



CULTURAL LANDSCAPE REPORT
FOR THE VANDERBILT MANSION
FORMAL GARDENS

VANDERBILT MANSION NATIONAL HISTORIC SITE



CULTURAL LANDSCAPE REPORT FOR THE VANDERBILT MANSION FORMAL GARDENS

VANDERBILT MANSION
NATIONAL HISTORIC SITE

HYDE PARK, NEW YORK

*“The highest personal note in
the art of landscape design is
the flower garden...”*

Robert Cridland

SITE HISTORY

EXISTING CONDITIONS

ANALYSIS AND EVALUATION

TREATMENT

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Olmsted Center for Landscape Preservation

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Cover Photo: Contemporary view of the formal gardens from the palm house terrace (Bill Urbin, 2005).

Title Page: Two girls and one boy leaning on an urn on the south side of the rose house terrace, circa 1920s (VAMA).

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At Vanderbilt Mansion National Historic Site, David Hayes, Chief of Resource Management served as project coordinator. Sarah Olson, Superintendent and Carol Kohan, Deputy Superintendent provided overall project guidance. Henry Van Brookhoven, Facility Manager and Dave Cerasaro, Grounds Foreman provided input on current grounds operations. Ann Jordan, Chief Curator and Frank Futral, Curator participated in meetings and provided information on objects in the landscape. Scott Rector, Chief of Interpretation and Allan Dailey, Supervisory Park Ranger participated in project meetings. Michele Ballos, Collections Manager and Tara McGill, Museum Technician assisted with historical research. Bill Urbin, Photographer provided the cover image.

From the Frederick W. Vanderbilt Garden Association, Inc., Margi Delafield, President; Kay Cangemi, Head of Historic Research; and Martha McConaghy, Treasurer assisted with gathering historical information. Many additional members participated in meetings and provided information for the report including Marion Asher, Board Member; Charlotte Daley, Head Annual Gardener and Vice President; Judy Dobbie, Head of Grounds; Shirley Downing, Garden Coordinator; Suzanne Gillespie, Member; Evelyn Kohuth, Volunteer Coordinator; Anita Mannion, Volunteer; Elaine Parker, Master Gardener; JoAnn Wheate, Head Perennial Gardener; and Anita Whelan, Secretary.

This report builds upon two published reports and one draft report. Excerpts are incorporated into the history of the formal gardens from the *Vanderbilt Mansion National Historic Site Cultural Landscape Report* prepared in 1988 by Rieley & Associates, Rudy J. Favretti, and Reuben M. Rainey, as well as from the *Cultural Landscape Report for Vanderbilt Mansion National Historic Site, Volume 1*, prepared in 1992 by Patricia M. O'Donnell, Charles A. Birnbaum, and Cynthia Zaitzevsky, Ph.D. Recommendations are also revisited from the draft "Landscape

Preservation Treatment Recommendations,” prepared by Patricia O’Donnell, Barbara Wilson, and Peter Viteretto in 1994.

FOREWORD

Certainly one of the highlights of a visit to the Hudson Valley is exploring the grounds at the Vanderbilt Mansion. A stroll along the stunning overlook of the Hudson River will lead you to the magnificent gardens that are the subject of this new report. People had begun writing about this remarkable landscape long before the Vanderbilt period and the gardens, too, were envisioned and laid out well before the Vanderbilts' arrival. Franklin Roosevelt also admired this landscape and, following Frederick Vanderbilt's death, paved the way for the establishment of the Vanderbilt Mansion National Historic Site in 1940. But in the 1940s and 50s the Park Service found it necessary to abandon the upkeep of the gardens. Enter the Frederick W. Vanderbilt Garden Association which brought the gardens back to life and, today, remain its caretakers.

This report reveals the history and significance of the gardens in splendid documentary and photographic detail, and presents plans for their restoration as they looked during Frederick Vanderbilt's lifetime. Our sincere thanks go to the NPS' Olmsted Center for Landscape Preservation, particularly John Hammond, Margie Coffin Brown and Brona Keenan, who skillfully assembled this volume. Their thorough research and insightful analysis uphold the Olmsted Center's unmatched reputation for treating important landscapes with sensitivity and skill. Thanks also to our park resource manager, Dave Hayes, who oversaw the project from start to finish.

Several of our partners in the Frederick W. Vanderbilt Garden Association reviewed drafts of the report along the way and were able to provide the important perspective of the working gardener. The Association is already at work restoring the Cherry Walk as an early step toward bringing back the 1930s garden.

These gardens unfold gradually and offer unexpected delights as you travel along their winding paths. They invite people back again and again to explore this historic landscape gem in greater detail. Once the gardens are fully restored, discovering all that lies within their walls will only grow more enriching for those lucky people who visit.

Sarah Olson

Superintendent



INTRODUCTION

Located in the town of Hyde Park, New York, on a terrace above the Hudson River with views to the distant Catskill Mountains, the Vanderbilt Mansion National Historic Site preserves the former home and estate grounds of Frederick and Louise Vanderbilt. The estate is one of many built along the river by influential families who were drawn to Dutchess County for its fertile soils, outstanding views, access to the river corridor, and proximity to New York City. The property reflects the consecutive developments by several affluent landowners, including the Bards, Hosacks, Langdons, and Vanderbilts and is significant for its association with the Gilded Age and as an example of Country Place Era landscape design as practiced at the end of the nineteenth century. The site includes the Vanderbilt's 54-room palatial Mansion, an exceptional collection of mature specimen trees, winding drives, expansive views, and ornate formal gardens.

Set apart from the Mansion and framed with elaborate walls and pergolas, the terraced formal gardens are the focus of this report. The earliest built features in the garden date to 1875, when the property was owned by Dorothea and Walter Langdon, Jr. The Vanderbilts purchased the property in 1895 and retained ownership until 1938. During this period they hired a succession of landscape architects to expand the formal gardens with design principles adopted from Italian and French gardens. The National Park Service assumed management of the property in 1940 with the legislated intent to explain the significance of the Gilded Age, interpret the lifestyle of the Vanderbilts as reflected by their estate, and to illustrate a phase of human interaction with the environment.

Much of the historic character of the formal gardens has been preserved by the ongoing efforts of Frederick W. Vanderbilt Garden Association, Inc. (FWVGA). Formed in 1984, the Association has worked in collaboration with the National Park Service to restore the gardens as closely as possible to their 1930s appearance, with thousands of volunteers hours devoted to the upkeep of the garden. The extent of the gardens is a challenge to maintain however, and there is some loss of the historic character of the garden as a result of missing features such as walls, greenhouses, plants, and ornamentation. Many extant features are deteriorating and are in need of repairs or rehabilitation.

PROJECT SCOPE AND METHODS

The Cultural Landscape Report for the Vanderbilt Mansion Formal Gardens serves as the primary treatment document for the formal gardens and the primary tool for their long-term management. It provides treatment guidance within the context of the site's history and significance, extant historic features, and current planning objectives and management goals. In addition to providing specific, targeted treatment tasks to address immediate identified issues, this document establishes an overall treatment philosophy and principles to guide future treatment decisions. Together, the treatment guidance will help articulate goals, establish priorities, and focus resources.

This report addresses the walled formal gardens, a component of the larger landscape of the Vanderbilt Mansion National Historic Site. The historic site is situated along the bank of the Hudson River in a long north-south parcel a quarter mile wide and over a mile long (Figure 0.1). The Mansion sits 170 feet above the river on the edge of a terrace characterized by open lawns, mature deciduous trees, formal gardens, serpentine drives, and neo-classically styled buildings. A site-wide treatment plan addressing the historic site as a whole was completed in 2009. This report builds on the 2009 treatment plan to provide more detailed and focused documentation and treatment for the complex landscape of the formal gardens.

The methodology used in this report follows *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques* (1998). The treatment guidelines and tasks are consistent guidelines established by the National Park Service *Director's Order 28: Cultural Resource Management* (1999), *NPS-28: Cultural Resource Management Guideline* (1997), and *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (1996).

REPORT ORGANIZATION

This report is organized into four chapters beginning with a detailed history of the evolution of the formal gardens, followed by documentation of the existing conditions, an analysis and evaluation of the integrity of the formal gardens with respect to the historic period of 1895 to 1938, and treatment guidance on the ongoing management of the garden. Additional detailed information is included in appendices. The four chapters are summarized below:

Chapter 1: Site History synthesizes information on the formal gardens extracted from previous cultural landscape reports and includes historic plans, photographs, and 1938 period plans. These 1938 period plans identify, as best as possible using historical documentation, the historic plant cultivars used in the formal gardens by the Vanderbilts until 1938, including trees, ornamental shrubs, evergreens, roses,

vines, perennials, and annuals. The plan also identifies architectural components, including walls, steps, walkways, pergolas, benches, fountains, and statuary.

Chapter 2: Existing Conditions provides a narrative overview of the garden area as it currently exists. Contemporary site operations and features are described including manipulated topography, circulation, and vegetation. Photographs and an existing conditions plan supplement the narrative.



Figure 0.1. Map showing the location of Vanderbilt Mansion National Historic Site as well as the Home of Franklin D. Roosevelt National Historic Site and Eleanor Roosevelt National Historic Site. The three national park units are managed together as a single administrative unit, Roosevelt-Vanderbilt National Historic Sites. The Roosevelt Farm and Forest and the Top Cottage properties are part of the Home of Franklin D. Roosevelt National Historic Site (OCLP 2009).

Chapter 3: Analysis and Evaluation summarizes existing National Register documentation for the property and evaluates the condition of key features and their contribution to the significance of the landscape.

Chapter 4: Treatment describes the preservation strategy for management of the formal gardens. It includes a framework that establishes a treatment character date, a preferred treatment of rehabilitation, and an overall philosophy that guides the individual treatment tasks. The treatment tasks are presented by landscape characteristic and include tasks for buildings and structures, circulation, vegetation, and small-scale features. The narrative treatment tasks are supplemented by annotated treatment plans, photographs, and drawings to illustrate selected tasks, and tables of recommended bedding plants.

SUMMARY OF EXISTING DOCUMENTATION

Vanderbilt Mansion National Historic Site is particularly well documented, both in primary sources and in secondary source documents that have been written in the past seventy years. Primary sources include drawings and written descriptions of the landscape that date as far back as the 1830s, surveys and plans for the formal gardens and the larger estate, photographs from the late nineteenth century through the 1940s, and careful records of estate financial transactions in the form of detailed estate purchase ledgers. Secondary sources include numerous histories, cultural landscape reports, and park master plans, which to varying degrees recount the site history, analyze the landscape, and provide management direction for the park.

This Cultural Landscape Report for the Vanderbilt Mansion Formal Gardens builds on the existing documentation to provide complete and coherent analysis and treatment guidance for the formal gardens. Where noted, information was extracted from previously compiled histories and supplemented with new information and analysis gathered from review of primary documentation, including historic photographs and the estate purchase ledgers.

Cultural Landscape Reports

The first cultural landscape report for the Vanderbilt Mansion was prepared in 1988 by Rieley and Associates, Rudy Favretti, and Reuben Rainey. One of the first of its kind prepared for a park service-managed landscape, the study focused on the formal gardens at Vanderbilt Mansion and included a site history and extensive analysis of historic garden plans and planting lists.

A property-wide cultural landscape report was authored by Patricia O'Donnell, Charles Birnbaum, and Cynthia Zaitzevsky and published in 1992 by the North Atlantic Region Cultural Landscape Program, the predecessor to the Olmsted Center for Landscape Preservation. The 1992 volume incorporates the earlier research completed by Rieley and Associates and includes a site history, existing

conditions, and analysis for the landscape from 1764 to 1991 as it evolved during its ownership by the Bards, Hosacks, Langdons, Vanderbilts, and the National Park Service.

In 1994, a draft of a second volume to the Cultural Landscape Report, *Volume 2: Landscape Preservation Treatment Recommendations* was prepared by Patricia O'Donnell, Barbara Wilson, and Peter Viteretto. Although never finalized, the draft provides treatment recommendation for many issues identified in the landscape of the park as a whole and in the formal gardens specifically. Treatment recommendations from the 1994 draft were carefully considered in the preparation of this report.

In 2009, the Olmsted Center for Landscape Preservation completed the *Cultural Landscape Report for Vanderbilt Mansion National Historic Site, Volume II: Treatment*. The 2009 treatment plan serves as the second volume to the 1992 cultural landscape report and provides treatment recommendations for the entire historic site property. Although the formal gardens are addressed cursorily in the treatment plan, the gardens' complexity warrants the more detailed analysis and treatment guidance that a dedicated cultural landscape report can provide.

Master Plans

Three master plans, written in 1941, 1961, and 1976, were developed to help guide the development and management of Vanderbilt Mansion National Historic Site. These documents provide valuable records of existing conditions at the times they were written and articulate the park's priorities and plans for the short-term future.

The first master plan for Vanderbilt Mansion National Historic Site was completed in 1941, shortly after the estate's acquisition by the National Park Service. The formal gardens were carefully documented in 1940 by the National Park Service Branch of Plans and Designs, resulting in the only written documentation of the contents of the Vanderbilts' gardens. Preservation of the grounds was a high priority. In a letter to Regional Director Roberts in 1940, President Franklin D. Roosevelt expressed his belief that the property "should remain permanently in its present condition," Yet, at this time there was considerable concern that the park would not have enough funds to maintain and heat the greenhouses. Shortly thereafter, as part of the 1941 Master Plan, Associate Landscape Architect Walter A. J. Ewald completed a "Planting Guide for Perennial Borders for the Vanderbilt Gardens," which was neither a restoration nor a preservation plan, but a reinterpretation of the gardens which favored economy and ease of maintenance.¹ Due to limited funds and resources, and the onset of World War II, the master plan was curtailed and the formal gardens closed.

A new master plan was completed in 1961 as part of the Mission 66 effort to revitalize the national park system. Despite what was typically an influx of funds

associated with Mission 66, the park still did not have enough resources to restore, or even maintain, the gardens. The master plan describes dilapidated buildings that were considered safety hazards and recommends removal of structures as their maintenance became unmanageable. The gardens were recognized in the plan as significant resources despite their poor condition, and recommendations for their interpretation included rehabilitation of some of the structures and an outlining of garden beds. As a result, in the early 1970s work began on the repair, repointing, and refacing of the garden structures and some of the beds were edged and delineated, but not planted.

The 1976 master plan once again describes gardens in poor condition and a park without the means to maintain them. Modest and stepwise recommendations are offered for the rehabilitation of the gardens, beginning with the rehabilitation of the basic structural elements:

The formal gardens cannot be restored to their early 20th century magnificence, but a partial effort can be made. Rehabilitation of gravel paths, walls, and piers could establish the basic outlines. Next could come the identification of more detailed features by use of ground cover or grass patterns. Other low-maintenance features that act as focal points could be restored, such as arbors, trellises, pergolas, etc. Later stages could introduce a selected number of planting beds, to illustrate the types of plants used in the prime historic period.²

Of note, the 1976 master plan recommends the use of volunteer assistance for the rehabilitation and maintenance of the gardens. This management direction led to the formation of the FWVGA in 1984, and the subsequent rehabilitation of the formal gardens as they appear today.

Historic Photos

Information contained in the secondary sources has been supplemented with available primary sources. Information about the content, arrangement, and character of the formal gardens during the historic period was gleaned from a number of historic sources, including historic photographs, garden plans, the estate purchase ledgers, and oral histories. These sources offer valuable primary information about the formal gardens and provide a rich picture of conditions during the Vanderbilt period. These sources, however, have their limitations and provide an incomplete record of historic conditions. This section describes the primary sources consulted for the treatment recommendations, the conclusions that can be drawn from them, and the areas where their information is incomplete.

A number of historic photos remain from the Vanderbilt period, covering nearly every portion of the formal gardens. These photos are invaluable for showing the gardens as they were, reducing the need for much of the speculation about historic conditions. In many of the cases, the photos clearly show the garden arrangements, plant materials, paths, steps, walls, greenhouses, and other garden

features. Some of the information that may be gained from the photos includes plant species, bed arrangements, plant heights, flower size, and foliage texture. Placing these photos in roughly chronological order can help determine how the gardens evolved over time and in what ways they remained constant throughout the historic period. Furthermore, the photos reveal the character of the gardens, a quality that is often difficult to discern from other sources.

The photos cover a period from about 1906 through the end of the historic period in 1938, as well as the early years of the National Park Service ownership in the 1940s. Unfortunately, few of the photos are dated and do not evenly cover the entire historic period. Although one photo can be definitively dated to before 1908 and a few likely date to the 1910s, the majority of the photos date from the 1920s and 1930s.

The photos have other limitations on the information they can provide. Many of the photos are grainy or blurry, obscuring details of the features and vegetation. The photos also reveal no information about flower color. And while some of the plant species can be discerned from the shape of the flowers and foliage, many of the plants do not show clearly enough to be identified.

Historic Garden Plans

A number of surveys and garden plans survive from the historic period. These include site surveys from 1897 showing the garden configuration at the time Vanderbilt bought the property as well as garden plans by James L. Greenleaf, Thomas Meehan and Sons, and Robert Cridland. These plans give valuable information about the two- and three-dimensional layout of the gardens as well as construction details, materials, and planting plans. Detailed as they are, they only show the gardens as the designers intended them to be, not necessarily as they were. Vanderbilt had several plans drawn up during his residency at Hyde Park, some of which were never implemented. Furthermore, it is believed that Vanderbilt and his gardeners had significant input in the garden designs, adding to or altering the plans developed by the designers and guiding the incremental development of the gardens in between design plans. These alterations, additions, and omissions were typically not documented. Some sense of which aspects of the garden designs were implemented can be garnered from cross-referencing the historic photos and estate purchase ledgers, but because of the limitations of those sources it is not possible to determine as-built conditions with certainty.

Plans that are of particular use in guiding treatment recommendations include those drawn by Greenleaf and Cridland. Greenleaf's drawings of the upper and lower perennial gardens in 1902 and 1903 document in detail the structural features he proposed, including the north pergola, pool pergola, pool and pool house, stair pergolas, and the lattice wall. The drawings also detail the grading, circulation features, and drainage system and gave specifications for vines and

hedges. The structural elements depicted in the drawings correspond well with historic photos and existing conditions, suggesting that the plans were implemented as drawn. While the vegetation of the perennial gardens changed during the historic period, many of the structural components remained unchanged through the end of the period. Greenleaf's drawings are therefore important sources for the preservation and restoration of walls, pergolas, paths, drainage features, and other structures in the upper and lower perennial gardens.

Robert Cridland worked for the Vanderbilts for more than twenty years, generating a number of designs and redesigns for the formal gardens. Some, like his comprehensive 1916 planting plan for the entire gardens, appear to have been, at most, only partially implemented. Others, including the 1922 plan for the double arborvitae hedge and the 1934 plans for the redesign of the upper perennial garden, correspond closely with historic photos. Cridland's drawings typically contained detailed planting plans and plant lists, which were specific in varieties, quantities, sizes, and locations of trees, shrubs, and bedding plants. The temporal nature of vegetation and the fact that it was frequently changed during the historic period make it hard to determine if the planting plans were implemented exactly as prescribed by Cridland. By referencing historic photos and the estate purchase ledgers, however, it is possible to be reasonably confident in the types of perennials selected for the gardens and how they were used.

Although the garden plans may not depict definitive as-built conditions of the gardens during the historic period, they do provide guidance on the location, arrangement, and construction details of structural elements, trees, shrubs, and hedges, and offer a palette of plants that were available and favored by the garden designers, and that were likely, in some place and at some time, located within the garden. This provides an excellent source for choosing suitable plants for the gardens today.

Estate Purchase Ledgers

Frederick Vanderbilt and the managers of his estate kept detailed records of all items bought or sold for the estate. This included everything from large purchases for the farm to everyday household items. Within the ledgers are hundreds of entries for plant materials, including trees, shrubs, perennials, seeds, and vines for both the estate grounds and the formal gardens. The ledgers provide a record of items actually planted at Vanderbilt's estate and establish a chronology of development. The ledgers contain information on plant species, variety, quantity, and size, and enable a high level of specificity and accuracy in selecting plants for the gardens today (Appendix A).

The estate purchase ledgers, however, have limitations to the information they provide. Although the ledgers cover the period to some extent from 1901 to 1938, they do so with varying degrees of details. Some of the ledgers contain no

information about plant materials purchased, while others contain numerous detailed entries. It is possible that not all of the ledgers survived, or that there was inconsistency over the years in what sort of purchases were recorded in the ledgers. It is also possible that over certain periods, most of the plants were propagated on site and in the greenhouses, and that few plants were actually purchased.

Plants purchased for the estate were used in a number of ways, including planting in the gardens, planting in the larger estate landscape, and for use as cutting or show flowers. Cutting flowers were grown either in the greenhouses or in the cutting garden south of the formal gardens and were not typically planted in the formal garden beds. In many instances, these various uses are not specified in the ledgers, leaving to speculation whether a purchased plant was ever used in the formal gardens.

Like the other historic sources, the estate purchase ledgers provide an incomplete record of the development of the formal gardens. However, they do provide valuable information about the species and varieties that were favored by Vanderbilt and bought and used in some way during the historic period. When used in conjunction with the other sources, the ledgers help complete the picture of the historic conditions and become an important source for selecting plants for garden treatment.

SUMMARY OF FINDINGS

Vanderbilt Mansion National Historic Site is a designed landscape with a nearly 250-year history, dating to 1764 when Dr. John Bard first established his farm on the lands next to the Hudson River. Since then, four families made Hyde Park their home, developing over time a stately landscape of grand mansions, scenic grounds, and lush gardens. The formal gardens, located in their current location since at least 1875, were both showcase and refuge for its owners. Like the larger landscape, they evolved over the years under the guidance of several noted architects and landscape architects as well as the owners and their gardeners.

The formal gardens are a contributing resource to the property-wide cultural landscape, which is significant as an early example of picturesque landscape design in America and for exhibiting the distinctive characteristics of Country Place Era landscapes, and for its association with the Gilded Age of American wealth in the late nineteenth and early twentieth centuries. The gardens retain a high degree of integrity, due in large part to rehabilitation efforts in the 1980s and to ongoing management by the FWVGA.

Treatment for the gardens focuses on stabilization and preservation of extant historic features, the reinstatement of lost structural and vegetation features, and the selection and planting of seasonal bedding plants.

