacement is not technically or economically feasible.

Replacing an entire water feature when repair or limited in-kind replacement is possible.

Utilizing a substitute material for limited replacement when the new material fails to convey the same visual characteristics as the historic material.

Utilizing a water source which does not provide either the quality or quantity of water flow present historically and, as a result, diminishes the historic character.

Replacing in-kind an entire water feature that is too deteriorated or damaged to repair, when the overall form, detail and design intent still are evident--and the physical evidence is used to guide the new work. Compatible materials may be utilized if the historic materials are not technically or economically feasible.

Replacing an entire water feature that is not beyond repair.

Replacing an entire water feature with a new feature that does not convey the same visual characteristics or physical operation/function as the historic feature.

Removing a water feature that is beyond repair but not replacing it.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the concerns listed above have been addressed.

Design for Missing Features

Designing and constructing new water features when the historic feature is completely missing, such as an filled in pond or pool. The new

Creating a false historic appearance by constructing, through the use of original historic plans and specifications, a feature that

feature may be an accurate reconstruction based on historical, pictorial or physical documentation, or should be a new design which is compatible with the overall historic character of the resource. Particular attention should be given to the overall form; water level, quantity, quality and flow; and edge and bottom treatment of the water feature.

Preparing comprehensive written and graphic documentation of the new design feature as a means of adding to the historic record of the designed historic landscape.

Alterations/Additions for the New Use

Removing non-contributing water features within the designed historic landscape which detract from the resource's historic character.

Designing and constructing new water features to support the new use. Such new features should be compatible with the historic character of the designed historic landscape; particular attention should be given to the location, scale, form, edge/bottom treatments, and water quality, quantity and flow.

Preparing comprehensive written and graphic documentation of the new addition as a means of adding to the historic record of the designed historic landscape.

was planned/designed but never built.

Introducing a new water feature, in place of a missing historic feature, that is not compatible with the resource's historic character.

Failing to provide an adequate, accurate record of the new design.

Removing water features which contribute to the resource's historic character.

Removing non-contributing, but non-obtrusive water features within the designed historic landscape and replacing them with new water features which detract from the historic character.

Introducing new water features which radically alter the resource's historic character.

Introducing new water features which are not visually and/or physically compatible with the resource's historic character.

Creating a false historic appearance because the new water feature is not easily distinguishable from extant historic features as a product of contemporary construction efforts.

Failing to provide an adequate, accurate record of the new design.

LANDSCAPE FEATURES: BUILDINGS AND STRUCTURES

Both buildings (constructed primarily for sheltering human activity) and structures (functional construction for purposes other than human shelter), may be important in defining the overall historic character of the landscape. In some cases, buildings and structures are extensions of the landscape and, therefore, may be integral to the resource's historic significance. In addition, buildings and structures may be significant in architecture or engineering. Thus, the identification, retention and preservation of buildings and structures which contribute to the resource's historic character and significance should be a consideration in any rehabilitation project. (Additional assistance regarding the appropriate treatment of buildings and structures--their overall mass and scale as well as exterior and interior features, materials and finishes--can be obtained from the USDOI **Guidelines for Rehabilitating Historic Buildings.**)

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining and preserving buildings and structures which are important in defining the overall historic character of a designed historic landscape. For example, buildings such as houses, barns, transit shelters, cabins or lean-tos; or structures such as walls, mausolea, bridges, docks, pergolas, recreational facilities or amusement rides.	Removing or radically changing buildings and structures which are important in defining the overall historic character of a designed historic landscape.
	Radically changing the orientation or integration of buildings or structures to the resource's landform or spatial relationships.
Identifying buildings and structures which are important in defining the overall historic character of the designed historic landscape through comprehensive documentation of historic and existing conditions, such as found in a Historic Landscape Report/Historic Structure Report, Environmental Impact Statement or Master Plan.	Failing to adequately compile a comprehensive record of historic and existing conditions prior to rehabilitation work beginning.
Protecting buildings and structures from destructive activities such as deterioration or vandalism. For example, preventing water from collecting and standing on exposed masonry, wood or architectural metal of buildings or structures.	Employing protective measures which are not comprehensive in nature, such as protecting a building surface from direct water damage only, rather than from water infiltration due to roof, gutter or foundation problems.
	Employing measures intended to protect the designed historic landscape but which adversely effect buildings and structures.
Protecting buildings and structures temporarily removing them in anticipation of rehabilitation work and re-installing them following completion of or included in the undertaking. For	Removing buildings and structures in an inappropriate or destructive manner so as to preclude re-installation.

example, removing a transit shelter during rehabilitation of a transit corridor and re-installing the shelter upon completion of the work.

