Guidelines for Restoring Cultural Landscapes

SPATIAL ORGANIZATION AND LAND PATTERNS

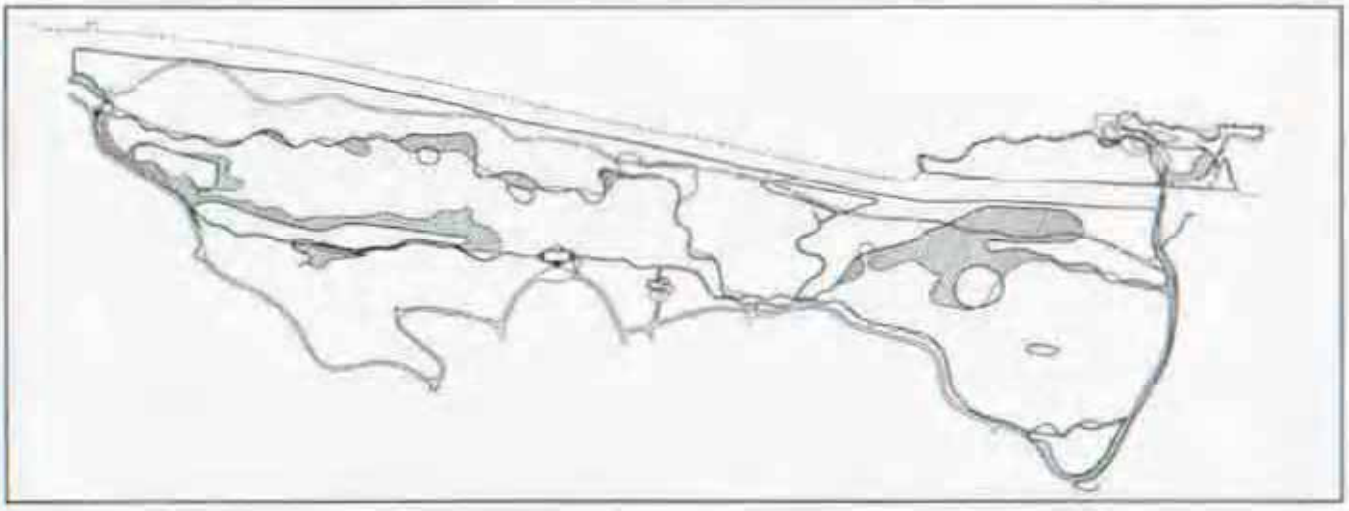
Identify, Retain, and Preserve Historic Materials and Features from the Restoration Period

Recommended

Identifying, retaining and preserving the existing spatial organization and land patterns of the landscape from the restoration period. Prior to beginning project work, documenting all features which define those relationships. This includes the size, configuration, proportion and relationship of component landscapes; the relationship of features to component landscapes; and the component landscapes themselves such as a terrace garden, a farmyard, or forest-to-field patterns.

Not Recommended

Undertaking project work without understanding the effect on the existing spatial organization and land patterns. For example, constructing a structure that creates new spatial divisions or not researching an agricultural property's development history.



The spatial organization and land patterns of the 211-acre landscape at the Vanderbilt Mansion National Historic Site in Hyde Park, New York, woodland edges are being restored. This historic aerial photograph from the 1930s, [above], provides excellent documentation of the spatial organization during the landscape's period of significance from 1830-1930. Project work re-establishing lost meadow areas that were overtaken from 1939 to the present are illustrated on the treatment plan, [top]. (Vanderbilt Mansion National Historic Site and LANDSCAPES)

Protect and Maintain Features and Materials from the Restoration Period

Protecting and maintaining features that define spatial organization and land patterns from the restoration period by non-destructive methods in daily, seasonal and cyclical tasks. For example, maintaining topography, vegetation, and structures which comprise the overall pattern of the cultural landscape.

Allowing spatial organization and land patterns from the restoration period to be altered, for example, through incompatible development or neglect.

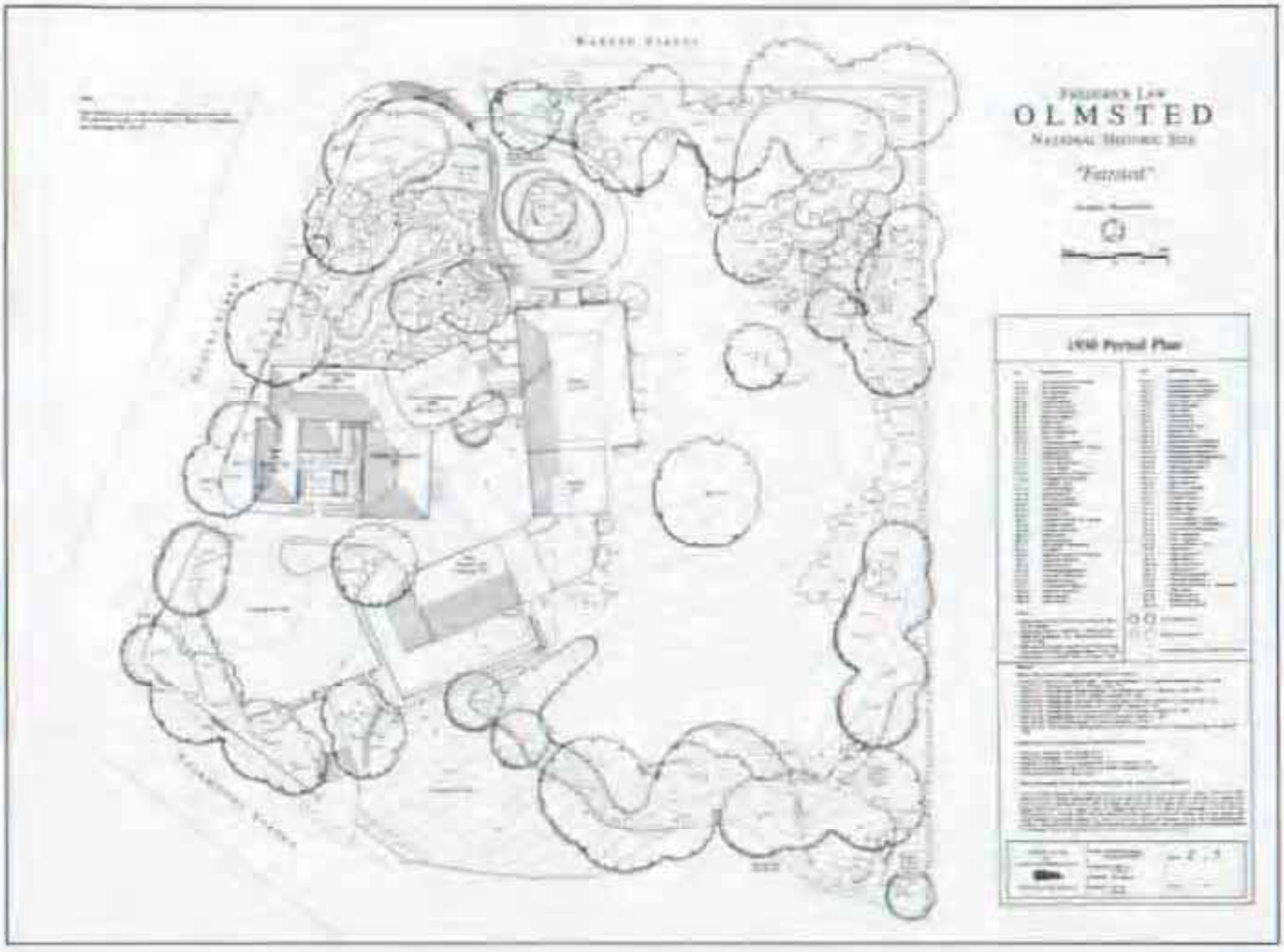
Utilizing maintenance methods which destroy or obscure the landscape's spatial organization and land patterns from the restoration period. For example, allowing field succession to obscure a historic farm and field pattern.