SITE HISTORY

While the extant features of the formal gardens date to 1875, the gardens were developed within the context of the estate as a whole. The following summarizes the history of the Hyde Park estate from its inception in 1764 to the present.

Dr. John Bard, 1764-1799

When Dr. John Bard acquired the property in 1764, it included the land of the current estate grounds along the Hudson River bank on the west side of Albany Post Road (today Route 9) in addition to a large area of land on the east side of the road, a total of 3,600 acres.³ Dr. Bard first developed the eastern portion of the property, land well suited to agriculture. He built and lived in the Red House just east of Albany Post Road and developed a farm, which included a barn and other farm structures, a fruit orchard, and cultivated fields. Landings on the Hudson River were made at the south end of the property at Hyde Park Landing or at the north end of the property at a large flat rock outcropping known as Bard Rock. Bard Lane, a road built to access Bard Rock from Albany Post Road was constructed during this period.

Dr. Samuel Bard, 1799-1821

John Bard's son, Dr. Samuel Bard, inherited the Hyde Park property upon his father's death in 1799. Unlike his father, the younger Dr. Bard was clearly interested in the scenic value of the western portion of the land overlooking the Hudson River. He built a grand house on the property's highest point at the precipice of the terrace above the rolling fields and forests that descended to the river. Illustrations from the period show Dr. Bard with his family on the grassy terrace near the house peering through a telescope at the view of the river and its activity of boats and steamships. In addition to the house, Dr. Bard built barns, stables, and other outbuildings, a store at Bard Rock, and a system of roads connecting the two river landings with the house and other structures. Dr. Bard also kept gardens and greenhouses to support his pursuit of horticulture and the collecting of rare and exotic plants, and he planted ornamental trees, vines, shrubs, and grasses to beautify his estate grounds.

Dr. David Hosack, 1828-1835

David Hosack purchased Hyde Park from the heirs of his friend and colleague, Samuel Bard, in 1828. Like Bard, Hosack showed an enthusiasm for horticulture, having established in 1801 the Elgin Botanical Garden, the first public botanical garden in the country. After enlarging and rebuilding Samuel Bard's house and adding gate lodges, a pavilion, stables, gardens, and greenhouses, Hosack turned his attention to the estate grounds, soliciting the help of landscape designer and nurseryman Andre Parmentier.

Parmentier, an immigrant from Belgium, had been operating a nursery in Brooklyn since 1824. He specialized in country seats, designing estate landscapes in the fashion of European country estates. Parmentier espoused the principles of picturesque landscape design, in which elements of the landscape are arranged according to compositional rules borrowed from landscape painting to give the impression of a natural landscape vista. In picturesque landscape design, naturalistic forms and arrangements are preferred over geometric or formal arrangements. Parmentier followed these tenets when laying out the grounds at Hyde Park. The main drive from Albany Post Road to the house was realigned to curve gently through the pastoral landscape and approach the Mansion obliquely. Other drives followed geographical features, like Crum Elbow Creek and the ridge line at the top of the bluff. Parmentier also favored the placement of classically inspired landscape ornamentation in the form of pavilions and sculptures. A number of these ornamental structures were placed throughout the estate grounds, including two rotunda pavilions. As a testament to the skill with which Parmentier composed the landscape at Hyde Park in the style of picturesque landscape design, drawings of the property made shortly after Dr. Hosack's death bear remarkable similarity to landscape paintings done during the same period, often intended to represent an idealized natural or pastoral landscape.

Walter and Dorothea Langdon and Walter Langdon, Jr., 1840-1895

After Dr. Hosack's death, the property was purchased from his heirs by John Jacob Astor, who then gave it to his daughter and son-in-law, Dorothea and Walter Langdon, in 1840. The northern portion of the estate grounds, later known as the Sexton tract, was retained by Magdalena Hosack and then sold separately to a series of owners before being reunited with the rest of the property by Frederick Vanderbilt in 1905. Many of the changes to the overall layout of the grounds were done in the early years of the Langdons' ownership to accommodate this change in boundary. These changes included a new north gate and gatehouse and the realignment of the entry road to the north gate. The Langdons also built a new mansion after the Hosack mansion burned in 1845. The new house was built in the same site as the previous house.

Walter Langdon died in 1847, leaving Hyde Park to his many children. Over the next five years, Walter Langdon, Jr. bought the interest from his siblings so that by 1852 he was the sole owner. He also purchased other land that had been separated from the estate, including Crum Elbow Creek and the farm property on the east side of Albany Post Road. Walter Langdon, Jr.'s most significant contribution to the estate was the construction of new formal gardens and greenhouses. The complex consisted of two cottages (a Gardener's Cottage and a Tool House) connected by a greenhouse, a conservatory, and enclosing walls. These architectural elements enclosed a series of six rectangular terraces that stepped down the hill, each containing a formal garden of geometric beds.

Frederick W. and Louise Vanderbilt, 1895-1938

The Vanderbilts purchased the estate and farm from Langdon's heirs in 1895 and immediately began updating the property with new buildings. The Langdon house was demolished and a new mansion was built in its place. Other new buildings include a guest house called the Pavilion, the Coach House, two gatehouses, a perimeter wall and gates, and a pump and power house on Crum Elbow Creek. Structures associated with the creek that were constructed in the early years of the Vanderbilts' ownership include the White Bridge, the Coach House Bridge, and four dams that created a series of ponds. Frederick Vanderbilt planted numerous trees over the course of his residency. These included specimen trees throughout the property, an allée of sugar maples along the entry drive, and a white pine buffer along Albany Post Road. The overall layout and character of the estate grounds, however, appears to have been largely retained.

The Vanderbilts also employed a series of landscape architects to redesign the formal gardens constructed by Walter Langdon, Jr. in 1875. Early changes to the gardens included the replacement of the greenhouses with three new greenhouse structures: the carnation house, the rose house, and a pair of palm houses. The gardens were also redesigned and extended eastward, with major redesigns of the two eastern-most terraces designed by James L. Greenleaf and the addition of the rose garden designed by Thomas Meehan and Sons and Robert B. Cridland. New structures in the gardens included walks, walls, arbors, pavilions, pools, and fountains. Changes to the gardens were carried out over several years from 1905 to about 1932, when the Italian garden designed by Greenleaf, with its dense plantings of evergreen shrubs and hedges, was redesigned by Cridland as a flowering cherry allée with perennial border beds.

After Louise Vanderbilt died in 1926, Frederick Vanderbilt is said to have spent more time at Hyde Park and probably gave even closer attention to the management of the landscape. A tree survey of the property completed in 1941 indicated a significant number of young trees, less than 13 inches in diameter, that were likely planted during the last twenty years of Frederick Vanderbilt's ownership. Plant purchases for the gardens documented in the estate's purchase ledgers during the late 1920s and 1930s also indicate a continued interest in the upkeep of the estate grounds. Cridland's redesign of the Italian garden mentioned above was also undertaken during this period. When Frederick Vanderbilt died in 1938, he left his estate to his niece Mrs. James Van Alen, who gave it to the National Park Service in 1940.

National Park Service, 1940-Present

The National Park Service acquired the 211-acre estate property west of Albany Post Road as a National Historic Site in 1940. The farm property east of the road was not included in the acquisition and continued to be held in private ownership. President Franklin D. Roosevelt, a friend and neighbor of Frederick Vanderbilt,

was instrumental in securing the estate as a National Historic Site, offering his strong endorsement and guiding the process through the legislature. Shortly after acquisition, the National Park Service conducted a thorough site inventory, including a detailed tree inventory, and developed a master plan for the park, although no substantial changes to the organization or character of the landscape were carried out. Over the years the greenhouses and several other secondary structures throughout the property were removed.

EXISTING CONDITIONS

Today the formal gardens comprise numerous historic features, including buildings, walls, steps and walkways, arbors and pergolas, garden pavilions, a pool and fountains, and numerous ornamental objects. In addition to these structural features, the gardens feature trees, shrubs, vines, and seasonal planting beds filled with annuals, perennials, and roses. While these vegetation features do not date to the historic period, they have been planted and are being maintained by the FWVGA in a manner that enhances the historic character of the gardens. The product of these structural and vegetation features is a complex of formal gardens that help convey the significance of the landscape at Vanderbilt Mansion National Historic Site.

The gardens are organized on a series of rectangular terraces that step down the hill slope toward the east. The top terraces, which once held greenhouses, are now open turf grass. Below these, the terraces are divided into geometric planting beds which are planted each year with colorful flowering annuals, perennials, and roses. The terraces are defined by steep banks and walls, and are connected by a system of walkways and steps.

ANALYSIS AND EVALUATION

The formal gardens contribute to the significance of the larger Vanderbilt Mansion National Historic Site. The site is significant at the national level under National Register of Historic Places Criterion A, association with a historic event or pattern of events, for its association with the Gilded Age of American wealth in the late nineteenth and early twentieth centuries. Country estates such as the Vanderbilt Mansion National Historic Site were the product of the economic, social, and cultural developments resulting from American industrialization following the Civil War. The site is also nationally significant under Criterion C, distinctive design, as a rare example of early picturesque landscape design in America and for exhibiting the distinctive characteristics of Country Place Era landscapes. The period of significance spans the years from 1828, when then-owner David Hosack and landscape designer Andre Parmentier began developing the site layout, to 1938, when Frederick Vanderbilt died. While the history of the development of the site dates at least to 1797, extant design characteristics such as the circulation system, location of the main house, and overall landscape character were

established with the Hosack-Parmentier design beginning in 1828. Characteristics of the earlier designs do not appear to have survived with sufficient integrity to be included in the period of significance. The period of significance end date of 1938 marks the end of the site's association with Frederick Vanderbilt and the beginning of the transition to the National Park Service.

The formal gardens are a major character-defining feature of the designed landscape. Since the end of the eighteenth century, the Hyde Park estate was used to showcase the horticultural hobbies of its owners. Both Samuel Bard and David Hosack maintained conservatories and ornamental gardens filled with exotic and remarkable specimens collected from around the world. The current gardens were originally laid out in 1875 by Walter Langdon, Jr. in an enclosed rectangular arrangement that stepped down the hillside in a series of terraces. These gardens were subsequently altered and expanded by the Vanderbilts from about 1900 through the 1930s. The gardens as they appeared at the end of the period of significance in 1938 were the culmination of almost sixty-five years of development that displayed important characteristics of Gilded Age estates and Country Place landscape design. The gardens represent the work of several important landscape designers and horticulturists of the period, including James L. Greenleaf, Thomas Meehan and Sons, and Robert Cridland.

TREATMENT

The goal of the treatment guidelines and tasks for the formal gardens is to reestablish the character of the landscape as it developed through the period of the Vanderbilts' residency. Emphasis is on the preservation of extant historic features, reestablishment of missing architectural and vegetation elements, and the cultivation of seasonal plantings that create full and vibrant gardens. The treatment guidance endeavors to establish and maintain a character consistent with historic conditions while allowing variation and flexibility to make the implementation and maintenance of the gardens feasible.

In accordance with guidance in the General Management Plan (2010), the recommended treatment approach is rehabilitation, which acknowledges the need to meet continuing or changing uses through alterations or new additions while retaining the historic character of the formal gardens. The reference date for treatment is 1938, the year Frederick Vanderbilt died and the end of the period of significance. In 1938, the landscape retained much of the character it had attained during the Vanderbilts' time there and incorporates all major changes to the landscape that happened during the historic period. While this date does not establish a static picture for restoring the gardens, it does provide a reference point when making treatment decisions.

Key treatment tasks for rehabilitation of the formal gardens include rebuilding missing wall and fence sections, including a section of the perimeter wall along

the south side of the lower annual garden and the trellis fence around the rose garden. Recommendations are given for the inclusion of gates for garden access, as well as the repair of garden steps and the installation of handrails to improve safety. Key recommendations for garden vegetation include the reestablishment of hedges, trees, and shrubs that once divided the terraces and defined enclosed garden spaces. These include a double arborvitae hedge along the west side of the lower annual garden, a hedge separating the upper and lower perennial gardens, juniper shrubs along the terrace slopes around the lower perennial garden, and ornamental shrubs that lined the east and west sides of the upper perennial garden. Recommendations are also given for the selection and arrangement of annuals, perennials, vines, and roses in their respective garden beds. These recommendations focus on providing palettes of appropriate plants that are compatible with historic conditions while allowing flexibility to accommodate availability and maintenance needs.

ENDNOTES

- 1 Patricia O'Donnell, Charles Birnbaum and Cynthia Zaitsevsky, Ph.D., *Cultural Landscape Report for Vanderbilt Mansion National Historic Site* (Boston, MA: National Park Service Cultural Landscape Program) 1992, 214.
- 2 O'Donnell, 250, quote from "Final Master Plan, Vanderbilt Mansion National Historic Site," January 1976, 22.
- 3 The property was originally patented in 1705 by Peter Fauconnier through a grant from Sir Edward Hyde, Lord Cornbury. Although Fauconnier doesn't appear to have implemented any physical improvements to the land during his sixty-year ownership, it is likely that it was he who named the estate Hyde Park in honor of Lord Cornbury, a century before the nearby town of Stoutenburg was renamed Hyde Park in 1812. The name Hyde Park would continue to be used to refer to this particular estate property throughout its history.



1. SITE HISTORY

This history of the Vanderbilt's formal gardens is partially extracted from two reports, the *Vanderbilt Mansion Cultural Landscape Report* prepared in 1988 by Rieley and Associates and the *Cultural Landscape Report for Vanderbilt Mansion National Historic Site*, written in 1992 by Patricia O'Donnell, Charles Birnbaum, and Cynthia Zaitzevsky, Ph.D. Where noted, the narrative is expanded with new information gathered from the estate purchase ledgers, photographs, and newspaper and magazine articles. The ledgers list items purchased by the Vanderbilts between 1901 and 1938.¹ The contents of these ledgers are included in Appendix A. The history relates the remarkable layering of garden elements, and how four subsequent property owners expanded on the work of their predecessors.

SETTLEMENT AND THE DEVELOPMENT OF A COUNTRY ESTATE, 1705-1828

Before European settlement, the Hudson River Valley was inhabited by the Algonquian-speaking Mahican and Munsee Native American group, known collectively as River Indians. They lived in small villages along the high terrace and banks of the Hudson River, which flows southward through the northern extension of a geological region known as the Great Valley. Underlain mostly by shales and carbonate rocks, the lowland river bed contained a surficial cover of fertile alluvial deposits that were well suited for agriculture.²

Europeans began settling in the region in the early 1600s. In 1609, Hendrik Hudson undertook the first documented trip by a European up the river that was later named after him. Hudson was employed by the Dutch India Company and sailed up the river in search of an expedient route to Asia. The Dutch subsequently settled in the region in the 1610s and established a trading post south of present-day Albany. Thereafter the Hudson Valley formed the heart of the New Netherland colony operations, with present-day New York City becoming a port for supplies and defense of the upriver operations.

EARLY PROPERTY OWNERS: FAUCONNIER AND BARD

The Vanderbilt estate is located on a portion of the Fauconnier Patent, a tract of land granted in 1705 to Pierre Fauconnier and three other partners by Sir Edward Hyde, Lord Cornbury, then Governor of New York. A Huguenot who left France for England, Fauconnier appears to have held the patent as an investment as there

were no documented improvements to the property. It was probably Fauconnier, however, who named the estate “Hyde Park” in honor of Lord Cornbury. Upon Fauconnier’s death in 1746, the property passed to his daughter, then to his granddaughter, Suzanne Valteau, who married Dr. John Bard.³

John Bard was a respected physician in New York City and, late in life, he served in partnership with his son as attending physician to President George Washington during his first term. Suzanne and John Bard acquired both Fauconnier’s share of the patent as well as those owned by his partners, and by 1764, the Bards were sole owners of the 3,600-acre patent. Intending to retire from medicine and pursue an agrarian life, John Bard established a farm on the east side of what would later be Albany Post Road. The farm included a farm house, barn, and an orchard of between five hundred and six hundred apple trees, as well as meadows and uplands. He also had three boat landings on the Hudson River, including Bard Rock, a large flat rock outcrop that served as a natural wharf and was capable of landing large boats.

Between 1768 and 1799, John Bard sold about 1,500 of the 3,600 acres, retaining the farm property and the portion along the river. In 1772, he built a house near his farm complex, which came to be known as the Red House. Although financial struggles prevented him from retiring to Hyde Park as planned, he kept the property as a country seat and maintained the farm. Bard finally retired permanently to Hyde Park in 1798, a year before his death. Prior to his death, their remaining land in Hyde Park was transferred to his son, Dr. Samuel Bard.⁴

Samuel Bard showed an interest in the discipline of landscape design early in his father’s ownership of Hyde Park. In letters that he wrote home to his father while studying medicine in Edinburgh in 1764, Samuel excitedly implores his father to consider aesthetic attributes when laying out his estate grounds.

Next, I think straight lines should be particularly avoided, except where they serve to lead the eye to some distant and beautiful object – serpentine walks are much more agreeable. Another object deserving of attention seems to be, to place the most beautiful and striking objects, such as water, if possible, a handsome green-house, a grove of flowering shrubs, or a remarkably fine tree, in such situations, that from the house they may almost all be seen; but to a person walking, they should be artfully concealed until he suddenly, and unexpectedly, comes upon them; so that by the surprise, the pleasure may be increased: and if possible, I would contrive them so that they should contrast each other, which again greatly increases their beauty.⁵

He also describes the importance of the connections between garden areas:

... grow the flower garden, kitchen, and fruit garden, and if possible, the whole farm, into one, so that they may appear as links of the same chain, and may mutually contribute to the beauties of the whole.⁶

More practical advice included the placement of plants in the topographic and climatic conditions which suited them. Samuel writes:

I mean, to distribute my plants according to the soil they most delight in; to place such as flourish most in a warm exposure and dry soil, upon the sunny side of a hill; while such delight in shade and moist ground, should be placed in the valleys. By this single precaution, one of the greatest beauties of a garden is obtained, which consists in the health and vigour of the plants which compose it. By considering well the predominant winds and storms of the country, we are directed where to plant our large trees, so that they shall be at once an ornament, and afford a useful shelter to the smaller and more delicate plants.⁷

While it does not appear that John Bard implemented any of his son's suggestions, Samuel got the chance to put his theories into practice when he inherited the land in 1799. Appreciating the scenic value of the western portion of the land overlooking the Hudson River, Samuel built a large house on the highest point of the property at the edge of the terrace. The house commanded panoramic views of the river and the mountains beyond, the rolling meadows below, and magnificent forest trees overhanging the ridge on either side. The scenic virtues of this location were acknowledged by each of Samuel Bard's successors at Hyde Park, who one by one built their mansions on the same site.

In addition to the house, Samuel Bard's estate contained several outbuildings, including barns and stables and a store at Bard Rock. He also built a garden and greenhouse, though the exact location is not known. Bard's son-in-law and biographer, John McVickar, writes about Bard's "enjoyment of his garden and conservatory, which were stored with the choicest native and exotic plants."⁸

In the flowers and fruits of the garden, he became a learned and skilful horticulturist,—conversed, read, and wrote, upon the subject,—laid exactions on all his friends who could aid him in obtaining what was rare, beautiful, or excellent, in its kind—drew from England its smaller fruits,—the larger ones from France, melons from Italy, and vines from Madeira,—managing them all with a varied yet experimental skill. . .⁹

McVickar writes also about Bard's conservatory:

In the construction of a conservatory, he displayed much of this talent, it being the first in that northern climate, which substituted, with success, the heat of fermentation for the more expensive and dangerous one of combustion. In this, during the severity of the winter, he would often pass the greater part of the day, engaged in his usual occupation of reading and writing, or his favorite amusement of chess; and welcoming his friends who called on him, to use his own sportive language, to the little tropical region of his own creation.¹⁰

Figure 1.1 indicates the approximate location of Bard's greenhouse and garden, set apart but visible across the flat terrace from the main house.

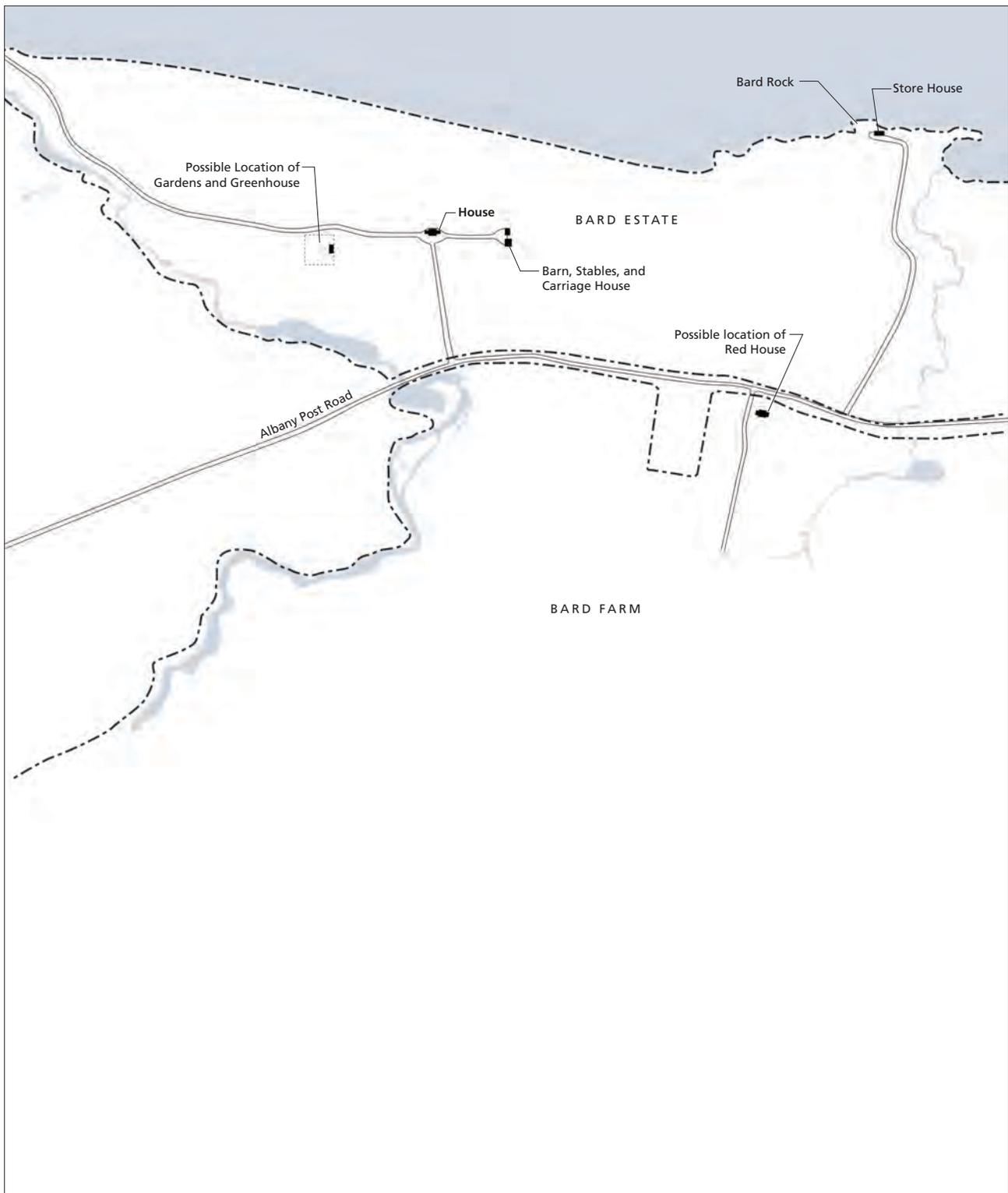


Figure 1.1. Period Plan showing Bard estate and farm in 1821 (OCLP 2009).