Maintaining buildings and structures by use of non-destructive or non-abrasive methods and/or materials in daily, seasonal or cyclical tasks.

Evaluating the overall condition of the resource's buildings and structures to determine whether more than protection and maintenance are required, that is, if repairs will be necessary.

Repairing buildings and structures by reinforcing historic materials. Limited in-kind replacement, such as in-kind replacement of a support beam section of a lean-to or in-kind replacement of seating in a stadium, constitutes repair when the replacement is predicated by extensive deterioration or damage and the feature is a significant prototype or survivor. Repair also may include limited replacement utilizing a compatible material when the existing conditions prohibit retention of historic fabric, and limited in-kind replacement is not technically or economically feasible.

Replacing in-kind an entire building or structure that is too deteriorated or damaged to be repaired, when the location, overall form, features, materials and finishes still are evident--and the physical evidence is used to guide the new work. Compatible materials may be utilized if the historic materials are not technically or economically feasible.

Relocating buildings or structures to an alternate, inappropriate setting within the designed historic landscape.

Failing to undertake preventative maintenance of buildings and structures.

Utilizing maintenance methods and/or materials which destroy or obscure buildings or structures such as grit blasting masonry, wood or architectural metals or scorching built forms with thermal cleaning devices.

Failing to identify buildings and structures which require more than protection and maintenance.

Replacing an entire building or structure when repair and/or limited in-kind replacement is possible.

Utilizing a substitute material for limited replacement when the new material does not convey the same visual characteristics as the historic material.

Replacing an entire building or structure that is not beyond repair.

Replacing an entire building or structure with a new feature that does not convey the same visual characteristics as the historic feature.

Removing an entire building or structure that is beyond repair and not replacing it.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects

and should only be considered after the concerns listed above have been addressed.

Design for Missing Features

Designing and constructing new buildings or structures when the historic feature is completely missing, such as a building on a town square or a boat dock at a waterfront. The new feature may be an accurate reconstruction based on historical, pictorial or physical documentation, or should be a new design which is compatible with the overall historic character of the resource. Particular attention should be given to the overall mass, scale, materials and color of the new building or structure.	Creating a false historic appearance by constructing, through the use of original historic plans and specifications, a feature that was planned/designed but never built. Introducing a new building or structure, in place of a missing historic feature, that is not compatible with the resource's historic character.
Preparing comprehensive written and graphic documentation of the new design feature as a means of adding to the historic record of the designed historic landscape.	Failing to provide an adequate, accurate record of the new design.

Alterations/Additions for the New Use

Removing non-contributing buildings or structures within the designed historic landscape which detract from the resource's historic character.	Removing buildings or structures which contribute to the resource's historic character. Removing existing non-contributing, but non-obtrusive buildings or structures from the designed historic landscape and replacing them with new buildings or structures which detract from the historic character.
Designing and constructing new buildings or structures to support the new use. Such new additions should be compatible with the historic character of the designed historic landscape; particular attention should be given to location, mass, scale, form, features, materials and color of the new additions.	Introducing new buildings or structures which radically alter the resource's historic character. Creating a false historic appearance because the new building or structure is not easily distinguishable from extant historic features as a product of contemporary construction efforts.
Preparing comprehensive written and graphic documentation of the new addition as a means of adding to the historic record of the designed historic landscape.	Failing to provide an adequate, accurate record of the new addition.

LANDSCAPE FEATURES: FURNISHINGS AND OBJECTS

Furnishings and objects add detail and diversity to a landscape and thereby contribute to the resource's overall historic character. Quite often, rehabilitation projects include proposals to replace site furnishings (elements which primarily serve a physical function, but also may satisfy a symbolic need); the intention is to improve comfort, safety and/or energy use while accommodating the new use. Similarly, objects (elements which primarily provide decoration, although also may serve some physical function) are relocated or re-arranged as part of a rehabilitation undertaking. In either case, care must be taken to recognize the important contribution collections of or individual furnishings or objects make to the designed historic landscape. Therefore, the identification, retention and protection of furnishings and objects which contribute to the resource's historic character and significance should be a consideration in any rehabilitation project.