Repair Features and Materials from the Restoration Period

Failing to undertake necessary actions resulting in the loss of spatial organization and land patterns. For example, allowing a post and rail fence to deteriorate.

Replacing a feature from the restoration period that defines spatial organization and land patterns when repair is possible. For example, replacing a hedge when the original hedge could have been pruned to generate new growth.

Until recently, spatial relationships at Stan Hywet Hall had changed due to a lack of maintenance [left]. The view, which has recently been reinstated, creates a strong visual link between the house and the larger landscape, originally designed by Warren H. Manning [right]. (Stan Hywet Hall Foundation)


FREDERICK LAW
OLMSTED
NATIONAL HISTORIC SITE
"Fairsted"
1938 Period Plan

Replace Extensively Deteriorated Features from the Restoration Period

Replacing in-kind an entire feature from the restoration period that defines spatial organization and land patterns that is too deteriorated to rejuvenate. For example, replanting in-kind an historic orchard.

Removing a feature from the restoration period that is beyond repair and not replacing it; or replacing it with a new feature that does not respect the spatial organization and land patterns of the restoration period. For example, removing a hedgerow and not replanting it.

Remove Existing Features from Other Historic Periods

Removing or altering features from other historic periods that intrude on the historic spatial organization and land patterns. For example, removing a skinned baseball field from a historic meadow.

Failing to remove features from another period, thus confusing the depiction of the cultural landscape's spatial organization and land patterns during the restoration period. For example, failing to remove a chain link fence where no fence historically existed.

Documenting features dating from other periods prior to their removal or alteration. If possible, selected examples of these features and materials should be stored to facilitate future research.

Failing to document features from other historic periods that are removed or altered so that a valuable portion of the historic record is lost.

Re-Create Missing Features from the Restoration Period

Recreating a missing feature important to the spatial organization and land patterns during the restoration period based on historical, pictorial and physical documentation.

Constructing a feature that contributes to the overall spatial organization and land patterns which was thought to have existed during the restoration period, but for which there is insufficient documentation; or, constructing a feature that was part of the original design but was never executed.

Based on historic plans, photographs and tree coverings, the ca. 1930 lawn space at the Frederick Law Olmsted National Historic Site in Brookline, Massachusetts, has been re-created through the removal of invasive woody species [opposite page, top and bottom, and opposite left] (courtesy NPS). Franklin Park's Country Meadow [following page] was one of Olmsted's greatest landscape achievements—as important historically [top] as the meadows and landscapes of New York City's Central Park and Brooklyn's Prospect Park. Soon after the park's completion, the public began playing golf, much to the chagrin of Olmsted. Restoration of the golf course [bottom] one of the most distinguishing features of the park, re-claims the expansive views and spatial relationships. (FLONHS and Boston Parks & Recreation)

TOPOGRAPHY

Identify, Retain, and Preserve Historic Features and Materials from the Restoration Period

Recommended	Not Recommended
Identifying, retaining and preserving the existing topography from the restoration period. Documenting topographic variation prior to project work, including shape, slope, elevation, aspect and contour. For example, preparing a topographic survey.	Undertaking project work that impacts topography from the restoration period. For example, regrading a cultural landscape without knowledge of historic topography.
Evaluating and understanding the cultural landscape's topography from the restoration period. For example, using archival resources such as plans and aerial photographs or, in their absence, archeological analysis techniques to understand the historic topography.	Executing project work without understanding its impact on topographic resources from the restoration period. For example, disturbing archaeological resources and watershed systems.

Protect and Maintain Features and Materials from the Restoration Period

Protecting and maintaining topography from the restoration period by use of non-destructive methods and daily, seasonal and cyclical tasks. For example, applying adequate sediment and erosion controls to protect fragile earthworks from the restoration period.	Failing to undertake preventive maintenance for topography from the restoration period. Utilizing maintenance methods which destroy or degrade topography from the restoration period. For example, using heavily weighted equipment on steep or vulnerable slopes.

Repair Features and Materials from the Restoration Period

Repair declining topographic features from the restoration period. For example, re-excavating a silted swale through appropriate regrading or re-establishing an eroding agricultural terrace.	Destroying the shape, slope, elevation or contour of topography from the restoration period when repair is possible.

For the Central Burying Ground in Boston, Massachusetts [see earlier reference, page 61] the collapsed free-standing mound tomb, the last of its kind remaining in Boston, was successfully repaired. (Boston Parks and Recreation)

Replace Extensively Deteriorated Features from the Restoration Period

Using physical evidence of form and detailing to reproduce in-kind an entire topographic feature from the restoration period. If using the same kind of material is not technically, economically, or environmentally feasible, then a compatible substitute material may be considered. For example, re-establishing earthworks around a fort.

Removing a deteriorated topographic feature from the restoration period and not replacing it; or replacing it with a new feature that does not convey the same visual appearance. For example, changing stepped terracing to a curved slope.

Remove Existing Features from Other Historic Periods

Removing or altering topographic features from other historic periods. For example, reshaping knolls to their appearance during the restoration period or removing fill to reveal a hollow.

Documenting topographic features from other periods prior to their alteration or removal.

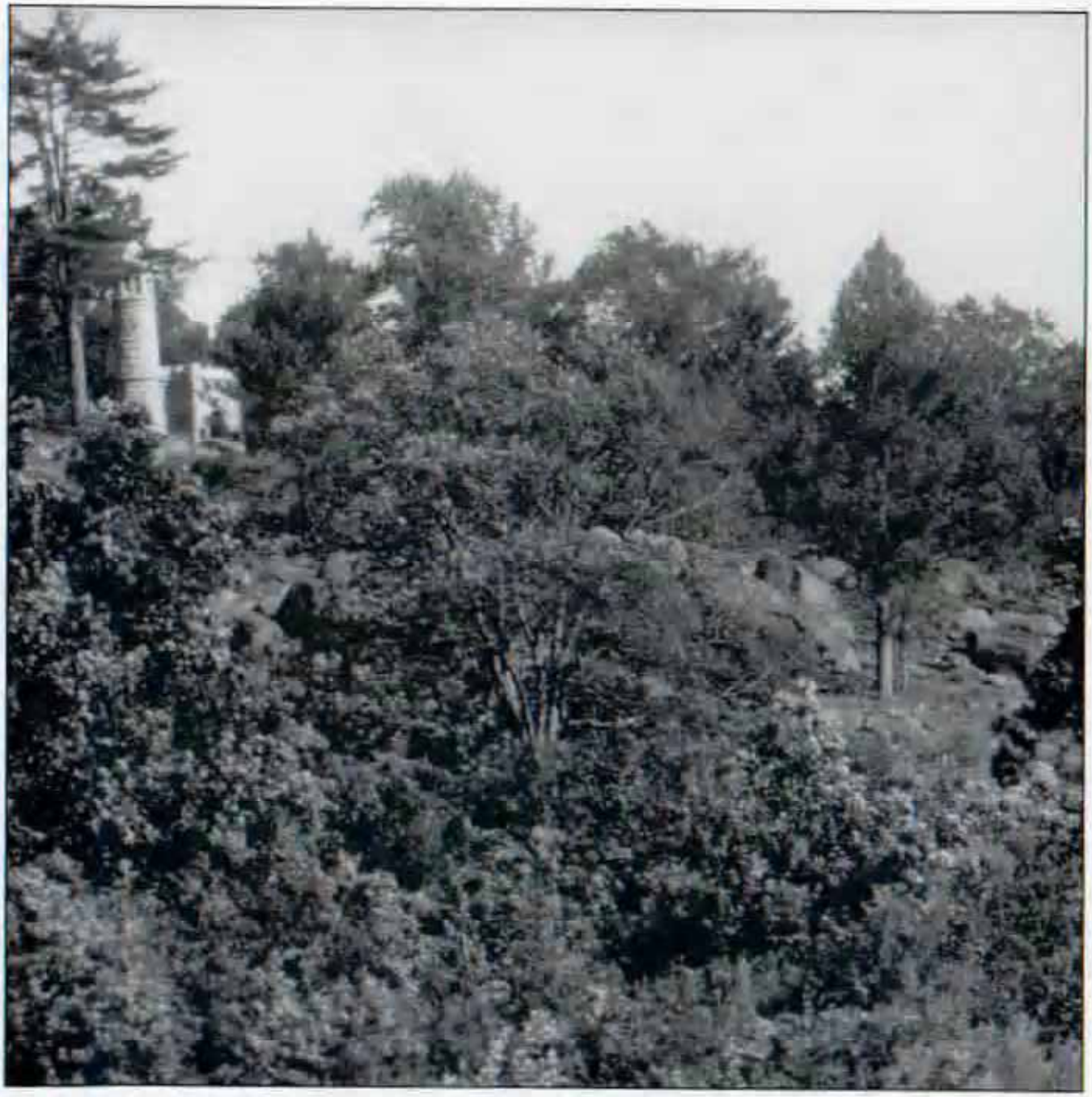
Failing to remove topographic features from another period, thus confusing the depiction of the landscape during the restoration period. For example, maintaining modern earthen mounds on a historic bowling green.