ESTABLISHING A COUNTRY ESTATE: JOHN HOSACK AND ANDRE PARMENTIER, 1828–1935

Upon Samuel's death in 1820, his only surviving son, William, inherited the property and, eight years later, sold it to his father's former student and partner, Dr. David Hosack.¹¹ Dr. Hosack's ownership of the 700-acre property spanned only seven years, from 1828 until his death in 1835, yet it was one of the most influential with respect to the overall layout of the estate grounds. Like Samuel Bard, Hosack was an accomplished physician as well as an avid horticulturist. Hosack was a professor at the College of Physicians and Surgeons at Columbia University and established the Elgin Botanical Gardens in 1801, the first botanic garden in the United States, on the site of the present Rockefeller Center in New York City. With the ample funds from his third wife, Magdalena Coster, Hosack purchased the Hyde Park property. Hosack invested in numerous landscape improvements and welcomed visitors. Soon the site became "an obligatory stopping point on the Hudson."¹²

Hosack consulted with the landscape gardener Andre Parmentier to lay out his estate grounds. Parmentier came from a family of French and Belgian horticulturists. Immigrating to the United States in 1824, he established a nursery in Brooklyn and was the first in this country to call himself a landscape gardener. Dr. Hosack's interest in botany no doubt led him to Parmentier.

Parmentier brought with him to America the principles of picturesque landscape design that had become popular in Europe. These principles were first developed at the grand country estates in England in the eighteenth century, and by the late 1820s, the style had come to the United States, strongly influencing the design of private estates. Parmentier was one of the earliest practitioners of picturesque landscape design in America, and although the number of landscapes he designed in the country appears to be rather modest, he had a discernable impact on the practice of landscape design. Andrew Jackson Downing, in his book first published in 1841, *A Treatise on the Theory and Practice of Landscape Gardening*, states, "We consider Mr. Parmentier's labors as having effected directly far more for landscape gardening in America than any other individual whatever."¹³ The full extent of Parmentier's contribution to the design of Hyde Park is unknown, but it is almost certain that he is responsible for the layout of the drives, the locations of the main buildings, and the arrangement of the major vegetation.

Hosack's estate also contained a conservatory and gardens. The conservatory was described in 1830:

At an equal distance south, is to be seen the green house and hot house, a spacious edifice, constructed with great architectural taste and elegance, and well calculated for the preservation of the most tender exotics that require protection in our climate. It is composed of a centre and two wings, extending 110 feet in front and from 17 to 20 feet deep. One apartment is appropriated to a large collection of pines. Among the rich

display of rare shrubs and plants are the magnolia grandiflora, the splendid strelitzia, the fragrant farnesiana, and a beautiful tree of the ficus elastica or Indian rubber, about 8 feet high, 5 years old.¹⁴

and the gardens:

Contiguous to the greenhouse is an extensive ornamental garden, in which is arranged in fine style, a beautiful variety of trees, shrubs and flowers, among which stands that glory of the forest, the magnolia glauca, bearing large white flowers, perfuming the atmosphere with a delightful fragrance.¹⁵

Andrew Jackson Downing also described Hosack's gardens in his 1841 *Treatise on the Theory and Practice of Landscape Gardening*. Illustrating a planting style he calls *beautiful* and that he differentiates from *picturesque*, Downing describes the arrangement of shrubs "similar to herbaceous flowering plants, in arabesque beds, along the walks. . ." ¹⁶ Of Hosack's gardens, he writes:

Those who have seen the shrubbery at Hyde Park, the residence of the late Dr. Hosack, which borders the walk leading from the mansion to the hot-houses, will be able to recall a fine example of this mode of mingling woody and herbaceous plants. The belts or borders occupied by the shrubbery and flower-garden there, are perhaps from 25 to 35 feet in width, completely filled with a collection of shrubs and herbaceous plants; the smallest of the latter being quite near the walk; these succeeded by taller species receding from the front of the border, then follow shrubs of moderate size, advancing in height until the background of the whole is a rich mass of tall shrubs and trees of moderate size. The effect of this belt on so large a scale, in high keeping, is remarkably striking and elegant.¹⁷

Not all accounts of Hyde Park were positive, however. A visitor in 1835, Patrick Sherriff writes:

The conservatory had been dismantled a few days before our arrival, by placing the plants in the open air; the collection seemed extensive and well kept. The flower garden is small, the walks limited, and both destitute of beauty. I am aware that most of the evergreens that impart loveliness to the residences in Britain cannot withstand the rigors of an American winter, but this circumstance is no excuse for the nakedness of Hyde Park walks, the aid of many native plants having been disregarded. The matchless beauty of the situation having not only been frequently neglected, but destroyed by stiff formal naked walks and the erection of temples resembling meat safes, without a climbing plant, which the country produces in endless variety, to hide their deformity, and harmonise them in the surrounding scene.¹⁸

Parmentier's role in laying out and stocking the gardens around the conservatory is unknown. Downing says that Parmentier was responsible for laying out the grounds at Hyde Park, but doesn't mention him in conjunction with his description of the gardens. Parmentier was a nurseryman and maintained a large retail nursery in Brooklyn, which was described in numerous articles in horticultural journals, and the plan was also published repeatedly. Because of its role as a nursery, the twenty-four acre triangular site offers few points of

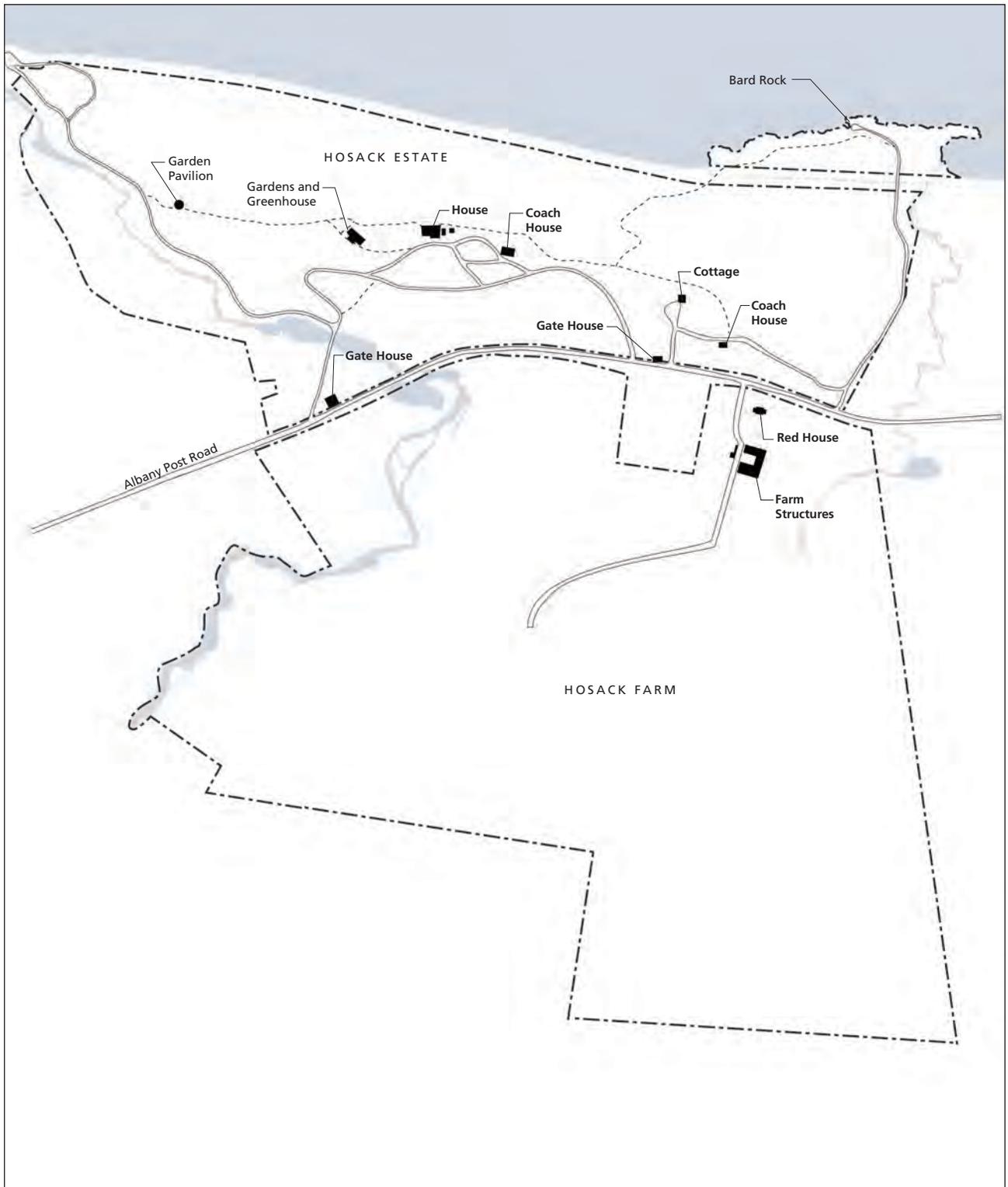


Figure 1.2. Period Plan showing Hosack estate and farm in 1835 (OCLP 2009).

comparison with a residential design, although it did feature a curvilinear pathway system through the extensive vineyards and orchards. In light of this, Parmentier may have indeed been involved in laying out and/or supplying plants for Hosack's gardens, but the historical record does not indicate so.

The exact location of Hosack's gardens and conservatory are also not known, but the description of them being "an equal distance south" from the main house as the coach house, which was located just north of the main house, would have placed the gardens somewhat further north than the current gardens. Figure 1.2 indicates the approximate location of Hosack's greenhouse and garden.

DEVELOPMENT OF THE FORMAL GARDENS: LANGDON OWNERSHIP, 1840–1895

Upon Dr. John Hosack's sudden death from a stroke in 1835, the Hyde Park estate passed to his wife and children, who retained the property for five additional years. In 1840, the estate was acquired by Walter Langdon through his wife Dorothea Astor Langdon and her father John Jacob Aster. Prior to the transfer, Hosack's heirs divided the property and retained the northern sixty-four acres. This portion of the property, often called the Sexton Tract for its last owner, was developed as a separate estate and remained separate from Hyde Park until it was purchased by Frederick Vanderbilt in 1905 and reunited with the rest of the estate.

The primary changes to the landscape effected by Langdon in the early years of his ownership appear to be the reorganization of the northern edge of the estate to accommodate the separation of the northern portion of the property (Figure 1.3). This included the realignment of the exit road and a new north gate. Langdon also built a new house to replace Hosack's house, which burned in 1845. The new house was built in the same location as the old one, at the edge of the terrace overlooking the Hudson River. Walter Langdon died in 1847, the same year his new house was completed, and passed the estate to his children. Over the course of several years, Walter Langdon, Jr. bought the interests of his siblings, so that by 1852 he was the sole owner.¹⁹

The Langdon's were occasional residents at Hyde Park and spent extended periods away from the estate, sometimes staying years at a time in Europe. Improvements to the estate were apparently made sporadically when the Langdon's were in residence. They also apparently valued their privacy, and accounts of their estate by visitors and by local press are sparse during these years. This resulted in a dearth of historical materials documenting the landscape at Hyde Park while Langdon owned the property. Documentation of the Langdon period consists of a couple of photographs of the house, fragmentary descriptions, and drawings of the structures in the formal gardens.

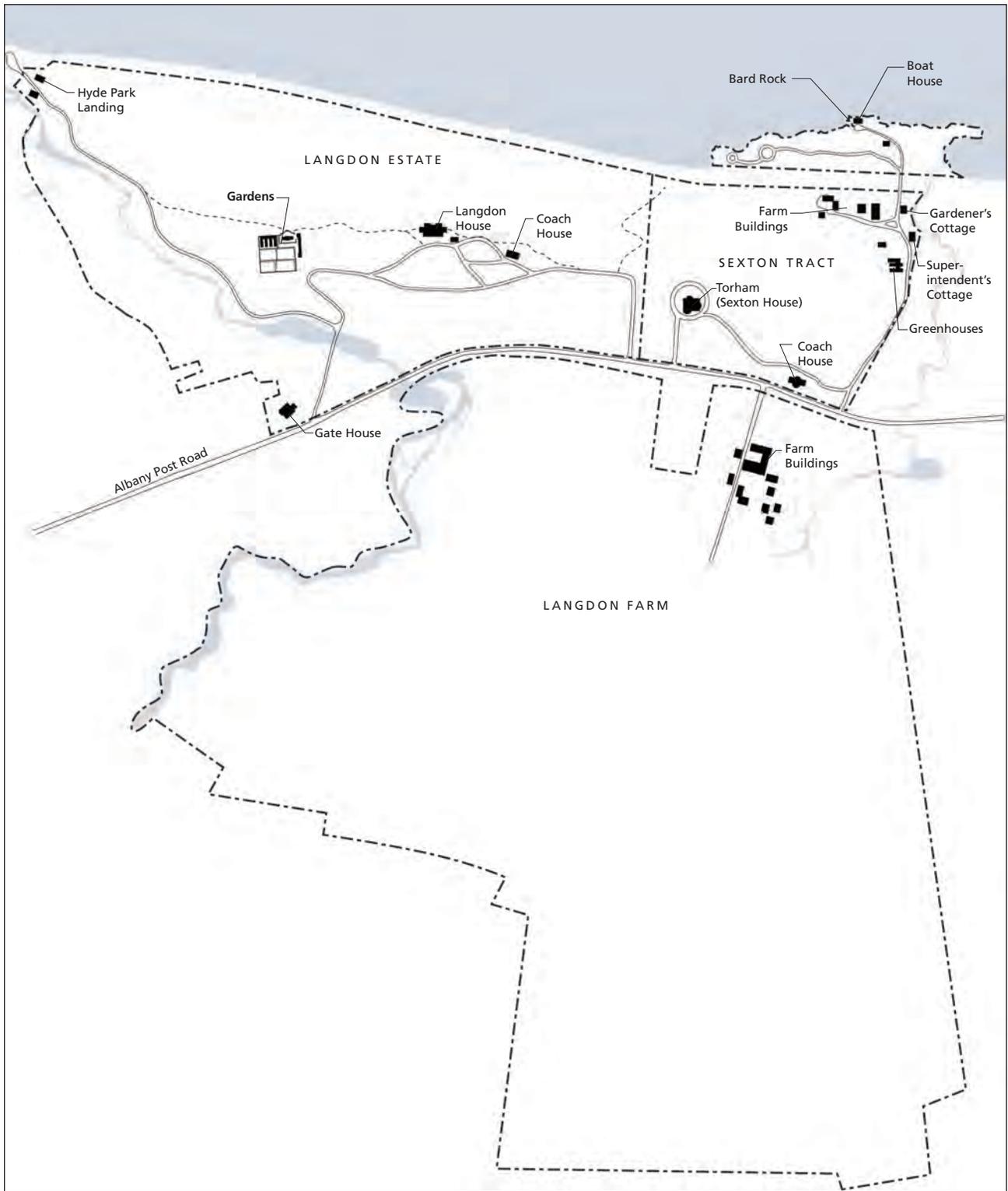


Figure 1.3. Period Plan showing the farm and estate during the Langdon ownership in 1894 (OCLP 2009).



Figure 1.4. Frederick W. Beers, Atlas of New York and Vicinity, 1867, Plate 45, Hyde Park (detail). Indicated on the left side of the map along the river bank is Walter Langdon's estate and "Hot House."

The earliest record of Walter Langdon Jr.'s improvements is a supplement to Downing's treatise, written in 1859 by H. W. Sargent. He records that Dr. Hosack's greenhouses had been replaced by Mr. Langdon. No mention was made, however, of the location of either the old or new greenhouses.²⁰ On the 1867 Beers Atlas, a "hot house" appears some distance south of the Mansion (Figure 1.4). The hot house's location relative to the estate drives indicates that it was in the general location of Hosack's conservatory, north of the current gardens.

In 1874, Langdon began the development of a new complex of greenhouses and gardens. The location of the new gardens was further south than Hosack's gardens, just southwest of the main sweep of the entrance drive. Langdon commissioned architects John H. Sturgis and Charles Brigham of Boston to design new greenhouses and garden structures. Surviving drawings include one perspective drawing of a new greenhouse and several drawings of a complex of structures that included a Gardener's Cottage, a Tool House, and a greenhouse connecting them, referred to as the grapery (Figures 1.5 and 1.6). Fragmentary references to their work at Hyde Park found in two letters from Brigham to Sturgis indicate that these structures were constructed in 1875. On October 2, 1875, the *Poughkeepsie Record* wrote:

The Langdon Homestead.—Walter Langdon, Esq., is making extensive improvements on the old Langdon Homestead, at Hyde Park, Dutchess County. An addition is being built to his Grapery, the Gardener's Cottage, and the boiler house from which the grapery is heated. Mr. Myers, a Hyde Park mason, has the contract and Messr. Alexander

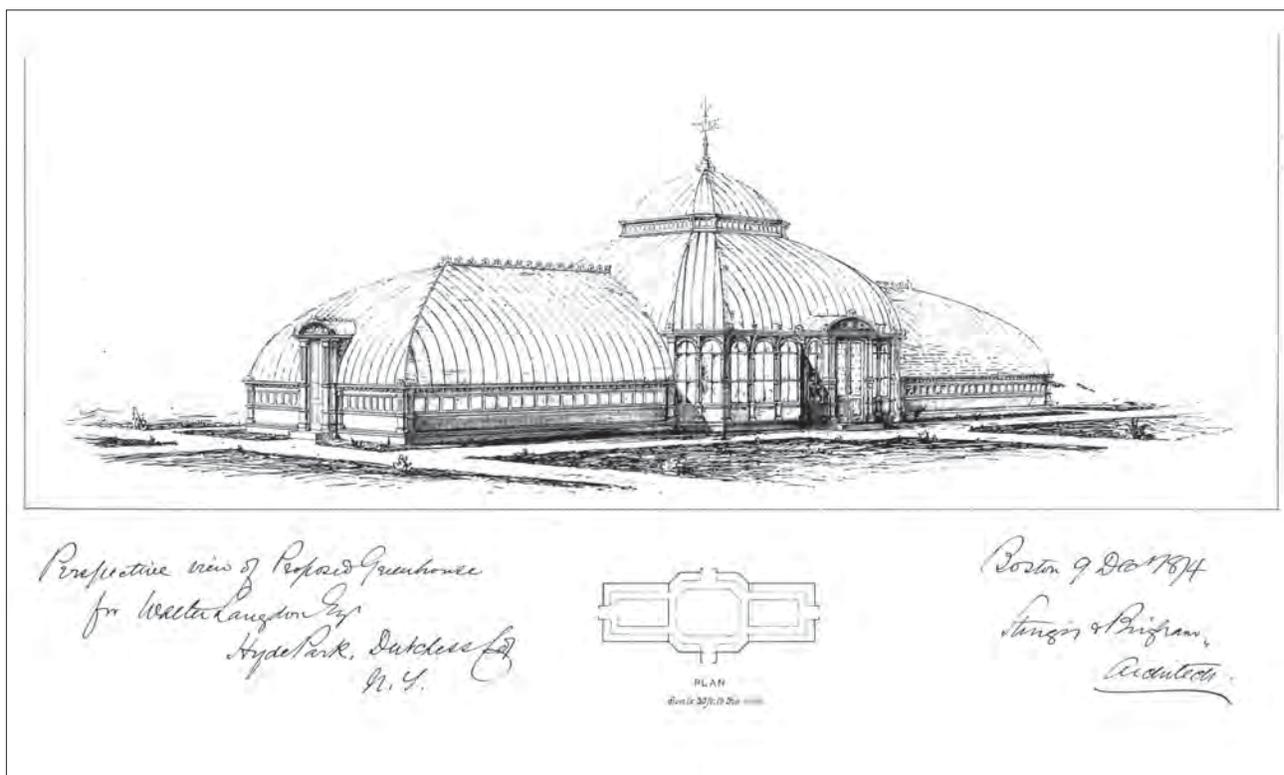


Figure 1.5. Perspective View of Proposed Greenhouse for Walter Langdon, Esq., Hyde Park, Dutchess Co., N.Y. Drawing, Boston, 9 December 1874, Sturgis and Brigham, Architects (Vanderbilt Mansion National Historic Site Archives, hereafter VAMA, no. V-86).



Figure 1.6. West Elevation of Gardener's Cottage, greenhouse known as the Grapery, and Tool House. Plan no. 5, Sturgis and Brigham, Architects, 1875 (VAMA, no. V-84).

and John Broas, of this city are his assistants. The brick for this grapery are all to be laid in black mortar. . .²¹

The Sturgis and Brigham structures anchored a new complex of gardens, which also included a four-winged greenhouse, perimeter walls, and ornamental planting beds. As drawings of the gardens from Langdon's ownership period, apart from those mentioned above, have not been found, what is known of the composition of the gardens is inferred from a survey of the gardens done in 1897, two years after Vanderbilt bought the estate, and from extant features. The Gardener's Cottage and Tool House with their connecting grapery formed the northern boundary of the gardens. The large greenhouse in the Sturgis and Brigham drawing was located just south of the Tool House, facing east. These structures together effectively formed the northwestern corner of the gardens. South of the large greenhouse was a complex of four greenhouse wings oriented east to west and connected by a long brick structure that served as a potting shed and tool storage and housed the boilers that heated the greenhouses. East of the greenhouses were four rectangular gardens that featured geometric planting beds that likely showcased the plants grown in the greenhouses.

