National Park Service
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Cultural Landscape Report for The Mansion Grounds

Marsh-Billings-Rockefeller National Historical Park

Volume III: Treatment

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TURAL LANDSCAPE REPORT
THE MANSION GROUNDS

ARSH-BILLINGS-ROCKEFELLER
TIONAL HISTORICAL PARK
ODSTOCK, VERMONT

Volume III:

Treatment

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The Olmsted Center for Landscape Preservation promotes the stewardship of significant landscapes through research, planning, and sustainable preservation maintenance. The Center accomplishes its mission in collaboration with a network of partners including national parks, universities, government agencies, and private nonprofit organizations. This report was developed through a cooperative agreement with the Faculty of Landscape Architecture at the State University of New York College of Environmental Science and Forestry, Syracuse, New York.

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Cover photograph: The Mansion grounds, historic aerial view looking north, 1994. Aero Photo, Inc., Wareham, Massachusetts.

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INTRODUCTION

This report has been developed as part of a comprehensive Cultural Landscape Report (CLR) that documents the history and significance of the Mansion grounds and provides a strategy for its short and long-term management.[1] The CLR for the Mansion Grounds has been organized into three volumes. This report, Treatment (CLR Part 2), is the third volume of the CLR and has been developed based on the findings of the previous two: Site History (CLR Part 1, Volume 1) and Existing Conditions & Analysis (CLR Part 1, Volume 2). Treatment describes how the landscape should look in the future based on the objective of preserving landscape characteristics and associated features that contribute to the historic significance of the property. For the Mansion grounds, the period of significance extends to an unusually late date (1801-1997) at the end of the Rockefeller's life estate on the property. Therefore, treatment of the landscape largely involves preservation of the existing (2004) landscape, since it is little changed from the end of the historic period in 1997.

The area covered in this volume encompasses the thirty-four (approximate) federally-owned acres within the Village of Woodstock that comprise the Mansion grounds. This area is maintained by the National Park Service as part of the larger 555-acre Historic Zone of Marsh-Billings-Rockefeller National Historical Park in Woodstock, Vermont. [Figure 1] This landscape contains manicured gardens, lawns, and specimen trees, as well as plantations and rustic gardens that are part of the park's forest that

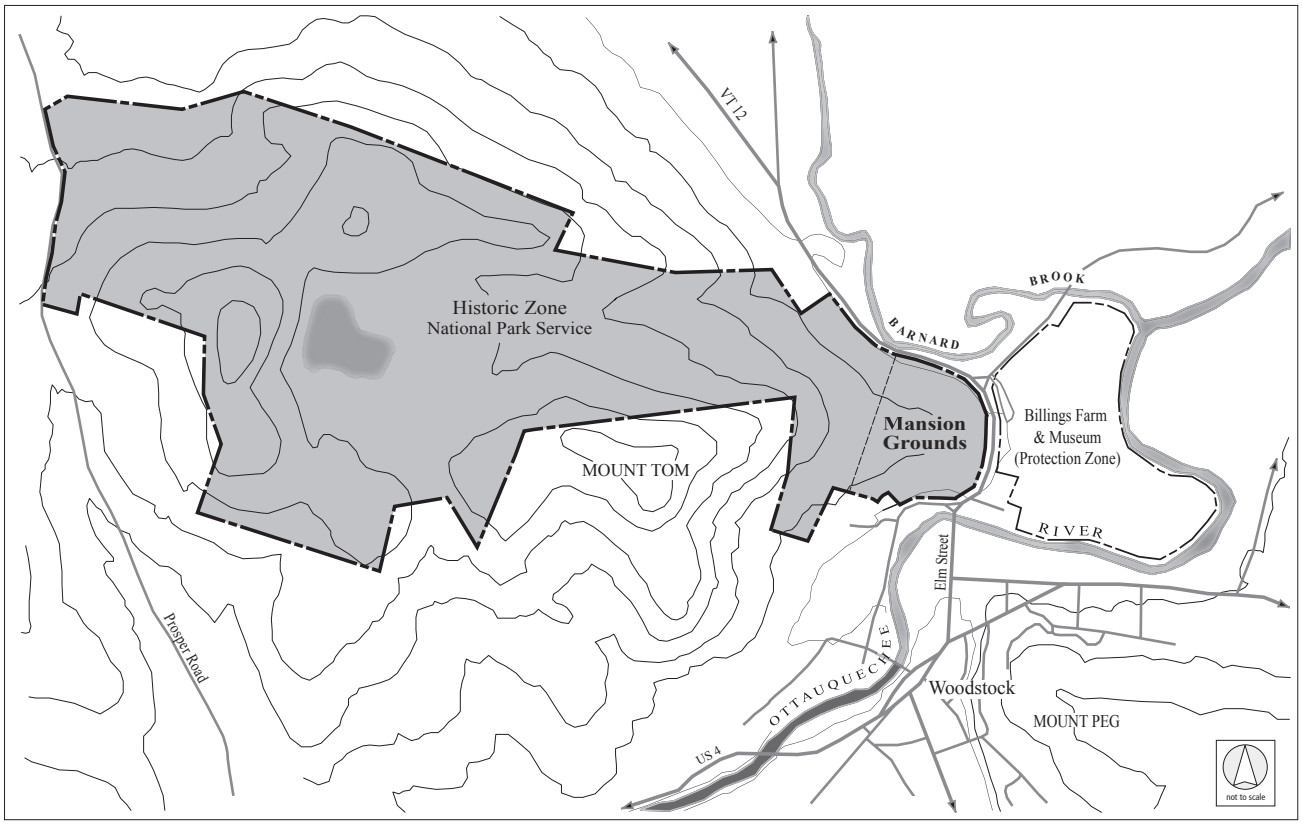


Figure 1: Location of the Mansion grounds relative to the National Park Service Historic Zone and Billings Farm & Museum Protection Zone of Marsh-Billings-Rockefeller National Historical Park. State University of New York College of Environmental Science and Forestry (SUNY ESF) .

extends west across Mount Tom. Within the Mansion grounds are the park's administrative offices and maintenance facilities.

The following introductory sections discuss a recommended management philosophy for the landscape, a definition of the primary treatment for park resources, and an overview of general treatment and interpretation issues affecting the landscape. The main part of this volume contains narrative treatment recommendations for individual landscape features organized by the following landscape characteristics: natural systems, spatial organization, circulation, vegetation, buildings and structures, views and vistas, constructed water features, and small-scale features. Features are further organized within each characteristic according to the three areas of the Mansion grounds: Mansion Terrace, Terrace Gardens-Belvedere, and Hill. [Figure 2] The volume concludes with a series of recommendations covering proposed projects and long-term treatment issues.

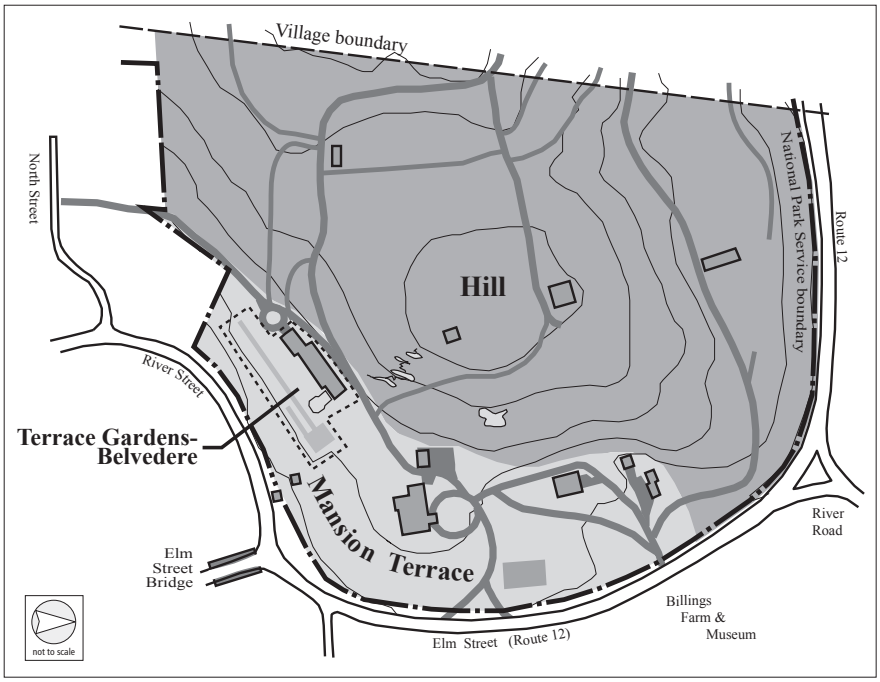


Figure 2: Diagram of the Mansion grounds illustrating three areas used to organize landscape features: Mansion Terrace, Terrace Gardens-Belvedere, and Hill. SUNY ESF.

Given that this treatment plan reflects only a little more than five years of active management by the National Park Service, the recommendations in this report should be re-evaluated and updated as the park gains further experience and perspective. This is especially true for treatment of features for which further information is recommended (e.g., Hillside Gardens), and for dynamic, large-scale features such as the forest plantations.

MANAGEMENT PHILOSOPHY

In managing Marsh-Billings-Rockefeller National Historical Park, the National Park Service (NPS) emphasizes historic preservation while demonstrating and interpreting a conservation philosophy that evokes a strong sense of place, created and sustained by human activity and stewardship.[2] The NPS continues the long Billings-Rockefeller tradition of land stewardship as part of its mission of conservation education and interpretation. The park is thus about history as well as contemporary life and work, illustrated through a working farm (Billings Farm & Museum) privately owned and operated by The Woodstock Foundation, Inc., and forests actively managed by the NPS.[3] Within the Mansion grounds, the NPS continues to actively manage the landscape, preserving its many layers of historic changes to interpret the conservation values and personal lives of the Marsh, Billings, and Rockefeller families.

The landscape of the Mansion grounds, as a component of the larger park, illustrates a long period of historic significance extending from the birth of George Perkins Marsh in 1801, through Frederick Billings's stewardship in the late nineteenth century, and continuing to the end of Mary F. and Laurance S. Rockefellers' life estate in 1997. The landscape retains features from throughout the period of significance, with the highest level of integrity naturally dating to the Rockefeller era (1954-1997). Most features from this era are from a major rehabilitation the Rockefellers undertook in the late 1950s and early 1960s, although they continued to make adjustments to the landscape as late as the 1990s. While these adjustments are relatively recent, they reflect a continuum of earlier conservation stewardship practices on the property and continued association with persons significant in the history of the American conservation movement. Only minor changes have been made to the landscape by the NPS since the end of the historic period in order to accommodate park operations.

As embodied in the park's enabling legislation (1992), the purpose of the park is to interpret the history and evolution of conservation stewardship in America through the lives and contributions of George Perkins Marsh, Frederick Billings and his heirs, including Mary French Rockefeller, and Laurance S. Rockefeller; and to preserve the Mansion and its surrounding grounds.[4] The 1998 General Management Plan (GMP) expanded upon the intent of the legislation by calling for preservation of features that dated through the Rockefeller's tenure:

> *Because the buildings and cultural features of Marsh-Billings National Historical Park* [sic] *reflect nearly two centuries of historically significant occupancy, no single period of history will be favored over another. Rather, the property will be managed to convey a sense of the site's evolution. Historical changes to the buildings and landscape will be retained, and visitors will experience the property largely as it appears today* [1998].[5]

The park's management philosophy does not call for freezing the landscape as it appeared at the end of the period of significance in 1997, but rather to manage change in a manner that preserves the overall historic character and historic features of the landscape. This management philosophy reflects the park's mission to continue the property's historic uses, as well as the dynamic quality of landscapes and the evolving philosophies and practices of conservation stewardship. While it is therefore appropriate to allow for limited change in the landscape to support park operations and conserve natural resources, management must still give priority to preservation in order to ensure that the landscape conveys its historic character and significance for future generations.

As a general treatment benchmark, it is recommended that the Mansion grounds be managed to preserve the character of the landscape during the Rockefellers' last five years on the property, c.1992-1997. Laurance S. and Mary F. Rockefeller continued to care for and enjoy their Woodstock home for five years following its designation as a National Historical Park in 1992, and took great interest in how the Mansion grounds

would be presented to the public once they gave up their life estate there. While they were elderly by this time and were not as active on the grounds as they once were, they still made a substantial effort to enhance the beauty and historic character of the landscape in anticipation of public visitation. The Rockefellers not only had studies commissioned to suggest appropriate ways to introduce public access and interpretation, but also made physical changes to the landscape, including new planting schemes in the gardens to extend the bloom period over the course of the anticipated visitor season, opening the expansive view looking east from the Mansion verandah, and creating a new vista looking across the farm from the main entrance drive. Yet during the latter part of this five-year span, some features in the landscape also declined or were lost as the Rockefellers prepared for transitioning management of the property to the National Park Service. These changes, which were most likely unintentional and due in part to natural dynamics as well as staff changes, included decline of the plantings in the Hillside Gardens, obstruction of the Bungalow and Ottauquechee River vistas, and removal of the Upper Meadow vegetable garden. Taken as a whole, however, the five-year span between 1992 and 1997 represents the character of the landscape that the Rockefellers wished to represent to the public.[6] Treatment recommendations outlined in this report therefore generally focus on maintaining, or in a few cases, restoring, the character of the landscape during the Rockefellers' last five years at the Mansion grounds.

PRIMARY TREATMENT

As identified in the General Management Plan (1998), rehabilitation is the general treatment approach to be followed for park resources.[7] "Rehabilitation"—one of four standards identified in the Secretary of the Interior's Standards for the Treatment of Historic Properties (other three being Preservation, Restoration, and Reconstruction)—is defined as a treatment that makes possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historic significance. Rehabilitation could include, for example, alteration of an historic building for a contemporary new use, resurfacing park drives, or adding handrails along steps. The Standards for Rehabilitation include the following:

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces, and 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 will 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 material will match the old in composition, 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 or related new construction will 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.8

Within the Mansion grounds, rehabilitation standards 1 through 8 (preservation) will guide most treatment measures for the landscape, with standards 9 and 10 (specific to rehabilitation) applied only to individual features as needs arise. As developed in the park's GMP, "Restoration" and "Reconstruction" were not considered appropriate treatments because they would not have fulfilled the intent of the legislation, which specifically identifies the importance of a continuum of occupancy by George Perkins Marsh, Frederick Billings and his heirs, including Mary French Rockefeller, and Laurance S. Rockefeller. Returning the landscape to a prior appearance within the historic period would substantially limit the presentation of the property's continuous use, thereby providing a more limited experience for visitors.[9]

GENERAL LANDSCAPE TREATMENT ISSUES

Through development of the Cultural Landscape Report and discussions with park staff, the following major treatment issues in the Mansion grounds landscape have been identified. Specific treatment tasks for these issues are discussed within the "Narrative Treatment Guidelines."

Treatment of Late Rockefeller-Era Features

The Mansion grounds landscape is an unusual historic property because its period of significance extends to 1997, exceeding the standard fifty-year threshold used to evaluate properties under the National Register Criteria. Most of the features established by the Rockefellers date from their initial improvements made between 1954 and 1962, and are thus nearing the fifty-year threshold and are more easily understood as historic. However, the Rockefellers also added and changed features throughout their tenure into the 1990s. Despite their recent origin, these latest features are considered "contributing" since they fall within the period of significance (1801-1997), and illustrate continued stewardship of the landscape and its association with conservationist Laurance S. Rockefeller.