Failing to document topographic features from other historic periods that are removed or altered so that a valuable portion of the historic record is lost.

Re-Create Missing Features from the Restoration Period

Recreating a missing topographic feature that existed during the restoration period based on historical, pictorial and physical documentation. For example, recreating a trench and fortification from the restoration period based on stratigraphic research.

Creating a topographic feature which is incompatible with the restoration period. For example, constructing a topographic feature that was thought to have existed during the restoration period, but for which there is insufficient information; or, constructing a topographic feature that was part of the original design but was never executed, thus creating a false historic appearance.

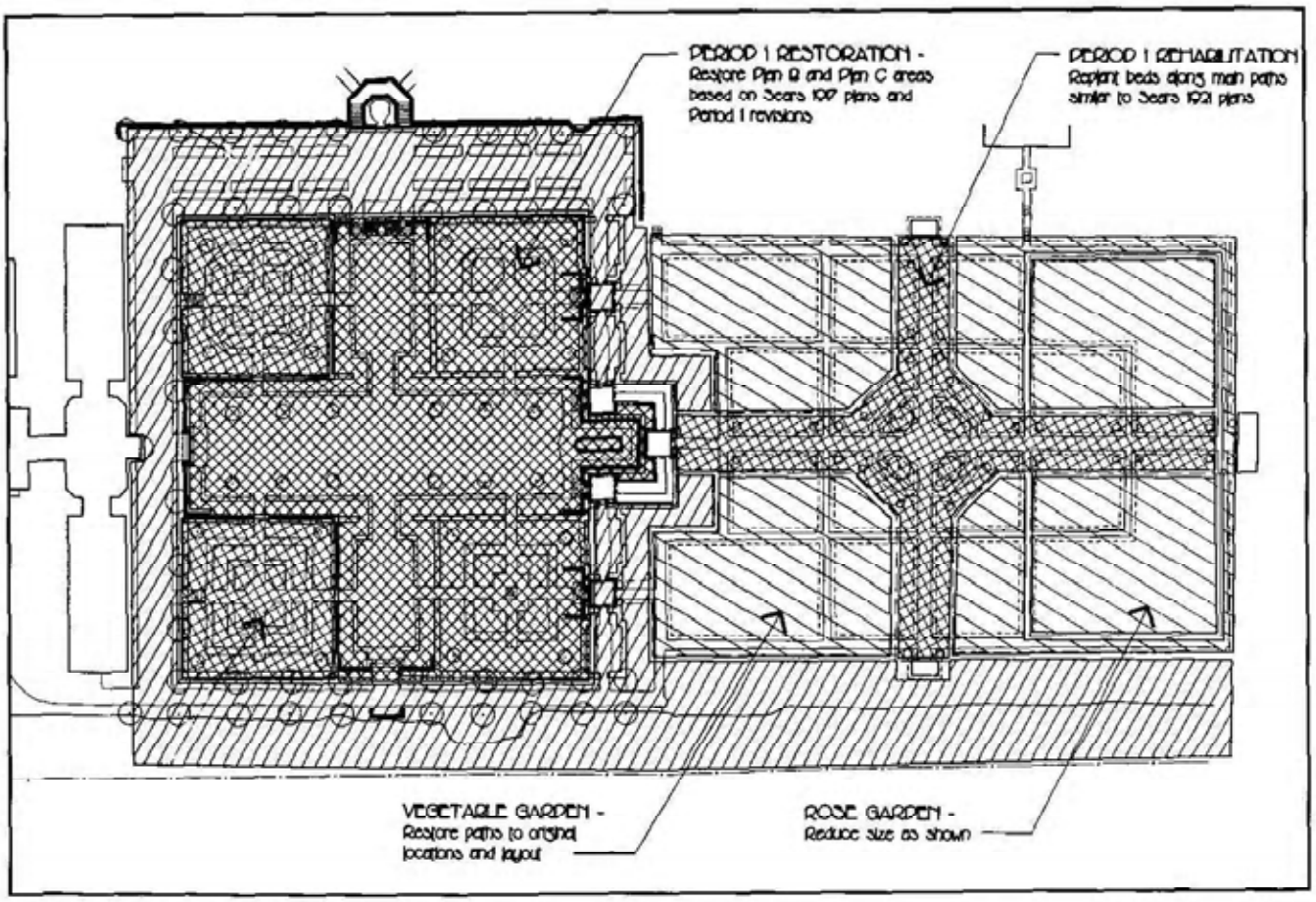


The landscape of the Battle of Gettysburg, Pennsylvania, has evolved dramatically since 1863. [opposite left] Open areas, for example, especially those on rocky ground, were covered with woody plants and Little Round Top became forested with redbud (Cercis Canadensis). To restore this topographic feature, [above, prior to treatment] invasive plants were removed to portray the second day battle scene, giving a sense of the landform of the area and the importance of the land to the bloody encounter that transpired there. (courtesy NPS)

VEGETATION

Identify, Retain, and Preserve Historic Features and Materials from the Restoration Period

Recommended	Not Recommended
Identifying, retaining and preserving the existing vegetation from the restoration period prior to project work. For example, woodlands, forests, trees, shrubs, crops, meadows, planting beds, vines and ground cover. Documenting broad cover types, genus, species, caliper, and/or size as well as color, scale, form and texture.	Undertaking project work that impacts vegetation from the restoration period without executing an "existing conditions" survey of plant material. For example, deep-tilling soil thus disturbing historic pollen artifacts.
Evaluating the condition and determining the age of vegetation from the restoration period. For example, tree coring to determine age.	Undertaking work without understanding the significance of vegetation from the restoration period. For example, removing perennial plantings from the restoration period during a clean out of invasive vegetation.
Retaining and perpetuating vegetation from the restoration period through propagation, using methods such as seed collection and genetic stock cuttings.	Failing to propagate extant vegetation from the restoration period, when few or no known sources for replacement are available. For example, removing a deteriorating tree without first taking cuttings.



The restoration of Reynolda Gardens at Wake Forest University in Winston-Salem, North Carolina, was based on available historic documentation for the period of significance, the long-term maintenance requirements, the surviving plant materials contained within an individual garden area, and the need to interpret the garden as it looked at one time to the public. (The Jaeger Group)

Protect and Maintain Features and Materials from the Restoration Period

Protecting and maintaining vegetation from the restoration period by use of non-destructive methods and daily, seasonal and cyclical tasks. For example, employing pruning or careful use of herbicides on historic fruit trees.

Utilizing maintenance practices which respect habit, form, color, texture, bloom, fruit, fragrance, scale and context.