The gardens were constructed on a series of rectangular terraces that stepped down the hillside. The level terraces were between about one hundred and one hundred and twenty feet long and about eighty feet wide and were bounded by short steep embankments. There were six terraces, with the top terrace, which held the large greenhouse, further divided into an upper terrace and a long rectangular terrace to the east. The 1897 survey shows the arrangement of garden beds, walks, slopes, greenhouses and buildings all framed by a surrounding brick wall (Figure 1.7). The garden beds on three of the terraces were laid out in

geometric forms—circles, squares, rectangles, octagons—in elaborate patterns typical of the bedding gardens of the period.²² The perimeter wall appears to have been the only dividing structure, and all of the terraces were open to each other. No trees or shrubs were recorded on the survey. An axonometric drawing of the gardens based on the 1897 survey shows the three-dimensional relationship of the terraces and garden structures (Figure 1.8).²³

The introduction of new enclosed gardens, with their conservatories, terraces, buildings, and perimeter walls, was probably the most significant change to the landscape made by the Langdons in their 55-year ownership of Hyde Park.²⁴ At the time of the Vanderbilt purchase, the *Poughkeepsie Sunday Courier* reported that the estate was somewhat neglected, with the hot houses “ample but empty.”²⁵ It is this foundation upon which the Vanderbilts began to build.²⁶

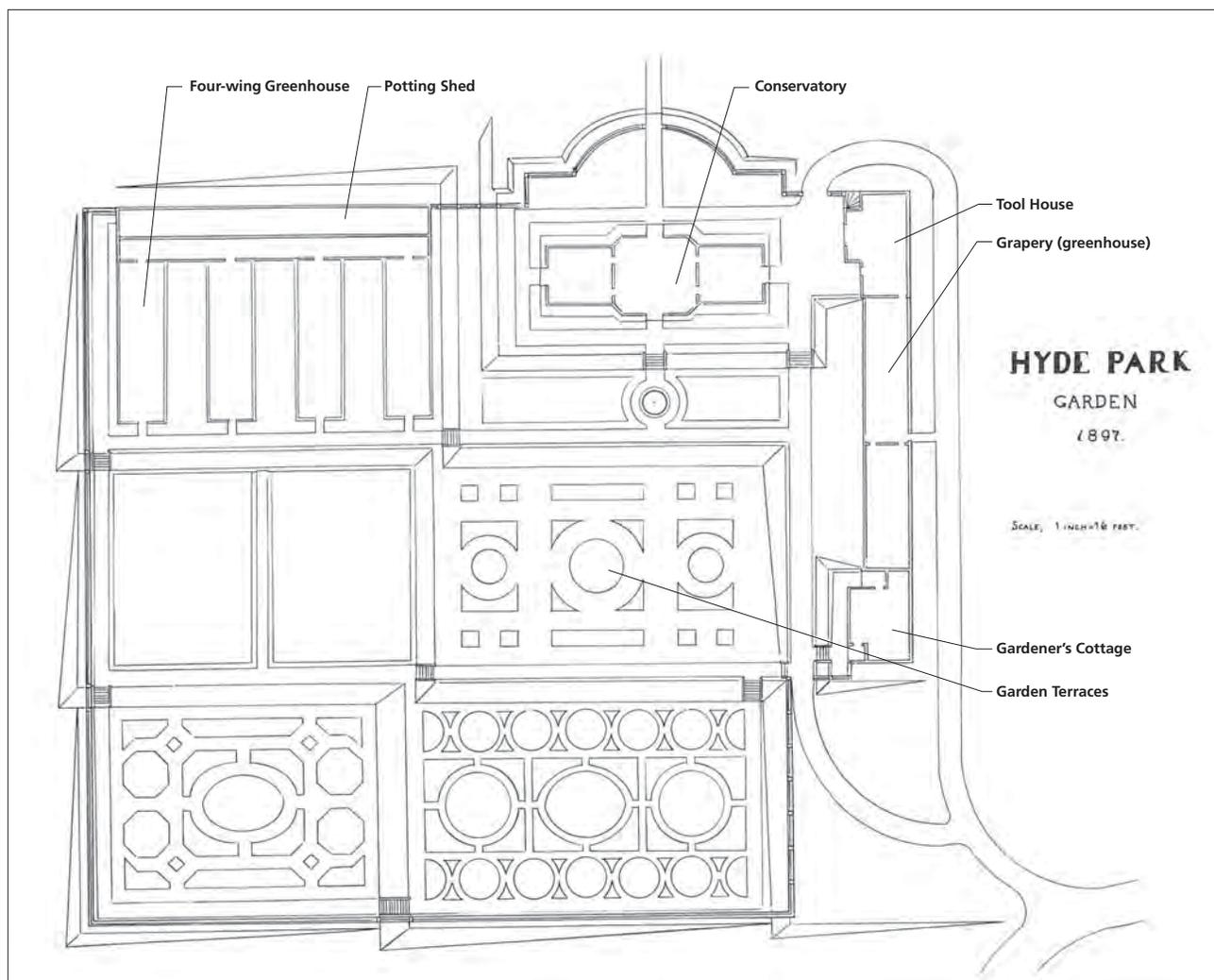


Figure 1.7. Hyde Park Gardens, 1897, traced by Landscapes, Inc. from faded blueprint of survey, with labels added by OCLP. The original blueprint was drawn shortly after the Vanderbilts purchased Hyde Park and is believed to reflect the gardens at the end of the Langdon period (VAMA).

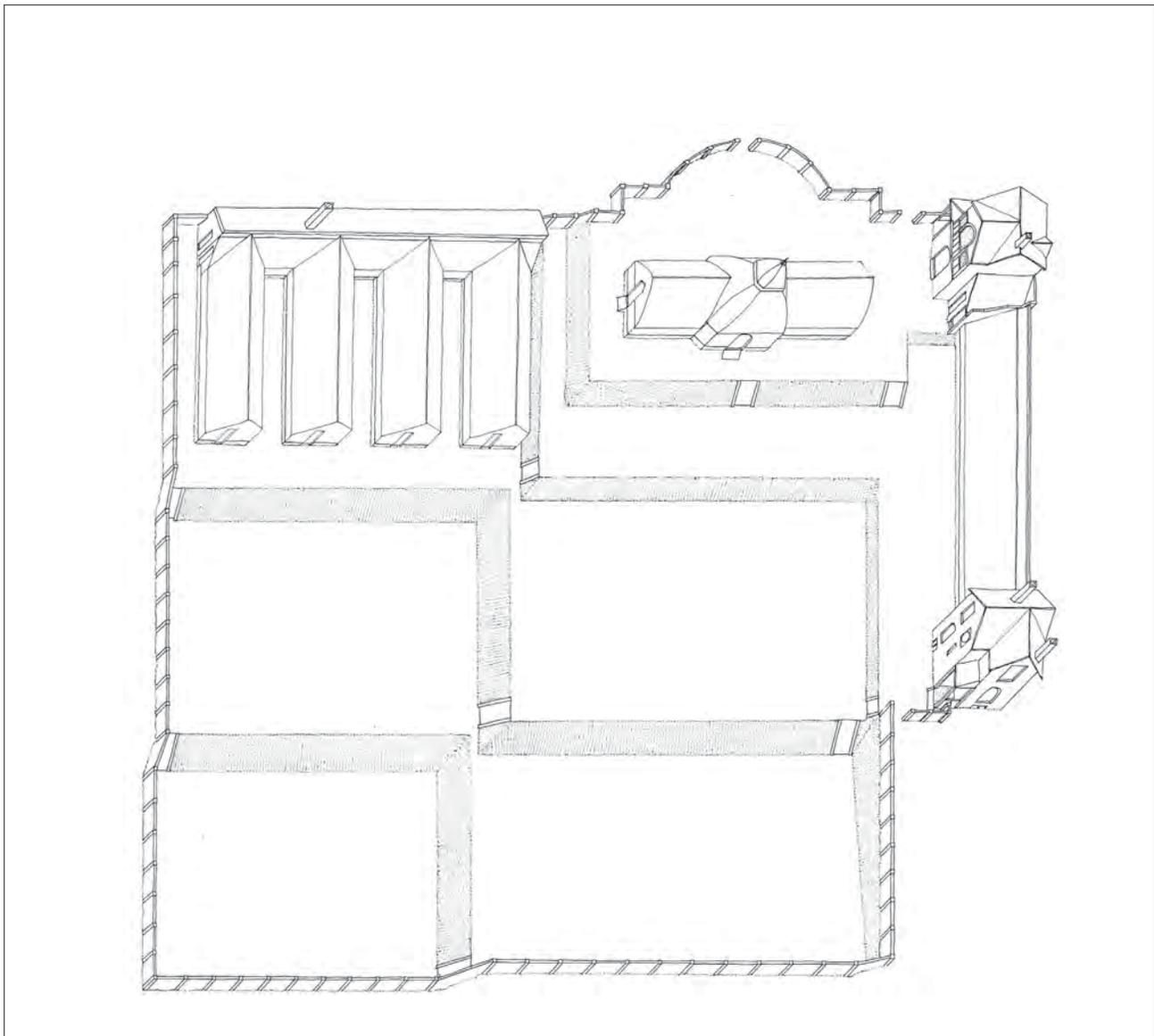


Figure 1.8. Axonometric of the formal gardens from 1897, John Robbins, NPS North Atlantic Region, 1981 (VAMA).

THE GILDED AGE: VANDERBILT OWNERSHIP, 1895–1938

During the four decades that Louise and Frederick Vanderbilt owned the Hyde Park property from 1895 to 1938, nearly every structure on the property was replaced, with the exception of the Gardener’s Cottage and Tool House. Despite the extensive modifications to the structures, the organization and circulation of the estate remained quite similar. The enduring quality of the property was reinforced by the mature specimen trees planted by earlier owners, which by this time framed the core of the estate, preserving the picturesque style of the landscape. The principles of this style, as previously described, were implemented at Hyde Park by Dr. Hosack and Andre Parmentier and preserved during the Langdon ownership.

The formal gardens initiated by the Langdons were an exception to the picturesque style. The Vanderbilts would continue to embellish the formal

gardens, adding several garden structures and executing four successive redesigns of the garden beds.

Garden Design Precedents

As noted by Riley and Associates, the modifications made in the formal gardens by the Vanderbilts were typical of late Gilded Age gardens. These gardens reflected the values of wealthy Americans who had benefited from the country's rapid Western expansion and the application of new industrial technologies to the abundant natural resources of the vast country. Painters, sculptors, architects, and landscape architects encouraged their wealthy clients to envision America as the legitimate heir to the great cultural and political achievements of Classical Greece, Rome, and the Italian Renaissance. They turned to the design precedents of Classical and Renaissance antiquity as proper symbolic expressions of the achievements in science, commerce, industry, and democracy. During the late nineteenth and early twentieth centuries, technological improvements in transportation and greenhouse heating systems made it possible to import and maintain exotic plants, thereby increasing the palette for garden designers.²⁷

Traveling abroad had become popular, which meant that clients were more receptive and enthusiastic about developing gardens with a European influence. Particularly influential was the Italian style of garden layout and design. The Vanderbilts traveled extensively both in Britain and Continental Europe and like many of their contemporaries were deeply impressed by the pleasure grounds and gardens they experienced. Back at Hyde Park, the Vanderbilts incorporated many of the design elements they had seen in Europe into their gardens.

Landscape architect, architect, and artist Charles Platt, whom the Vanderbilts hired for a brief period, published his book, *Italian Gardens* in 1894, two years before the Vanderbilts purchased their estate. In the book he set forth the design principles of Italian Renaissance and Baroque villas as the proper means of creating a setting of leisured elegance for the wealthy benefactors of the Industrial Revolution. Platt did not copy Italian villas; rather he sought to adapt them to American conditions of climate, topography, vegetation, and social use. The principal features of the Italian style advocated by Platt and many of his contemporaries included geometric patterning, axial spatial organization, and reliance on proportion and interconnection of parts by sight lines. While some designers firmly held to Downing's principles, preferring "natural" lines as a counterpoint to what they saw as the harsh geometry of the city, other designers adhered to formal design principles, especially those evident in Italian gardens.²⁸

The Vanderbilts, like many of their contemporaries, combined elements of both the picturesque or natural style and the European formal garden style on their estate grounds (Figure 1.9). Since Frederick and Louise Vanderbilt both had a particular interest in agriculture and horticulture, the Vanderbilts continued the

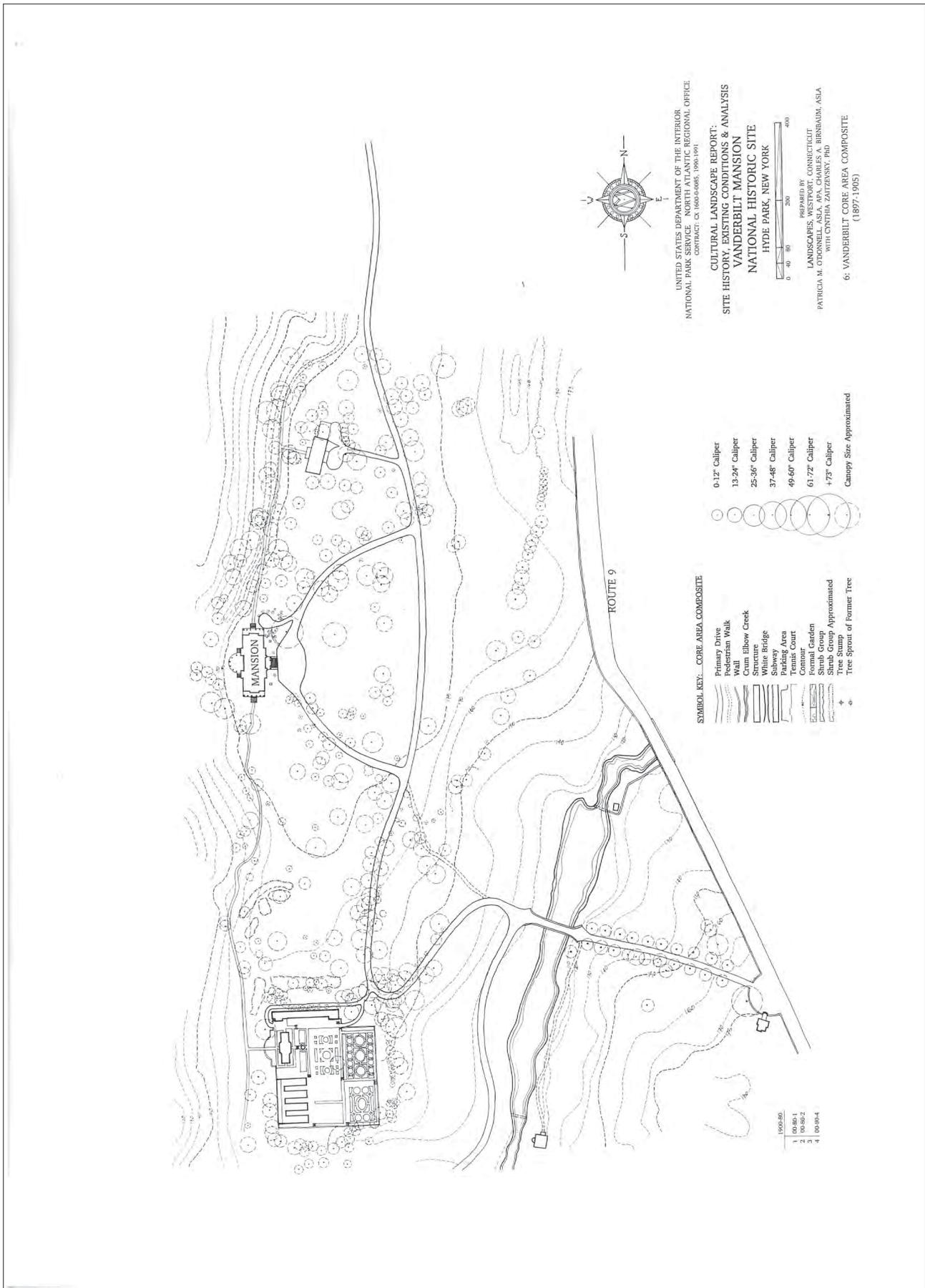


Figure 1.9. Vanderbilt Core Area Composite for the period of 1897 to 1905 (O'Donnell, Landscapes, Inc., 1992).

Hosack/Langdon botanical tradition and maintained greenhouses on the estate. They also retained Dr. Hosack's romantic landscape, but modified Langdon's formal gardens to reflect an Italian influence, and referred to the space as the "Italian Garden."²⁹

Horticultural Interests of Frederick and Louise Vanderbilt

The Vanderbilt estate was one of many properties along the Hudson River Valley that developed extensive gardens during the Gilded Age. The proximity of the valley to New York City, its inherent beauty and its rich horticultural tradition, made it very desirable to those who could afford to become gentlemen farmers. New York State was nationally known as a leader in horticulture and New York City was the trendsetter in matters of taste. When the Vanderbilts bought the Hyde Park estate, Dutchess County was particularly well known for its horticultural enterprises and as the home of many wealthy, influential families. Announcing the Vanderbilt purchase, the local newspaper proclaimed "Another Millionaire in Dutchess."³⁰

Frederick was the grandson of Cornelius Vanderbilt, founder of the family fortune, and the third son and seventh child of William Henry and Maria Louisa Kissam Vanderbilt. Frederick married Louise "Lulu" Holmes Anthony who was the daughter of Charles L. Anthony, a prominent financier of New York City and Newport, Rhode Island. Louise was twelve years older than Frederick and the couple had no children. When Frederick and Louise Vanderbilt purchased Hyde Park in 1895, they had been married for seventeen years. Characterized as humble and shy, Frederick graduated from Yale's Sheffield Scientific School in 1878, was a very successful businessman, and had a lifelong interest in botany and animal husbandry.³¹ Frederick often won prizes for his horticultural displays and livestock in the annual fairs in Dutchess County and elsewhere in New York. Louise, on the contrary, was outgoing, a philanthropist and an event organizer, who used the formal gardens as a setting for gatherings such as an annual "Ice Cream Social."³² Newspaper accounts cite Louise's interest in flowers and chronicle her contributions of arrangements to social and church events, as well as her role as a judge for flower exhibitions.

As did many of their contemporaries, the Vanderbilts had summer homes, a townhouse in New York City, and a yacht, in addition to Hyde Park which they used primarily in spring and autumn. In general, their schedule was to take up residence in New York City in November for the social season until March or April when they would take the yacht to Palm Beach, Florida.³³ From Easter until the Fourth of July they would remain in Hyde Park; and from the Fourth to Labor Day they would visit one of their summer estates in the Adirondacks or along the coast, or spend some time in Europe, then return to Hyde Park in the fall. Since they were in residence at Hyde Park from Easter to the Fourth of July, the formal garden beds were planted with perennials which bloomed in New York

in late spring and early summer; and, since they returned to Hyde Park around Labor Day, many late --flowering perennials were included as well.³⁴ This was fundamentally the schedule they maintained until Mrs. Vanderbilt died in 1926. For the next twelve years until his death in 1938, Mr. Vanderbilt remained for the most part in Hyde Park.

The recollections of one of the estate's gardeners, Alex Knauss, provide some insights as to how the Vanderbilts made use of their garden's bounty. When the Vanderbilts were at Hyde Park, he notes that palms and decorative plants were put in the main hall, the dining room, the stair well, and around the second floor balustrade of the mansion. The greenhouse workers also delivered cut flowers to the house each morning. The butler then arranged them in vases to be placed in the main hall, drawing room, gold room, library, and all bedrooms. Outside, large bay trees were placed between the columns of the Mansion's south portico on each side of the front steps, in the formal gardens, and at the loggia on the lowest garden level.³⁵ When the Vanderbilts were in residence elsewhere, flowers were shipped to them by rail along with produce from the farm. If they were on their yacht, flowers were shipped to Mr. Vanderbilt's relatives. Special displays were cultivated in the greenhouses at Christmas and Easter so that Hyde Park's churches could be decorated with palms and such flowering plants as poinsettias, begonias, daisies, and Easter lilies.³⁶

Landscape Consultants for the Formal Gardens

Over a period from 1901 to 1934 four noted landscape architects and horticulturists, including Charles A. Platt, James L. Greenleaf, Thomas Meehan and Sons, and Robert B. Cridland, all developed plans and oversaw construction on the formal gardens of the estate. Three of these design professionals, Greenleaf, Meehan, and Cridland, altered various areas of the formal gardens. In addition, there is photographic evidence that the Vanderbilts and their gardeners also contributed to the planting of the gardens, deviating from or filling gaps in the plans provided by their consultants. The end result was a complex of gardens that, though reasonably consistent in style by area, was the product of at least four different designers.

The physical development of the gardens and greenhouses is described below and divided into four major periods of development during the Vanderbilt period of ownership:

- 1897 to 1904, when the Vanderbilts consulted with Charles Platt and James Greenleaf and built the Italian garden;
- 1904 to 1910, when the Vanderbilts replaced the Langdon greenhouses;
- 1910 to 1913, when the Vanderbilts consulted with Thomas Meehan and Sons and added the rose garden; and

- 1913 to 1938, when the Vanderbilts engaged Robert Cridland, who over some twenty years developed new designs in each area of the formal gardens.

Within each time period, information about the evolution of the gardens is presented sequentially from the upper greenhouse terraces down to the lower terraces, which were added in subsequent years.

EARLY YEARS OF THE VANDERBILT PERIOD: 1895–1902

For the first few years after acquiring the Hyde Park estate, the Vanderbilts focused their efforts on the house and other buildings. The Vanderbilts initially intended to renovate the Langdon house, but when it was discovered that the house had severe structural problems, they decided to rebuild it in its entirety. The new house was located in the same place as all of the previous houses, and while it resembled the Langdon house in general appearance, it featured the latest in modern conveniences, including electricity, plumbing, and central heat. In addition to the house, the Vanderbilts constructed a guest house, called the Pavilion, as well as two gatehouses, a coach house, a power house along Crum Elbow Creek, a pump house on the lower road near the Hudson River, two bridges, dams, and other structures. Vanderbilt did give some consideration to the gardens during this time, commissioning a number of plans for redesigning the garden terraces and the area around the gardens and replacing the greenhouses. For whatever reason, the earliest plans for the garden were not executed, and it was not until 1902, when Vanderbilt hired James L. Greenleaf, that alterations to the formal gardens were undertaken.