In general, however, most of the late Rockefeller-era features contribute to the historic significance of the property in a more limited manner, largely only through their association. They do not generally illustrate significance related to landscape design or conservation practices in particular, and therefore may not warrant the same level of treatment for features that do. For example, the secondary perimeter hedge, added in c.1984 to enhance the Rockefellers' privacy and security, contributes for its association with the Rockefellers, but does not have significance related to the design of the landscape or to conservation practices in particular. In contrast, the hillside Norway spruce plantations are not only associated with Frederick Billings, but also illustrate his earliest reforestation (conservation) practices and are character-defining features of the country place landscape he developed during the late nineteenth century. Treatment of the plantations therefore warrants a high degree of preservation, while the hedge may only warrant maintenance of its overall form. Late Rockefeller-era features such as the hedge should nonetheless be retained as part of the physical record of the landscape's development and the story of the Rockefellers' life on the Mansion grounds. It should also be recognized that as time passes, these features may gain additional significance as new information and perspective are gained on the Rockefeller era.

Plantations and Woods

The plantations and woods on the Mansion grounds present a difficult treatment challenge in terms of balancing preservation and natural dynamics. Treatment must allow for natural growth and decline, yet also protect and preserve historic forest character and plant materials as records of Frederick Billings' earliest reforestation efforts and forest management by his heirs over the course of nearly 120 years. While the Rock-

efeller-era practices of intensive maintenance to create a well-tended character within designed areas such as the Hillside Gardens is necessary to perpetuate the historic character of the forest, the Rockefeller-era practice of managing to allow natural succession to occur is generally not. Existing historic plantation trees, whether individuals or part of an intact plantation, should be protected and perpetuated through appropriate arboricultural practices, control of natural succession, and implementation (when necessary) of an in-kind replacement strategy. Such treatment is especially critical for character-defining portions of the plantaitons, including edges along open spaces, as well as for plantations that retain their original even-age monocultural character, and that adjoin roads and paths or other designed areas. The development of the Forest Management Plan (underway as of 2004) should further refine and expand the treatment recommendations outlined in this report.

Herbaceous Plantings

The herbaceous plantings within the Mansion grounds present another treatment challenge due to the lack of detailed historic documentation and the yearly change that, over time, has the potential to alter historic character. While herbaceous plantings such as in the Flower Garden and the Waterfall Garden are character-defining features of the landscape, their historic character is derived from their overall form, color, general species composition, and massing, and not by adherence to a strict planting plan. Based on available documentation, there were no detailed planting plans that were maintained for any of the flowerbeds, rock gardens, or woodland gardens during the Rockefeller era. Planting schemes changed annually, but the overall character appears to have remained fairly constant, with the exception of changes made to accommodate extension of the bloom period after 1992. Treatment for herbaceous plantings therefore does not need to follow a strict planting plan, but must remain within defined overall forms, colors, species, and massing that characterized conditions during the late Rockefeller era.

Wear and Tear

Wear and tear of the landscape has become an important treatment consideration since opening of the park in 1998, particularly in terms of pedestrian use. In the year 2000, for example, approximately 15,000 people participated in guided tours. While the tours largely follow drives and paths, they also cross the Mansion lawn and the grass walks in the Terrace Gardens. Wear and tear on these sensitive areas of the landscape should be closely monitored. Introduction of paths in the lawn would not be an appropriate means to address pedestrian wear and tear because they would alter the historic character of the landscape. Treatment should instead focus on repairing or strengthening the lawn, or on rerouting tours (see following section, “Landscape Interpretation Issues”).

Vehicular wear and tear, while probably not substantially increased since the end of the historic period, nonetheless impacts the landscape. The impact of vehicles, evident

near the Garden Workshop and Double Cottage, on the Upper Meadow through-road, and beneath the Norway spruce plantation along the south side of the Upper Meadow, should be monitored and corrective action taken, either to remove or limit vehicular use and parking, or to restrict the path of vehicles. Wear and tear from vehicles can have such adverse impacts as root compaction, lawn damage, alteration of historic road alignments, and rutting during wet seasons. In addition, vehicular use can also impact the visual character of the landscape. While the presence of modern staff and maintenance vehicles, such as in the Mansion parking area and at the Double Cottage, is in keeping with the presentation of the park as a working landscape, an excess of vehicles can also detract from the historic character of the landscape.

Wear and tear from pedestrians and vehicles has also declined in areas since the end of the historic period. Such decline warrants increased maintenance to preserve paths and roads that are no longer being kept clear due to lack of use.

Hillside Gardens

The Hillside Gardens (east hillside including the Waterfall Garden, Lily Pond, and Wood Drive) are largely outside of the park's existing interpretive program for a variety of reasons, including difficult access (steep slopes and stairs), fragility of the landscape, inconspicuous character (visible only up-close on foot), and time limit on tours. Because of these reasons and also the amount of resources required for proper maintenance, the Hillside Gardens have declined since the Rockefeller era. Preservation of the Hillside Gardens should, however, be made a priority for treatment due to their historic significance. This landscape represents a middle ground between the meticulously maintained Mansion terrace and the forests on Mount Tom—a naturalistic, rustic landscape only steps away from the Mansion. The integration of this informal landscape with the adjoining formal gardens and lawns is a distinctive aspect of the Mansion grounds that helps illustrate the conservation sensibilities of the Billings and Rockefeller families. The Hillside Gardens warrant detailed documentation (especially given the lack of historic documentation), protection of existing features, and rehabilitation as park resources permit. Due to a lack of historic documentation, an exact restoration of the Hillside Gardens plantings cannot be undertaken, but the overall character of the landscape can be restored.

LANDSCAPE INTERPRETATION ISSUES

Interpreting the Mansion Grounds in the Context of the Park's Conservation Theme

The Mansion grounds are presently interpreted largely to convey the life stories of the Marsh, Billings, and Rockefeller families. While these life stories involve conservation, the relationship of the existing designed landscape to the conservation stewardship theme of the park is not clear. Many visitors may see a philosophical contradiction between their understanding of conservation and the manicured lawns and gardens of the Mansion grounds, due to the contemporary ecological-preservation perspec-

tive in conservation that differs from the responsible (wise) use perspective under which the Mansion grounds were stewarded by the Billings and Rockefeller families. Interpretation of contemporary conservation practice can, however, be enhanced by acknowledging the important changes that have occurred in conservation stewardship over the past 130 years. In contrast to today's conservation imperatives for ecological preservation and wilderness protection, the Mansion grounds landscape illustrates the historic importance of landscape beauty and active resource management in American conservation.

Visitor Entrance

Visitors enter the Mansion grounds by foot along the Secondary Entrance Drive from the Billings Farm & Museum visitor center, an historic service drive that provides a sort of 'back-door' first impression to the landscape. During the historic period, the formal entrance to the Mansion grounds was along the main entrance drive. In planning for the opening of the park, options to use the main entrance drive as the visitor entrance were explored, but were deemed unsafe due to traffic on Route 12. Despite this, options should continue to be explored for reinstating the main entrance drive as the preferred pedestrian visitor entrance to the grounds. Provided safety issues are resolved, the recommended route should be along the sidewalk on the east side of Route 12, crossing at the main entrance drive, proceeding up the main entrance drive, and then turning right to the Carriage Barn visitor center. Visitors could then exit the Mansion grounds via the Secondary Entrance Drive.

Tour Circuit

As outlined in the GMP, visitor access to the Mansion grounds is by guided tour only, except on the north slope of the hill along the main carriage road, which is open to free public access from dawn to dusk. The guided tour was designed to control access and minimize impact to the buildings and landscape. The present tour circuit takes visitors through the swale to the main entrance drive, and enters the lawn in front of the Mansion where visitors are shown the east view. Tours then proceed through the front entrance of the Mansion, exit at the rear, and follow the path to the Flower Garden, pool terrace, and Belvedere. The tour then returns to the Carriage Barn along the drive. Through this tour circuit, visitors are given an overview of the manicured lawns and gardens of the Mansion terrace, but are not provided access to the adjoining naturalistic landscape of the hill, particularly the Hillside Gardens. The hillside has, however, much potential for interpretation of rustic landscape design, botany, and conservation practices that were characteristic of the landscape during the historic period. It contains Frederick Billings' earliest forest plantations and Lily Pond, remnants of Elizabeth Billings' Fernery and other wild botanical gardens, and Mary French Rockefeller's rustic Bungalow, as well as later changes by the Rockefellers illustrating their continued stewardship and appreciation of nature. The close proximity of the formal Terrace Gardens and other manicured parts of the Mansion terrace to the naturalistic Hillside Gardens is one of the most distinctive aspects of the Mansion grounds landscape and is telling of conservation stewardship practice of its time.

Visitor access has not been extended to the hillside for several reasons, including the need to limit the length of the tour (presently just over one hour), handicapped accessibility on the steep grades, and the fragile nature of the paths and gardens. Possible ways to overcome these obstacles may include taking tours at least partially up the hillside along the lower section of the Wood Drive, which has a moderate grade of 13% (still above ADA requirements) between the Belvedere and the path to the Lily Pond. From this central circulation feature, visitors could get a glimpse of the adjoining plantations, Waterfall Garden, Lily Pond, and Bungalow, which could be indirectly interpreted in greater detail by the tour guide. Other routes on paths that can handle heavier traffic (avoiding moss-covered paths) could be explored. In addition to making an overview of the hillside part of the regular tours, there could also be offered regularly-scheduled special tours that would take visitors through the Waterfall Garden, Lily Pond, and adjoining paths (there are presently occasional special tours, but not on a regular basis). The effect of this tour would have to be closely monitored for adverse impact to the landscape.

A second recommendation for the tour circuit is to alter the route from the Carriage Barn visitor center to the Mansion. Instead of leading visitors across the swale and Mansion lawns from the Carriage Barn, a more appropriate and lower impact alternative would be to follow the drives. From the Carriage Barn, visitors would proceed down (east on) the main entrance drive to near the gates, where they would view the vista across the farm meadow and see the exterior of the Mansion. Instead of crossing the Mansion lawn to the front steps, tours would then proceed back up the drive to the porte-cochere, and enter the Mansion verandah from this point. This route will aid the experience of the landscape by following historic circulation patterns and allowing the east view—one of the defining features of the landscape—to be gradually revealed as visitors walk along the verandah to the front doors of the Mansion. This route will also allow for a better vantage point for the first experience of the east view (an elevated position), and will also limit wear and tear on the Mansion lawn (as is currently evident near the front steps). Visitors can experience the Mansion lawn from the verandah without having to tread on it.

Signs

Signs were used historically in certain parts of the Mansion grounds, primarily for plant identification and directional purposes. In general, new signs should be avoided where none existed historically. Where signs were used historically, such as plant labels in the Hillside Gardens or directional signs in the woods, the historic signs should be maintained, and when new ones are needed, they should be compatible with the historic design. Installation of permanent photo-interpretive plaques and kiosks (not presently proposed) is not recommended because such features would be incompatible with the historic character of the landscape due to their necessary large scale. If such interpretive material is needed, it could perhaps be handled by the tour guide, and stored away when not in use.

NARRATIVE TREATMENT GUIDELINES

The following narrative provides treatment guidelines for preserving the historic character of the Mansion grounds landscape as it existed between circa 1992 and 1997, the Rockefellers' last years on the property following establishment of the National Historical Park. These guidelines have been developed in the context of the rehabilitation treatment approach outlined in the park's 1998 General Management Plan, which reflects the dynamic character of natural resources and the potential need for changes in order to fulfill the park's educational mission.

The following section, Landscape Rehabilitation Tasks, provides a succinct discussion of specific treatment guidelines for landscape characteristics and features. Understood in this narrative is that all of the landscape features in the Mansion grounds that were evaluated as "contributing" in CLR volume 2 (Existing Conditions & Analysis) shall be treated in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, Standards for Rehabilitation. Additional landscape-related preservation guidance can be found in the National Park Service's *Guidelines for the Treatment of Cultural Landscapes* (U.S. Department of the Interior, 1996).

This narrative covers rehabilitation tasks only for those features that require treatment other than straightforward preservation maintenance.[10] General guidelines are also provided for features that change from year-to-year, such as annual plantings and clipped hedges. The narrative guidelines provide a brief overview of each landscape characteristic that warrants treatment (natural systems, spatial organization, circulation, vegetation, buildings and structures, views and vistas, constructed water features, and small-scale features), followed by a discussion of rehabilitation tasks necessary for individual landscape features that comprise the characteristic, organized by landscape area (Mansion Terrace, Terrace Gardens-Belvedere, and Hill) and CLR number as identified in CLR volume 2. Treatment plans for each landscape area, locating the features discussed in the text, follow the treatment narrative. Proposed projects and long-term treatment concerns are discussed in the last section of the report, "Other Treatment Considerations." Day-to-day maintenance necessary to maintain the landscape will be covered in a separate forthcoming report, the Preservation Maintenance Plan.

LANDSCAPE REHABILITATION TASKS

NATURAL SYSTEMS

Natural systems such as geology, hydrology, and ecology have characterized the Mansion grounds landscape for centuries and provide the few tangible links with the landscape of the Marsh era (1801-1869). In general, natural systems remain intact from the late Rockefeller era (1992-1997), illustrating static features such as the landform of

the Mansion terrace and hill, as well as dynamic features such as the streams on the north side of the hill. Where natural systems were managed during the historic period, this management should continue provided it is compatible with the historic character of the landscape.

Task

NS-1: *Mansion Lawn Boulder*: Remove young volunteer woody plant material that has grown on top of the boulder, and maintain low-scale vegetation, including lichens, ferns, and mosses. Retain remnant wires and iron anchors. Although covered in vines and other vegetation through the early 20th century, the Mansion lawn boulder was maintained as an isolated feature without vegetation during the Rockefeller era, corresponding with the generally manicured condition of the Mansion terrace.

SPATIAL ORGANIZATION

The spatial organization of the Mansion grounds is a defining characteristic of the landscape and remains largely unchanged from the late Rockefeller era (1992-1997). Spaces are generally delineated by the limits and location of forests, lawns, specimen trees, shrubs, and buildings. Where new features are required, they should be designed in a manner that does not detract from the spatial organization of the landscape. Because the spaces in the landscape are delineated in large part by vegetation, minor change over time is appropriate as trees and forests mature, but successional growth along the edges of the woods and plantations, as well as hedges and other managed vegetation, should be closely controlled in order to limit such change.

Figure 3: Historic view looking east through the Long Terrace space (SO-4) illustrating enclosed character defined by large perimeter hemlock hedges (V-49) during the late Rockefeller era, summer 1994. Olmsted Center for Landscape Preservation.

Tasks

patial Organization: Terrace Gardens-Belvedere

SO-4: *Long Terrace*: Restore enclosed character by allowing perimeter hemlock hedges to mature to a height of 6' to 8' (see lso V-49, page 25). [Figure 3]

patial Organization: Hill

SO-11: *Hillside Gardens Space:* Maintain gap in the canopy over the Lily Pond to retain open overhead plane and ensure that sufficient sunlight light reaches the Japanese iris (V-76) and other light-sensitive plantings. Ensure that the rest of the canopy remains intact by replacing lost mature trees, and manage canopy to preserve dappled sunlight character. In addition, remove competing successional volunteer woody plant material (except saplings of historic tree species—oak, Norway spruce, white pine, and hemlock—to permit regeneration, where space permits) in order to maintain the open character of the understory that defines the Hillside Gardens space.

igure 4:
entrance drive (C-1) looking northeast from the Mansion roof showing sharp lawn/road edge during the late Rockefeller era, November 1993. Olmsted Center for Landscape Preservation.