RECOMMENDED	NOT RECOMMENDED
Identifying, retaining and preserving furnishings and objects which are important in defining the overall historic character of the designed historic landscape. For example, furnishings such as seating, lighting, recreation facility elements (backstops, viewing stands, fireplaces), planters or clocks; or objects such as sculpture, urns, memorial plaques or flagpoles.	Removing furnishings and objects which are important in defining the overall historic character of the designed historic landscape so that, as a result, the historic character is diminished.
	Radically changing the location, orientation or number of furnishings or objects. For example, altering the placement and frequency of seating or lighting, or re-arranging commemorative plaques or interpretive displays.
	Radically changing the method of operation for furnishings. For example, reversing the swing of gates or turnstiles, altering the quality or quantity of site illumination, or modifying the frequency or decibel level of bells or chimes.
Identifying furnishings and objects which are important in defining the overall historic character of the designed historic landscape through comprehensive documentation of historic and existing conditions, such as found in a Historic Landscape Report, Environmental Impact Statement or Master Plan.	Failing to adequately compile a comprehensive record of historic and existing conditions prior to rehabilitation work beginning.
Protecting furnishings and objects from destructive activities such as deterioration or vandalism. For example, utilizing protective fencing during construction work.	Employing protective measures which are not comprehensive in nature.
	Employing measures intended to protect the designed historic

	landscape but which adversely effect furnishings and objects.
Protecting furnishings and objects by temporarily removing them in anticipation of rehabilitation work and re-installing them following completion of or included in the undertaking. For example, removing street signs, traffic controls or lighting during rehabilitation of a corridor and re-installing the elements upon completion of work.	Removing furnishings and objects in an inappropriate or destructive manner so as to preclude re-installation. Relocating furnishings and objects in alternate, inappropriate settings within the designed historic landscape.
Maintaining furnishings and objects by use of non-destructive or non-abrasive methods and/or materials in daily, seasonal and cyclical tasks.	Failing to undertake preventative maintenance of furnishings and objects. Utilizing maintenance methods and/or materials which destroy or obscure furnishings and objects, such as grit blasting of masonry, wood or architectural metals.
Evaluating the overall condition of the resource's furnishings and objects to determine whether more than protection and maintenance are required, that is, if repairs will be necessary.	Failing to identify furnishings and objects which require more than protection and maintenance.
Repairing furnishings and objects by reinforcing historic materials. Limited in-kind replacement, such as in-kind replacement of bench seat slats or a street light globe, constitutes repair when the replacement is predicated by extensive deterioration or damage and the feature is a significant prototype or sole survivor. Repair also may include limited replacement utilizing a compatible material when existing conditions prohibit retention of historic fabric and limited in-kind replacement is not technically or economically feasible.	Replacing an entire furnishing or object when repair or limited in-kind replacement is possible. Utilizing a substitute material for limited replacement when the new material does not convey the same visual characteristics as the historic material.
Replacing in-kind an entire individual or group of furnishings or objects that is/are too deteriorated or damaged to repair, when the overall form, scale, material and color still are evident--and the physical evidence is used to guide the new work. Compatible materials may be utilized if the historic materials	Replacing an entire individual or group of furnishings or objects that is/are not beyond repair. Replacing an entire individual or group of furnishings or objects with a new feature/features that does/do not convey the same visual characteristics as the historic furnishings or objects.

are not technically or economically feasible.	Removing furnishings and objects that are beyond repair but not replacing them.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the concerns listed above have been addressed.

Design for Missing Features

Designing and constructing/installing new furnishings and objects when the historic feature is completely missing, such as a perimeter fence or commemorative marker. The new feature may be an accurate reconstruction based on historical, pictorial or physical documentation, or should be a new design which is compatible with the overall historic character of the resource. Particular attention should be given to the location, form, scale, materials and color of the new feature.	Creating a false historic appearance by constructing, through the use of original historic plans and specifications, a feature that was planned/designed but never built. Introducing furnishings or objects, in place of missing historic features, that are not compatible with the resource's historic character.
Preparing comprehensive written and graphic documentation of the new design feature as a means of adding to the historic record of the designed historic landscape.	Failing to provide an adequate, accurate record of the new design.