Charles Adams Platt

The first designer from whom the Vanderbilt's sought professional advice was Charles Adams Platt, landscape architect, architect, artist and author of *Italian Gardens*. By 1901, when the Vanderbilts engaged him, Platt had designed several houses and gardens, including his own in Cornish, New Hampshire.³⁷ The Vanderbilts apparently anticipated having Platt do rather extensive landscape alterations as they commissioned a survey of their property in 1901 by Jay L. Burley for Platt.³⁸ The survey records important tree locations and clearly shows the path to the formal gardens from the south portico of the house. In addition, a pen and ink drawing done for the Vanderbilts illustrates Platt's approach to re-designing Langdon's gardens, in particular a garden to the north of the Gardener's Cottage and Tool House.³⁹ The Platt collection in the Avery Library at Columbia University has no materials relating to this project, and there is no record explaining why the Vanderbilts did not continue their association with Platt. It does not appear that any of Platt's designs for the Vanderbilts were implemented, and within a year of beginning work with Platt, the Vanderbilts terminated their working relationship with him and had hired Greenleaf.⁴⁰

Greenhouses

When the Vanderbilts purchased Hyde Park, they inherited the greenhouses built by Walter Langdon, Jr. These consisted of the elaborate conservatory on the uppermost terrace, the four-wing greenhouse on the terrace to the south, and the grapery between the Tool House and the Gardener's Cottage. When the Vanderbilts turned their attention to the grounds and gardens of their new estate, their first objective appears to have been to replace the Langdon greenhouses.

From 1897 to 1913 the Vanderbilts consulted with three companies on the replacement of the Langdon greenhouses with new designs. The park archives hold a series of plans for Vanderbilt's proposed greenhouses.

The first greenhouse designs were prepared by Hitchings & Company, who designed the iron and glass frames, and John Scollay, who specified the layout, masonry and heating systems. The detailed plans by these two manufacturers prior to 1905 appear to be the earliest designs developed, but none were constructed. Further detail on the construction of the greenhouses is described in the next period of garden development from 1904 to 1910.

Garden Terraces

Below the greenhouse terraces were four rectangular garden terraces that stepped down the hillside. The earliest documentation of the layout of the garden terraces is the 1897 survey produced during the second year of the Vanderbilt's ownership (see Figure 1.7). As there is no record of any structural changes to the gardens during this period, it is presumed that the survey records the conditions of the gardens at the end of Langdon's ownership. It is possible, however that the bed layout represented in the 1897 survey reflects early work by Vanderbilt. The survey shows an elaborate design of circular and rectangular parterre beds on three of the terraces; the southwest terrace shows an open terrace bisected by a path.

The arrangement and character of these beds during this period is not known, but it is likely that they were planted mostly or entirely with annual bedding plants. The best records for annuals used during the first ten years of Vanderbilt ownership are the estate purchase ledgers. The purchase records for 1904 indicate the following annuals may have been used in the annual terrace beds: caladium, coleus, geraniums, nicotiana, petunias, salvia, snapdragons, stock, and verbena.⁴¹

The garden terraces did not retain the 1897 configuration for long. The two lowest terraces were redesigned in 1902 and 1903 by James L. Greenleaf into a long Italian Garden, with new walls, pergolas, paths, beds, and a reflecting pool. The upper terraces reflected new bed configurations by 1908, although the date these were changed is not known.

JAMES L. GREENLEAF AND THE ITALIAN GARDEN: 1902–1904

James L. Greenleaf, a founder of the American Society of Landscape Architects, was hired by the Vanderbilts in 1902 to design an Italian garden. At that time, he had been practicing landscape architecture for eight years in New York City, though his formal training was as a civil engineer.⁴²

Greenleaf's design principles reflected a very different attitude toward nature and the landscape than that of Parmentier.⁴³ Like Platt and many other designers, Greenleaf was a proponent of the Italian style.⁴⁴ Whereas Parmentier advocated that any sign of man's manipulation be concealed in the garden, those who favored the Italian style expected the garden to adapt to the architectural lines of the house, with a gradual transition made from architectural to natural lines the further one was removed from the house. Characteristically Italian garden effects included the use of symmetry, central walks, terraces, walls, formally clipped hedges, water, statues, and evergreen plants. Flowers were used, but the structure of the garden could stand without them. Of critical importance, however, was the sense of scale and proportion.⁴⁵ Greenleaf relied on the simplicity, light and shadow, and geometrical spaces using classical proportions. In a letter from Italy, Greenleaf writes, "... nature is not art; nature is blind when it comes to handling things so as to mould them into lines of utility and beauty There is no conflict between nature and art. There is no conflict between nature and design."⁴⁶

Greenleaf's garden philosophy had a strong influence on the development of the formal gardens, though he worked within the frame of walls established by the Langdons. While a garden in true Italian style would have been closely related to the house, the Vanderbilts, perhaps at the recommendation of Greenleaf, chose to redesign the lower level of the existing garden in the Italian style, though the garden was three hundred yards from the house.⁴⁷

Italian Garden

Greenleaf produced more than sixty plans for the eastern half of the formal gardens between 1902 and 1904. The new garden, referred to as the Italian garden, occupied the two easternmost terraces and included new grading and extensive new structures. The linear space was oriented along a north-south axis, about 320 feet long and 90 feet wide.⁴⁸

Greenleaf united the two terraces with an axial path that was cut into the grade so that it descended gradually from the upper end at the north to the lower level at the south. But while unifying the two terraces visually with this strong axial element, he also maintained the two distinct spaces by retaining the original bank that marked the grade change from one terrace to the next. Greenleaf further emphasized the separation with a tall cedar hedge at the top edge of the bank that served as an enclosing wall for the two spaces. The hedge was perforated with the central opening through which the path passed and with an opening at the east

end of the hedge, which led through an arched trellis and down a flight of steps to the lower terrace. The axis was punctuated with an elaborate brick and wooden timber pergola at the north end and a pavilion, pergola, and reflecting pool at the south end (Figures 1.10 and 1.11). The space was enclosed on all sides with brick walls and iron trellis fences.

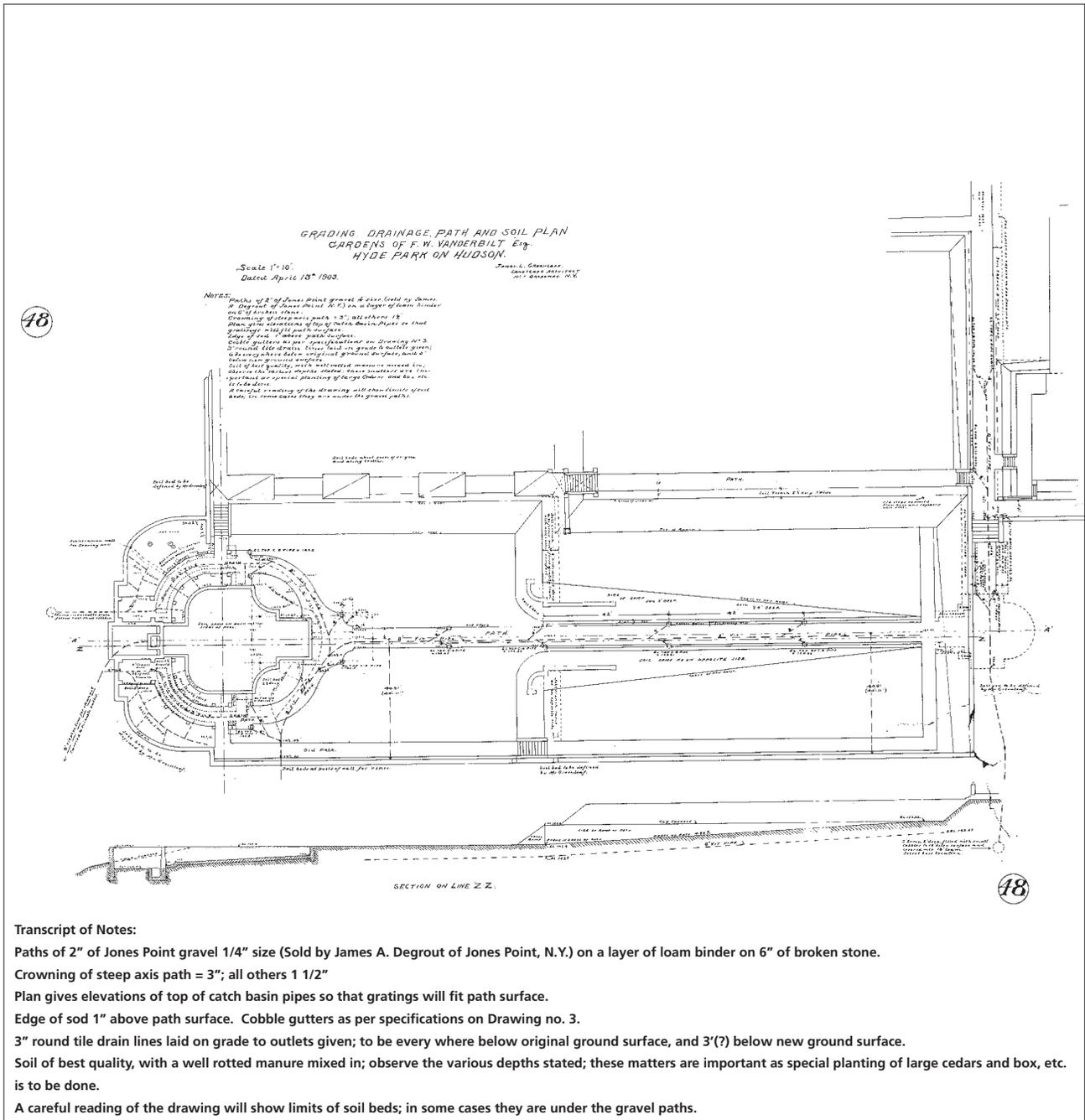


Figure 1.10. "Grading, Drainage, Path and Soil Plan, Gardens of F.W. Vanderbilt, Esq., Hyde Park, N.Y.," James L. Greenleaf. Landscape architect, Plan #48, April 13, 1903. Greenleaf's notes on the plan have been transcribed for legibility (VAMA, no. V-114).

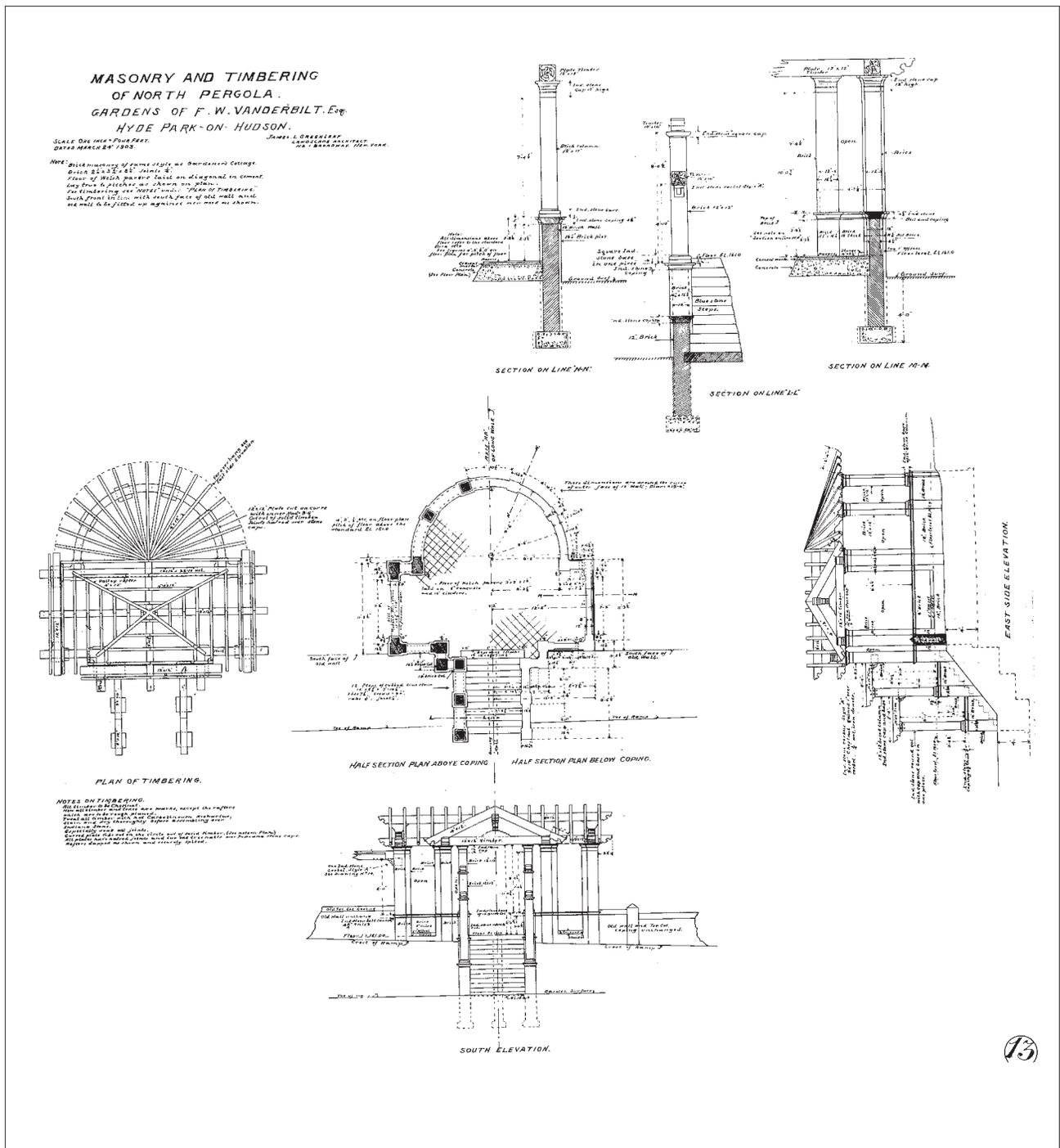


Figure 1.11. "Masonry and Timbering of North Pergola, Gardens of F. W. Vanderbilt Esq., Hyde Park-on-Hudson," James L. Greenleaf, Landscape Architect, Plan #13, March 24, 1903 (VAMA, no. V-104).

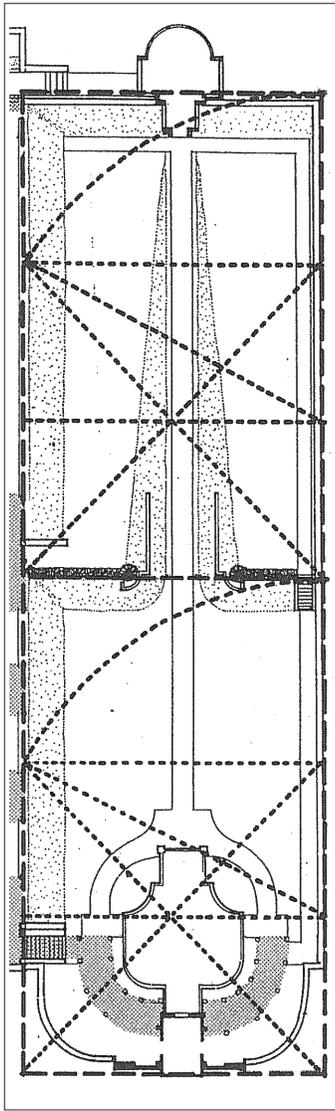


Figure 1.12. Diagram of the classical proportioning system employed in the Italian garden by James Greenleaf. Diagram from Rieley and Associates.

A study of the dimensions of the two levels of the Greenleaf's garden indicate that he employed a classical proportioning system—manifested in the two rectangular spaces representing the upper and lower terraces of his Italian garden (Figure 1.12).⁴⁹ With the construction of the pool house and pergola, Greenleaf extended the lower terrace to the south so that both the upper and lower terraces featured approximately the golden ratio of 1 to 1.6, a rectangle classically believed to have ideal proportions.

An axonometric view of the garden's structures in the 1905 to 1907 period shows the development of Greenleaf's plans for multiple pergolas, steps, walls and trellises (Figure 1.13).

Trellis Fences

Along the top edge of the sloped banks that marked the western edge of the Italian garden, Greenleaf enclosed the garden with trellis fences and pergolas. The fences ran along the east side of the walkway on the east edge of the annual terraces, separating the annual terraces from the Italian garden below. Features included an arched stair arbor of wire mesh at the north end of the walk, a series of wooden pergolas along the lower annual terrace, and two wooden pergolas over the central stairs and south stairs. The walk above the Italian garden through these arbors and pergolas served as an alternate route to the reflecting pool and pool house, which was the focal point of Greenleaf's Italian garden. Moving along this walk south toward the pool house, a garden visitor would have had an unobstructed view of the parterres of the upper and lower annual gardens on the right. Along the left side of the walk through the upper annual garden, however, Greenleaf installed brick piers which were spanned by an iron fence. The fence was planted with vines to obscure the view from the walk into the Italian garden. Along the left side of the same walk as it passed through the lower annual garden, the fence treatment was changed. Here, Greenleaf proposed a lattice with window openings (Figure 1.14) so that one could periodically peek out to overlook the Italian garden below. These elements introduced by Greenleaf provided vertical separation between the different garden areas, and also provided a sequence of views so that the whole garden was not visible from the upper terraces.⁵⁰

Along the eastern edge of the lower terrace of the Italian garden, Greenleaf altered the low brick wall from Langdon's garden by raising the brick piers and spanning them with graceful iron arches to frame views of Crum Elbow Creek to the east. Greenleaf also developed details for the water supply and drainage systems within the garden. Several drain grates that match his design still function along the garden walks (Figure 1.15).⁵¹

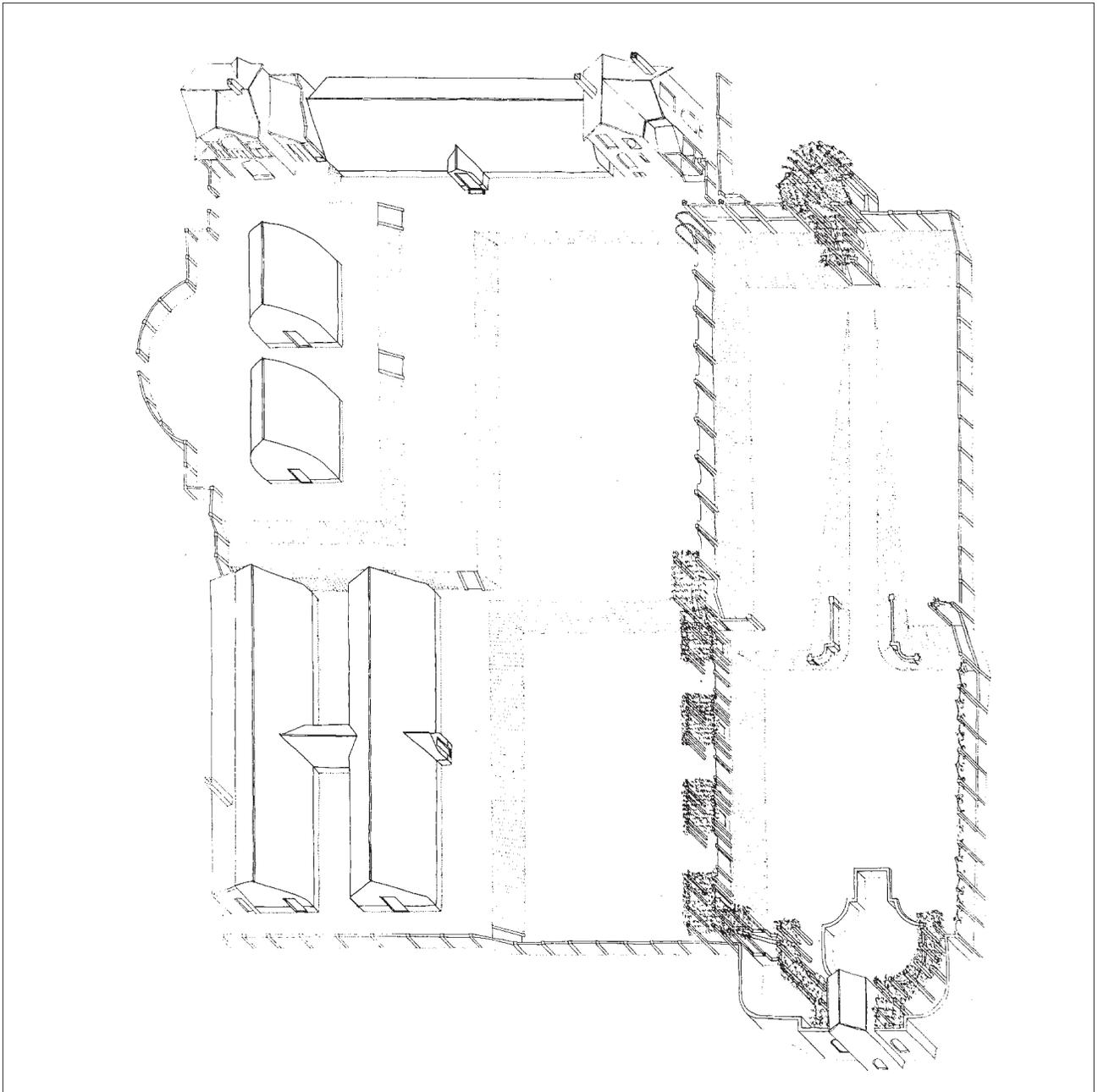


Figure 1.13. Axonometric of the formal gardens 1905-1907, showing Greenleaf constructions in the Italian Gardens, Vanderbilt greenhouses on upper terraces and sloping terrace edges. John Robbins, NPS North Atlantic Region, 1981 (VAMA).