SO-9: *Upper Meadow Space*: Remove young hedgerow that is growing along the north side of the Upper Meadow where experimental chestnut trees (V-74) were planted in 1997, and mow as part of Upper Meadow. Aside from the chestnuts, this hedgerow is composed of trees (some of which are invasive, including box elder and buckthorn), shrubs, and weeds/grasses that have grown up since mowing ceased, probably when the chestnuts were first planted. This hedgerow is altering the open spatial character of the Upper Meadow bordering the Wood Drive (C-24). It is appropriate to remove the experimental chestnut trees and their protective fencing becuase they are non-contributing features added after the end of the historic period.

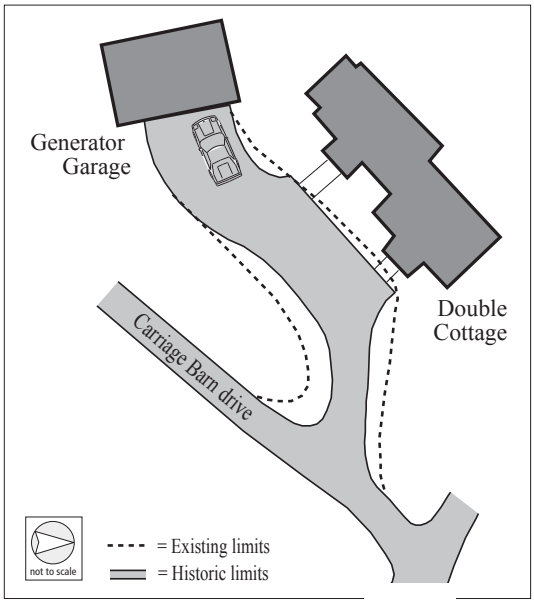
CIRCULATION

Circulation, consisting of refined graded gravel drives and gravel paths on the Mansion terrace, and more rustic woodland paths, graded roads, and road tracks on the hill, is a defining characteristic of the Mansion grounds landscape. Most of the roads and drives continue to be regraded by the same contractor used by the Rockefellers with the same ¾" gray gravel from Hartland, Vermont and West Lebanon, New Hampshire. Since the end of the historic period, however, the edge treatment of some of the drives has changed due to imprecise regrading practices and lack of grading specifications, and paths and roads that are no longer actively used have deteriorated due to lack of maintenance and encroachment of vegetation and litter.

Tasks

Circulation: Mansion Terrace

Figure 5: Recommended general limits of Double Cottage drive (C-3), based on extent documented on 1978 plan by Bryan J. Lynch entitled "Secondary Entrance Drive / The Mansion." SUNY ESF.



C-1: *Main Entrance Drive*: Maintain uniform appearance of drive across both inactive (between circle and Elm Street) and active (circle) sections, and maintain historic drive edge aligned with the outside edge of the catch basins (the edges were restored in 2002 by removing approximately one foot of encroached turf). Consider addition of inconspicuous steel edging (similar to that used on the Secondary Entrance Drive) in order to retain and mark the sharp edge between the lawn and graded roadbed that was characteristic of the Rockefeller era. [Figure 4]

C-3: *Double Cottage Drive*: Re-establish historic limits of drive with adjoining lawn/planted areas. [Figure 5] Consider the addition of inconspicuous steel edging to retain and mark the limits of the drive, which have expanded since the historic period, likely due to a combination of infrequent or imprecise grading and vehicle encroachment. Consider limiting parking on the drive during the visitor

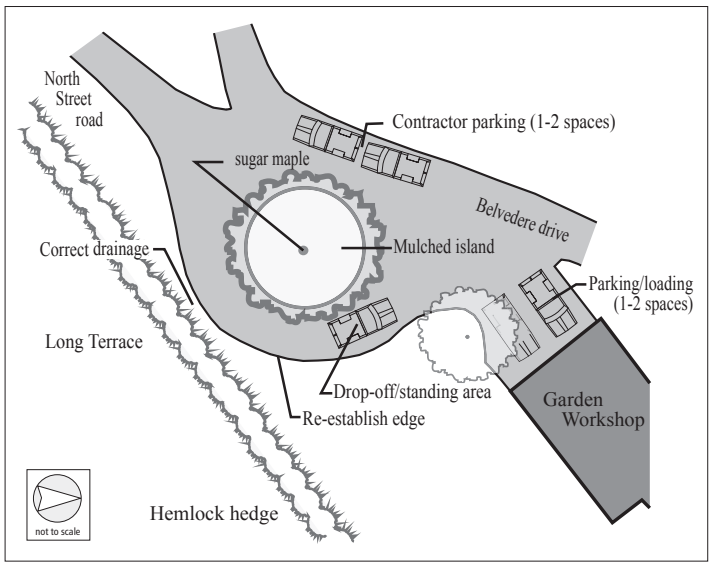


Figure 6: Recommended general limits and organization of the Belvedere drive circle (C-4) at the Garden Workshop. SUNY ESF, based on Bruno survey (2002).

season to avoid a view of parked cars as the first impression for visitors entering from Elm Street.

C-4: *Belvedere Drive*: Maintain distinct edge between graded drive and adjoining lawn and planted areas. Consider the addition/extension of inconspicuous steel edging to retain and mark the edge of the drive (some steel edging presently exists near the Mansion). At the circle next to the Garden Workshop, re-establish drive edges, and continue to mulch in island to lessen root compaction on sugar maple (V-17). [Figure 6] Correct drainage along south side of circle to prevent erosion of the drive edge and washout onto the adjoining lawn and Long Terrace. Prohibit staff parking on the circle and use bays in front of and/or inside of Garden Workshop for parking of maintenance vehicles. Enforce staff parking in Billings Farm & Museum lot and limit vehicles to delivery drop-off and other necessary maintenance purposes. Space for parallel parking of one or two contractor vehicles may be appropriate on the north side of the circle. The circle is not wide enough to accommodate staff parking and vehicular access (notably on south side of circle), thus causing vehicles to encroach beyond the edges of the drive onto the adjoining lawn and compacting the root system of the sugar maple, which is showing signs of decline. Excessive parking in the circle also detracts from the historic setting of the adjoining Terrace Gardens, from which the cars are visible.

Circulation: Terrace Gardens-Belvedere

C-12: *Long Terrace Walks & Steps*: Saw off tops of whole-log risers on steps at end of rose bed to create level treads in order to improve traction. The existing rounded log risers become very slippery when wet. If necessary for access, rebuild similar set of steps on west side of pool terrace wall, removed in c.1999, where only a wooden railing now exists. Replace recently installed treated lumber railing along the site of these steps with a less conspicuous railing, such as black-painted pipe mounted on the wall.

C-14: *Pool Terrace Steps*: Repair impact from foot traffic to turf landings (including landing on Long Terrace extending to west steps in Flower Garden, and upper landing on the Belvedere terrace) and protect other vegetation on pool terrace steps (sedum). Removal of turf and substitution with a defined walk would be incompatible with the historic character of the landscape. Continue turf management and/or consider alternative tour routes (e.g., using north steps in Flower Garden to access middle flight of pool terrace steps) to limit impacts. All tours presently use the same route from the Flower Garden to the pool terrace steps, causing deterioration of the turf landings and adjoining lawn of the Long Terrace.

Circulation: Hill

Inactive roads: C-16 *Old Mountain Road*, C-17 *Road from Garden Workshop to Upper Meadow,* C-18 *Upper Meadow-Cemetery Road*, C-22 *Shortcut from Garden Workshop to Upper Meadow Road*, C-*23 Lower Woodshed Road*: Maintain and/or re-establish tracks and roadbed, and clear right-of-way. Mow roads that have a grassy bed and shoulders, and cut back encroaching woody vegetation to establish an appropriate clear zone. Because these roads are seldom used by vehicles, vegetation is slowly encroaching into the roadbeds, thereby eroding historic character.

C-20: *Upper Meadow Road*: Prohibit staff parking on and alongside road under the mature Norway spruce on section between the Belvedere and the Horse Shed. This old Norway spruce plantation, dating to c.1874 and probably the first one established by Frederick Billings, will become increasingly sensitive as it ages to compaction, pollution, impact injuries, and other potential effects from vehicular use of the Upper Meadow road.

C-21: *Upper Meadow Through-Road*: Retain earthen tracks (do not grade) and mow a clear zone of approximately 8'. Prohibit use during wet seasons to avoid rutting (the road does not have a firm bed) by instead using the Upper Meadow road (C-20) to access the compost area and Bungalow. If this is not possible due to the ski trail easement, consider shifting the easement from the Upper Meadow road to the Upper Meadow through road.

C-24: *Wood Drive*: Maintain mown clear zone approximately 8' wide, reflecting the origin of the Wood Drive as a road rather than a path. Mow/clear up to edge of stone wall (BS-35).

Paths: C-27 *Lily Pond Path*, C-28 *Waterfall Garden Path*, C-29 *Lily Pond Waterfall Path*, C-30 *Upper Hillside Path*, C-31 *Arboretum Path*: Keep paths clear of encroaching vegetation and path surfaces clear of leaf litter and er debris. This will most likely require regu- scheduled clearing throughout the sum- er and fall (rather than just annual clearing). ere paths have a moss-covered surface or moss edges (primarily in the Waterfall Garden), estrian use should be restricted to avoid age to the mosses. Repair deteriorated stone d log steps, and replace in-kind when deterio- ed beyond repair. During the Rockefellers' e, the hill paths were well maintained with ed or swept surfaces and little encroaching ation [Figure 7].

Figure 7: Historic view of the Waterfall Garden path (C-29), illustrating well-maintained condition and open understory in the Hillside Gardens characeristic of the Rockefeller era, c.1992. Courtesy of Mimi Bergstrom, Woodstock, Vermont.

VEGETATION

Vegetation, from large-scale plantations to small-scale shrubs and flowerbeds, is a defining characteristic of the Mansion grounds landscape. In general, manage vegetation to preserve the overall appearance of the late Rockefeller era (1992-1997) within the limits of natural growth and decline. Change due to natural growth of features such as specimen trees and plantations is appropriate and reflects the natural dynamics of the landscape, but should be managed where it conflicts with other historic characteristics, such as views or spatial organization. Where natural growth was managed historically, such as through clipping and pruning of hedges and shrubs and mowing of lawns, this treatment should continue. Annual herbaceous planting should maintain bed limits, scale, form, general plant types, bloom period, and color present during the 1992-1997 years.

For all woody plant material, including plantations, groves, specimen trees, hedges, and shrubs, preservation should be the priority treatment. Historic plant material can strongly convey a feeling of age in a landscape, and also provides a tangible link to the past. Therefore, replacement is generally warranted only when the feature is in irreversible decline, posing a significant threat to safety or adjoining historic features, or no longer fulfills its historic design intent as extant during the 1992-1997 years. In general, vegetation within the Mansion grounds reflects the historic character of the landscape and is in good condition. However, the historic character of the perimeter and hill plantations (V-4, V-68) is threatened by natural succession.

Tasks

Vegetation: Mansion Terrace

Lawns: V-1 *Mansion Lawn*, V-2 *Swale Lawn*: "Class A," characterized by uniformity of appearance, low tolerance for weeds, and a vibrant green color, is the preferred level of maintenance of the Mansion and swale lawns, in keeping with conditions during the Rockefeller era. [Figure 8] Maintenance should minimize the use of pesticides, in keeping with the park's Integrated Pest Management (IPM) program. In summer 2002, the lawn was restored to its class "A" level of maintenance. If in the future class "A" cannot be maintained sustainably (without extensive use of ecologically damaging products and/or practices), a lower level of maintenance would be appropriate provided the historic height and coverage of the lawn is maintained. The lowering of the level of maintenance would be a reversible change, allowing for potential future restoration to "Class A," but should be restricted, if possible, to less visible areas of lawn. These areas would include the outer (southern and eastern) portions

Figure 8: Historic view looking east across the Mansion lawn (V-1) illustrating class 'A' level of maintenance characteristic of the Rockefeller era, c.1992. Courtesy of Mimi Bergstrom, Woodstock, Vermont.

Figure 9: View south of the sugar maple in the Mansion lawn grove (V-3) adjoining the Mansion lawn boulder (NS-1), October 2000. The tree was removed in fall 2000. SUNY ESF.

of the Mansion lawn along the perimeter hedges and the eastern part of the swale lawn adjoining the tennis court grove.

V-3: *Mansion Lawn Grove*: Plant a sugar maple (*Acer saccharum*) off the southwest corner of the Mansion lawn boulder, with exact location to be determined through examination of remains from the historic tree. [Figure 9] This sugar maple was removed in fall 2000. A mature red oak in this grove was recommended for removal at the same time, but remains standing. Preservation of this tree is the preferred treatment, given that it does not pose a significant threat to surrounding buildings or to the visiting public (provided tours do not pass near the tree), and is one of only two trees in the Mansion lawn (the other being the adjacent sugar maple) surviving from the Frederick Billings era. If this tree must be removed, it should be replaced in-kind (*Quercus rubra*) in the same location.

V-4: *Perimeter Plantations*: The following recommendations pertain to the perimeter tree plantations bordering Elm Street and River Street, adjoining the Mansion lawn and Terrace Gardens. For further information, see also V-68 (Hill Plantations). These recommendations are being further developed through the forest management plan and environmental assessment currently (2004) underway.

* Line of hemlocks along Mansion lawn: Maintain hemlocks at or slightly below the existing height (approximately 10' to 15'), except at Ottauquechee River vista clearing (see VV-2). Removal and replanting of this line of hemlocks, originally planted as screening material, may also be appropriate provided removal does not pose a threat to the adjoining aged Norway spruce.

* Hemlocks on south/east sides of Flower Garden: Control height to limit shade and stabilize growing conditions in the Flower Garden (see V-55, page 25). The preferred treatment is to top, thin, and prune. An alternative treatment may be to remove the hemlocks closest to the garden and replant in-kind, maintaining sufficient mature trees to retain vertical enclosure to the Flower Garden space.

* Mixed naturalized plantation along south side and west end of the Long Terrace: Control spread/canopy in order to ensure proper growing conditions for the adjoining hemlock hedge (see V-49); and control height and spread to preserve the vista of the south peak of Mount Tom (see VV-4).

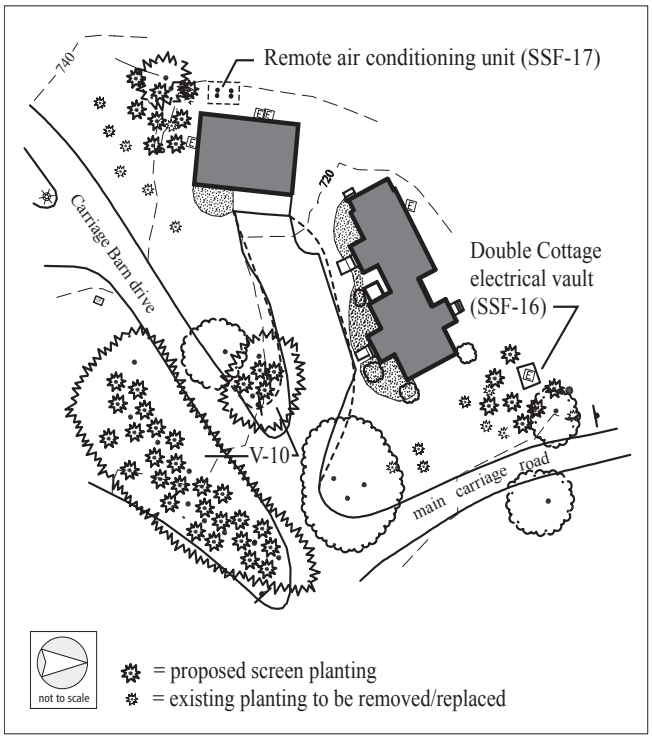
* Grove in Triangular Park above Elm Street Bridge: Although not owned by NPS, the small grove in this park, which dates back to plantings set out by Frederick Billings, forms an extension of the perimeter plantations and should be managed in the same manner. The understory should be maintained as mown lawn. While the park presently maintains this area, a formal agreement or easement with the appropriate municipality (Village or Town of Woodstock) should be developed in order to ensure appropriate long-term treatment.

