

Standards for Rehabilitation & Guidelines for Rehabilitating Cultural Landscapes

When repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate, Rehabilitation may be considered as a treatment. Prior to undertaking work, a documentation plan for Rehabilitation should be developed.

Standards for Rehabilitation

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in a such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Introduction

In **Rehabilitation**, a cultural landscape's character-defining features and materials are protected and maintained as they are in the treatment **Preservation**; however, a determination is made prior to work that a greater amount of existing historic fabric has become damaged or deteriorated over time and, as a result, more repair and replacement will be required. The **Standards for Rehabilitation and Guidelines for Rehabilitation** allow the replacement of extensively deteriorated, damaged, or missing features using either traditional or substitute materials. For example, **Rehabilitation** may include replacing a crushed bluestone carriage drive with a rolled aggregate finish or replacing shaded-out understory shrubs with more shade-tolerant species. Of the four treatments, only **Rehabilitation** includes an opportunity to make possible an efficient contemporary use through alterations and additions; for example, replacing tillage with permanent grasslands to support a new system of livestock grazing or introducing new turf management to a park's open meadows to support sports field use.



Identify, Retain, and Preserve Historic Materials and Features

Like **Preservation**, guidance for the treatment **Rehabilitation** begins with recommendations to identify those landscape features and materials important to the landscape's historic character and which must be retained. Therefore, guidance on **identifying, retaining, and preserving** character-defining features is always given first. An overall evaluation of existing conditions should always begin at this level. The character of a cultural landscape is defined by its spatial organization and land patterns; features such as topography, vegetation, and circulation; and materials, such as an embedded aggregate pavement.



When evaluating the surviving spatial organization and land patterns of battlefield lands today, it is necessary to understand historic documents, such as this map section (top right), prior to making management decisions. This documents the 1862 entrenchments lines and the routes followed by U.S. Forces under the Command of Union MG Halleck, in their advance on the Confederate stronghold of Corinth, Mississippi. (NPS archive). This century-old oak (opposite) from a Hudson river estate has been grounded for its protection with a lightning rod. (author, 1991)

❖ Protect and Maintain Historic Features and Materials

After identifying those materials and features that are important and must be retained in the process of **Rehabilitation** work, then **protecting and maintaining** them are addressed. Protection generally involves the least degree of intervention and is preparatory to other work; it may be accomplished through permanent or temporary measures. For example, protection includes restricting access to fragile earthworks or cabling a tree to protect against breakage. Maintenance includes daily, seasonal, and cyclical tasks, and the techniques, methods and materials used to implement them. For example, repointing a stone footbridge, pruning a hedge, or rotating crops.

❖ Repair Historic Features and Materials

When existing conditions of character-defining materials and portions of features warrant more extensive work, **repairing** is recommended. **Rehabilitation** guidance for the repair of historic features and materials, such as brick pavements, masonry walls, and wire fencing, begins with the least degree of intervention possible. Such work could include regrading a section of a silted swale, aerating soil, or reclaiming a segment of meadow edge. Repairing also includes the limited replacement in kind of extensively deteriorated materials or parts of features, or replacement in kind of materials or parts of features lost due to seasonal change. Using material which matches the historic in design, color, and texture is always the preferred option; however, substitute material is acceptable if the material conveys the same visual appearance as the historic period. For example, spring replacement of annual beds; in an orchard, planting a tree of new stock that matches the historic form, and composition; or, using a spun aluminum baluster where a cast zinc member was beyond repair.

Traditional maintenance practices for the corral fences at the Hubbell Trading Post NHS (top right) in Ganado, Arizona have preserved the integrity of the wooden fencing and the dirt yards they define. This historic birch allee (opposite) at Stan Hywet Hall, Akron, Ohio, was suffering from borer infestation and leaf miner. Dying trees were topped and basal sprout growth encouraged. Trees were thinned, and, when new growth matured, older trunks were removed. Original rootstock and genetic material were preserved. This work took fifteen years to realize. (author, 1996, 1994)



■ Replace Deteriorated Historic Materials and Features

Following repair in the hierarchy, **Rehabilitation** guidance is provided for **replacing** an **entire** character-defining feature with new material because the level of deterioration or damage precludes repair. Examples include replacing a farm's drought-damaged pasture or replacing a corroded cast iron fence surrounding a reservoir. Like the guidance for repair, the preferred option is always replacement of the entire feature in kind. Because this approach may not always be technically, economically, or environmentally feasible, the use of compatible substitute materials can be considered. Whatever level of replacement takes place, the historic features and materials should serve as a guide to the work.