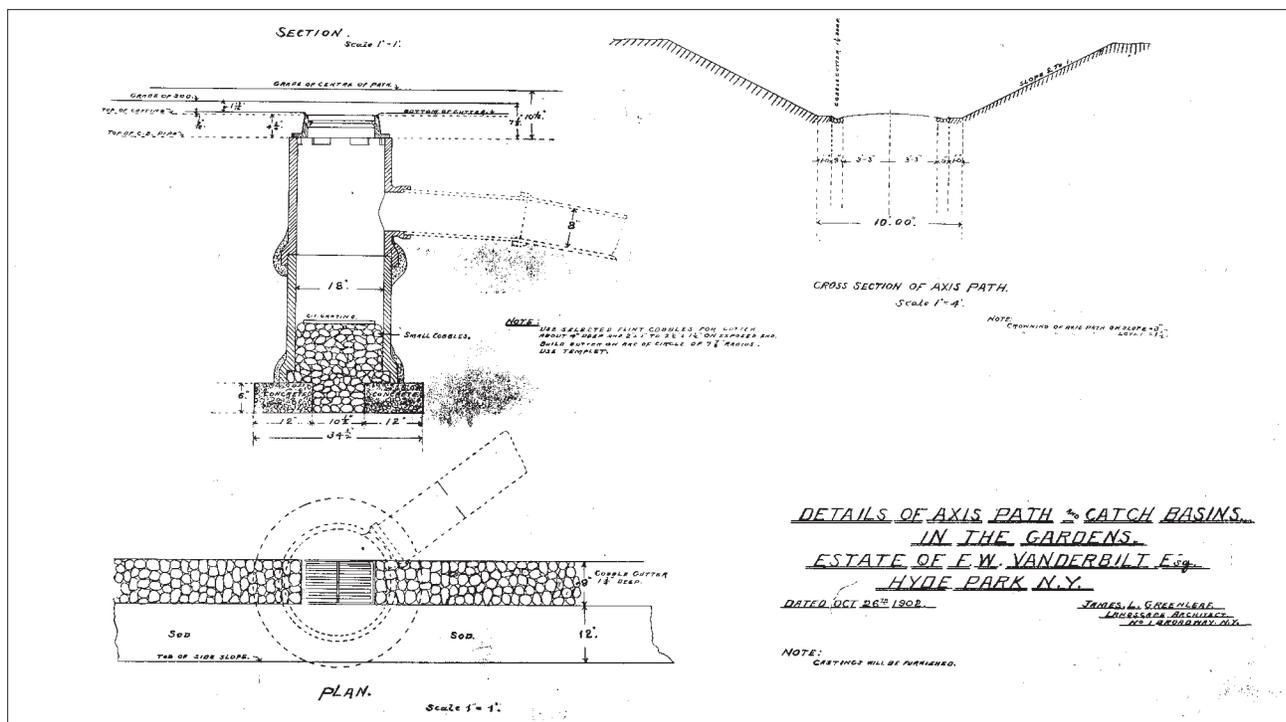


Figure 1.15. "Details of Axis Path and Catch Basins in the Gardens of F. W. Vanderbilt Esq., Hyde Park, N.Y.," James L. Greenleaf, Landscape Architect, Plan #3, October 26, 1902 (VAMA, no. V-96B).

North Pergola and Retaining Walls

Greenleaf altered the area at the north end of the upper perennial garden adjacent to the Gardener’s Cottage from a sloping embankment to a retaining wall providing a level walk adjacent to the building and enclosing the north end of the garden. The redesigned walk led to a new set of steps flanked by two beds, an 18 inch wide trench planted with ferns and a 4 foot wide trench for shrubs. The walk and steps led through Greenleaf’s elaborate north pergola, which he designed with large, brick and stone piers topped with chestnut timbers in a peaked roof pattern. The north pergola, without vine cover, is seen in Figure 1.16.

Pool House and Lower Pergola

Greenleaf expanded the Italian garden to the south beyond the existing garden wall, creating a curved wall to encompass his Italian-style pool house and large lower pergola. The pool served as the focal point for the Italian garden, and would later capture the reflection of an Italian white marble statue of an odalisque, or concubine, standing at the edge of the water in the shade of the pool house.⁵² The elaborate forms of the pool and surrounding pergola are articulated in one of Greenleaf’s plans (see Figure 1.10).

Cedar Hedges and Ornamental Plantings in the Italian Garden

Greenleaf extended the effect of the garden wall with what he referred to as the “midway hedge,” a formally clipped cedar hedge (probably *Juniperus virginiana*) reminiscent of the Italian cypress (see Figure 1.16).⁵³ The hedge was placed across the Italian garden at the top of the sloped bank that separated the upper and the lower terraces, dividing the garden into two distinct spaces. The central walkway that connected the two terraces passed through a twenty-five-foot gap in the center of the hedge. The cedars were specified for installation at a large size: the two sixteen-foot-long sections of the hedge were to be more than ten feet tall, while the two end cedars that flanked the walkway were specified as eighteen feet high.⁵⁴ The estate purchase ledgers indicate that the Vanderbilts bought over 70 cedar trees in July of 1903, which ranged from 8 to 24 feet in height.⁵⁵

A diagram of plantings for the east half of the gardens, dated June 29, 1903 (located in the park archives), is the only planting plan developed by Greenleaf. It specifies the plantings of vines and climbers on the entire perimeter of the garden, although limited planting within the interior of the garden are called out. Plants noted by Greenleaf include, “Crimson Rambler, Multiflora, Evergreen Gem, Jersey Beauty, Gardenia, and Prairie Queen. Other plants are: *Clematis paniculata*, *Clematis jackmanni*, *Euonymus radicans*, *Ivy canariensis*, English ivy, Virginia creeper, *Akebia quinata*, *Bignonia grandi*, *Ampelopsis veitch*, Wild grape,



Figure 1.16. View looking north showing the Italian Garden pool in foreground and north pergola in background without vine cover, circa 1904. Rows of trimmed cedars divide the garden space. The perennial beds are filled with mixed species. Two Corinthian capitals are set in the central walk, and were later moved to the annual and palm house terrace (VAMA, no. V-673).

and Wisteria.”⁵⁶ The estate purchase ledgers indicate that all of the plants specified were installed with the exception of the Prairie Queen roses (Table 1.1).

Two watercolor illustrations done around the time of the completion of Greenleaf’s design show the upper and lower perennial garden. In the upper perennial garden, the long central walk is flanked by two banked beds thickly planted with flowering perennials (Figure 1.17). On the west edge of the garden, the embankment appears to be planted with shrubs and groundcover or vines. The east edge of the garden also shows a number of small shrubs between the walkway and the garden wall. The upper and lower terraces are divided by the midway hedge, a tall formal hedge punctuated by columnar elements at the ends. The opening in the center of the hedge frames views of the reflecting pool and pergola, which is itself framed by two tall columnar cypresses.

Table 1.1. Plants specified by Greenleaf in 1903

Species	Date Purchased	Reference in Ledgers
Crimson Rambler Rose large (double red)	19 purchased, 1903	Book 15, pp. 77, 86, 87, 178
Multiflora Rose	6 purchased, 1903	Book 15, p. 77, 87
Evergreen Gem Roses (double light yellow)	115 purchased, 1903	Book 15, pp.51, 87, 162
Jersey Beauty Rose (single pale yellow)	154 purchased, 1903	Book 15, pp. 51, 87, 162
Gardenia Rose (creamy yellow)	113 purchased, 1903	Book 15, pp. 51, 87, 162
Prairie Queen Rose	No order recorded	
Clematis paniculata	100 ordered, 1903 6 ordered, 1915 6 ordered, 1920	Book 15, p. 86 Book 16, p. 183 Book 1, p. 100
Clematis jackmanni	20 ordered, 1903	Book 15, p. 86
Euonymus radicans	100 ordered, 1903 30 ordered, 1910 20 ordered, 1926	Book 15, p. 163 Book 16, p. 2 Book 1, p. 270
Ivy canariensis (Hedera helix canariensis)	21 ordered, 1903	Book 15, p. 86
English Ivy (Hedera helix)	12 ordered, 1903 25 ordered, 1914	Book 15, p. 86 Book 16, p. 143
Virginia creeper	8 ordered, 1903	Book 15, p. 86
Akebia quinata	10 ordered, 1903	Book 15, p. 163
Trumpet Vine Bignonia grandi (syn. Campsis radicans)	2 ordered, 1903	Book 15, p. 86
Ampelopsis veitch (syn. Parthenocissus tricuspidata)	18 ordered, 1903 30 ordered, 1911 6 ordered, 1915 20 ordered, 1925	Book 15, p. 77 Book 16, p. 34 Book 16, p. 183 Book 1, pp. 248, 253
Wild grape	60 grapes ordered in 1903 including 40 ‘Concord’, 20 ‘Delaware’ and 20 ‘Niagara’—possibly for the farm	Book 11, p. 42
Wisteria floribunda Wisteria floribunda Wisteria chinensis	5 blue ordered, 1903 5 white ordered, 1903 14 sinensis ordered, 1903	Book 15, p. 86 Book 15, p. 86 Book 15, p. 86

The second watercolor shows a close-up of the pool and pool pergola (Figure 1.18). The pergola is adorned with climbing vines and flanked by Italian cypresses. Flowering plants appear to occupy the space between the pool and the pergola, and two potted flowering plants adorn the corners of the pool. The beds on either side of the pool, as well as the other beds north of the pool, are not planted with perennials, and instead appear to be open panels of turf.

The two illustrations together give a striking impression of the character of Greenleaf's garden. It is open and restrained, with vegetation employed sparingly for maximum effect. The Italian influences are evident, both in the layout of the gardens and in the use of classical structures and evergreen shrubs and hedges.

Curiously no photographs have been located that show the gardens as they are in the watercolor illustrations. Rather, photos show the upper perennial garden densely planted with evergreen shrubs and trees flanking the garden path. These shrubs are quite large, and by the end of the 1910s appear considerably overgrown. The lower perennial garden shows the current configuration of perennial beds in all known historic photos. There is no record of these changes to Greenleaf's design, and they were likely carried out by Vanderbilt and his gardeners, which over the years included head gardener Henry Allen, and gardeners George Nichols, William Henman, Alton Newman, John Moore, and Alex Knauss among others.

Ornaments in the Garden

Two photographs taken between 1904 and 1910 show two Corinthian capitals in the central walk (Figures 1.16 and 1.19). Shortly thereafter the odalisque was placed in the pool house. The estate purchase ledgers indicate that a white marble base was purchased in 1911.

REPLACEMENT OF GREENHOUSES: 1904–1910

During the period from 1904 to 1910, the Vanderbilts continued to carry out major design changes in the formal garden area, most notably on the upper terraces with the replacement of the Langdon greenhouses. However, changes to the gardens during this period are not well documented.

Greenhouse Construction

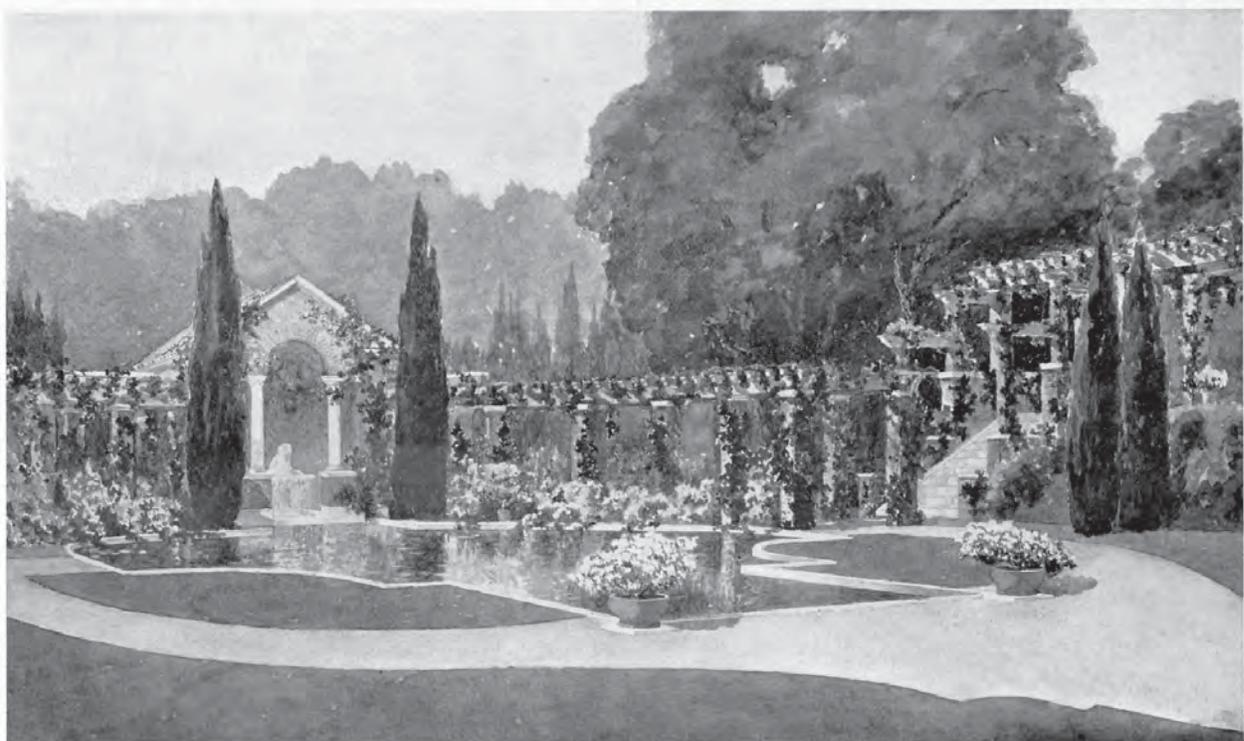
In 1905 plans were put forward by the Pierson-Sefton Company of Jersey City, New Jersey, who advertised themselves as horticultural builders and architects. The company proposed simple, twin palm houses intended to replace the more elaborate Langdon conservatory on the first terrace of the formal gardens. Two alternative schemes were developed as water color drawings. The palm houses were constructed in 1905, though slightly differently than the proposals (Figure



THE WALK. GARDENS, F. W. VANDERBILT, HYDE PARK-ON-HUDSON.

James L. Greenleaf, Landscape Architect.

Figure 1.17. Watercolor of the upper perennial garden in 1903 shortly after completion of Greenleaf's design, view looking south from the north pergola. The image shows a very open character with a perennial border and cedar hedge separating the two terraces.



THE FOUNTAIN POOL. GARDENS, F. W. VANDERBILT, HYDE PARK-ON-HUDSON.

James L. Greenleaf, Landscape Architect.

Figure 1.18. Watercolor of the lower perennial garden in 1903 shortly after the completion of Greenleaf's design.



Figure 1.19. View looking south showing the Italian garden, circa 1904. Two Corinthian capitals are set in the central walk and the statue of the odalisque is not yet placed in the pool house (VAMA, no. V-639, postcard, Shears Collection).

1.20). For the next three years, the palm houses were used in conjunction with the remaining four Langdon greenhouses at the southwest corner of the garden.⁵⁷

In 1907 the Pierson U-Bar Company, which was based on Madison Avenue in New York City and likely a successor firm of the Pierson-Sefton Company, developed drawings and construction details for the greenhouse between the Gardener's Cottage and Tool House. This greenhouse was configured somewhat differently than the preexisting structure in the same location, with a greater width and a central doorway opening to the gardens on the south side. The structure, known as the carnation house, was completed by 1908. Carnations were a favorite of the Vanderbilts, as reflected in the estate purchase ledgers. Early 1900s records indicate that the Vanderbilts sold over 500 carnations a year, while records from the 1910s through 30s record purchase of 100 to 600 carnation plants a year of four or five different varieties (see Appendix A).

Pierson U-Bar also developed schemes for the replacement of the remaining range of four Langdon greenhouses to the south with a large two-winged rose house (Figure 1.21). The remaining Langdon greenhouses were removed and the new rose house were completed by 1908 (Figure 1.22 and 1.23). Five years later, further plans were developed by Pierson U-Bar that were never executed. These plans included a structure to link the twin palm houses and a greenhouse to the south of the rose house complex.⁵⁸

The area to the south of the Rose Greenhouses, outside of the walled garden, contained cold frames, the remnants of which remain, and further to the south were rectangular propagation beds and cutting gardens.

Ornaments in the Garden

By 1910 there were many ornaments in the garden. Features captured in early 1900s photographs included a Corinthian capital in the center of the upper annual garden, the boy and dolphin fountain in the fountain terrace, and several Baroque style sandstone vases on the greenhouse terrace (see Figures 1.16, 1.19, 1.22 to 1.25). None of these acquisitions are documented in the estate purchase ledgers.

Garden Development

There are no drawings available which show planting designs for the garden from 1904 to 1910. As previously described, the Greenleaf drawings indicate only a few of the plant species used during this period. Photographs from this period indicate that the upper half of the Italian garden was very heavily planted with evergreen trees and shrubs (Figure 1.26). The lower half of the garden was filled with perennials and to the south of the pool house, beyond the garden wall, evergreens also framed the space (Figure 1.27). The purchasing ledgers indicate that an extensive variety of annuals, perennials, bulbs, shrubs, and trees were purchased in 1904. However, there are no records of purchases in 1905 to 1908 and only a couple of entries for carnations in 1909. In 1910, however, documentation of extensive purchases resumes including a \$75 dollar payment for a plan for the “Italian garden” (Plan 2011) by Thomas Meehan and Sons. At this time the Vanderbilts referred to the entire garden as the Italian garden. The next recorded plan for the garden was completed by Robert Cridland in 1913 (Plan 2469).

THOMAS MEEHAN AND SONS: 1910–1913

In 1910 the Vanderbilts expanded the formal gardens in consultation with Thomas Meehan and Sons, a Philadelphia nursery that also provided landscape architectural services. The nursery was founded in the 1850s by Thomas Meehan, an immigrant from England who had been trained in English gardens. His nursery business thrived and, upon his death in 1901, the company was run by three of his four sons and two of his four brothers.⁵⁹ The design services offered by the Meehan and Sons are described in their 1905 nursery catalog:

This department carries a large staff of thoroughly trained experts in various lines, giving it an equipment unique in its completeness. It offers valuable, thorough and economical service, both in the construction and the execution of plans for every class of landscape work. An especial study has been made of the planning and construction of formal gardens, so that they conform to the architectural features as found.

Entire charge can be taken of operations of grading, draining, roadmaking, planting, pruning, spraying, and the proper development or maintenance of private or public properties. When desired, professional service alone is given and suggestions made verbally and by special reports.⁶⁰

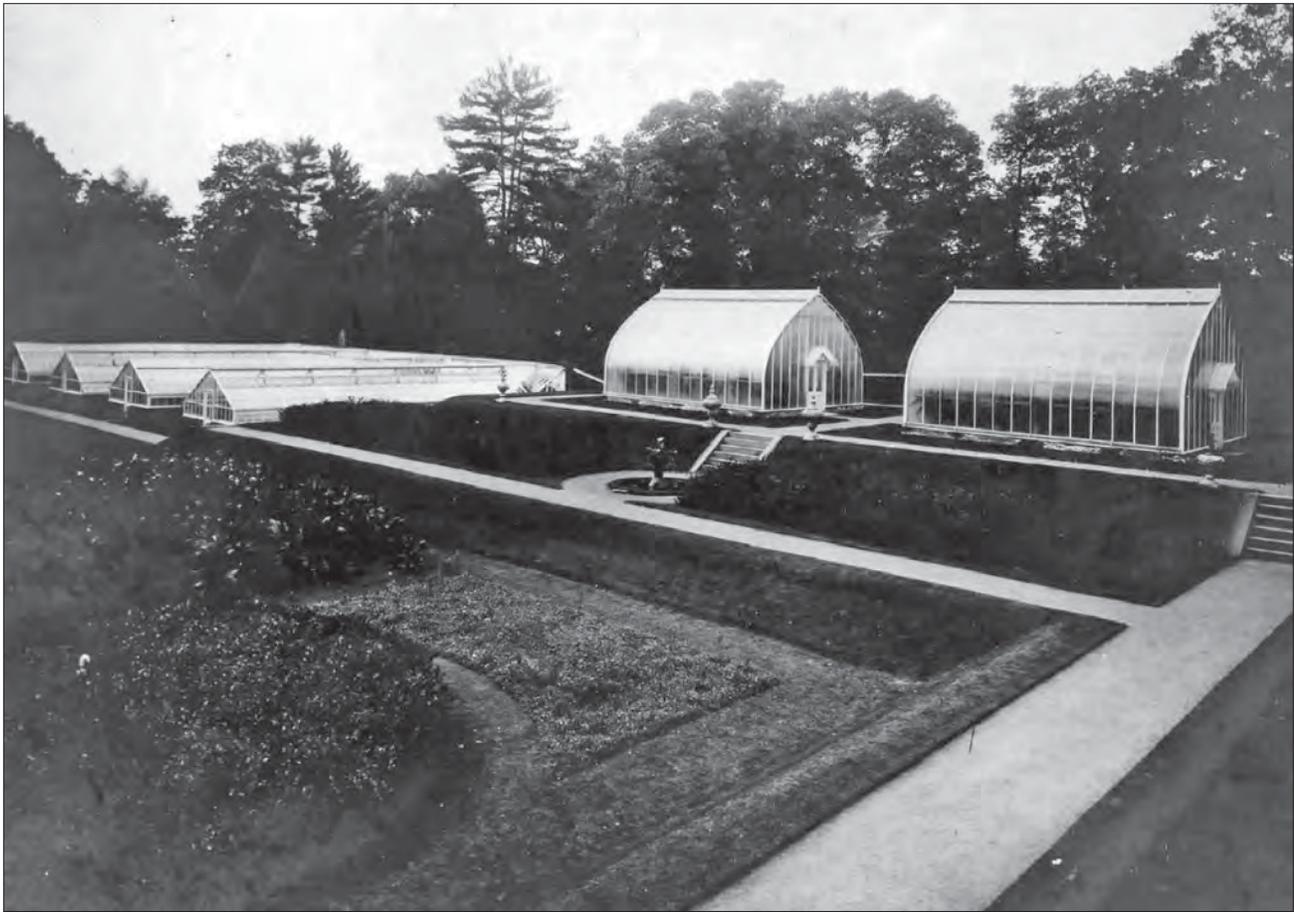


Figure 1.20. View looking west showing new twin palm houses at right and remaining Langdon era greenhouses at left, circa 1906. The fountain terrace is visible in the center of the image and the upper annual garden is in the foreground (VAMA, no. V-1269).