V-5: *Tennis Court Grove*: Remove existing four browsed hemlocks (*Tsuga canadensis)* along south side of tennis court fence and replace in-kind to reinstate screening of the tennis court from the Mansion. Prevent deer browsing. Replacement of these hemlocks, planted in c.1971, is also warranted to reduce competition with the adjoining older birch planting.

V-10: *Hemlock and Birch Screening between Carriage Barn and Double Cottage*: Two treatment options are proposed for two hemlock groves at the junction of Secondary Entrance Drive and Carriage Barn drive that have been browsed up and no longer provide their historic screening function:

* Preferred Treatment: Establish understory plantings in hemlock groves to reinstate screening of the Generator Garage and the delivery area at the back of the Carriage Barn. [Figure 10] Use shade-tolerant understory plantings characteristic of the Rockefeller era, such as the rhododendron and mountain laurel found beneath the hemlocks at rear of Mansion. The understory plantings should reach a sufficient height (approximately 5'-7') necessary for screening. Prune the hemlocks to maintain their existing height (15' to 20') and width and prevent growth into mature trees, which would alter the historic spatial character of the area.

Figure 10: Preferred treatment for vegetative screening (V-10) at Carriage Barn and Double Cottage. SUNY ESF, based on Bruno survey (2002).



* Alternative Treatment: Remove existing hemlocks (10 in grove on south side of Carriage Barn drive, 3 in grove on north side) and replace in-kind with large specimens that restore screening of the delivery area. Manage to prevent deer browsing and allow growth that does not exceed height of existing trees (15'-20').

In addition to these historic plantings, the eleven hemlocks and 5 birches that were planted around the Double Cottage and Generator Garage as part of the rehabilitation of the Carriage Barn in 1998-1999 have the potential as they mature to alter the historically open space into a wooded landscape, thereby also blurring the historic limits of the hill plantations that form a defining edge to the Mansion terrace. Two treatment options for these plantings include:

Figure 11: Historic view of the mature silver maple (V-22) along the Secondary Entrance Drive during the late Rockefeller era, November 1993. The tree was removed in c.1998. Olmsted Center for Landscape Preservation.

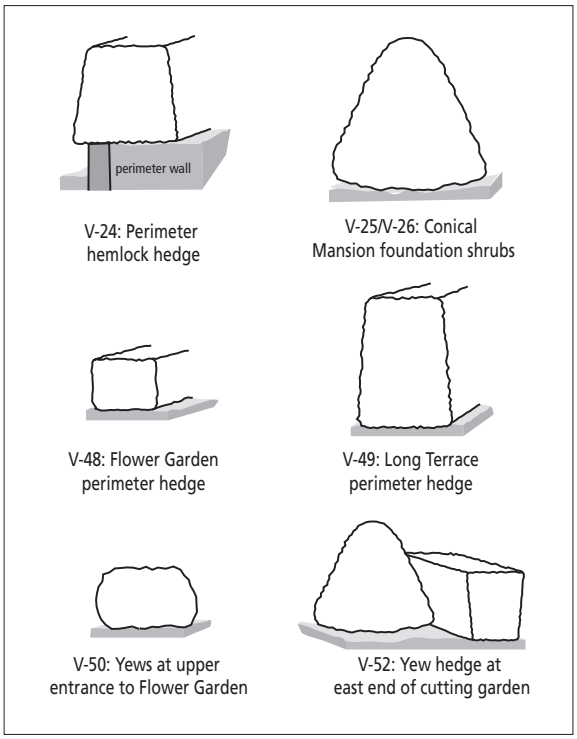
* Preferred Treatment: Replace all birch and hemlock with native shrubs or small trees, limiting replacement plantings to an area necessary for screening of the remote air conditioner unit (SSF-17) and Double Cottage electrical vault (SSF-16). [Figure 10] Appropriate plantings include gray dogwood (*Cornus racemosa*), white fringetree (*Chionanthus virginicus*), and beetle-resistant viburnums (including *Viburnum burkwoodii, V. juddii, and V. sieboldii*). Maintain necessary space to allow access to utilities.

* Alternative Treatment: Remove birch and prune hemlock in a naturalistic manner to maintain a height not to exceed approximately 10'. Allow hemlocks to spread in order to improve screening, and prevent browsing. Birch do not respond well to pruning or topping and are therefore recommended for removal.

V-13: *Mansion Lawn Hemlock*: Maintain hemlock and identify variety to determine if the tree is a unique or unusual variety of *Tsuga canadensis*. If it is, the tree should be propagated to ensure that its future replacement maintains the same form.

V-22: *Secondary Entrance Drive Yellowwoods*: Maintain yellowwoods and plant a silver maple (*Acer saccharinum*) in gap in line on north side of Carriage Barn entrance walkway, approximately 10' off the corner of the Carriage Barn. A large silver maple was removed from this location in c.1998. [Figure 11]

Figure 12: Diagram of recommended forms for clipped hedges on the Mansion grounds. SUNY ESF.



V-24: *Perimeter Hemlock Hedge*: Maintain hemlock (*Tsuga canadensis*) hedge at uniform shape, characterized by a flat cap, inwardly canted sides [Figure 12], and an overall height of 6'-7', tapering down to 4'-5' under the shade of the perimeter plantation (V-4) south of the Mansion. One hundred and eighty linear feet of the hedge east of the Lower Summerhouse were replaced in spring 2002, along with a short section within the old hedge. These new plantings, including those adjoining the main entrance drive planted in 1997, should be allowed to mature into a shape and size that is consistent with the adjoining historic plants. A consistent shape and size between old and new plants may also in part be achieved through limited renewal pruning of the historic plants.

V-25: *Mansion Foundation Shrubs*: Maintain manicured appearance and existing size and shape of clipped and natural-form deciduous and evergreen shrubs, allowing recent replacement plant material to reach a size no greater than that present during the 1992-1997 period. [Figures 12, 13, and 14] In general, keep shrubs below the height of the verandah railing (east/south

Figure 13: Historic view of the foundation shrubs (V-25) and lawn yews (V-26) along the east front of the Mansion during the late Rockefeller era, November 1993. Olmsted Center for Landscape Preservation.

Figure 14: Historic view of the foundation shrubs (V-25) and lawn yews (V-26) along the south and west sides of the Mansion during the late Rockefeller era, November 1993. Olmsted Center for Landscape Preservation.

sides) or the sills of the windows (south/west sides), except for the four large conical (gumdrop) hemlocks (*Tsuga canadensis*), which should be maintained at no more than approximately 10' high. These hemlocks may be pruned back to reduce crowding on adjoining shrubs, in which case their height should be reduced by a proportionate amount, retaining a consistent height and shape among the four. Prune all of the shrubs back from the verandah the minimum space necessary to maintain adequate airflow and reduce moisture on the wood structure, being careful to retain overall shapes and size.[16]

On the north side of the Mansion, revive shrubs and adjoining grass and fern cover ex- din he dri e in th d f he N Shrubs sho ld be main-

tained only along the foundation and not in the open space extending to the drive. If existing shrubs cannot be revived, they should be replaced with more shade tolerant varieties characteristic of understory plantings made during the Rockefeller era (such as rhododendrons and azaleas at the rear of the Mansion). The ground between the arborvitae tree and Norway spruce to the west should be maintained as open ground (earth/lawn), reflecting its historic use as a parking spot known as the "cubbyhole."

Maintain shrub beds with a dark brown (pine-bark or similar) mulch and a distinct edge along the lawn, with no flowering annuals except adjoining the shrubs along the Mansion-Flower Garden walk on the west side of the Mansion.

V-26: *Mansion Lawn Yews*: Retain existing clipped yews in their existing size and shape. The two dwarf yews (*Taxus cuspidata 'nana'*) south of verandah have a naturalistic, loosely-clipped rounded form, approximately 7' high and 8'-10' wide at the base. The two yews (*Taxus cuspidata*—group of three) east of the verandah have a closely clipped, conical (gumdrop) shape, approximately 10' high and 10'-12' wide at the base. [Figures 12, 13, and 14]

V-27: *Fairy Hill Rhododendron*: Replace the *Rhododendron PJM* in the middle of the planting with Wilson rhododendron (*Rhododendron x laetvirens,* a hybrid of *R. carolinianum* and *R. ferrugineum*) to reinstate the uniformity of the planting. The "PJM" rhododendron were thought to be Wilson rhododendron when they were planted as replacements in c.1995. Wilson rhododendron are commercially available.

Figure 15: Historic view looking south of the lilac hedge (V-30) at bottom of swale during the late Rockefeller era, November 1993. Olmsted Center for Landscape Preservation.

V-30: *Lilac screening at bottom of the Swale:* Remove rectangular mulched bed and re-establish turf, maintaining small mulched areas around the stems. Maintain plants as individuals and extend plantings in-kind (*Syringa vulgaris*) approximately 10' to the east and west to re-establish character extant during the Rockefeller era. [Figure 15] If lilacs continue to decline due to poor growing conditions (shade), replace with a shade-tolerant shrub having a similar form and habit, such as Burkwood viburnum (*Viburnum burkwoodii*).

V-32: *Secondary Perimeter Hedge*: Maintain the various shrubs on the east section of this hedge in an informal, naturalistic form to retain screening from Elm Street and the east view from the Mansion lawn and verandah [see VV-1]. Maintain the portion of the hedge behind the viewshed opening at a maximum height of approximately 8', about 2'-3' taller than the perimeter hemlock hedge. Plant shrubs presently found in hedge—andromeda (*Pieris japonica*), quince (*Malus sp.*), lilac (*Syringa vulagris*), burning bush (*Euonymus alatus*) or species with similar form and character—in the gap on south side of viewshed opening to screen the open ground from view on the Mansion lawn. Keep hemlock (*Tsuga canadensis*) at the south end of the viewshed opening at or below current height of approximately 10'-15'. Main-

tain the section of the hedge along the south side of the Mansion lawn as an informal, narrow hedge of lilac and euonymus at a height (approximately 6') sufficient to screen the view of Elm & River Streets through the browsed understory of the adjoining hemlocks in the perimeter plantations (V-4). Extend the hedge with similar shrubs for approximately 80' west to near the Upper Summerhouse in order to provide screening where the adjoining hemlocks (V-4) have been browsed.

V-35: *Flower Bed along Main Entrance Drive Circle*: Develop a planting plan to guide annual plantings. Retain rectangular dimensions (approximately 14' by 5') and general character of bed as a uniform planting of flowering annuals. The annual plantings should be low, generally less than 3' high. Red geraniums, characteristic of the Rockefeller era, are the most appropriate plantings, although wax begonias (*Begonia semperflorens*) and tulips (*Tulipa sp.*) were added toward the very end of the historic period to extend seasonal interest for the anticipated tourist season.

V-37: *Carriage Barn Beds*: Non-historic mulched beds should be maintained as an informal understory planting characterized by small-scale shrubs, ferns, and woodland herbaceous perennials (as presently exist). Showy flowering annuals or formal shrubs are not appropriate plantings for this area, which was historically a utilitarian part of the landscape.

V-38: *Double Cottage flower beds*: Retain existing bed limits and low-scale, inconspicuous character of annual plantings, which may vary from year to year. Showy displays of flowering annuals are not appropriate plantings around the Double Cottage, which was historically a utilitarian part of the landscape.

Vegetation: Terrace Gardens-Belvedere

V-48: *Flower Garden Perimeter Hedge*: Allow Japanese yew (*Taxus cuspidata*) hedge along the east border of the Flower Garden to mature into a low, uniform sheared hedge, with a flat top and perpendicular sides, and a maximum height of 2'-3' sufficient to provide a border to the garden [see Figure 12]. Maintain symmetry to two sections of hedge to either side of stairs.

V-49: *Long Terrace Perimeter Hedges*: Allow three-year old hemlocks (*Tsuga canadensis*) to mature into a tall, uniformly sheared hedge, with flat tops, a maximum height of 6'-8', and width of 5'-7' (allowing for slight cant from bottom to top) sufficient to provide enclosure to the Long Terrace (see also SO-4, page 12) [see Figure 12]. This hedge should not be allowed to reach the overgrown width (approximately 10') it achieved during the late Rockefeller era, because that condition was a result of long-term improper clipping practices, rather than a desired size, and also resulted in snow-load damage.

V-50: *Yews at Upper Entrance to Flower Garden*: Maintain two Japanese yew (*Taxus cuspidata*) shrubs at upper entrance to Flower Garden as matching, low mounds, approximately 3' high and 4' wide, with flat tops and rounded sides [see Figure 12].

V-52: *Yew Hedge at East End of Cutting Garden*: Maintain 25'-long hedge of Hicksii yew (*Taxus x media 'Hicksii*;') with outwardly canted (vase-shape) sides, a flat cap, and a height of approximately 5'-6' and top width of 7'. Maintain the conical (gumdrop) shaped pyramidal Japanese yew (*Taxus cuspidata*) that adjoins the hedge at the north end at a height of 10' and base width of 10-11' [see Figure 12].

V-55: *Flower Garden Beds*

Center Beds: Develop a planting plan to guide annual plantings, which may vary from year to year while maintaining a consistent overall character of a mixed, informal herbaceous border with bloom period extending from May through October, characteristic of plantings made during the 1992-1997 years. [Figure 16] In each of the four center beds, the plantings are roughly symmetrical with respect to the center. The tallest plants are generally in the center, with the bed edges in low or creeping plants. Astilbe occupy much of the shadier south half of the two south beds. Typical plants used in the center beds during the late Rockefeller era include: *Achillea, Ageratum, Allium, Alyssum, Antirrhinum, Aster, Astilbe, Begonia, Browalia, Campanula, Centaurea, Chrysanthemum, Cleome, Colchicum, Cosmos, Dahlia, Delphinium, Dianthus, Dicentra, Digitalis, Filipendula, Helianthemum, Heliotrope, Heuchera, Impatiens, Iris, Lavendula, Liatris, Lilium, Matricaria, Mondarda, Myosotis, Nicotiana, Nierembergia, Petunia, Phlox, Polemonium, Primula, Rudbekia, Salivia, Sedum, Thalictrum, Veronica*, and *Vinca* (see also Appendix A for other appropriate plants).[17] Control shade from adjoining

Figure 16: Historic view of the Flower Garden (V-55) looking southeast during the late Rockefeller era, summer 1994. Note shade from hemlocks along south (right) side of garden. Olmsted Center for Landscape Preservation.

hemlocks in perimeter plantation on the south side of the garden in order to maintain the existing planting scheme.

Outer beds (rose garden): Develop a planting plan to guide annual plantings, which may vary from year to year, while maintaining a consistent overall character consisting of a rose bed bordered by low flowering annuals, including hybrid tea tree roses spaced evenly along the wall, and standard hybrid tea roses filling the rest of the beds. Roses should be planted in two rows running parallel with the length of the beds, with the tree standards planted approximately 5' apart in the row adjacent to the stone wall. Group rose varieties in masses, with the tree roses providing contrast within the masses. Replace rose plants as necessary on an annual basis, emphasizing perfumed varieties and the standards. Rose varieties used in these outer beds during the late Rockefeller era include 'Glory Days,' 'Graham Thomas,' 'Heritage,' 'Iceberg,' 'Mr. Lincoln' (Mary Rockefeller's favorite), 'New Year,' 'Pascali,' 'The Pilgrim,' 'Queen Elizabeth,' 'Sharifa,' 'Sheer Bliss,' and 'Tropicana.'[18] Appropriate border annuals include nierembergia and sedum.