Utilizing historic horticultural and agricultural maintenance practices when those techniques are critical to maintaining the integrity of the vegetation from the restoration period. For example, the manual removal of dead flowers to ensure continuous bloom.

Failing to undertake preventive maintenance of vegetation from the restoration period.

Utilizing maintenance practices and techniques which are harmful to vegetation from the restoration period. For example, mowing lawns containing spring bulbs.

Utilizing maintenance practices and techniques that fail to recognize the uniqueness of individual plant materials. For example, utilizing soil amendments which may alter flower color or poorly-timed pruning and/or application of insecticide which may alter fruit production.

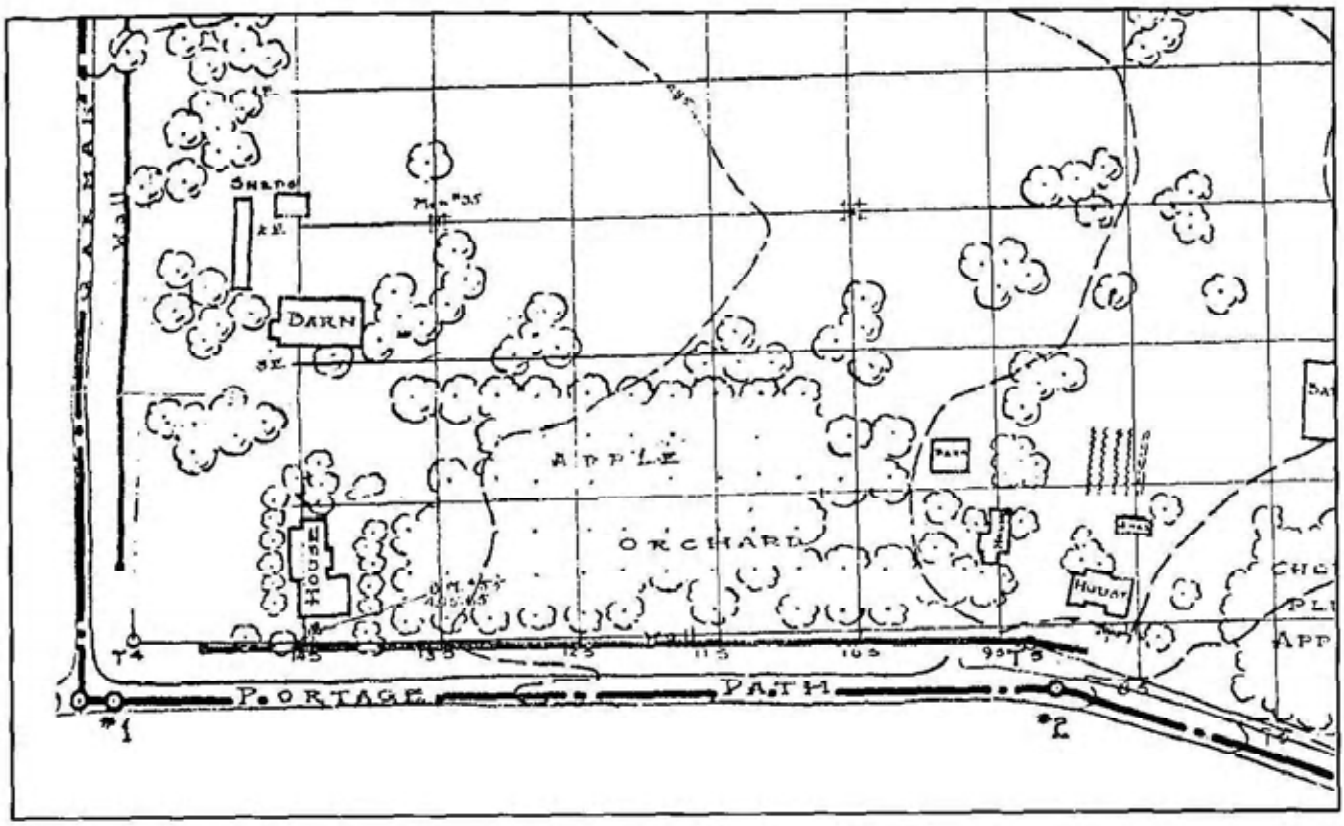
Employing contemporary practices when traditional or historic can be used. For example, utilizing non-traditional harvesting practices when traditional practices are still feasible.

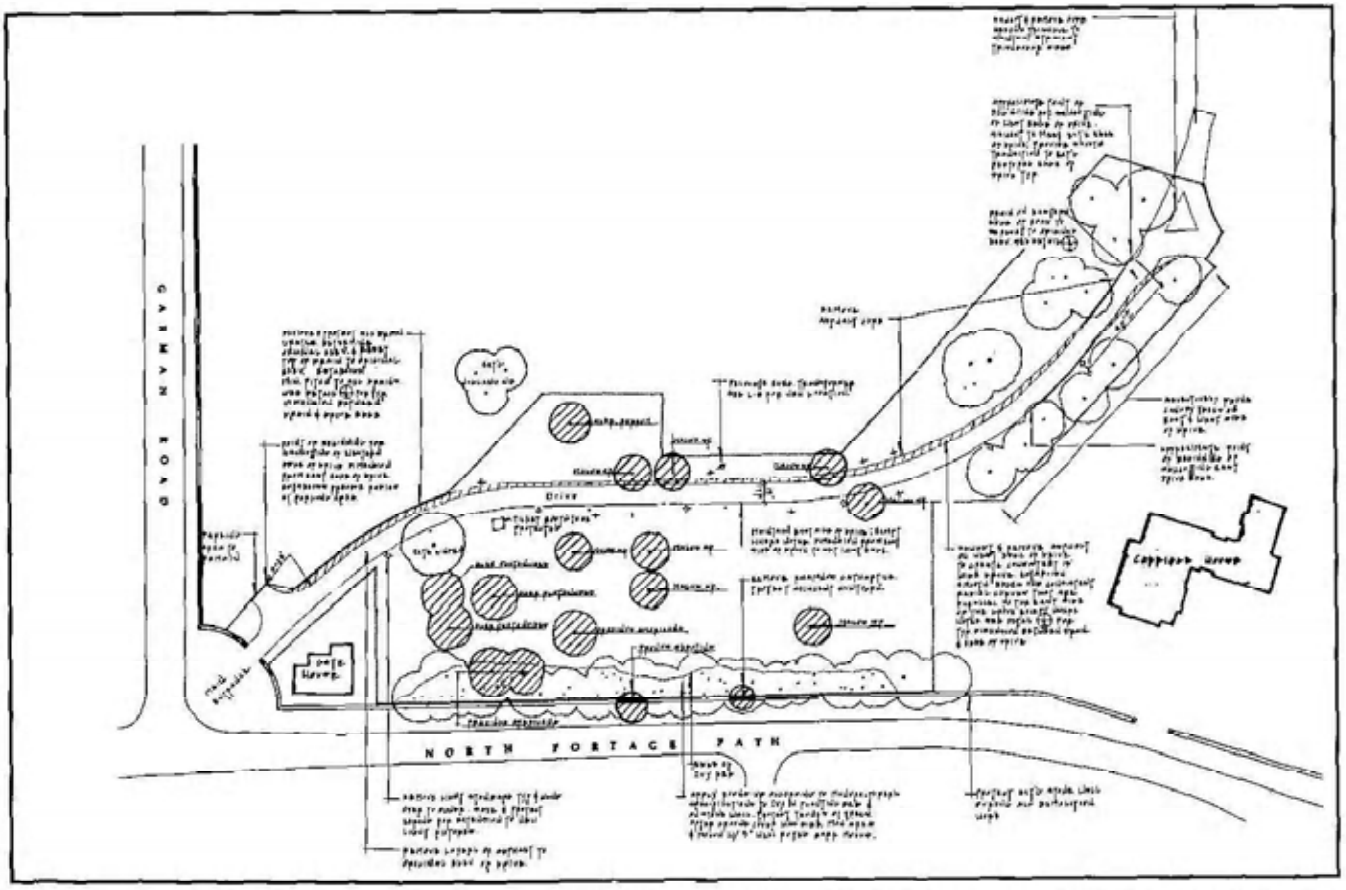
Repair Features and Materials from the Restoration Period

Rejuvenating historic vegetation from the restoration period. For example, by corrective pruning, deep root fertilizing, aerating soil, renewing seasonal plantings and/or grafting onto historic genetic stock.