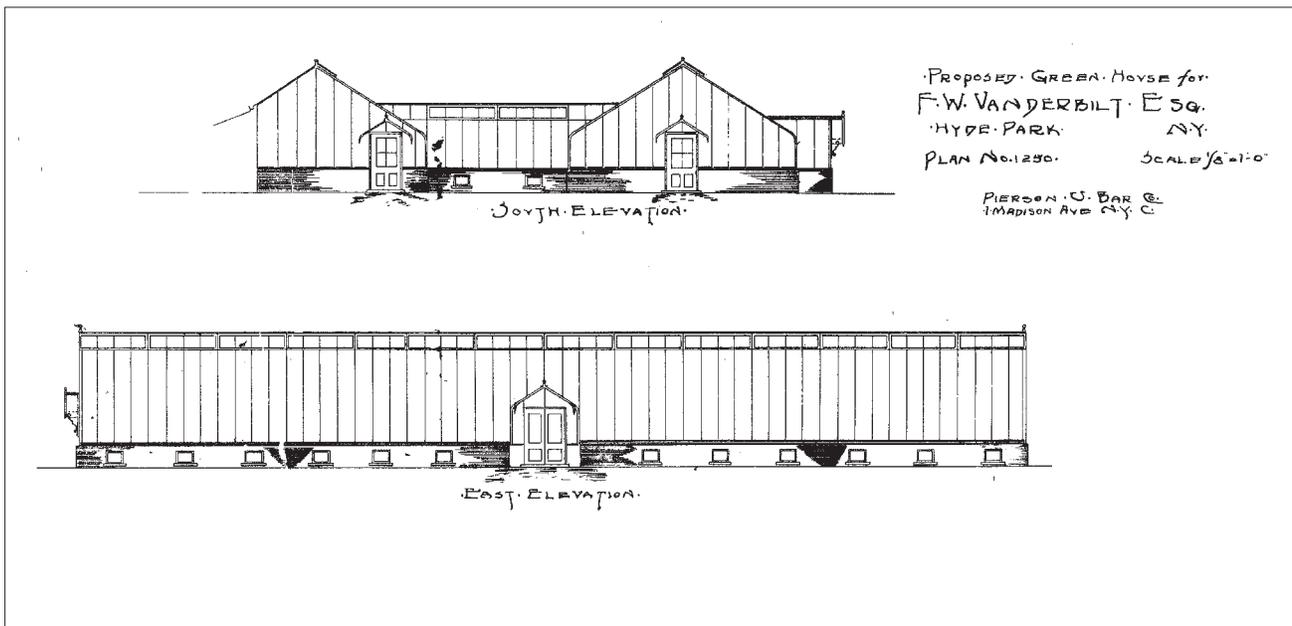


Figure 1.21. "Proposed Greenhouse for F. W. Vanderbilt," Plan No. 1250. Pierson U-Bar Co., Madison Avenue, New York City, no date, circa 1907 (VAMA, no. V-145).



Figure 1.22. View looking southwest showing the new twin rose houses at left and one of two palm houses at right, post 1908. The fountain terrace is visible in the center of the image and the upper annual garden is in the foreground. Note the Corinthian capital in the center of the garden, which is still extant. Photograph by E. Van Osdell (VAMA, no. V-128).



Figure 1.23. View looking southwest showing the south palm house and the statuary that ornamented the greenhouse and fountain terraces, post 1908 (enlargement of Figure 1.22). At least six late nineteenth-century Baroque style sandstone vases demarcated the walks and corners of the greenhouse terrace. Now only pieces remain. The boy and dolphin fountain was partially installed by 1906 (see Figure 1.20) and completely installed by circa 1908 (VAMA, no. V-128 detail).

It is likely that Greenleaf introduced the Vanderbilts to Meehan and Sons. It was a nursery well known at the time for its extensive inventory and quality of plant material.⁶¹ The estate purchase ledgers indicate that beginning in 1902 the Vanderbilts purchased over one thousand trees and ornamental shrubs from Meehan and Sons. The Vanderbilts subsequently hired the company to prepare plans for an extension of their garden. The Vanderbilts also requested a plan for the arrangement of walks around the Mansion, but these plans were never implemented.

Loggia Garden (Rose Garden)

In 1910, the Meehan firm designed the loggia garden, an eastward extension of the garden on a lower level that was later known as the rose garden. Initially, two plans were prepared.⁶² Plans 2011, which was recorded in the purchase ledgers as costing \$75 dollars, and 2011A prepared in 1910 detail the layout, grading, masonry and plantings of this addition to the formal gardens (Figure 1.28). The garden form was a rectangular extension of the Italian garden to the southeast with two levels and a curved wall at the eastern terminus. The rectilinear space was centered on an east-west axis and mirrored the dimensions of Greenleaf's garden, if one included the lower perennial garden as the first level of the new space.



Figure 1.24. View looking northeast showing the upper annual garden in the foreground and the twin palm houses, tool house, and carnation house in the background, post 1908. Plant species in the annual beds possibly include petunias at left, statice in the foreground, alyssum edging beds in the background and at right, and pennisetum fountain grass and canna in the circular bed surrounding a Corinthian capital (VAMA, no. V-104, Van Osdel Collection).

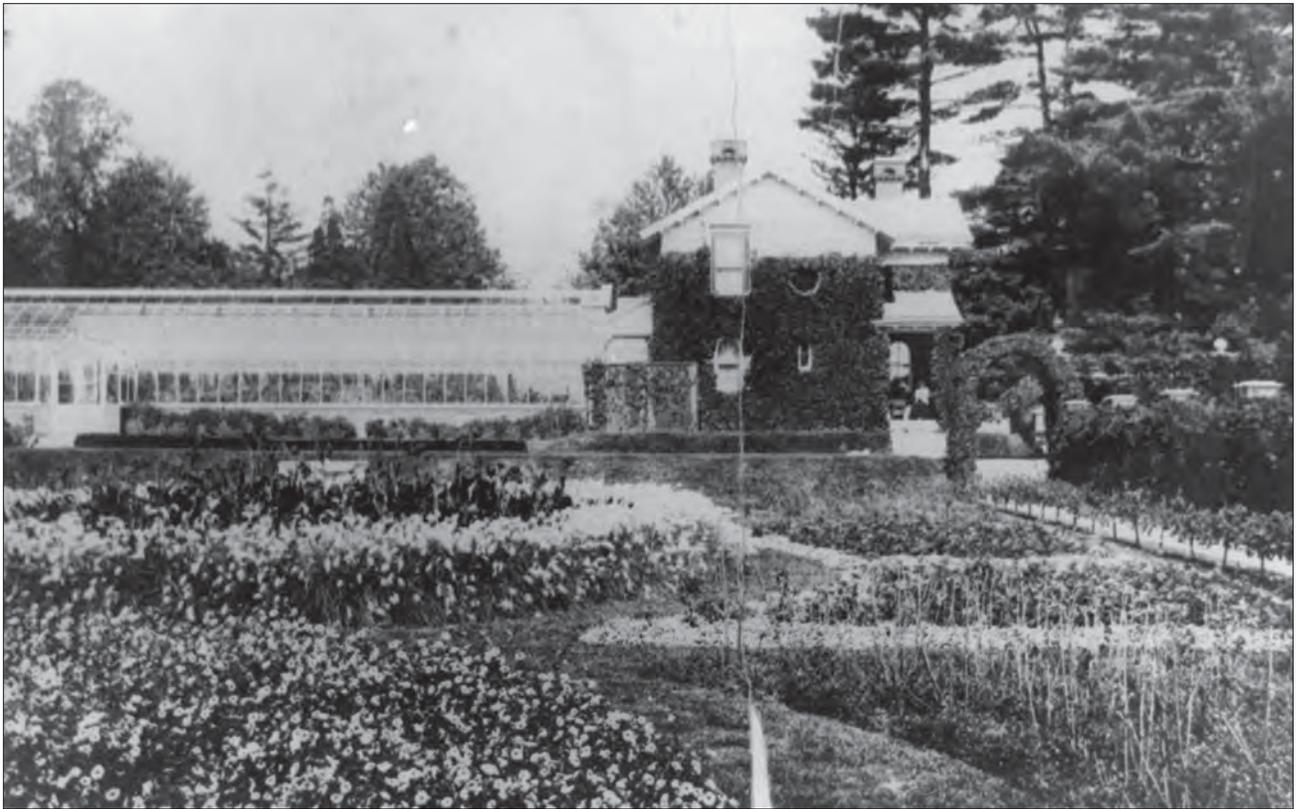


Figure 1.25. View looking north showing the upper annual garden, post 1908. Note the small standard plants along the walkway and the arched stair arbor and adjacent lattice wall designed by Greenleaf at right, now covered with vines (VAMA, V-103 Van Osdel Collection).



Figure 1.26. View looking north showing the Italian garden central walk and north pergola, circa 1911. The evergreen hedge planted by Greenleaf to separate the upper and lower perennial gardens is mature. Vines cover the north pergola. German bearded iris line the walk in the foreground and perennials spill on to the walk in the background (VAMA, no. V-749).



Figure 1.27. View looking south showing the Italian garden central walk and pool house, circa 1911. German bearded iris line the walk in the foreground and bay trees in pots frame the pool house. A row of evergreens south of the garden frame the space (VAMA, no. V-750).

To effectively tie the new garden to the existing garden, Meehan and Sons created two new openings in the east wall of the lower perennial garden. Located at the corners of the space, the openings did not detract from the reflecting pool and pool house as the focal point. At the new openings, two sets of ten steps, each el-shaped, descended to the upper terrace of the rose garden—a fifty by one hundred foot rectangular space with two symmetrical garden parterres. The walks joined on a central axis leading to another set of thirteen steps that descended to the lowest garden level. The lowest level was organized in four parterres with a round fountain in an almost square space of approximately one hundred feet in length. The eastern curving end of the garden was accented, on the plan, with a garden seat at the terminal end of the central axis at the location where the loggia was later built.⁶³

The list of plants specified by Meehan and Sons for the new rose garden (Plan 2011) includes a large number of perennials; peony, daylily, phlox, bell flower, columbine, poppy, iris, aster, balloon flower, anemone, chrysanthemum, and more. There are several varieties of each species to be planted in the garden parterres. On the lowest terrace the narrow edge beds were specified for the planting of 160 assorted roses. The beds were designed to put on their most lavish display in the spring. Meehan's list of plants is included in Appendix B, as is a color analysis completed by Rieley and Associates in their 1988 *Vanderbilt Mansion Cultural Landscape Report*. The garden was designed to bloom blue, white, yellow, pink, purple, magenta, and red in the spring; blue, white, yellow and red in the summer; and blue, white, and pink in autumn.⁶⁴

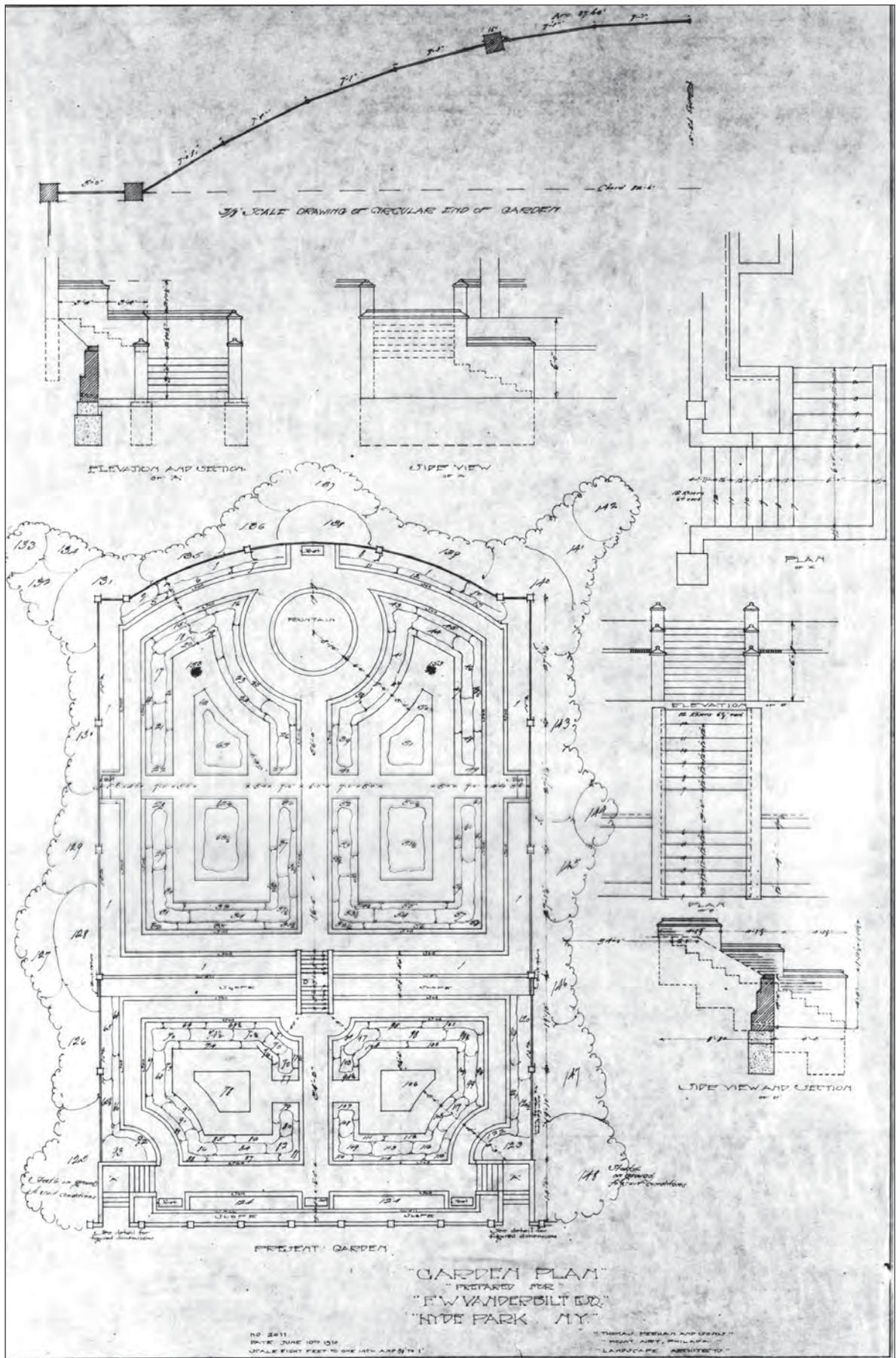


Figure 1.28. "Garden Plan prepared for F.W. Vanderbilt, Esq., Hyde Park, NY.," June 10, 1910, Thomas Meehan and Sons, Mount Airy, Philadelphia, Landscape Architects, Plan 2011, (VAMA, no. V-170A).

Perennials were a specialty of the Meehan nursery. In fact, in their 1915 catalog they advertise the “Meehan Old-Fashioned Hardy Garden Collection,” for which they packaged plans and plants together as a kit. For example, Hardy Garden No. 8 cost \$5.00. This kit would include 50 plants and a plan to arrange them over an area from 100 to 1,250 square feet. The drawing used in the advertisement shows the perennial beds laid out in the same manner as those at the Vanderbilt estate.⁶⁵

Photographs and one postcard view of rose garden from about 1920 show a combination of plants with some roses, but the garden does not appear to have been planted to the wide assortment of perennials specified in the Meehan planting key.⁶⁶

Frog Fountain and Garden Furnishings

The first fountain installed in the rose garden was referred to as the frog fountain. Crafted in France in about 1890, the white marble figural fountainhead in the form of a frog was based on the gilt lead frogs of the Bassin de Latone in the gardens of Versailles, which were designed by André le Nôtre and sculpted by Gérard and Balthazar Marsy between 1668 and 1670.⁶⁷ Figures 1.29 and 1.30 show the pool and frog in the foreground looking west along the central walk and up to the higher terrace. The frog fountain was replaced with the Orpheus fountain in 1925. No other garden ornaments were placed in the rose garden. Six benches were set along the edges of the garden as specified in the Meehan and Sons plan and photographs (Figure 1.31).

Shrub Plantings Around the Gardens

Both of Meehan’s 1910 designs for the rose garden included a shrub planting around the perimeter of the formal garden outside of the garden wall (see Figure 1.28 and Appendix B. Adjacent to the garden fence and brick piers, the plans specified a sequence of twenty-four groups of massed flowering shrubs. These included viburnum, spirea, Indian currant, hydrangea, barberry, honeysuckle, deutzia, privet, forsythia, weigela, stephanandra, mock orange, Japanese quince, and rhododendron, arranged around the formal garden space in a dense, informal massing from the northwest corner eastward to the southwest corner. At the northeast and southeast corners of the rose garden, conical evergreens were specified, with Oriental spruce and Balsam fir occupying opposite corners, and arborvitae surrounding the garden seat at the site of the future loggia.

Views of the garden some ten years later show a dense mass of shrubs surrounding the edge of the garden confirming that the specified shrub masses were planted. The exact relationship of the shrubs pictured and those specified in the planting list and plan is undocumented.⁶⁸ The estate purchase ledgers do not itemize purchases from Meehan from 1910 onward. Several large payments are made to Meehan in 1910, “Extension to Italian Garden Draft (\$1147.50),

(\$2686.82), (\$1237.68), and (\$800).” Again in 1912, the Vanderbilts pay Meehan for “Furnishing & Planting as per contract (\$382.25)” and “Replanting garden extension (\$71.65).” Also recorded are purchases from Meehan for fifty rhododendrons in 1910, forty mugo pines in 1912, and forty-four Hall’s honeysuckle in 1914. Extensive purchases from other nurseries during this time period reflect the broad network of horticultural suppliers that provided seeds, bulbs, and plants to the Vanderbilts for their Italian garden as well as their greater estate or “park” and farm properties.

Meehan Influence on the Formal Gardens

Meehan and Sons appear to have had little influence on the existing garden elements in the upper terraces. The annual terraces were planted out as in previous years. The perennial terraces continued to mature and reflect the Greenleaf design. Photographs in the 1910s along the central walk show that the design was fully mature (see Figure 1.26). By this time extensive vines covered the brick columns and wooden rafters of the pergola. The pool contains some water lilies. Two bay shrubs in pots stood at the pool corners. The small pool beds were planted with flowering annuals or perennials. The beds at the walk edges show massed iris foliage.

Meehan and Sons influence was chiefly in the design of the new rose garden and the surrounding shrub plantings. Later planning by Robert Cridland would



Figure 1.29. View looking west showing the frog fountain in the rose garden, circa 1918 (VAMA, no. V-706).

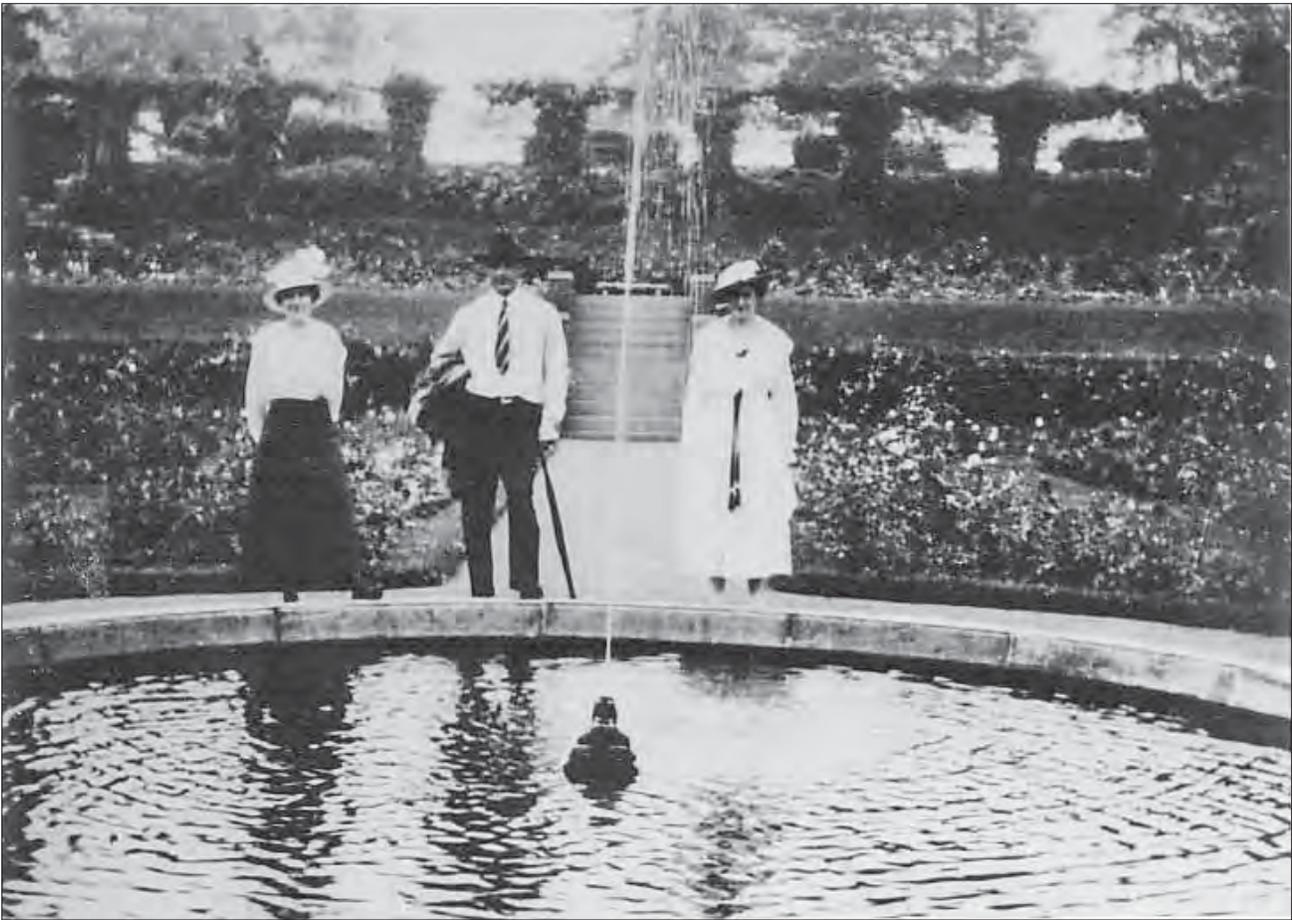


Figure 1.30. View looking west showing the frog fountain and rose garden, circa 1918 (VAMA).