Alterations/Additions for the New Use

Removing non-contributing furnishings and objects within the designed historic landscape which detract from the resource's historic character.	Removing furnishings and objects which contribute to the resource's historic character. Removing existing non-contributing, but non-obtrusive furnishings or objects from the designed historic landscape and replacing them with new furnishings or objects which detract from the historic character. Creating a false historic appearance because the new furnishing or object is not easily distinguishable from extant historic features as a product of contemporary construction efforts.
Preparing comprehensive written and graphic documentation of the new	Failing to provide an adequate, accurate record of the new addition.

addition as a means of adding to the historic record of the designed historic landscape.

CONCLUSION

The existing **Secretary of the Interior's Standards for Historic Preservation Projects** and supporting **Guidelines**, although falling short on universal applicability due to selected language and terminology, offers defensible professional philosophies and technical advice regarding the physical treatment of cultural and historic resources. To disregard the basic tenets established in the **Standards** and the technical assistance provided by the **Guidelines** in favor of a completely new approach seems short-sighted and self-serving. The **Standards** should remain broad in language and terminology to allow for the intended philosophies and policies to be universally understood and applied; similarly, the **Guidelines** should remain more specific in nature--offering technical advice germane to a particular physical treatment of a specific resource type. The long established and tested substance, procedure and organization of the existing federal document should be sustained as the National Park Service and outside contributors strive to improve upon the applicability of both the **Standards** and **Guidelines.**

This thesis responds, in part, to the National Park Service request for comments and input as agency staff conduct an in-house review of the **Standards** and **Guidelines.** Future work by both the NPS and independent researchers should address guidelines for each of the other six treatments as related to designed historic landscapes, and ultimately for all resources defined by the NPS. In addition, future efforts should explore the use of an alternative term for the "preservation" treatment: use of this term as a specific treatment under the broader umbrella term "historic preservation treatments"

presents a situation where a word is used, in part, to define itself. A more appropriate term, applicable to the general intents of the current NPS-definition for "preservation," and the revised definition presented in this thesis, should be identified and employed.

The physical treatment of the nation's historic landscape resources needs the same careful, directed guidance that is provided to architectural resources by the current language of the **Secretary of the Interior's Standards for Historic Preservation Projects** and supportive **Guidelines.** Consistent, appropriate treatment of the these varied and valuable resources will aid in guaranteeing their protection and preservation for generations to come. The analyses and recommendations of this thesis strive towards that end.

ENDNOTES

1. William J. Murtagh, Keeping Time: The History and Theory of Preservation in America (New York: Preservation Press, 1988), pp. 11-16.

2. Ibid, p. 25. Several civic and/or community properties were the subject of "preservation" undertakings in the late 1700s and early 1800s, including the saving of the Old Philadelphia State House in 1816 and the significant repair and restoration of the Newport (RI) Synagogue in 1828.

3. Ibid, p. 32.

4. Ibid, Chapters 2-4. Although two groups in Massachusetts did undertake efforts to preserve resources for their intrinsic qualities rather than merely their associations--the Trustees of Public Reservations and the Ispwich (MA) Historical Society, these organizations were involved in single-property efforts and did not approach the activity level of SPNEA. Similarly, the New York American Scenic and Historic Preservation Society (est. 1895), although oriented primarily to conservation of natural sites and settings with interest in architectural preservation, was not as prolific as SPNEA in engaging in preservation projects centered on building resources. Groups which were formed after SPNEA, such as the San Antonio (TX) Conservation Society, were more active and successful.

5. Although this program was somewhat progressive in concept, in practice it was tied solely to federally owned properties.

6. Charles Hosmer, Preservation Comers of Age: From Williamsburg to the National Trust, 1926-1949 (Washington DC: Preservation Press, 1967), Chapters 1-2.

7. Ibid. This effort at Williamsburg spurred other prominent, wealthy citizens of the same era to pursue similar projects; perhaps the most notable contemporary example of the time is Greenfield Village in Dearborn (MI) sponsored by Henry Ford. Although such activity waned, in part, because of the Depression, subsequent efforts sponsored by a variety of individuals and organizations have continued this preservation practice (e.g., Genesee Country Museum, Mumford (NY)).

8. Ibid. Recognizing that the first historic district was established by an act of local government--city of Charleston (SC)--in 1931, little was done to identify or protect the nation's collective historic resources and their environments until the advent of the National Historic Preservation Act of 1966.