Replacing or destroying vegetation from the restoration period when rejuvenation is possible. For example, removing a matured shrub and replacing with new material when proper pruning may be employed.

When replacing deteriorated or declining vegetation and the same kind of material is not available, then a substitute material may be considered. This material should be of compatible scale, color, form, shape and texture. Considering a mature American elm's pendulous form [left], a Japanese zelkova's vase-like form [right], such a substitution of plant materials would not meet the Standards. (author, 1994)





The Estate Drive through the Apple Orchard at Stan Hywct Hall , Akron, Ohio, is being restored to a 1913 design by Warren Manning. Based on historic documentation [top] those trees that were inappropriate to the original design were removed [bottom]. (Douglas Reed)

Replace Extensively Deteriorated Features from the Restoration Period

Using existing physical evidence of form, habit or composition to replace a deteriorated or declining vegetation feature from the restoration period. If using the same kind of material is not technically, economically, or environmentally feasible, then a compatible substitute material may be considered. For example, replacing a memorial tree with a tree grown from its genetic stock.

Removing vegetation from the restoration period that has deteriorated and not replacing it, or replacing it with a new feature that does not convey the same visual appearance. For example, removing a blight-ridden hedge and replacing it with pyramidal form trees.

Remove Existing Features from Other Historic Periods

Removing or altering vegetation from other historic periods. For example, removing later foundation plantings or successional woodlot growth.

Documenting vegetation from other periods prior to its alteration or removal. If possible, representative examples of this vegetation should be saved, cultivated and managed, through seed collection and genetic stock cuttings, to facilitate future research.

Failing to remove vegetation from another period, thus confusing the depiction of the landscape during the restoration period. For example, maintaining a lawn on the site of a historic cutting garden.

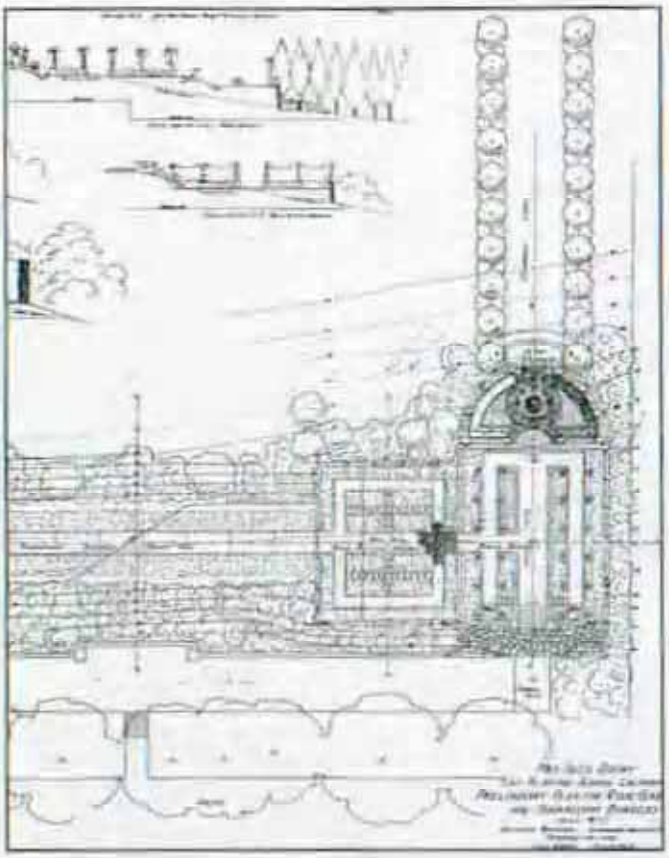
Failing to document vegetation from other historic periods that is removed or altered so that a valuable portion of the historic record is lost.

As part of an overall restoration program for each of the gardens at Rancho Los Alamitos in Long Beach, California, close attention has been paid to its vegetation features. The Old Garden [1928 and 1996] was overtaken by 40' of bamboo timber [top left and right]. Here, efforts include replanting the original boxwood hedge, propagating and replanting genetic stock from the remaining bananas and replanting and training cypress to a hedge-form. The Rose Garden has been restored [page 112] including replacing in-kind the original rose trees [only one survived] using the original 1927 plan by the Olmsted Brothers [1928, 1995 and 1996]. The Cutting Garden has also been restored, [above left and right] which until recently had been maintained as a herb garden. A recent discovery of these plans allowed for the restoration of the garden including its herbaceous materials and even the design of the garden bench [1994 and 1996]. (Rancho Los Alamitos Foundation)

Re-Create Missing Features from the Restoration Period

Recreating a missing vegetation feature that existed during the restoration period based on historical, pictorial and physical documentation. For example, replanting crop types based on pollen analysis.

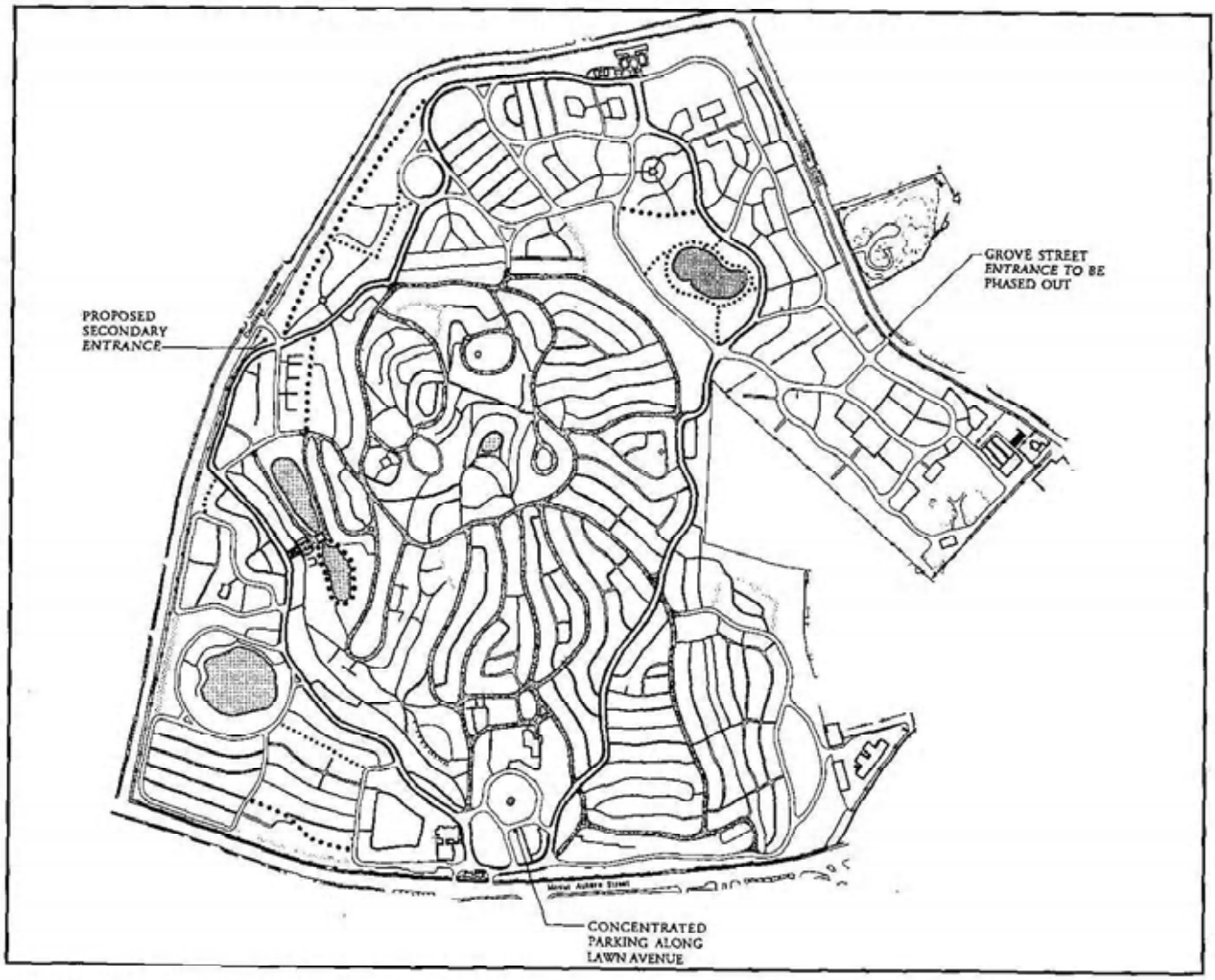
Installing vegetation that was thought to have existed during the restoration period, but for which there is insufficient documentation; or planting vegetation that was part of the original design but was never installed thus creating a false historic appearance.