V-56: *Long Terrace Rose Bed*: Develop a planting plan to guide annual plantings, which may vary from year to year while maintaining a consistent overall character consisting of a 75'-long bed of floribunda and hybrid-tea roses, accented by low border of flowering annuals along the walk. Plant roses in three rows running parallel with the length of the bed, with tree standards, if used, placed in the center row. Group varieties in masses. Replace rose plants as necessary on an annual basis, emphasizing perfumed varieties and the standards. Rose varieties used in this bed during the late Rockefeller era include 'Alexandra Mackenzie,' 'Barbara Bush,' 'Blue Girl,' 'Chrysler Imperial,' 'Dolly Parkins,' 'John Davis,' 'J. P. Connell,' 'King's Ransom,' 'Mr. Lincoln,' 'Old Faithful,' 'Pascali,' 'Peace,' 'Royal Highness,' 'Queen Elizabeth,' 'Summer Sunshine,' 'Sunsprite,' 'Tropicana,' and 'Yellow Moss' (see also Appendix B for additional appropriate varieties).[19] Appropriate border annuals include *Nierembergia* and *Sedum*.

V-57: *Cutting Garden*: Develop a planting plan to guide annual plantings, which may vary from year to year while maintaining a consistent overall character consisting of 13 beds between bluestone walks with masses of cut-flower annuals. Typical plant material used during late Rockefeller era included *Antirrhinum, Chrysanthemum, Dahlia, Delphinium, Gladiolus, Gypsophila, Lilium, Matricaria, Rudbekia, Salvia,* and *Zinnia* (see also Appendix A for additional appropriate plants).[20] The area beneath the crabapple at west end of garden should be treated as a shade garden, planted with flowering annuals such as begonia and impatiens.

V-58, V-61, V-62: *Rock Gardens*: Develop planting plans for all rock gardens. Retain existing configuration of beds, rock placement, woody plant material, and alpine character. [Figure 17] Maintain existing size of woody plant material. Replace herbaceous plants in-kind as necessary. Typical herbaceous plant material used during the late Rockefeller era included: *Aruncus, Astilbe, Asarum, Campanula, Epimedium, Iris, Phlox,*

Figure 21: Historic view of the rock garden (V-58) along the upper pool terrace steps during the late Rockefeller era, summer 1994. Olmsted Center for Landscape Preservation.

Primula, Scabiosa, Sedum, Thymus, and *Veronica* (see also Appendices A & B for additional appropriate plants).[2]

[1] V-59: *Belvedere Beds*: Maintain bed on north side of Belvedere porch as a fern garden edged by flat stones. Develop a planting plan for annual plantings in the bed on the south side of the Belvedere porch extending along the south side of the Belvedere terrace above the pool patio brick wall. This bed features an informal mixture of low cinquefoil (*Potentilla sp.*) shrubs interspersed by low flowering annuals such as red geranium (*Pelargonium*).

V-63: *Garden Workshop Sweet Pea Bed*: Develop a planting plan to guide annual plantings. Treat as a single row of multi-colored sweet peas (*Lathyrus odoratus*) set in a wood-framed raised bed and trained up a wire fence.

Vegetation: Hill

V-64: *Upper Meadow*: Allow meadow grasses to reach a maximum height of approximately 2' to 3' to maintain a low meadow character, except along the through-road, within the corral, and around the perimeter of the Horse Shed, which should be mown. To avoid damage to the meadow from rutting, limit vehicular access to north side of Horse Shed, especially during wet periods; use east side entrance to Horse Shed instead. By c.1997, a small vegetable garden (approximately 75' square) in the southeastern part of the Upper Meadow ceased to be maintained. Restoration of this garden would be appropriate if an interpretive or functional need arises. Otherwise,

it is also appropriate not to restore the garden since it disappeared during the historic period.

V-66: *Oak Grove*: Preserve oak grove by maintaining existing trees and perpetuating overall character defined by high canopy and open understory. In order to document the condition of the grove and provide data for short and long-term preservation maintenance strategies, collect data on mature tree location, species, age, diameter, height, volume, quality, insects and disease, growth rate, and understory. Remove or cut back competing successional vegetation . If oak trees must be removed, they should be documented and replaced in-kind. Where growing space permits (including at the oak snag, V-70), establish new plantings using oak species found in the grove.

V-67*: Marsh-Era Woodlot*: Preserve woodlot by maintaining existing aged trees and perpetuating overall character defined by existing species composition and spatial character. In order to document the woodlot and provide data for short and long-term preservation maintenance strategies, collect data on mature tree location, species, age, diameter, height, volume, quality, insects and disease, growth rate, and understory. Identify trees that possibly remain from the Marsh era. The limits of the woodlot, which extends west of the Mansion grounds, also should be determined. If aged trees must be removed due to safety concerns, individuals should be documented and analyzed to ascertain age.

V-68: *Hill Plantations*: Treatment of the forest plantations within the Mansion grounds hill is being developed through the forest management plan and environment assessment currently (2004) underway. It is the recommendation of this CLR based on the findings of volumes 1 and II that these plantations be managed as an area of primary historic significance, with treatment stressing historic preservation to the extent feasible within the context of natural forest dynamics. The plantations within the Mansion grounds are the earliest record of Frederick Billings's pioneering forestry work, with the Norway spruce plantation extending from the Belvedere to the Upper Meadow (Stand 42b) the most notable because it was the first (c.1874) plantation that Billings established according to scientific methods stressing the use of monocultures and even spacing. [Figure 18] This plantation is also significant because it gained wide renown at the turn of the century in professional forestry circles as a pioneering use of Norway spruce. In addition to significance related to the history of forestry, the plantations within the Mansion grounds are also character-defining features of the landscape, particularly those along the boundaries

Figure 18: Historic view looking west from the Belvedere drive through the c.1874 Norway spruce plantation (V-68) showing open understory characteristic of the late Rockefeller era, November 1993. Olmsted Center for Landscape Preservation.

Figure 19: View southeast through the plantation on the east hillside below the Lily Pond illustrating heavy successional hardwoods growth and death of lower limbs on historic Norway spruces due to shading, September 2002. SUNY ESF.

of open spaces (Terrace Gardens and Belvedere, Mansion terrace, Upper Meadow, Woodshed yard, and Route 12/Elm Street).

It is recommended that the following treatment considerations be integrated into the forest management plan for the plantations within the Mansion grounds hill:

* Historic plantation trees should be protected to extend their life and preserve their historic character to the extent feasible. Natural hardwoods regeneration around historic plantations trees should be carefully monitored to avoid competition that is resulting in decline of historic plantation trees and loss of the historic managed appearance. [Figure 19]

* Within naturalized plantations stands (mostly on the forest interior), the existing mixed species composition should be retained and perpetuated. Where historic plantation trees (conifers) are lost, they should be replanted in-kind if growing conditions permit [Figure 20]. Natural regeneration of the historic plantation species could also be managed to provide replacement plant material within naturalized stands, where uniform planting patterns and even-age are not defining characteristics.

* Historic plantation trees that contribute to the historic character of the Mansion grounds landscape (notably those along boundaries of open spaces) should be replanted in-kind once the historic trees are lost (outside of Stands 42 a and b, see following).

Figure 20: Naturalized plantation on hillside east of Bungalow where historic white pines have been removed, leaving sufficient space for replacement planting, September 2002. Note successional hardwoods that have grown up along the edges of the open space. SUNY ESF.

* The existing species composition, uniform planting patterns, and even-age character of Stand 42b (Belvedere to Upper Meadow) and Stand 42a (Elm Street/Route 12 perimeter) should be perpetuated in their entirety. Two possible treatments for the long-term perpetuation of these stands include:

1. Full-stand replacement: This alternative would perpetuate the uniform, even-age character and planting patterns of the stands in the long-term, thus ensuring that the plantation will continue to convey its historic significance in the areas of conservation and forestry. Replanting would be considered once a stands has lost a sufficient number of trees to impact its historic integrity and overall character. A replanting strategy that allows for the introduction of a new generation while leaving scattered aged trees standing would be an effective means of perpetuating these plantations and also soften the impact of such a transition upon the historic character of the landscape. [Figure 21]

2. Single-tree replacement and recruitment: This alternative would perpetuate the monocultural species composition of the stands. In the long-term, this alternative could result in the loss of the stands' uniform even-age character and planting patterns, but in the short term would reduce the impact of replanting on the character of the landscape. Replanting would be possible once a sufficient number of trees are lost to provide ample growing space.

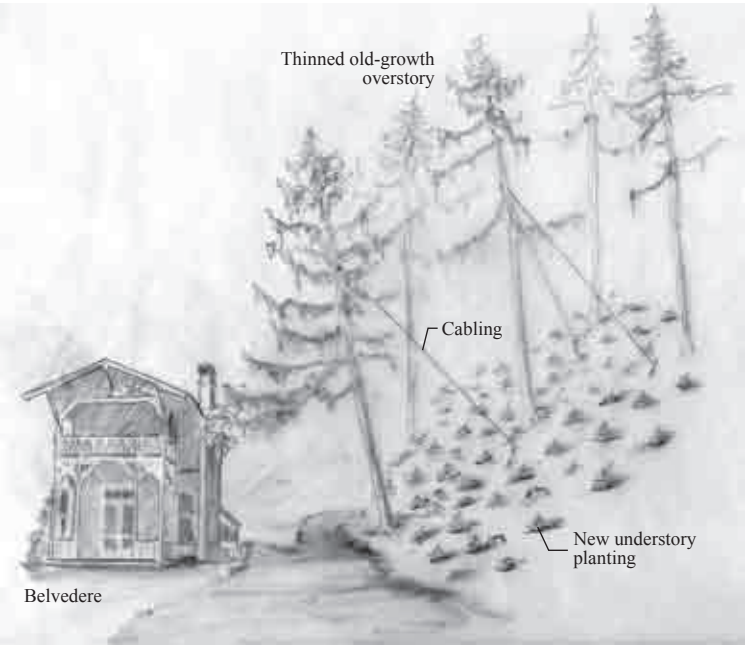


Figure 21: Illustration of possible long-term replanting strategy for Stand 42b, the c.1874 Norway spruce plantation on the south hillside showing retention of widely-spaced old-growth and an understory of new plantings. SUNY ESF.

* Forest understory within the Hillside Gardens and along roads and trails should be managed to preserve the historic well-tended appearance of the landscape and historic views into the forest understory. This would require selective removal of volunteer woody shrub material, dead lower branches, and successional hardwoods.

* Understory that was historically mown, including areas within the Hillside Gardens, and above the Garden Workshop and Mansion parking area, should continue to be mown unless such practice proves detrimental to the health of the forest. In that case, a low groundcover that maintains the overall historic character may be substituted.

* A tree nursery should be established to propagate seedlings from historic plantation trees in order to ensure a continuity of genetic lineage for future replantings. In addition to in-kind replacement within historic plantations, this tree stock could be used to establish new plantations for interpretive purposes within currently forested areas not highly visible from the major open spaces in the Mansion grounds.

V-70: *Oak Snag*: Maintain snag and remove surrounding successional growth. Ensure that snag does not pose a threat to the stone ledge bench (SSF-29), located below one of the main branch stumps. As part of the larger oak grove (V-66), plant one in-kind replacement tree on west side of the snag, maintaining the alignment with the stone bench. The oak tree was cut down in c.1980, leaving a snag about 12' high with three large branch stumps. The trunk is deteriorating and is presently being damaged by rot and animals. It should be documented and analyzed to determine its age, since much of it will probably collapse or disappear in the near future. The stump should be retained as long as possible without extraordinary means. The snag reflects the Rockefellers' sensitivity toward historic features in the landscape and the former prominence of this tree within the Hillside Gardens.

V-77: *Lily Pond Plantings*: Develop a graphic plan of the existing plantings around the Lily Pond and adjoining waterfall to provide an accurate record of existing conditions and a base map for future replanting. Rehabilitate garden by removing non-historic

native and invasive weeds (Canadian moonseed, hog peanut), protecting existing garden plants, enhancing growing conditions, and reestablishing plant stock. Because no detailed documentation on historic planting plans has been found, new plantings should follow an overall naturalistic, small-scale, and lush scheme characteristic of the Rockefeller era. New plantings should be established alongside existing plants, or where there are physical traces of historic plantings, generally along the edges of the pond and adjoining paths. The garden appears to have been dominated by various ferns, plus accents of *Aruncus, Asarum, Cypridpedium, Heuchera, Lobelia cardinalis, Podophyllum peltatum, Polygonatum,* and *Trillium* (see also appendices A & C for other appropriate plants).

V-78: *Waterfall Garden Plantings*: Develop a graphic plan of the existing plantings in the Waterfall Garden to provide an accurate record of existing conditions and a base map for future replanting. Rehabilitate garden by removing non-historic native and invasive weeds (Canadian moonseed, hog peanut), protecting existing plants, enhancing growing conditions, and re-establishing stock of woodland plants. Protect moss on and adjoining the garden paths. Because no detailed documentation on historic planting plans for this garden has been found, new plantings should follow an overall naturalistic, small-scale, and lush scheme characteristic of the Rockefeller era. [Figure 22] New plantings should be established alongside existing plants, or where there are physical traces of historic plantings, generally around the pools and adjoining paths. Appropriate plants include *Aruncus, Asarum, Cypridpedium, Heuchera, Lobelia cardinalis, Polygonatum,* and *Trillium* (see appendices A & C for other appropriate plants).

Figure 22: Historic view looking west across the upper part of Waterfall Garden showing historic character of woodland plantings (V-78) and sunlight-dappled conditions during the late Rockefeller era, c.1992. Courtesy of Mimi Bergstrom, Woodstock, Vermont.

BUILDINGS & STRUCTURES

Buildings and structures are a defining characteristic of the Mansion grounds, but their treatment is generally addressed separately from a CLR. The following tasks have been identified during research for this report, but are not intended as a thorough review of treatment necessary to maintain the historic buildings and structures in the Mansion grounds.

Tasks

Buildings & Structures: Mansion Terrace

BS-4: *Upper Summerhouse* and BS-5: *Lower Summerhouse*: Undertake an historic structure report (HSR) to address long-term preservation of these buildings, which are rare-surviving examples of mid-nineteenth century rustic architecture and important vestiges of the Frederick Billings-era landscape. In the interim, remove encroaching vegetation and assess surface drainage. Undertake corrective measures to stop surface runoff from contacting wood structural members. Reinstall missing downspout leader on Upper Summerhouse. The surrounding ground is presently raised above the original grade, causing surface drainage to damage the wooden structure and cladding. Retain Rockefeller-era "Private Home" sign in Lower Summerhouse.

Buildings & Structures: Terrace Gardens-Belvedere

BS-17: *Greenhouse*: To maintain the historic character of the landscape, the greenhouse should be stocked during the visitor season in order to maintain a functional appearance. During the late Rockefeller era, the greenhouse was used for propagation, display of various plants including grape vines, cacti, and bougainvillea; and to overwinter annuals and houseplants from the Mansion grounds and the Woodstock Inn & Resort. For further information, see Barbara Yocum, "The Greenhouse / Incremental Historic Structure Report" (National Park Service, October 2001). The greenhouse was restored in 2002.

B-23: *Putting Green*: Although no longer in use, continue to maintain putting green and set out red-plastic hole markers during the visitor season. Assess long-term conservation of hole markers. Consider fabricating a reproduction set for active use, and keep original set in storage.