9. Phoebe Culter, The Public Landscape of the New Deal (New Haven: Yale University, 1985), Chapters 1-3.

10. In his book The Beginnings of a New National Historic Preservation Program, 1957-1969 (Chapter 1), James A. Glass identifies the General Services Administration program for developing new offices for federal agencies as a third federal program equal to the Interstate System and Urban Renewal in negatively impacting cultural and historic resources. While it is true that the GSA initiatives resulted in the loss of prominent federal properties, such actions effected a limited number of resources (i.e., one/two buildings per agency per location) while the other two programs effected large geographic regions and acres of contiguous individual

properties within one community (e.g., at times dozens of square blocks of urban neighborhoods).

11. Murtagh, Keeping Time: The History and Theory of Preservation in America, pp. 64-66.

12. For further information see "What is the National Historic Preservation Act?", **Local Preservation Series**, National Park Service Interagency Resources Division (Washington DC: USGPO, 1987).

13. The ASLA adheres to the following policy regarding the preservation of historic and cultural resources (Resource Conservation: Policy A305, Preservation of Historic Sites, Adoption date unknown, R1984):

> "The American Society of Landscape Architects considers that the preservation of meaningful historic sites, structures, remains, and objects stems from an intrinsic need to imprint in the minds of this and future generations the inspirational values, sense of history, and appreciation of the accomplishments, hardships, adversities, adventures, and hopes which are revealed in the lives and legacies of those who have gone before us. The Society further believes that it is a governmental responsibility to insure these matters are essential to our individual and group well-being. Government rightly can be expected to encourage interest and, where necessary, provide or generate leadership. In the matter of direct participation, the level of governmental responsibility (local, state, or national) should in large degree grow out of the comparative significance of particular sites or areas."

14. In 1987, the Onondaga Park Association submitted an application to designate the Upper Onondaga Park as a preservation district pursuant to the Syracuse Landmark Preservation Ordinance. The advocate group was concerned with the community's image of the park as well as the local government's improvement programs for park features. The Association worked in conjunction with the Syracuse Landmark Preservation Board to not only successfully designate the Park, but to initiate a public education program regarding historic landscape preservation. Those efforts, in part, led to the city subsequently engaging in a comprehensive survey of all publicly owned landscapes to identify potential nominations to the New York State and National Registers of Historic Places.

15. New York State Parks, Recreation and Historic Preservation Law, New York State Legislature 1980, C.354, Section 14.09.

16. It should be noted that although these categories, and their corresponding definitions, are used primarily within the NPS in dealing with NPS-owned or managed properties, the hierarchy of resource types is applicable beyond the bounds of the federal agency and its holdings.

17. "Preserving Landscapes: Definitions," **CRM Bulletin**, Vol. 10, No. 6 (December 1987).

18. In 1987, the National Park Service published **National Register Bulletin #18**, "How to Evaluate and Nominate Designed Historic Landscapes." This bulletin defines designed historic landscape types, the characteristics of

these resources and the qualifications used in evaluating properties for inclusion in the National Register of Historic Places. **National Register Bulletin # 30**, "How to Identify, Evaluate, and Register Rural Historic Landscapes" defines rural (vernacular) historic landscape types and their features and a methodology for evaluating and nominating these resources to the Register. Similarly, **National Register Bulletin # 38**, "Traditional Cultural Properties: Guidelines for Evaluation," provides the same general information and assistance regarding ethnographic landscapes; of particular interest is the clarification that not all ethnographic landscapes are historic--that is, many of these resources obtain significance as a cultural landscape type due to quite recent events, uses or peoples.

19. John O. Simonds, in his book Landscape Architecture, identifies landscapes as being ordered by nature and effected by man; he recognizes both major and minor landscape features (i.e., earthscape vs. site elements). Garrett Eckbo identifies similar characteristics in his definition of landscapes: natural physical elements and social patterns--the combination of natural and human processes (Eckbo, The Landscape We See). And in his book, Managing the Sense of a Region, Kevin Lynch also defines landscape components as a composite of natural features and human intervention.

20. The NPS, through its **National Register Bulletin Series** and its **Local Preservation Series**, provides both criteria for evaluation and a methodology for nominating properties to the National Register. See notes above.

21. Through the efforts of an international, interdisciplinary organization of professionals, ICOMOS, universal preservation philosophies and policies regarding the identification, evaluation and treatment of cultural and historic resources have been developed and adopted by participating member nations. Charters passed by this body in Athens, Venice and Florence clearly outline such basic tenets; and, in turn, have served as a basic reference in creating the national preservation efforts in this country.