CIRCULATION

Identify, Retain, and Preserve Historic Features and Materials from the Restoration Period

Recommended	Not Recommended
Identifying, retaining and preserving the existing circulation features from the restoration period prior to beginning project work. All circulation features should be documented, from small paths and walks to larger transportation corridors such as parkways, highways, railroads and canals. Documenting alignment, surface and edge treatment, width, grade, materials and infrastructure.	Executing project work that impacts circulation from the restoration period. For example, altering the route and configuration of a historic bridle path without identifying its historic alignment.
Evaluating and understanding the cultural landscape's circulation from the restoration period. Using archival resources such as plans and aerial photographs, or, in their absence, archeological analysis techniques to understand the circulation from the restoration period.	Executing project work without understanding its impact on circulation features from the restoration period. For example, changing road widths without a thorough evaluation of the historic road.



The layout of the circulation system is the centerpiece of Mount Auburn's landscape design, and the least changed aspect of it. Today there are about 70 miles of paths and 12 miles of roads. The chronological development of the cemetery's access, circulation and parking has resulted in the proposal for protecting and retaining , and in places, restoring the historic circulation design. (The Halvorson Company)

Protect and Maintain Features and Materials from the Restoration Period

Protecting and maintaining circulation features from the restoration period by use of non-destructive methods and daily, seasonal and cyclical tasks. For example, this may include hand-raking, top-dressing, or rolling surface materials.

Failing to undertake preventive maintenance for circulation features from the restoration period. For example, permitting a failed drainage system to contribute to the degradation and loss of associated curbs or erosion of shoulders.

Utilizing maintenance methods which destroy or degrade circulation features from the restoration period. For example, using a snow plow over a coarse textured pavement.

Repair Features and Materials from the Restoration Period

Repair declining circulation features from the restoration period by reinforcing the materials that comprise these features. Repairs will also generally include the limited replacement in-kind or, with compatible substitute material, of those extensively deteriorated or missing parts of features when there are surviving prototypes. For example, replacing in-kind limited sections of capstone along a historic parapet. The new work should be unobtrusively dated to guide future research and treatment.

Replacing or destroying circulation features from the restoration period when repair of materials and limited replacement of deteriorated or missing components are appropriate.

Failing to reuse existing surface or edge materials from the restoration period when only the substrate requires repair.

Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the circulation feature from the restoration period, or that is physically or environmentally incompatible.

Replace Extensively Deteriorated Features from the Restoration Period

Using physical evidence of form, detailing and alignment to reproduce an entire circulation feature from the restoration period. If using the same kind of material is not technically, economically, or environmentally feasible, then a compatible substitute material may be considered. The new work should be unobtrusively dated to guide future research and treatment. For example, replacing a bulkhead's timber coping along an entire waterfront esplanade.

Removing a circulation feature from the restoration period that is unrepairable and not replacing it; replacing it with a new feature that does not convey the same visual appearance; or failing to document the new work. For example, removing a crushed stone carriage road and replacing it with a wider asphalt road.

Remove Existing Features from Other Historic Periods

Removing or altering circulation features from other historic periods. For example, removing a later parking lot.

Failing to remove circulation features from another period, thus confusing the depiction of the landscape during the restoration period. For example, maintaining a modern asphalt path through a historic meadow.

Documenting circulation features from other historic periods prior to their alteration or removal. For example, recording cross sections of road and retaining wall construction. If possible, representative features should be stored for future research.

Failing to document circulation features from other historic periods that are removed or altered so that a valuable portion of the historic record is lost.

Re-Create Missing Features from the Restoration Period

Recreating a missing circulation feature that existed during the restoration period based on historical, pictorial and physical documentation. For example, duplicating paving patterns based on surviving prototypes.

Constructing a circulation feature that was thought to have existed during the restoration period, but for which there is insufficient information; or constructing a circulation feature that was part of the original design but was never executed, thus creating a false historic appearance.

The garden walks constructed during the 1920s and 1930s at Shadows-on-the-Teche in New Iberia, Louisiana, had filled in with grass over time [top]. As part of the current master plan, these walks have been re-created using a mixture of earth and Portland cement. The materials are set in place, and water added [opposite]. Finally, a gravel top coat is packed-in and rolled flat [bottom]. (Shadows-on-the-Teche)

WATER FEATURES

Identify, Retain, and Preserve Historic Features and Materials from the Restoration Period

Recommended	Not Recommended
Identifying, retaining and preserving existing water features and water sources such as retention ponds, pools, and fountains from the restoration period prior to project work. Documenting shape, edge and bottom condition/ material; water level, movement, sound and reflective quality; associated plant and animal life, and water quality.	Executing project work that impacts water features and associated hydrology from the restoration period, without undertaking an "existing conditions" survey. For example, filling in a pond that was historically used for ornamental or farming purposes.
Evaluating the condition of water features from the restoration period. For example, assessing water quality or utilizing archeological techniques to determine the path of a watercourse.	Executing project work without understanding its impact on water features from the restoration period. For example, placing a section of creek in a culvert or concrete channel.

Protect and Maintain Features and Materials from the Restoration Period

Protecting and maintaining water features from the restoration period by use of non-destructive methods in daily, seasonal and cyclical tasks. For example, cleaning leaf litter or mineral deposits from drainage inlets or outlets.	Failing to undertake preventive maintenance of water features from the restoration period. For example, allowing a historic fish pond to fill up with leaf litter. Utilizing maintenance methods which destroy or degrade water features from the restoration period. For example, using harsh chemical additives for maintaining water quality.
Maintaining a water feature's mechanical, plumbing and electrical systems to insure appropriate depth of water or direction of flow. For example, routinely greasing and lubricating gate mechanisms for a pond.	Allowing mechanical systems to fall into a state of disrepair, resulting in changes to the water feature. For example, failing to maintain a sprinkler system on a historic golf course.

Repair Features and Materials from the Restoration Period

Repair deteriorated water features from the restoration period by reinforcing the materials that comprise these features. Repairs will generally include limited replacement, in-kind or compatible substitute material, of those extensively deteriorated or missing parts of features when there are surviving prototypes. For example, replacing in-kind corroding iron valves in a historic spray pool. The new work should be unobtrusively dated to guide future research and treatment.	Replacing or destroying water features from the restoration period when repair of materials and limited replacement of deteriorated or missing parts are appropriate. For example, filling in a historic farm pond instead of removing invasive plant materials. Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the water feature from the restoration period, or is physically or environmentally incompatible. For example, replacing marble coping stone with concrete.