Buildings & Structures: Hill

BS-24: W*oodshed*: An "Architectural Conservation Assessment Report" was completed in 2001 for the Woodshed (Mary Jo Llewellyn, January 2001). Plans are being developed for the rehabilitation of this significant building. Temporary stabilization measures should be considered if the planned rehabilitation is delayed to address

structural issues outlined in the report. The open lower level of the building, visible to the public, should be cleaned of debris.

BS-31*: Lily Pond Dam*: Document and assess as part of treatment of CWF-2 *Lily Pond*.

VIEWS & VISTAS

Overview

Views and vistas are defining characteristics of the Mansion grounds landscape, providing visual connection to the surrounding landscape of fields, valleys, and forested hills. Because views and vistas were historically defined largely by clearings through vegetation, they are easily susceptible to obstruction unless vegetation is actively managed. Changes in adjoining properties in terms of vegetation and development can also have an impact. In order to preserve and enhance historic views and vistas, an annual assessment of the viewshed clearings and associated viewsheds both within and outside of the park should be undertaken.

Because clearings for views and vistas were generally not maintained on an annual basis, it was typical during the historic period for vegetation to encroach upon the view/vista clearings between cuttings. This change was often subtle and resulted in little perceptible change to the landscape. Since the end of the historic period, however, this encroachment has progressed to the point where some views and vistas are being obstructed because the clearings have not been maintained. Most of the views and vistas from or within the Mansion grounds therefore require some amount of restoration. This restoration should reopen the viewshed clearing to its most recent limits, which may predate 1992 to capture the intended clearing limits, not necessarily the limits that had grown in unintentionally during the c.1992-1997 period.

Tasks

Views & Vistas: Mansion Terrace

VV-1: *East View from Mansion*: Retain 120'-wide opening along east perimeter of lawn above hedge; lower secondary perimeter hedge (V-30) to a maximum height of approximately 8' so that the view is unobstructed from the Mansion verandah and adjoining west half of lawn. Maintain sufficient height on hedge to screen Elm Street and the bare west side of the perimeter hemlock hedge. Establish agreement with owner of Hitchcock property (Octagon Cottage) to limit height of vegetation that may obstruct the view. Review Scenic Zone to determine if additional purchase of development rights is warranted to protect the viewshed and to determine if current easements are being enforced.

VV-2: *Ottauquechee River Vista*: Restore vista by removing encroaching vegetation within perimeter plantation (V-4) to allow Ottauquechee River in foreground to be

Figure 23: The Ottauquechee River vista (VV-2) showing historic condition with view of river through the perimeter plantations, view south from Mansion, May 1977. Billings Family Archives.

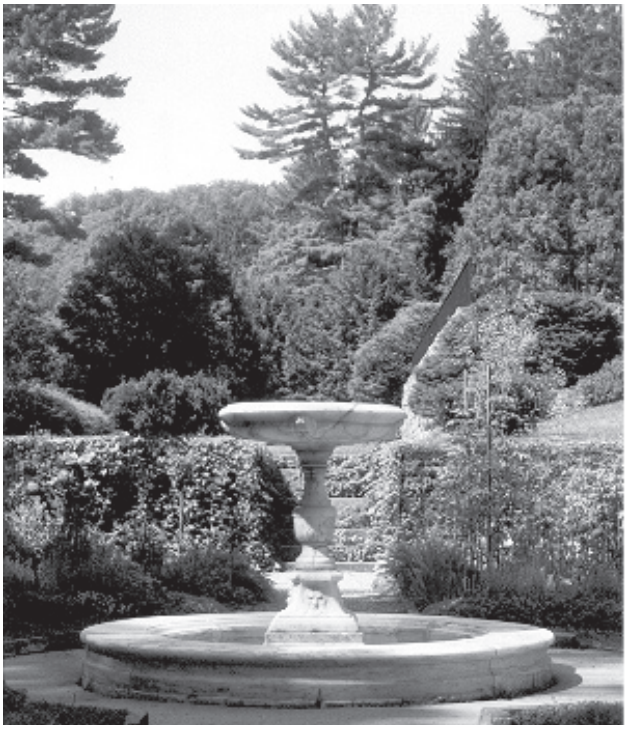
visible from the second and third floor rooms (including the ockefellers' bedroom) on the south side of the Mansion. Maintain sufficient height on the vegetation within the vista learing to screen the view of River Street from the Mansion. he vista clearing was maintained during the Rockefeller era as a narrow opening in the perimeter plantation, with hemlocks and other shrubs used to screen River Street. This vista became more enclosed in later years, but the river probably emained visible. [Figure 23]

VV-3: *Main Entrance Drive Vista*: Retain vista clearing across north side of triangle in main entrance drive by removing or runing back vista-obstructing branches and hedges.

iews & Vistas: Terrace Gardens-Belvedere

VV-4: *Mount Tom Vista*: Retain vista of the South Peak of Mount Tom by lowering trees in perimeter plantation (V-4), hemlock grove, and successional woods west of the Long Terrace (V-41), in front of and south of double-leader white pine (V-42). [Figure 24] This may require work on the adjoining Sterling property at 1 River Street, once part of the Mansion grounds but now under private ownership of the Woodstock Resort Corporation. The portion of the vista toward the North Peak of Mount Tom, located to the north of the double-leader white pine (V-42) probably became obstructed during the early Rockefeller era through growth of the hill plantations, specifically Norway spruce located uphill from the North Street road. The decline of these Norway spruce (one tall specimen at the Belvedere drive circle near the Garden Workshop was removed in 2000) may in the future present an opportunity to reopen this vista, which once was an important part of the Terrace Gardens landscape.

Figure 24: Historic view of the Mount Tom vista (VV-4) during the late Rockefeller era, summer 1994. Mount Tom is the ridge visible to the left of the double-leader white pine. Olmsted Center for Landscape Preservation.



Views & Vistas: Hill

VV-5: *Bungalow Vistas*: Restore vistas to the northeast and northwest of the Bungalow. At the northwest clearing, remove successional growth along established clearing measuring approximately 100' downhill and 40' across; remove or top tall evergreen(s) downhill of vista clearing (located within Woodland Garden). At the northeast clearing, remove successional growth in vista clearing downhill to Arboretum path (C-31); retain and top Norway spruce bordering Arboretum path along old topping marks. Clear vegetation over approximately 15' in height among more advanced successional growth in clearing extending approximately 50' to 75' further downhill in order to open the vista toward Billings Farm. View of the farm

may still be partially blocked by the perimeter Norway spruce along Route 12 (V-4); however, given the importance of these trees, they should not be topped to reopen this view. The northeast vista was extant as late as 1994; growth east of the Arboretum path has since obscured the vista.

CONSTRUCTED WATER FEATURES

Constructed water features are distinctive parts of the Mansion grounds landscape, historically serving both recreational and aesthetic purposes. In general, these features remain largely unchanged from the late Rockefeller era (1992-1997), but require a thorough structural and mechanical evaluation to address immediate repairs, long-term preservation, and cyclical maintenance.

Tasks

Constructed Water Features: Terrace Gardens-Belvedere

CWF-1: *Swimming Pool*: Retain historic character of pool by filling with water during visitor season. Assess stability of masonry structure, and minimize chemical sanitizers and fungicides as a general treatment approach, since neither may be necessary for maintaining the historic character of the pool now that it is not used for swimming. Document outlet destination for pool drain for the purpose of stopping pool chemical discharge into the environment (the pool may empty into the Ottauquechee River). Enhance safety in a manner that does not detract from the historic character of the pool and surrounding landscape.[22] To enhance safety, consider the following treatments: 1. Install a security alarm system to alert park staff of intrusion in the pool; 2. Train all park staff (including tour guides) in appropriate life-saving techniques; and 3. Install a removable cover for use when the grounds are not open to visitors. Installation of a permanent fence around the pool or a permanent cover would adversely impact the historic spatial character of the pool terrace and is not recommended.

Constructed Water Features: Hill

CWF-2: *Lily Pond*: Maintain Lily Pond and continue to operate (fill with water) on a seasonal basis as part of system that includes the Lily Pond waterfall (CWF-4). Remove accumulated silt in order to improve water quality, taking care not to disturb historic plant material (Japanese iris, V-76). Complete a thorough structural assessment and documentation (plan, section, elevation, photographs) of the pond lining, constructed rock ledges and waterfall cataract, masonry dam (BS-31), and plumbing system. The topographic survey of the Mansion grounds (Bruno Associates, 2002) did not provide the level of detail necessary to adequately document the Lily Pond, and no detailed historic documentation on the feature has been found.

CWF-3: *Waterfall Garden Watercourse*: Maintain Waterfall Garden watercourse and continue to operate on a seasonal basis. Complete a thorough structural assessment

and documentation (plan, section, elevation, photographs) of the pools, rills, constructed masonry and stone ledges, and plumbing system. The topographic survey of the Mansion grounds (Bruno Associates, 2002) did not provide the level of detail necessary to adequately document the watercourse, and no detailed historic documentation of the feature has been found.

CWF-4: *Lily Pond Waterfall*: Maintain Lily Pond waterfall and continue to operate on a seasonal basis as part of system that includes the Lily Pond (see CWF-2).

SMALL-SCALE FEATURES

Many of the small-scale features on the Mansion grounds have been introduced by the National Park Service and are therefore non-historic. With one exception, they are generally compatible with the historic character of the landscape. The few surviving historic small-scale features, including benches, signs, lampposts, and a hitching post, are not conspicuous features of the landscape, but add detail and interest and should be preserved to help convey the character of the landscape during the late Rockefeller era (1992-1997). New small-scale features introduced for park use should be differentiated from historic small-scale features, but at the same time be compatible with the design of the historic features and the overall historic character of the landscape.

Tasks

Small-Scale Features: Mansion Terrace

SSF-11: *NPS Benches*: Replace Victorian-style cast-iron benches added in 1999 on Mansion-Flower Garden walk and at the Carriage Barn entrance and walkway. The heavy, ornate design of these benches reflects a civic origin and a design type that did not exist historically in the landscape. As a general treatment approach, introduce benches in inconspicuous locations, avoiding open spaces such as the Mansion lawn where the Rockefellers did not historically place benches.

Figure 25: A historic lawn seat in the Upper Summerhouse, a model for the general lines of new benches that would be compatible with the historic character of the landscape, 2001. This particular seat has an unusual movable back. SUNY ESF.

Introduced benches should read as contemporary additions that are compatible with the historic character of the landscape. The historic lawn seat in the Upper Summerhouse provides a good model for a compatible design (the Rockefellers set out several benches similar in overall form and detail to this example, which probably dates from the late nineteenth or early twentieth century). [Figure 25] Designs similar to this, with simple rod frames and painted wood-slat seats and backs, would be most appropriate when sited adjacent to plantings or buildings (such as the Carriage Barn) and not as isolated features. Where benches must be placed in an open area, such as in the lawn along the Mansion-Flower Garden walk, the backs should be omitted in order to make the benches less conspicuous.

SSF-15. *Mansion Lawn In-ground Security Lighting*: The system of in-ground canister lights and associated above-ground electrical boxes was not evaluated due to lack of information as to whether the system was installed as an aesthetic feature (tree uplighting) or simply as a security measure without relation to the landscape. Stabilize system in order to keep open possible future rehabilitation, unless information is found to document evaluation as non-contributing.

Small-Scale Features: Hill

SSF-30: *Woodland Plant Labels*: Maintain existing labels on the hillside, including Estate-era stamped zinc tree labels and Rockefeller-era green plastic-incised labels in the Waterfall Garden. If additional labels are needed, consider reusing historic labels now in storage; or use new labels that are compatible with the character of the historic labels with respect to overall design, materials, size, and scale. The larger zinc labels should be restricted to marking trees, while the small plastic labels should be used for marking woodland plants. The non-contributing Woodland Garden plastic labels should not be reused in the Hillside Gardens because they are generally too large.

SSF-32: *Upper Meadow Corral Horse Trough*: Retain and keep the galvanized horse trough within the corral to reflect the historic use of the space. Set upright, provided the trough drains adequately, and store inside during the winter.

SSF-36: *Rockefeller-Era Directional & Privacy Signs*: Reset post-mounted "Private Residence" sign in its historic location on the Upper Meadow road east of the Horse Shed (BS-27). Preserve directional tree-mounted signs noting "To River Street" and "To Billings Park" (located off Upper Meadow road), "Private Residence" sign in Lower Summerhouse, and any others that may survive in the park.

SUMMARY -- TREATMENT PRIORITIES

Since the end of the historic period, the National Park Service has been a good steward of the historic landscape of the Mansion grounds. The preceding treatment recommendations provide both short and long-term recommendations for tasks necessary to further preserve and enhance the historic character of the landscape as the park continues to maintain the landscape for public benefit. Because of the park's sound stewardship and the recent end date of the historic period, the key to preserving the landscape of the Mansion grounds will be found through maintenance practices, to be outlined in the forthcoming Preservation Maintenance Plan. Completion of this document should be the foremost priority in management of the Mansion grounds landscape.

Aside from the plantations, the landscape of the Mansion grounds does not require any immediate treatment to preserve its historic character, although there are features

that warrant intervention in the near future, primarily due to the growth and decline of plant material and road grading practices. In order of priority (#1 being the highest priority), these features include the following:

1. Plantations & Woods: V-4, V-66, V-67, V-68: Remove competing successional vegetation where impacting historic plantation trees and well-tended, managed character.