22. "The Secretary of the Interior's Standards for Archeology and Historic Preservation, 1979 (rev. 1990)," US Department of the Interior (Washington DC: USGPO, 1990).

23. Ibid.

24. As part of several comprehensive tax incentive programs and general tax reform measures, Congress created a tax credit opportunity for those engaging in the rehabilitation of older commercial (i.e., income producing) properties. Although the specific formula for calculating anticipated credits has been modified in each successive tax reform bill, the general tenure of the program has remained consistent: rehabilitation of the nation's older commercial building stock is rewarded with a tax credit based on some percentage of the cost of rehabilitation; a slightly higher credit, and one that can be applied to the rehabilitation of both commercial and residential income producing properties, is available to those that complete a certifiable rehabilitation of a property listed in the National Register. A project is considered certifiable if the proposed and completed work is carried out according to the **Standards for Historic Preservation Projects.**

ENDNOTES

25. "The First Historic Landscape Report for the Ravine, Prospect Park, Brooklyn, New York," City of New York, Parks and Recreation, 1986, Section I.

26. Ibid.

27. Ibid, Section II.

28. Ibid, Sections I-II.

29. "Structure and Land Use Statement: Lorenzo State Historic Site," New York State Office of Parks, Recreation and Historic Preservation, Bureau of Historic Sites, 1985 (rev.1986).

30. Doell, M. Christine Klim, Gardens of the Gilded Age (Syracuse NY: Syracuse University Press, 1986), pp. 148-151.

31. "The Secretary of the Interior's Standards for Archeology and Historic Preservation, 1979 (rev. 1990)," US Department of the Interior (Washington DC: USGPO, 1990).

32. Ibid.

33. "The Secretary of the Interior's Standards for Archeology and Historic Preservation, 1979 (rev. 1990)," US Department of the Interior (Washington DC: USGPO, 1990).

34. Ibid.

35. Ibid.

36. Ibid. Although the original intent of the Standards was to clearly illustrate broad policies regarding the physical treatment of all cultural and historic resources, the language that was developed and subsequently modified showed a bias towards buildings and related architectural elements. Specifically:

1. Every reasonable effort shall be made to provide a compatible use for a property that requires minimal alteration of the building, structure, or site and its environment, or to use a property for its originally intended purpose.

2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.

3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.

4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.

5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.

6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplication of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.

8. Every reasonable effort shall be made to protect and preserve archeologial resources affected by, or adjacent to, any acquisition, stabilization, preservation, rehabilitation, restoration or reconstruction project.

37. Ibid.

38. **National Register #16**, "Guidelines for Completing National Register of Historic Places Forms, 1977 (rev.1989)," US Department of the Interior (Washington DC: USGPO, 1989).

39. While it is arguable that "property" is readily associated with land, as in the "real property" which is the subject of title transfers in the United States, the symbolic illustration of one's "property" tends to take the form of architecture (first) with surrounding space or land (second).

40. "The Secretery of the Interior's Standards for Archeology and Historic Preservation, 1979 (rev.1990)," US Department of the Interior (Washington DC: USGPO, 1990).

41. Ibid.

42. Ibid.

43. Ibid.

44. Ibid.

45. Ibid.

46. Ibid.

47. Ibid.

48. Ibid.

49. In **National Register Bulletin #16**, "How to Apply the National Register Criteria for Evaluation (rev.1986)", US Department of the Interior (Washington

DC: USGPO, 1982), integrity is defined as the authenticity of a resource's historic identity, evidenced by the survival of physical characteristics that existed during the resource's historic or prehistoric period. Further, integrity is a quality that applies to resources in seven ways: location, design, setting, materials, workmanship, feeling and association. It is the degree of retention of various physical characteristics which determines if a resource possesses integrity of location, design, setting, and so on.

50. "The Secretary of the Interior's Standards for Archeology and Historic Preservation, 1979 (rev. 1990)," US Department of the Interior (Washington DC: USGPO, 1990).

51. Ibid.

52. **National Register Bulletin #16**, "How to Apply the National Register Criteria for Evaluation, 1977 (rev.1989)," US Department of the Interior (Washington DC: USGPO, 1989).

53. "The Secretery of the Interior's Standards for Archeology and Historic Preservation, 1979 (rev.1990)," US Department of the Interior (Washington DC: USGPO, 1990).