While the *Guidelines* recommend the replacement of an entire feature that is extensively deteriorated or damaged, they never recommend removal and replacement with new material if repair is possible.

■ Design for the Replacement of Missing Historic Features

When an entire feature is missing, the landscape's historic character is diminished. Although accepting the loss is one possibility, where an important feature is missing, its replacement is always recommended in the **Rehabilitation** guidelines as the **first** or preferred course of action. Thus, if adequate historical, pictorial, and physical documentation exists so that the feature may be accurately reproduced, and if it is desirable to re-establish the feature as part of the landscape's historical



Where historic fences were lost, new replacement fences (top right) have been constructed based on historic photographs of nearby neighborhoods for the Martin Luther King, Jr., National Historic Site, Atlanta, Georgia. (courtesy NPS) Historically, plant materials for the design of Perry's Victory and International Peace Memorial in Put-in-Bay, Ohio, (center) were ill-chosen for the severe conditions. The design for replacement hedges at this waterfront location should use a hardier species than originally planted. (courtesy NPS) This former carousel in Genesee Valley Park, Rochester, New York, (opposite) has been re-used as a picnic shelter. The installation of a new restroom facility has also been required by the heavy public use of the park. The design of the latter facility is clearly new, but is inspired by earlier park shelter design. (LANDSCAPES)

appearance, then planning, designing and installing a new feature based on such information is appropriate.

A second course of action for the replacement feature is a new design that is compatible with the remaining character-defining features of the historic landscape. The new design should always take into account the spatial organization and land patterns, features, and materials of the cultural landscape itself and, most importantly, should be clearly differentiated so that a false historical appearance is not created. For example, replacing a set of lost granite steps with concrete steps which match the historic in location, size, scale, color and texture or replacing a mass of Eastern hemlocks with Japanese spruce.

❖ Alterations/Additions for the New Use

When alterations to a cultural landscape are needed to assure its continued use, it is most important that such alterations do not radically change, obscure, or destroy character-defining spatial organization and land patterns

or features and materials. Alterations may include enclosing a septic system, increasing lighting footcandles, extending acceleration and deceleration lanes on parkways, or, adding new planting to screen a contemporary use or facility. Such work may also include the selective removal of features that detract from the overall historic character.

The installation of additions to a cultural landscape may seem to be essential for the new use, but it is emphasized in the **Rehabilitation** guidelines that such new additions should be avoided, if possible, and considered only after it is determined that those needs cannot be met by altering secondary, i.e., non character-defining, spatial organization and land patterns or features. If, after a thorough evaluation of alternative solutions, a new addition is still judged to be the only viable alternative, it should be planned, designed, and installed to be clearly differentiated from the character-defining features, so that these features are not radically changed, obscured, damaged, or destroyed. For example, constructing a parking lot in a secondary meadow that is enclosed by existing vegetation or



This Central Park playground had become deteriorated over time. Rather than replace the structures with standard apparatus from a catalog, the new play structures—made of traditional materials—are compatible with the park's historic character. (Central Park Conservancy)

installing contemporary trail signage that is compatible with the historic character of a landscape.

Additions and alterations to cultural landscapes are referenced within specific sections of the **Rehabilitation** guidelines such as Topography, Vegetation and Water Features.

☒ Accessibility Considerations/Health and Safety Considerations/Environmental Considerations and Energy Efficiency

These sections of the **Rehabilitation** guidance address work done to meet accessibility requirements; health and safety code; environmental requirements; or limited retrofitting measures to improve energy efficiency. Although this work is quite often an important aspect of preservation projects, it is usually not part of the overall process of protecting, stabilizing, conserving, or repairing character-defining features; rather, such work is assessed for its potential negative impact on the landscape's character. For this reason, particular care must be taken not to obscure, damage, or destroy character-defining materials or features in the process of undertaking work to meet code and energy requirements.



The Arnold Arboretum's Hunneywell Visitor's Center in Jamaica Plain, Massachusetts was constructed in 1892. [top right] Its immediate setting has changed considerably over time. [center] Since the existing landscape immediately surrounding the structure has little remaining integrity, the new accessibility solution has the latitude to integrate a broad program including site orientation, circulation, interpretation, and maintenance. The new planting design references the original planting design principles, with a strong emphasis on form, color, and texture. The new curvilinear walks also provide a connection to the larger arboretum landscape for everyone. [opposite]