2. Views & vistas: VV-1 – VV-5: Restore by removing obstructing vegetation.

3. Hillside Gardens: V-75, V-78: Document and rehabilitate Waterfall Garden & Lily Pond plantings

4. Hill paths: C-26 – C-32: Clear, cut back encroaching vegetation, repair steps.

5. Herbaceous beds: V-35, V-55 – V-57: Create planting plans (preservation maintenance plan).

6. Mansion terrace drives: C-1 – C-4: Develop grading specifications.

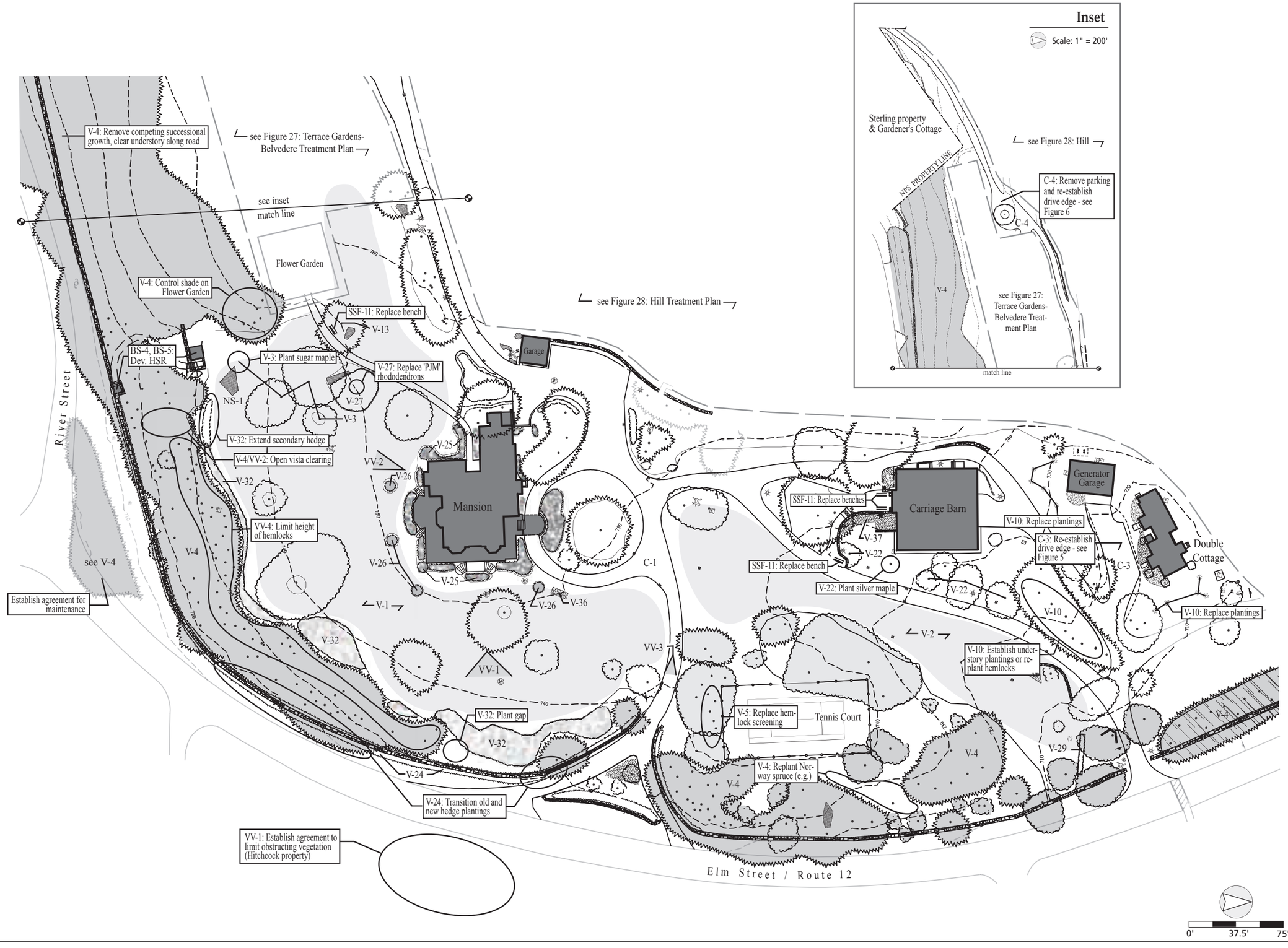
7. Hill roads: C-19, C-20, C-24: Develop grading specifications, limit use of Upper Meadow through-road.

8. Hemlock and birch screening at Tennis Court, Carriage Barn-Double Cottage: V-5, V-10: Modify and/or replace plantings.

9. Secondary perimeter hedge: V-32: Lower hedge, infill plant, and extend toward Upper Summerhouse.

10. NPS benches: SSF-11: Replace with a more compatible design.

Figure 26: Historic aerial view of the Mansion grounds looking north during the late Rockefeller era, 1994. Aero-Photo, Waltham, Massachusetts.



Cultural Landscape Report for the Mansion Grounds

Marsh-Billings-Rockefeller National Historical Park

Treatment Plan Mansion Terrace

National Park Service
Olmsted Center for Landscape Preservation
99 Warren Street, Brookline, MA

in cooperation with:

Faculty of Landscape Architecture
SUNY College of Environmental Science and Forestry
Syracuse, New York

SOURCE

Topo. Plan Mansion Grounds (Bruno, 2001)

ANNOTATED BY

John Auwaerter
Illustrator 10, 2004

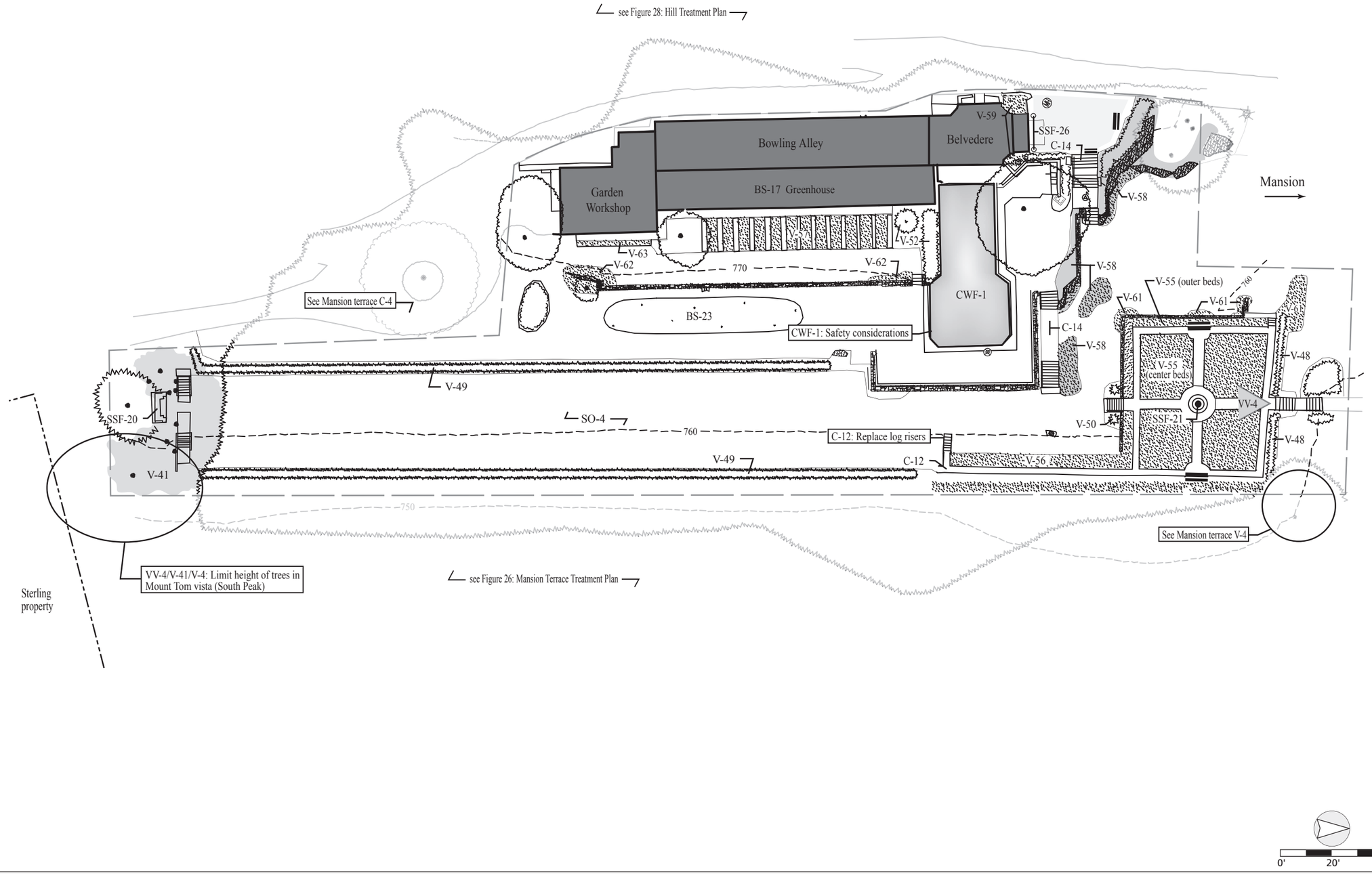
LEGEND

- manhole
- electric box
- utility pole
- hydrant
- catch basin
- lamppost
- gate valve
- sign
- valve pit
- building
- stone wall
- fence
- deciduous canopy
- coniferous canopy
- even-age monocult.
- decidous specimen
- coniferous specimen
- new tree
- herbaceous bed
- edge of lawn
- rock outcropping
- edge of road/walk
- 10' contour
- property boundary

NOTES

Landscape features described in treatment narrative are indicated by CLR number.
Shading indicates feature extent.
Text boxes indicate treatment other than maintenance (preservation)
Features outside of Mansion terrace/NPS property are ghosted.

Figure 27



Cultural Landscape Report for the Mansion Grounds

Marsh-Billings-Rockefeller National Historical Park

Treatment Plan Terrace Gardens-Belvedere

National Park Service
Olmsted Center for Landscape Preservation
99 Warren Street, Brookline, MA

in cooperation with:

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- edge of road/walk
- 10' contour
- property boundary

NOTES

Landscape features described in treatment narrative are indicated by CLR number.
Shading indicates feature extent.
Text boxes indicate treatment other than maintenance (preservation)
Features outside of Terrace Gardens-Belvedere area are ghosted.

Figure 28

Cultural Landscape Report for the Mansion Grounds

Marsh-Billings-Rockefeller National Historical Park

Treatment Plan Hill

National Park Service
Olmsted Center for Landscape Preservation
99 Warren Street, Brookline, MA

in cooperation with:

Faculty of Landscape Architecture
SUNY College of Environmental Science and Forestry
Syracuse, New York

SOURCE

Topo. Plan Mansion Grounds (Bruno, 2001)

ANNOTATED BY

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Illustrator 10, 2004

LEGEND

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- decidous specimen
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- rock outcropping
- edge of road/walk
- 10' contour
- property boundary

NOTES

Landscape features described in treatment narrative are indicated by CLR number.
Shading indicates feature extent.
Text boxes indicate treatment other than maintenance (preservation)
Features outside of Hill area/NPS property are ghosted.

Figure 29

OTHER TREATMENT CONSIDERATIONS

WOODSHED REHABILITATION & EDUCATIONAL BUILDING ADDITION

At the end of the historic period during the Rockefeller era, the Woodshed yard (SO-10) was a triangular open space bordered by the long side of the Woodshed to the west, the main carriage road and lower Woodshed road to the south and north, and mature conifer plantations set out in the 1870s and 1880s. Prior to the Rockefeller era, the Woodshed yard served as the lumber yard and center of forestry operations for the Billings Estate, where logs were sawn, lumber was stockpiled, and machinery related to the forestry operations of the estate was stored. Aside from the Woodshed, this yard contained only one other building: a small shed housing a drag saw. By c.1960, forestry operations ceased in the Woodshed yard, and the saw shed and associated machinery were most likely removed at this time. The space was maintained as an open meadow, with the Woodshed used for storage. In c.1980, the Woodland Garden (C-33, V-79) was built on the west side of the Woodshed, entered along an old access road (AS-1) along the south side of the Woodshed yard.

"Rehabilitation of the c.1876 Wood Barn and Mill Complex" Project

The purpose of the project is to rehabilitate the deteriorated Woodshed (called by the name "Wood Barn" in the project) to house displays on the history of the forest and sustainable forestry practices, and to showcase value added products made from wood. The exhibit space will also provide orientation to the park's network of 19th century carriage roads and trails. The rehabilitation will dramatically improve the environmental conditions for the collection of sixteen historic carriages and allow them to be exhibited for the first time. A multi-purpose educational structure will also be constructed nearby to provide classroom and flexible meeting space. It will become a staging area for forest education programs in the park. It will also be the only classroom and flexible space in the park that can accommodate a group larger than 25 and will be available for programs sponsored by the park, National Park Service Conservation Study Institute, Woodstock Foundation and Billings Farm & Museum.

An Environmental Assessment will be conducted for the project. In the Environmental Assessment several alternatives for the final siting of the new building will be considered and evaluated to assess its impact on the historic character of the property.

STERLING PROPERTY

The Sterling property, located at 1 River Street off the southwest corner of the National Historical Park, was part of the property Frederick Billings purchased from Charles Marsh, Junior in 1869 and was subsequently developed as part of the Mansion

grounds. In 1951, the 1.17-acre parcel was subdivided from the Mansion grounds and estate of Mary Montagu Billings French and sold to Richard Sterling, who built the existing house and driveway in 1952. The property is presently owned by the Woodstock Resort Corporation and leased as a private residence.

The Sterling property retains a close association with the Mansion grounds not only as part of the setting of the landscape (it is contiguous on two sides, and on third with the Gardener's Cottage), but also because it retains contributing landscape features from its pre-1951 development, including a portion of the perimeter stone wall (BS-9) and perimeter plantations (V-4). Some trees on the property have matured since 1951, and are now beginning to obstruct the vista of Mount Tom (VV-4) from the Terrace Gardens. In addition, the property breaks the connection of the Gardener's Cottage with the Mansion grounds, except for a narrow strip along the North Street road. Therefore, in order to preserve historic features on the property, the setting of the Mansion grounds, and the vista of Mount Tom, and to ensure future connection between the Gardener's Cottage and the Mansion grounds, the following alternatives are recommended:

* The preferred alternative is for the National Park Service to seek the donation of the Sterling property, incorporating it into the overall management of the park. The landscape, including the historic perimeter stone wall and plantations, would be treated according to the preservation standards used for the rest of the park. Additions, alterations, or changes in use to the non-contributing Sterling house that detract from the historic character of the Mansion grounds would not be undertaken.

* A second alternative provided the property cannot be donated or otherwise acquired, is for the National Park Service to seek a management covenant with the owner of the Sterling property to ensure that features which contribute to the significance of the Mansion grounds are treated according to appropriate preservation standards. Under this alternative, the National Park Service would assume management of the perimeter stone wall, perimeter tree plantations, woods and specimen trees to preserve the Mount Tom vista, and other features as deemed necessary to preserve the historic setting of the Mansion grounds. In addition, the covenant should provide for consultation with the National Park Service when any material changes or changes in use to the property are proposed.

GARDENER'S COTTAGE / BERGSTROM HOUSE

The Gardener's Cottage, located at 3 North Street off the southwest corner of the National Historical Park, was built in c.1859 and purchased by Frederick Billings in 1872 as a staff residence, serving for much of its history as the home of head gardeners and their families. The property formed the southwest corner of the Mansion grounds, located at the end of the service drive linking the formal grounds and greenhouses with North Street. The head gardeners, including George Mass during the Frederick Bill-

ings era, Robert Carruthers during the Estate era, and more recently, Carl Bergstrom during the Rockefeller era, were responsible for the care of the Mansion grounds, including the gardens and greenhouses. In 1992 just prior to establishment of Marsh-Billings National Historical Park, the Rockefellers subdivided the Gardener's Cottage from the Mansion grounds and proposed park, establishing an individual, .53-acre residential lot. The property is presently owned by the Woodstock Resort Corporation and is leased as a private residence.

While this subdivision legally separated the Gardener's Cottage from the Mansion grounds (the property was earlier partially separated due to the 1951 subdivision of the intervening Sterling property), the property retains an intimate physical and historical connection with the Mansion grounds. After the 1992 subdivision, the property remained the residence of head gardener Carl Bergstrom and his wife, Mimi. Carl Bergstrom continued to care for the Mansion grounds until his death in 1997, and Mimi Bergstrom still resides in the house today. The house and landscape are largely unchanged from the end of the historic period, and contain portions of features that contribute to the historic character of the Mansion grounds, including the western end of the perimeter stone wall (BS-9), the west half of the North Street road (C-5), and perimeter plantations (V-4).

In order to preserve this important part of the Mansion grounds, and continue its historic association with the landscape, the following alternatives are recommended:

* The preferred alternative is for the National Park Service to seek the donation of the Gardener's Cottage, while respecting the life estate of Mimi Bergstrom. The house and landscape, including the historic perimeter stone wall, North Street road, and plantations, would be treated according to the preservation standards used for the rest of the park. An appropriate use for the house would be as a residence for National Park Service staff associated with the care of the Mansion grounds, thus continuing its historic use and association. It would also be appropriate to adapt the house, in part or whole, for interpretive uses.