54. Ibid.

55. Ibid.

56. Ibid.

57. By example, the Virgina Transportation Research Council published "Trial Guidelines for the Conservation of Viginia's Historic Bridges" (Spero, Paula A.c., Charlottesville, 1986) and the NPS released the "Standards for Historic Vessel Preservation Projects with Guidelines for Applying the Standards," (1990). It should be noted that in the latter, the general and specific standards, and the definitions of each of the NPS-defined treatments, are presented as applicable to historic vessels, with the emphasis of the document on the specific technical guidance offered for the treatment of such resources.

58."The Secretery of the Interior's Standards for Archeology and Historic Preservation, 1979 (rev. 1990)," US Department of the Interior (Washington DC: USGPO, 1990).

59. Ibid.

APPENDIX A

Definitions*

Association: the physical, visual and functional relationships among and between features of a historic resource, or among and between different historic resources; based on the physical, visual and intrinsic qualities of the resource(s).

Composition: the qualitative and quantitative makeup of an entire historic resoure, its individual features and/or individual natural or human-made materials or biota which contitute all or a portion of a feature.

Feature: an identifiable physical or visual part or subdivision of a historic resource; synonymous with component.

Finish: the physical surface treatment of a material.

Material: the naturally occuring and human-made substances or elements used to form an entire historic resource or its individual features.

Resource: a building, structure, site, object or collection of same which is found to be significant in history and/or a particular study context and contributes to American history and cultural development at a local, regional and/or national level.

*Proposed revisions and/or additions to NPS definitions.

APPENDIX B

REVISIONS TO THE SECRETARY OF THE INTERIOR'S STANDARDS FOR HISTORIC PRESERVATION PROJECTS

The General Standards

1. A resource shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the resource.

2. The historic character of a resource shall be retained and preserved. The removal of historic materials, finishes or features or the alteration of physical, visual or intrinsic associations which characterize a resource shall be avoided.

3. Each resource shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features from other resources, shall not be undertaken.

4. Most resources change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

5. Distinctive features, finishes, construction techniques, craftsmanship and other physical, visual and intrinsic associations that characterize a historic resource shall be retained and preserved.

6. Deteriorated historic features, materials and finishes and physical, visual and intrinsic associations shall be repaired or reinforced rather than replaced. Where the severity of deterioration or degradation requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, composition, association and other physical, visual and intrinsic qualities. Replacement of missing elements shall be substantiated by documentary, physical, or pictorial evidence.

7. Maintenance measures, whether short or long term, shall be undertaken using non-destructive and/or non-abrasive methods and shall respond to a comprehensive program, eliminating the potential for deferred maintenance. Chemical or mechanical treatments which cause damage to historic features, materials or finishes or to physical, visual or intrinsic associations shall not be used.

8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

The Specific Treatments

Acquisition

Acquisition: the act or process of acquiring fee title or interest other than fee title of real property (including acquisition of development rights, easements, view sheds or remainder interest).

Standards for Acquisition

9. Careful consideration shall be given to the type and extent of property rights which are required to assure the preservation of the historic resource. The preservation objectives shall determine the exact property rights to be acquired.

10. Resources shall be acquired in fee simple when absolute ownership is required to insure their preservation.

11. The purchase of less-than-fee-simple interests, such as open space or facade easements, shall be undertaken when a limited interest achieves the preservation objective.

12. Every reasonable effort shall be made to acquire a sufficient property with the historic resource to protect its cultural and historical significance.

Protection

Protection: the act or process of applying measures designed to affect the physical condition of a resource by defending or guarding it from deterioration, loss or attack, or to cover or shield the resource from danger or injury. Such treatment is generally of a temporary nature and anticipates future historic preservation treatment.

Standards for Protection

9. Before applying protective measures which are generally of a temporary nature and imply future historic preservation work, a comprehensive analysis of the actual or anticipated threats, along with current and historic conditions, shall be made.

10. Protection shall safeguard the physical condition, immediate site or setting and/or environment of a resource from destructive or intrusive natural or human activities which cause deterioration or damage of the resource.

11. If any historic features are to be removed, they shall be properly recorded prior to removal and, if possible, stored for future study, reuse and/or re-installation.

Stabilization

Stabilization: the act or process of applying measures designed to remove or prevent debilitating activities and re-establish stability of an unsafe or deteriorated resource while maintaining the resource's essential historic character as exists at present.

Standards for Stabilization

9. Stabilization shall re-establish stability of a resource through reinforcement of existing support systems or by arresting deterioration, damage or intervention leading to failure.