Replace Extensively Deteriorated Features from the Restoration Period

Using existing physical evidence of form, depth and detailing to reproduce an entire water feature from the restoration period. If using the same kind of material is not technically, economically, or environmentally feasible, then a compatible substitute material may be considered. The new work should be unobtrusively dated to guide future research and treatment. For example, replacing a granite watering trough with one of cast stone.

Removing a water feature from the restoration period that is unrepairable and not replacing it; replacing it with a new feature that does not convey the same visual appearance; or failing to document the new work. For example, channeling a natural stream into a culverted pipe.

Remove Existing Features from Other Historic Periods

Removing or altering water features from other historic periods. For example, removing a modern retention pond.

Failing to remove water features from another period, thus confusing the depiction of the landscape during the restoration period. For example, maintaining a swimming pool on the site of an historic herb garden.

Documenting water features from other periods prior to their alteration or removal. For example, inventorying and cataloguing hydrology, flora and fauna associated with the feature. If possible, selected examples of these materials or features should be stored to facilitate future research.

Failing to document water features from other historic periods that are removed or altered so that a valuable portion of the historic record is lost.

Re-Create Missing Features from the Restoration Period

Recreating a missing water feature that existed during the restoration period based on historical, pictorial and physical documentation. For example, recasting a fountain from its original mold.

Constructing a water feature that was thought to have existed during the restoration period, but for which there is insufficient information; or constructing a water feature that was part of the original design but was never executed, thus creating a false historic appearance.

At the Joslyn Castle in Omaha, Nebraska, the location of pools believed to be part of the original design by Jens Jensen was confirmed by archeology. (Mary Hughes)

STRUCTURES, FURNISHINGS AND OBJECTS

Identify, Retain, and Preserve Historic Features and Materials from the Restoration Period

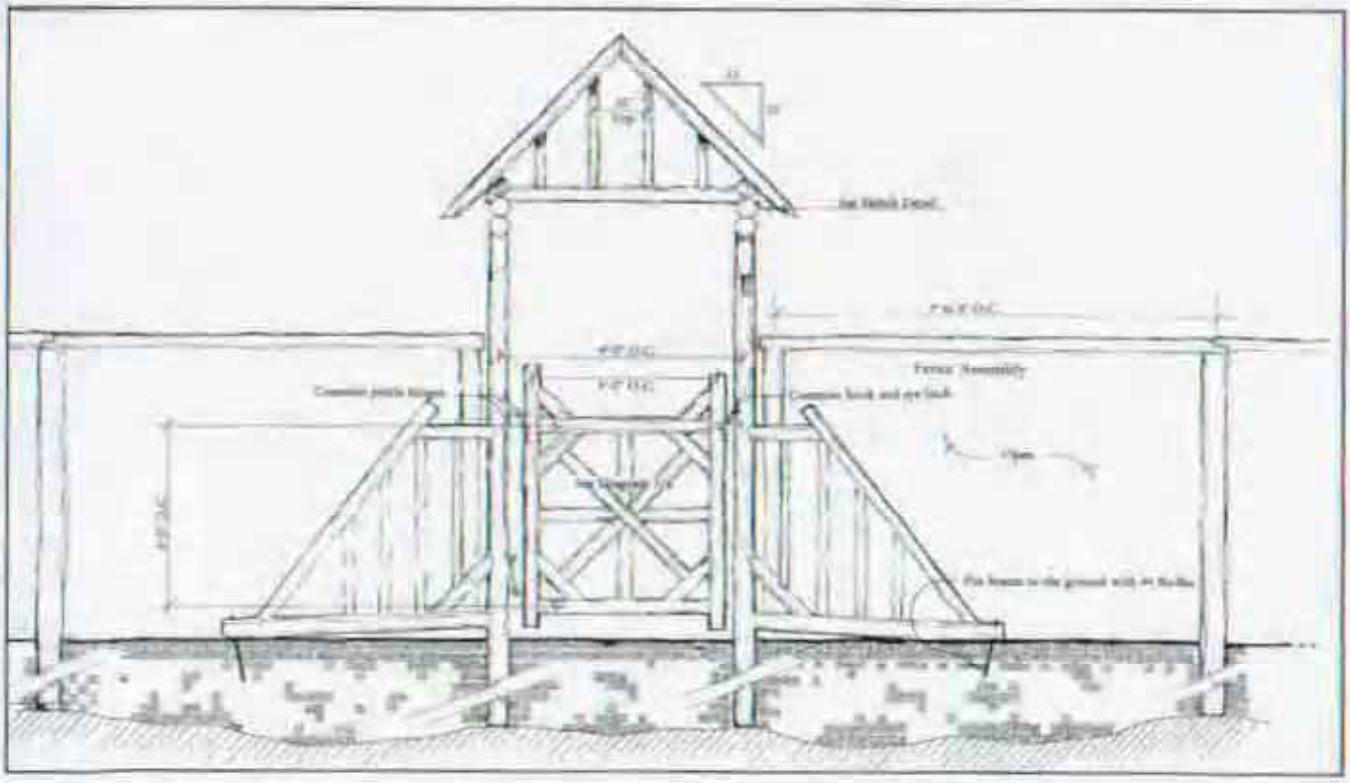
Recommended	*Not Recommended*
Identifying, retaining and preserving existing structures, furnishings and objects from the restoration period prior to beginning project work. Documenting the relationship of these features to each other, their surrounds, and their material compositions.	Executing project work that impacts structures, furnishings and objects from the restoration period, without undertaking an "existing conditions" survey. For example, altering a pale fence that delineates the limits of a corral cluster.
Evaluating the condition of structures, furnishings and objects from the restoration period. For example, utilizing Historic Structures Reports and aerial photography to understand the relationship between tracks, trestles and screens at a mining site.	Executing project work without understanding its impact on structures, furnishings and objects from the restoration period. For example, removing picnic tables and fireplaces from a group camp.

Protect and Maintain Features and Materials from the Restoration Period

Protecting and maintaining buildings, structures, furnishings and objects from the restoration period by use of non-destructive methods in daily, seasonal and cyclical tasks. For example, cleaning leaf litter from the gutters of a park pavilion.	Failing to undertake preventive maintenance of structures, furnishings and objects from the restoration period. For example, allowing a cast iron fence from the restoration period to deteriorate.
	Utilizing maintenance methods which destroy or degrade structures, furnishings and objects from the restoration period. For example, using harsh grit blasting techniques to clean historic stone or bronze statuary.
Maintaining mechanical, plumbing and electrical systems for structures and furnishings. For example, providing adequate ventilation in a dovecote and improving its energy efficiency.	Allowing mechanical systems to fall into a state of disrepair, resulting in changes to a structure, furnishing or object. For example, enclosing mechanical systems of a poolhouse so they are not adequately ventilated.

Repair Features and Materials from the Restoration Period

Repairing deteriorating structures, furnishings and objects from the restoration period by reinforcing the materials that comprise these features. Repairs will also generally include the limited replacement in-kind or with compatible substitute material, of those extensively deteriorated or missing parts of features when there are surviving prototypes, such as roof features, windows, bollards and signage. The new work should be unobtrusively dated to guide future research and treatment.	Replacing or destroying structures, furnishings and objects from the restoration period when repair of materials and limited replacement of deteriorated or missing parts are appropriate.
	Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the structure, furnishing or object from the restoration period, or that is physically or environmentally incompatible. For example, replacing a wood slat with a recycled plastic one in a historic bench.



The missing garden gate at Weir Farm National Historic Site [bottom] in Wilton, Connecticut, was restored [top right] through photographic documentation [top left] and archeology. (courtesy NPS and Weir Farm National Historic Site)

Replace Extensively Deteriorated Features from the Restoration Period

Using existing physical evidence of form, material and detailing to reproduce structures, furnishings or objects from the restoration period. If using the same kind of material is not technically, economically, or environmentally feasible, then a compatible substitute material may be considered. The new work should be unobtrusively dated to guide future research and treatment. For example, replacing a cast stone mileage marker.