* A second alternative provided the property cannot be donated or otherwise acquired, is for the National Park Service to seek a management covenant with the owner to ensure that features that contribute to the significance of the Mansion grounds are treated according to appropriate preservation standards. Under this alternative, the National Park Service would assume management for the exterior of the Gardener's Cottage, perimeter stone wall, perimeter tree plantations, and other features as deemed necessary to preserve the property and the historic setting of the Mansion grounds. In order to continue the historic use and association of the property, the covenant should specify that future residents include, if possible, National Park Service staff associated with the care of the Mansion grounds. In addition, the covenant should provide for a right-of-way to the National Park Service along the North Street road, and provide for consultation with the National Park Service when any material changes or changes in use on the property are proposed.

ENDNOTES

[1] In March 2000, a parallel CLR (Site History and Existing Conditions) was prepared for the forested Mount Tom lands entitled "Cultural Landscape Report for the Forest at Marsh-Billings-Rockefeller National Historical Park." It was prepared by the University of Vermont in conjunction with the National Park Service and the Conservation Study Institute. This CLR addressed forested land on the hill within the Mansion grounds, but did not focus on individual landscape features.

[2] Marsh-Billings National Historical Park, "Draft General Management Plan/Draft Environmental Impact Statement" (Prepared by the Park, April 1998), 19 [hereafter, 'GMP'].

[3] GMP, 19-20.

[4] Public Law 102-350, Sections 2, 4, Appendix 'A,' GMP, 77-78.

[5] GMP, III.

[6] Little graphic documentation on the appearance of the landscape during the 1992-1997 period was found in the course of research for this project.

[7] GMP, 26.

[8] Charles A. Birnbaum and Christine Capella Peters, editors, *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (Washington, D.C.: National Park Service, 1996), 48-49.

[9] GMP, 32. In the future, restoration may become an appropriate treatment in order to return features to their historic appearance due to changes incurred after the end of the historic period. This may be especially true for vegetation features such as plantations.

[10] Graphic illustrations are provided only for select treatment guidelines in order to supplement the narrative. Photographs of existing conditions for all landscape features can be found in the Cultural Landscape Report for the Mansion Grounds, Volume 2, "Existing Conditions and Analysis."

[11] See Marsh-Billings-Rockefeller National Historical Park, "Report on the Management of the Historic Mount Tom Forest" (Unpublished report, August 2001), Marsh-Billings-Rockefeller National Historical Park library [hereafter, MABI], and subsequent draft forest management plan (currently being developed by the park as of 2004). Preservation of historic plantations has received little professional attention to date. The treatment recommendations in this section therefore represent a largely experimental approach to apply the Secretary of the Interior Standards to a large-scale dynamic natural resource. Forestry experts consulted in the development of this treatment plan included Ralph Nyland, Distinguished Service Professor, Faculty of Forest and Natural Resources Management, SUNY College of Environmental Science and Forestry, Syracuse; and Jon Bouton, Windsor County Forester. Forester John Wiggin's 1993 "Forest Management and Ecological Inventory Report" provided important site-specific treatment information. Franklin F. Moon's and Nelson Courtlandt Brown's *Elements of Forestry* (New York, 1914), served as a general forestry and silvicultural reference, reflecting in part historic practices.

[12] GMP, 17, 22, 27.

[13] Given the high number of variables for the treatment of specific areas of the planta-

tions, a professional forester should be engaged to interpret the goals and objectives of this treatment plan for the forest plantations.

[14] Ralph Nyland, interview by John Auwaerter, 27 August 2002.

[15] Jon Bouton, Windsor County Forester, site inspection with John Auwaerter, 20 September 2002.

[16] Scott McDowell, "Mansion Porch Repair" (NPS Northeast Cultural Resources Center, Building Conservation Branch, Summer 1999), MABI. McDowell recommended pruning the shrubs back a minimum of 8"-10" from the verandah.

[17] Plant varieties include those extant in 2000 because documentation for plantings during 1992-1997 period is available only for 1992 (other records do not differentiate plantings in Flower Garden from other herbaceous plantings on Mansion grounds); many of the perennials extant in 2000 likely date from the 1992-1997 period. Mansion grounds files ("Flower garden"), Resortscapes Inc., Woodstock, Vermont, 1992-1997; and examination of varieties extant in 2000.

[18] Mansion grounds files ("Roses"), Resortscapes Inc., Woodstock, Vermont, 1992-1997.

[19] Ibid.

[20] Mansion grounds files ("Flower garden"), Resortscapes Inc., Woodstock, Vermont, 1992-1997.

[21] Mansion grounds files ("Rock garden"), Resortscapes Inc., Woodstock, Vermont, 1992-1997.

[22] The swimming pool poses a potential safety hazard. The hazard of this pool is, however, greatly reduced by the fact that public access is limited to guided tours, and the pool is located in a remote part of the grounds that is not easily accessible and is fenced off during the winter (as part of deer protection for the Terrace Gardens). The Town of Woodstock does not have any requirements in its building code for installing fences around swimming pools. The State of Vermont does require a 4'-high enclosed fence with self-latching gates around public swimming pools; this code likely does not apply to the Mansion grounds pool because it is not maintained as a swimming pool (and as federal property may be exempt from state code). "State of Vermont code 5-1302: Design and Construction of Public Swimming Pools And Bathing Beaches," http://www.epoolandspa.com/asp/code/code_pass.asp.

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APPENDICES

APPENDIX A

HERBACEOUS PLANT MATERIAL ADDED TO MANSION GROUNDS, 1992-2000
(List compiled by Resortscapes, Inc., Woodstock, Vermont)

This list documents the plant material added to the herbaceous beds on the Mansion grounds by Resortscapes, Inc., the horticultural consulting firm that worked for the Rockefellers/Woodstock Inn & Resort between 1992 and 1997, and later for the National Park Service. These beds include the flowerbed along the main entrance drive (V-36), the Flower Garden (V-55), Cutting Garden (V-57), rock gardens (V-58, 61, 62), and to a lesser extent, the woodland plantings in the Waterfall Garden (V-77) and around the Lily Pond (V-76). While this list includes plantings made after the Rockefellers' last five years on the property (1992-1997), overall it represents plant material that is appropriate for these herbaceous beds. Documentation on where specific plantings were made is not available.

Allium giganteum (Giant onion)
Allium sphaerocephalum (Ballhead onion)
Allium thungergii "Ozawa's pink" (Japanese onion)
Aconitum napellus (Aconite monkshood)
Andromeda polifolia "Blue ice" (Bog rosemary)
Anemone sylvestris (Snowdrop anemone)
Aster novi-belgii "Winston Churchill," "White swan," "Patricia Ballard," "Celeste" (New York aster hybrids)
Astrantia carniolica "Rubra" (Masterwort)
Baptisia australis (Wild blue indigo)
Begonia "Linda"
Brunnera macrophylla variegata (Variegated brunnera)
Calluna vulgaris "Alison Yates," "Kerstin," "Radnor," "Rosea," "Silver Knight" (Heather hybrids)
Campanula glomerata "Joan Elliot," "Superba" (Clustered bellflower)
Campanula percisifolia (Peach-leaved bellflower)
Campanula porcharskyana (Serbian bellfower)
Centaurea montana (Mountain bluet)
Chrysanthemum "Bravo," "Emily," "Helen," "Jessica," "Triumph" (Chrysanthemum hybrids)
Cleome spinosa "Helen Campbell," "Pink queen" (Spiny spiderflower)
Colchicum cilicium, "Autumnal Album," "Autumnal major" (Waterlily)
Crocus vernus (Common crocus)
Dahlia mix
Delphinium "Blue bird," "Black Knight," "Guineuera," "Magic fountain" (Larkspur)
Dianthus x "Frosty fire" (Pinks)
Dicentra spectablis "Alba" (White bleeding heart)
Digitalis grandiflora (Yellow foxglove)
Digitalis lutra (Foxglove)
Digitalis purpurea (Biennial foxglove)
Digitalis x mertonensis (Foxglove hybrid)
Echinops sphaerocephallus "Artic glow," "Blue glow" (European globe-thistle)

APPENDIX A, continued

Erica darleyensis (Darley heath)
Geranium hybrida "Johnson's blue" (Cranesbill hybrid)
Gladiolus "Golden glove," "Pink friendship" (Gladiolus hybrid)
Gladiolus royalty "Good news," "Sun ruffles" (Gladiolus hybrids)
Heuchera micrantha "Palace purple" (California alumroot)
Impatiens x hybrida "Danziger" "Illusion," "Impulse" (New Guinea impatiens)
Lavendual angustifolia "Munstead dwarf" (True lavender)
Lilium asiatic "Gran paradiso," "Loreta," "Menton," "Pink," "red asiatic" (Asiatic lily hybrids)
Lilium asiflorum "Aerobic," "Showbiz" (Asiflorum lily)
Lilium orental "Arena" (Oriental lily)
Lilium tigrinum, "Yellow" (Tiger lily)
Liqualaria dentate desdemona (Golden groundsel)
Liqularia przewalski ("The Rocket" groundsel)
Monarda didyma "Blue stocking," 'Garden view scarlet' (Bee balm)
Phlox subulata "Snowflake" (Creeping phlox)
Platycodon x (Balloonflower)
Primula japonica "Redfield strain" (Japanese primrose)
Salvia nemorosa "Viola Klose" (Mint)
Scabiosa caucasica "Butterfly blue" (Caucasian scabious)
Scaevola aemula "New Wonder" (Fan flower)
Sedum "Autumn joy" (Stonecrop)
Tradescantia "Zwanenburg Blue" (Spiderwort)
Trollius europaeus (Common globeflower)
Tulipa "Ester," "Pink supreme" (Tulip)
Verbena x "Sissinghurst" (Verbena)
Veronica liwanensis (Turkish veronica)
Veronica x "Goodness grows" (Veronica hybrid)
Zinnia x pumila "Profusion" (Zinnia)

APPENDIX B

PLANT MATERIAL ADDED IN PRIMAVERA REHABILITATION OF ROCK GARDENS, MAY & JUNE 1992

("Rock Garden" file, Resortscapes, Inc., Woodstock, Vermont)

This list documents the plant material added to the rock gardens in the Terrace Gardens-Belvedere area as part of the replanting undertaken by Primavera, of Barnard, Vermont, in 1992. These replanted areas included the rock gardens along the pool terrace steps (V-58), the rock gardens along the north side of the Flower Garden (V-61), and the rock gardens at the east and west ends of the putting green wall (V-62). This list represents plantings appropriate for future replanting in these rock gardens. Documentation on where specific plantings were made is not available.

Abies koreana (Dwarf Korean fir)
Abies balsamea nana (Dwarf balsam fir)
Alchemilla mollis procumbens (Lady's mantle)
Allium senescens glaucum (Blue flowering onion)
Androsace primuloides 'Yunnan' (Rockjasmine)
Anthemis beibersteiniana (Camomile)
Asarum (European ginger)
Astilbe simplicifolia "Sprite" (Star astilbe)
Athyrium niponicum var. pictum (Japanese painted fern)
Calluna vulgaris (Heather): "County wicklow" (double pink), "White lawn," "Silver knight," "Barnet anley," "Kinlockruel," "Rubrum."
Chrysanthemum weyrichii (Groundcover chrysanthemum, pink flowers)
Clematis integrifolia (Solitary clematis)
Dianthus "Blue hills" (Pinks, magenta with blue foliage)
Dianthus simulans (Pinks, pink flowers)
Dianthus "Tiny rubies" (Pinks, compact, pink flowers)
Dicentra Formosa (eximia) 'Snowdrift' (Pacific bleeding-heart)
Erigeron scopularum (Fleabane)
Genista "Royal Gold" (Flowering broom)
Geranium renardii (Geranium, pale-pink flowers)
Geranium sanguinium "New Hampshire" (Blood-red geranium)
Geranium sanguinium lancastriense (striatum) (Geranium, pale-pink flowers)
Gypsophilia repens rosea (Creeping baby's breath)
Hemerocallis "Stella d'Oro" (Daylily)
Hosta "Krossa Regal" (Plantain-lily, dark green leaves)
Hosta "Gold Standard" (Plantain-lily, light green leaves)
Hutchinsia alpina (Alpencress)
Iris pumila (Dwarf bearded iris)
Iris pallida variegata (Variegated dwarf bearded iris)
Juniperus communis "Berkshire" (Common juniper, flat-mounded, silvery blue)
Juniperus virginiana "Grey owl" (Eastern red-cedar, prostrate, silver-gray)
Juniperus x. media "Old gold" (Chinese juniper, prostrate, gold-tipped green)
Lewisia cotyledon hybrids (Lewisia)
Oxalis adenophylla (Chilean oxalis)
Penstemon hirsutus v. pygmaeus (Dwarf hairy beardtongue)
Penstemon x. 'Holly' (Penstemon)

APPENDIX B, continued

Phlox douglasii "Crackerjack" (Creeping phlox, magenta flowers)
Picea abies 'Little gem' (Dwarf spreading Norway spruce)
Primula beesian (Bees primrose)
Rosa (miniatures)
Saxifraga aizoon (paniculata) (Aizoon saxifrage)
Saxifraga arendsii (? Saxifrage)
Saxifraga cochlearis (Snail saxifrage)
Saxifraga rotundifolia (Round-leafed Saxifrage)
Scabiosa lucida (Scabious, rose-lilac flowers)
Scilla numidica (Squill)
Sedum "Icicle"
Sedum middendorfianum (kamschatca)
Thymus 'French white' (Thyme)
Veronica armena (Armenian speedwell)
Veronica 'Minuet' (? Speedwell)
Yucca filamentosa variegata (Variegated Adam's needle)

APPENDIX C

WOODLAND, WETLAND, AND ALPINE HERBACEOUS PLANTS SHIPPED TO MANSION GROUNDS, 1979

(Zenon Schreiber receipt dated December 27, 1979, Resortscapes, Inc. files, Woodstock, Vermont)

The following material was planted on the Mansion ground in fall 1979 under the supervision of landscape designer Zenon Schreiber. The documentation does not indicate the location of the plants, but many were probably planted in the Hillside Gardens, where Schreiber focused his efforts. Due to lack of documentation on plants extant during the 1992-1997 years, this list represents the best documentation available on appropriate plantings for the Lily Pond (V-76) and Waterfall Garden (V-77). Documentation on where specific plantings were made is not available.

Aruncus sylvestris (Goat's beard)
Asarum europaeum (European wild ginger)
Astilbe bitemata (False spirea)
Bellis perennis minuta (English daisy)
Cimicifuga americana (American bugbane)
Cimicifuga racemosa (Cohash bugbane or Snakeroot)
Corydalis lutea (Yellow corydalis)
Cypripedium acaule (Lady's slipper)
Cypripedium pubescens (Yellow lady's slipper)
Dicentra cucullaria (Dutchman's breeches)
Dionaea muscipula (Venus flytrap)
Galax aphylla (urceolata) (Galax)
Hepatica acutiloba (Sharp-lobed hepatica)
Hepatica triloba (Three-lobed hepatica)
Heuchera americana (American alumroot)
Lobelia cardinalis (Cardinal-flower)
Mertensia virginica (Virginia bluebells)
Mitchella repens (Partridge-berry)
Orchis spectabilis (Showy orchis)
Podophyllum peltatum (Common mayapple)
Polygonatum commutatum (Great Solomon's seal)
Sarracenia flava (Trumpet pitcher-plant)
Sarracenia purpurea (Common pitcher-plant)
Sempervivum arachnoideum (Spiderweb houseleek)
Shortia galacifolia (Oconee-bells)
Silene virginica (Fire-pink catchfly)
Smilacina racemosa (False Solomon's seal or wild spikenard)
Thalictrum dioicum (Early meadow-rue)
Trillium grandiflorum (Snow trillium)
Trillium undulatum (Painted trillium)
Uvularia sessilifolia (Little merrybells or wild oats)
Viola pedata bicolor (Bicolor birdfoot violet)