10. Stabilization shall be accomplished in such a manner that it detracts as little as possible from the resource's historic character and significance. When reinforcement is required to re-establish stability, such work shall be concealed wherever possible so as not to intrude upon or detract from the historic character or significance of the resource, except where concealment would result in the alteration or destruction of resource features. Comprehensive documentation of stabilization procedures shall be made part of the resource's historic record.

11. Stabilization work that will result in ground disturbance shall be preceded by sufficient archeological investigation to determine whether significant subsurface features or artifacts will be affected. Recovery, curation and documentation of archeological features and artifacts shall be undertaken in accordance with appropriate professional methods and techniques.

Preservation

Preservation: the act or process of applying measures to sustain existing integrity of a resource. Preservation may include initial stabilization work, where necessary, as well as ongoing maintenance of a resource.

Standards for Preservation

9. Preservation shall maintain the existing physical, visual and intrinsic qualities which define the resource's extant location, design, setting, materials, workmanship, feeling and association. All resources, in particular archeological sites, shall be preserved undisturbed whenever feasible and practical. Substantial reconstruction or restoration of lost features or properties are not included in a preservation undertaking.

10. Preservation shall include techniques of arresting or retarding deterioration of a resource through a program of on-going maintenance.

11. Use of destructive or abrasive techniques, methods or materials to achieve preservation of a resource, such as archeological excavation, shall be limited to providing sufficient information for research, interpretation and management needs.

Rehabilitation

Rehabilitation: the act or process of returning a resource to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those features which are important in defining the resource's historic significance.

Standards for Rehabilitation

9. New additions, alterations or related new construction shall not destroy features which define the resource's historic character.

The new work shall be differentiated from the old and shall be compatible with the size, scale, composition and association of the resource's features, overall historic character, and general and immediate environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the resource's existing integrity of location, design, setting, materials, workmanship, feeling and association would be unimpaired.

Restoration

Restoration: the act or process of accurately recovering the form and details of a resource and its environment as it appeared at a particular period of time or as intended by its original design. Such treatment can be achieved by removal of elements outside of the period of significance or no longer existing as intended by original design; or by the replacement in-kind of missing or altered elements from the period of significance or central to the original executed design.

Standards for Restoration

9. Every reasonable effort shall be made to use a resource for its originally intended purpose or to provide a compatible use that will require minimum alteration to the resource and its environment.

10. Required reinforcement of support systems or the installation of code compliance elements shall be concealed wherever possible so as not to intrude or detract from a resource's historic character, except where concealment would result in the alteration or destruction of all or part of a resource.

11. Any restoration work that will result in ground disturbance shall be preceded by sufficient archeological investigation to determine whether any significant features or artifacts will be affected. Recovery, curation and documentation of archeological features and artifacts shall be undertaken in accordance with appropriate professional methods and techniques.

Reconstruction

Reconstruction: the act or process of reproducing by new construction, installation or reclamation the exact form and detail of a non-extant historic resource, or any part thereof, as it appeared at a specific period of time or as intended by its original executed design.

Standards for Reconstruction

9. Reconstruction of all or part of a historic resource shall be undertaken only when such work is essential to reproduce a significant missing feature of the resource, and when a contemporary design solution is not acceptable. Reconstruction of archeological sites generally is not appropriate.

10. Reconstruction of all or part of a historic resource shall be appropriate when the reconstruction is essential for interpreting the value of the resource, or when no other historic resource with the same associative value has survived and sufficient documentation exists to insure an accurate reproduction of the original.

11. The reproduction of a resource's missing features, or an entire resource, accomplished with new materials or associations shall duplicate the visual and physical qualities of the missing feature or entire resource. Reconstruction shall be based upon accurate duplication of original resource features, or the entire resource, substantiated by physical or documentary evidence rather than upon conjectural designs or the availability of similar features from other resources.

12. Reconstruction of an entire resource, or portion thereof, on an original location shall be preceeded by a thorough archeological investigation to locate and identify all subsurface features and artifacts. Recovery, curation and documentation of archeological features and artifacts shall be undertaken in accordance with professional methods and techniques.

13. Reconstruction shall include measures to preserve any remaining original feature of a historic resource and its greater and immediate environmental setting. The reconstruction of missing features, or an entire resource, shall be done in such a manner that the integrity of the original surviving resource features, or associated other resources, is unimpaired.

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