Removing a structure, furnishing or object from the restoration period that is unrepairable and not replacing it; replacing it with a new feature that does not convey the same visual appearance; or failing to document the new work. For example, replacing a deteriorated pier with a floating dock.

Remove Existing Features from Other Historic Periods

Removing or altering structures, furnishings and objects from other historic periods.

Failing to remove structures, furnishings and objects from another period, thus confusing the depiction of the cultural landscape during the restoration period. For example, maintaining modern sculpture in a historic estate.

Documenting structures, furnishings and objects from other periods prior to their alteration or removal. If possible, selected examples of these materials or features should be stored to facilitate future research.

Failing to document structures, furnishings and objects from other historic periods that are removed or altered so that a valuable portion of the historic record is lost.

Re-Create Missing Features from the Restoration Period

Recreating a missing structure, furnishing or object that existed during the restoration period based on historical, pictorial and physical documentation. For example, recasting a garden jardiniere from its original mold or duplicating a corn crib from an extant prototype.

Constructing a structure, furnishing or object that was thought to have existed during the restoration period, but for which there is insufficient information; or constructing a bandstand that was part of the original design but was never executed, thus creating a false historic appearance.

Historic signs at Mt. Auburn Cemetery, Cambridge, Massachusetts, typical of the era, [opposite] are depicted through new castings made from a historic prototype. A deteriorated sign from another historic burial ground could also be restored using this prototype. The signature historic street lights, unique to Denver, Colorado, had been lost over time to quick-fix solutions. As part of a city-wide project to restore original streetscape furnishings, historic fixtures were recast, and installed in their appropriate settings. Two examples include the single-globe fixtures along Speer Boulevard [historic, contemporary-before and after; opposite page bottom], and the downtown double-teardrop fixture [historic and two contemporary views; opposite page top]. (Western History Department, Denver Public Library; Foster and Marshall)

Although the work in the following sections is quite often an important aspect of restoration projects, its is usually not part of the overall process of restoring character-defining features (maintenance, repair and limited replacement); rather, such work is assessed for its potential negative impact on the landscape's historic character. For this reason, particular care must be taken not to obscure, alter, or damage character-defining features.

ACCESSIBILITY CONSIDERATIONS

Identifying the cultural landscape's features, materials and finishes from the restoration period so that accessibility code-required work will not result in their damage or loss.

Undertaking code-required alterations before identifying those features, materials and finishes which are from the restoration period and must therefore be preserved.

Complying with barrier-free access requirements in such a way that features, materials and finishes from the restoration period are preserved.

Damaging or destroying restoration period features in attempting to comply with accessibility requirements.

Working with local accessibility and preservation specialists to determine the most appropriate solution to access problems which will have the least impact on character-defining features.

Altering features, materials and finishes from the restoration period without consulting local accessibility and preservation experts.

Providing barrier-free access that promotes independence for the disabled person to the highest degree practicable, while preserving significant character-defining landscape features, materials and finishes. For example, incorporating wider sidewalks only at intersections where ramps are being installed, leaving the main runs of historic sidewalks in place.

Making access modifications that do not provide a reasonable balance between independent, safe access and preservation of landscape features, materials and finishes from the restoration period.

Finding solutions to meet accessibility requirements that minimize the impact on the cultural landscape, for example, compatible ramps and lifts.

Making modifications for accessibility without considering the impact on the cultural landscape. For example, introducing a new access element (ramp or lift) that destroys the symmetry of a formal garden.

At the Eugene O'Neill National Historic Site in Danville, California, original walks that are too narrow by today's accessibility standards were retained and a new wheelchair route was defined via reinforced turf. (author, 1994)

Modifications to the entrance of the Frederick Law Olmsted National Historic Site in Brookline, Massachusetts, meet accessibility requirements and retain significant landscape and architectural features. (courtesy NPS)

HEALTH AND SAFETY CONSIDERATIONS

Identifying the cultural landscape's features, materials and finishes from the restoration period so that code-related work will not result in their damage or loss.	Undertaking code-required alterations before identifying those features, materials and finishes from the restoration period which are character-defining and must therefore be preserved.
Complying with health and safety code requirements, in such a manner that features, materials and finishes from the restoration period are preserved. For example, recognizing standards for the removal of lead-based paints on play equipment.	Altering, damaging or destroying features, materials and finishes from the restoration period while making modifications to a cultural landscape to comply with safety codes.
Removing toxic materials only after thorough testing has been conducted and only after less invasive abatement methods have been shown to be inadequate.	Destroying a cultural landscape's features, materials and finishes from the restoration period without careful testing and without considering less invasive abatement methods.
Providing workers with appropriate personal protective equipment for hazards found in the worksite.	Removing unhealthful materials without regard to personal and environmental safety.
Working with local code officials to investigate systems, methods, or devices of equivalent or superior effectiveness and safety to those prescribed by code so that unnecessary alterations can be avoided.	Making changes to cultural landscapes without first exploring equivalent health and safety systems, methods, or devices that may be less damaging to features, materials and finishes from the restoration period.
Upgrading features from the restoration period to meet health and safety codes in a manner that assures their preservation. For example, upgrading a historic stairway without destroying handrails and balustrades from the restoration period.	Damaging or obscuring features, materials and finishes from the restoration period, in the process of doing work to meet code requirements.
Installing safety-related systems that result in the retention of features, materials, and finishes from the restoration period; for example, fire-suppression systems or seismic retrofits.	Covering features from the restoration period with fire resistant sheathing which results in altering their visual appearance.
Applying the necessary materials to add additional protection to features, materials and finishes from the restoration period. For example, applying fire retardant, intumescent paint coatings to a deck to add thermal protection to its steel.	Using materials intended to provide additional protection, such as fire-retardant coatings, if they damage or obscure features, materials and finishes from the restoration period.
Adding new features to meet health and safety codes in a manner that preserves adjacent features, materials and finishes from the restoration period. For example, providing a new fire access along a derelict road from the restoration period.	Radically changing, damaging or destroying features, materials and finishes from the restoration period when adding new code-required features.

ENVIRONMENTAL CONSIDERATIONS

Identifying the cultural landscape's features, materials and finishes from the restoration period so that environmental protection-required work will not result in their damage or loss.

Undertaking environmental protection-required work before identifying those features, materials and finishes from the restoration period which must be preserved.

Complying with environmental protection regulations in such a manner that features, materials and finishes from the restoration period are preserved. For example, protecting vegetation from the restoration period in which endangered species nest.

Altering, damaging, or destroying features, materials and finishes from the restoration period while making modifications to a cultural landscape to comply with environmental protection regulations.

Working with environmental protection officials to investigate systems, methods, devices or technologies of equivalent or superior effectiveness to those prescribed by regulation so that unnecessary alterations can be avoided.

Making changes to cultural landscapes without first exploring equivalent environmental protection systems, methods, devices or technologies that may be less damaging to historic features, materials and finishes from the restoration period.

Reclaiming or re-establishing natural resources in a manner that promotes the highest degree of environmental protection, while preserving features, materials and finishes from the restoration period. For example, reclaiming a wetland to comply with applicable environmental regulations, while re-establishing the feature as it appeared during the restoration period.

Making environmental protection related modifications that do not provide a reasonable balance between improved environmental conditions and the preservation of features, materials and finishes from the restoration period.

ENERGY EFFICIENCY

Retaining and maintaining those energy-efficient features or parts of features of the landscape from the restoration period. For example, maintaining vegetation from the restoration which performs passive solar energy functions.

Removing or altering those features or parts of features from the restoration period which play an energy-conserving role. For example, removing a historic windbreak.

Improving energy-efficiency of existing features from the restoration period through non-destructive means. For example, utilizing a recirculating system in a fountain rather than uncontrolled discharge to a storm system.

Replacing energy inefficient features from the restoration period rather than improving their energy conservation potential. For example, replacing an entire historic light standard, rather than retrofitting the fixture to be more efficient.