Figure 1.31. View looking north showing a garden bench in the rose garden with the wire fence in the background, circa 1920s (VAMA, no. V-12, Alex Knauss Collection).

increase the quantity of roses in the beds but the grading, layout, and organization of the garden developed by Meehan and Sons would remain.

ROBERT CRIDLAND: 1913–1938

In the 1910s the Vanderbilts engaged Robert B. Cridland. Cridland had been employed with Thomas Meehan and Sons prior to 1913 and likely worked on the original plans for the loggia garden. Cridland was trained as an architect and published a book in 1916 entitled, *Practical Landscape Gardening*, with the dedication, “Joseph Meehan, Eminent Horticulturist, Adviser, and Friend.”⁶⁹

Beginning in at least 1913 and continuing until 1934, Cridland developed new designs for each area of the formal gardens, in addition to preparing plans for the Mansion foundation planting. During his twenty year association with the Vanderbilts, his major contributions were to reconfigure and modify structural elements in the garden and to revise planting schemes rather than to develop new garden areas. Cridland’s work was additive, embellishing and changing the texture and quality of the garden spaces while building on the works of Greenleaf and Meehan.⁷⁰ During this period the Vanderbilts maintained but did not expand their estate. Mrs. Vanderbilt passed away in 1926 at the age of 82 and Mr. Vanderbilt passed away in 1938, also at the age of 82.

The estate purchase ledgers suggest that Robert Cridland was working for the Vanderbilts by 1913 according to the April 29th entry, paid to Cridland: “Prof Service Stock & Planting (\$1470) Less Planting Plan #2469 (\$72.50) Total (\$1397.50).” Again in June 1914 the Vanderbilts paid Cridland for “Visits (\$25), Plans (\$142.50) Expenses (\$10) total (\$177.50).” The same year the Vanderbilts purchased 75 maxima rhododendrons and 12 hemlocks from Cridland. In 1916 Cridland designed and oversaw construction of the loggia at the east end of the rose garden, which he called the garden house. The purchase ledgers indicate that in 1916 the Vanderbilts paid Cridland for the “Garden House (\$2932.60), Pier Caps (\$354.20), Paving (\$93.50), Stock (\$1250), and 900 Roses @ \$.40 (\$360).” Also in 1916 Cridland developed planting plans for the fountain terrace, annual terraces, a portion of the lower perennial garden terrace near the pool and pool pergola, and the rose garden below (Figure 1.32).⁷¹

In his book, Cridland articulated planting design principles. For color arrangements, he recommended that cool purples and blues be used in the background with warm lighter colors in the foreground for the effect of making the planting bed appear larger. He also recommended balance of form and color rather than symmetry. Lastly, he stated that evergreens, preferably pyramidal, should be placed at regular intervals and always at the corners and ends of the beds bisected by walks.⁷² Cridland’s plant lists from his book are grouped according to season and color. It appears that Cridland applied the principles

outlined his book directly to the Vanderbilts' garden. In general, the plants as specified in the 1916 plan would bloom as follows:⁷³

Fountain Terrace/Upper Annual Garden

Spring: Yellow, Pink, White
Summer: Blue/Purple, Pink, White
Autumn: Pink, White

Lower Annual Garden

Summer: Purple, Blue, and White

Upper Perennial Garden

Spring: Yellow, Blue, Lavender/Purple, White
Summer: Yellow/Orange, Blue, Lavender/Purple, White
Autumn: Yellow, Blue, Lavender, Pink, White

Lower Perennial Garden

Spring: Yellow, Blue, Lavender/Purple, Pink, White
Summer: Yellow, Blue, Lavender/Purple, White
Autumn: Yellow, Blue, Lavender/Purple, Pink, White

Rose Garden

Spring: Red/Orange, Yellow, Blue, Lavender/Purple, Pink, White
Summer: Red/Orange, Yellow, Blue, Lavender/Purple, Pink/Salmon, White
Autumn: Yellow, Pink, White

Annual Garden Terraces

The configuration of the planting beds of the upper garden terraces remained similar to the configuration depicted in the 1897 survey, though as early as 1906 the small rectangular beds were eliminated and the curved beds were enlarged. The lower annual garden also remained largely unchanged during this period. The one notable change evident in historic photos is a simplification of the center beds. Early photos show a smaller circular bed in the center surrounded by a perforated ring of eight beds. Sometime in the early 1920s, the smaller beds of the perforated ring were enveloped by an enlarged circular bed. An alternative layout for both the upper and lower annual gardens was included in the 1916 drawing by Cridland in which he reconfigured the upper and lower curvilinear annual beds to rectilinear beds with mixed perennials. It does not appear that the proposed configurations for the annual gardens were implemented during the historic period.

Photos taken during the historic period are an excellent source for determining the form and character of the vegetation, and in some cases the plant species, in the annual beds (Figures 1.33 through 1.45). The photos are typically not dated,

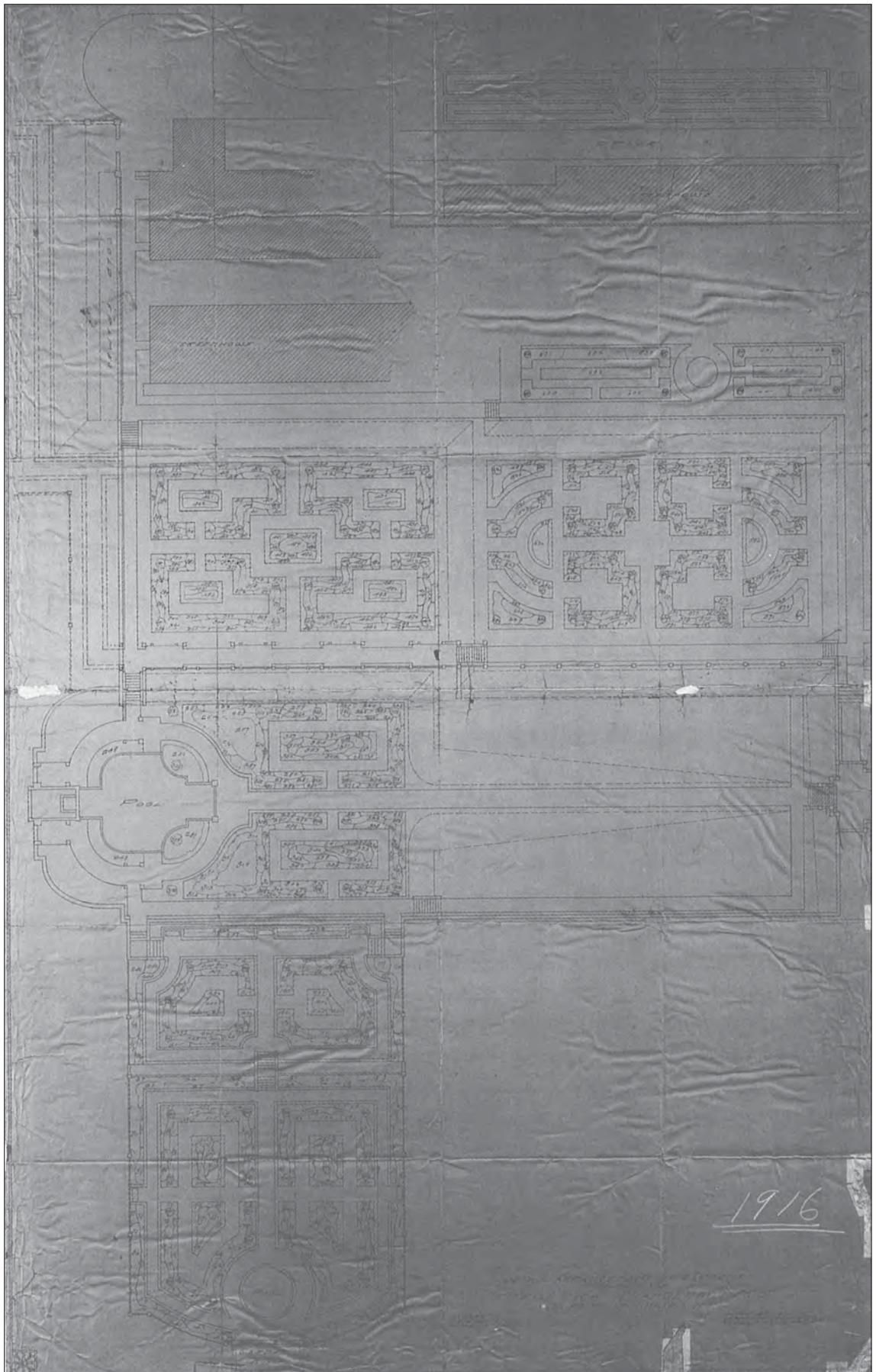


Figure 1.32. Plan 133 by Robert Cridland dated February 15, 1916 entitled "Detail Arrangement of Gardens prepared for F. W. Vanderbilt, Esq., Hyde Park-on-Hudson, N.Y." (VAMA, no. V-122A).

but general time periods can often be determined by the elements in the photos or by the clothes of people depicted in the photos. A number of photos have been found that show the two annual gardens. The majority of the photos show the arborvitae hedge along the east side of the lower annual garden, which was installed in 1922. This dates these photos to between that year and 1938.

Some species are identifiable in the historic photos. The cannas and pennisetum in the central beds are visible, as are plants resembling heliotrope, petunias, pelargonium, and alyssum. Positive identification is difficult in the grainy black and white photographs. In combination with Alex Knauss' recollections and the information in the estate purchase ledgers, however, identification of these species may be made with reasonable confidence.

The estate purchase ledgers show purchases for many annuals throughout the Vanderbilt residency. Many of these were purchased for the greenhouses to be used as cut flowers in the mansion, to be shipped to the Vanderbilts' other residences, or to be entered into flower shows and competitions. Many, however, were planted in the gardens. Annuals that appear in large numbers for multiple years that may have used as bedding plants include cannas, begonias, petunias, zinnias, alyssum, heliotrope, pelargonium, primroses, pansies, nasturtiums, marigolds, asters, cosmos, cineraria, verbena, lantana, and salvia.

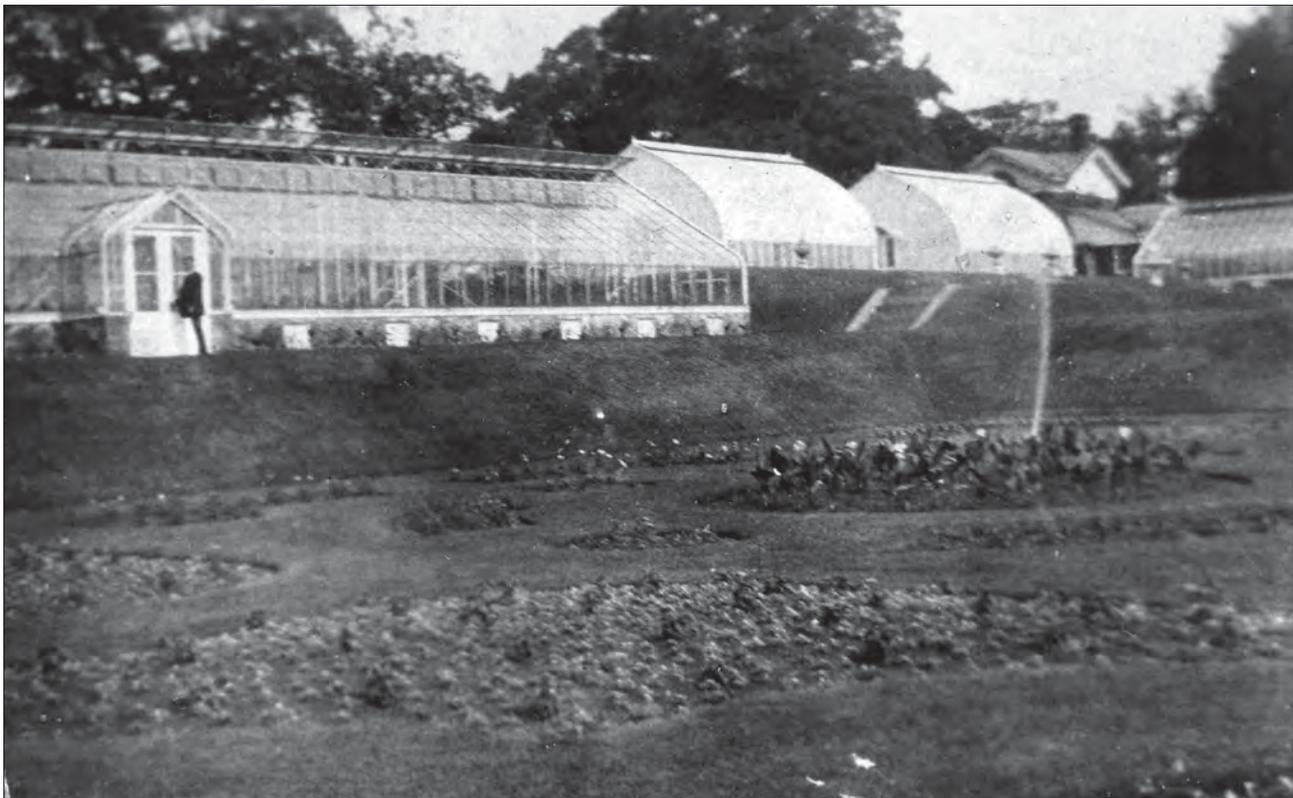


Figure 1.33. View looking west showing the lower annual garden with geometric planting beds surrounding a central circular bed, circa 1910. Plant species may include alyssum, browallia, and cannas (VAMA, no. V-798).



Figure 1.34. View looking north showing the lower annual garden with perforated ring beds surrounding a central circular bed, circa 1910. The central circular bed is planted with dracaena and bordered by another plant (VAMA, V-27).



Figure 1.35. View looking northeast showing the lower annual garden, circa 1922. This image shows the use of a low flowering groundcover, likely alyssum, with individual plants within in both the wing-shaped beds and the perforated ring bed. The center bed is canna, and the heart-shaped beds may be begonias (VAMA, no. V-87, Alex Knauss Collection).

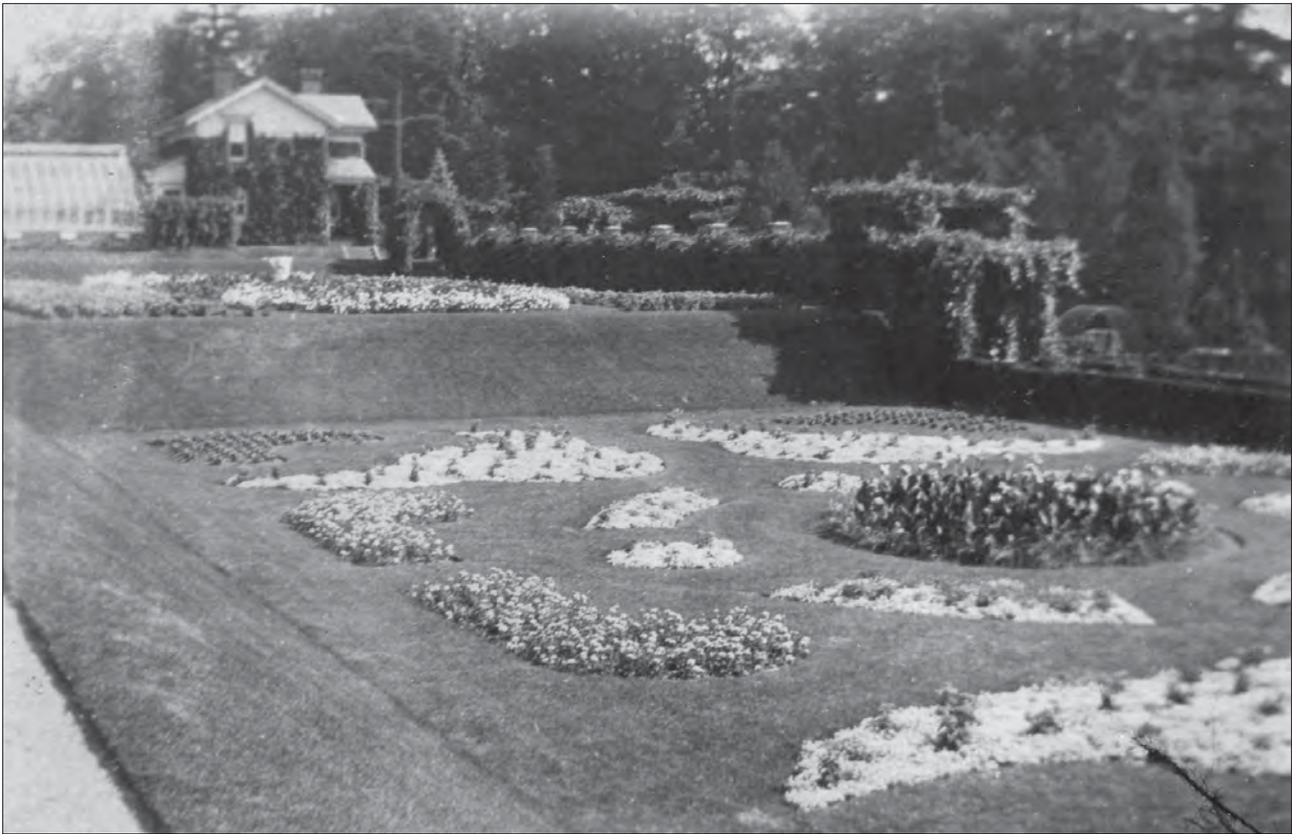


Figure 1.36. View looking northeast showing the lower annual garden, circa 1922. This image, taken the same year as Figure 1.35, shows some of the upper annual garden. The flanking circular beds on the upper annual garden feature a white flowering border of possibly petunias (VAMA, no. V-88, Alex Knauss Collection).



Figure 1.37. View looking northeast showing the lower annual garden, post 1922. The heart-shaped beds in the foreground are planted with petunias and the wing beds appear to be pelargonium. This image, taken early in the 1920s, shows the perforated ring of beds around the circular center bed (VAMA, no. V-51, Alex Knauss Collection).



Figure 1.38. View looking northwest showing the lower annual garden, post 1922. The heart-shaped beds in the foreground are planted with petunias, and the wing-shaped beds are planted with pelargonium with an alyssum border (VAMA no. V-92, Alex Knauss Collection).



Figure 1.39. View looking northeast showing the lower annual garden, post 1922. The center bed is planted with canna with no ornamental grass border (VAMA, no. V-86, Alex Knauss Collection).

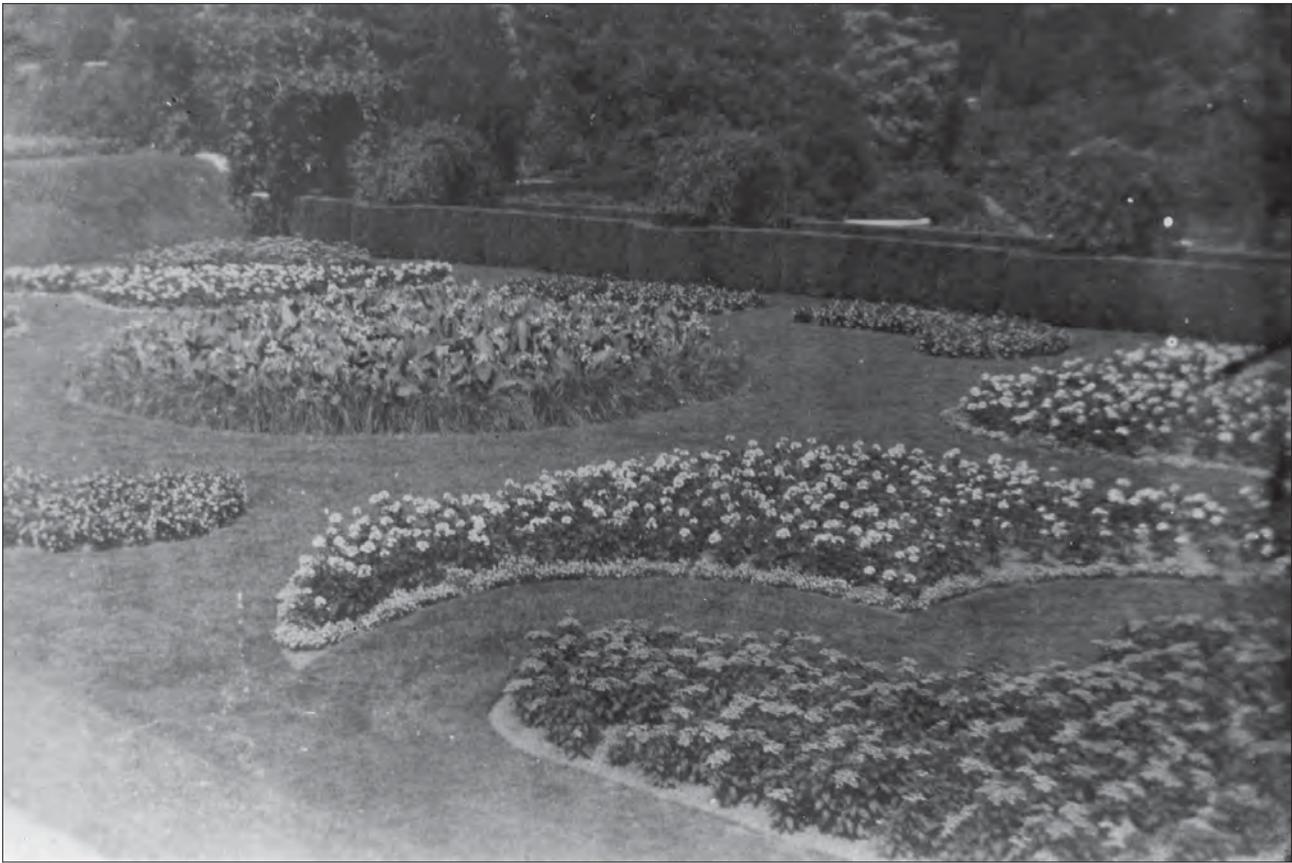


Figure 1.40. View looking northeast showing the lower annual garden, post 1922. Sometime in the 1920s the center bed was planted as a solid circle with canna and a pennisetum border. The heart shaped bed in the foreground appears to be heliotrope (VAMA, no. V-47, Alex Knauss Collection).

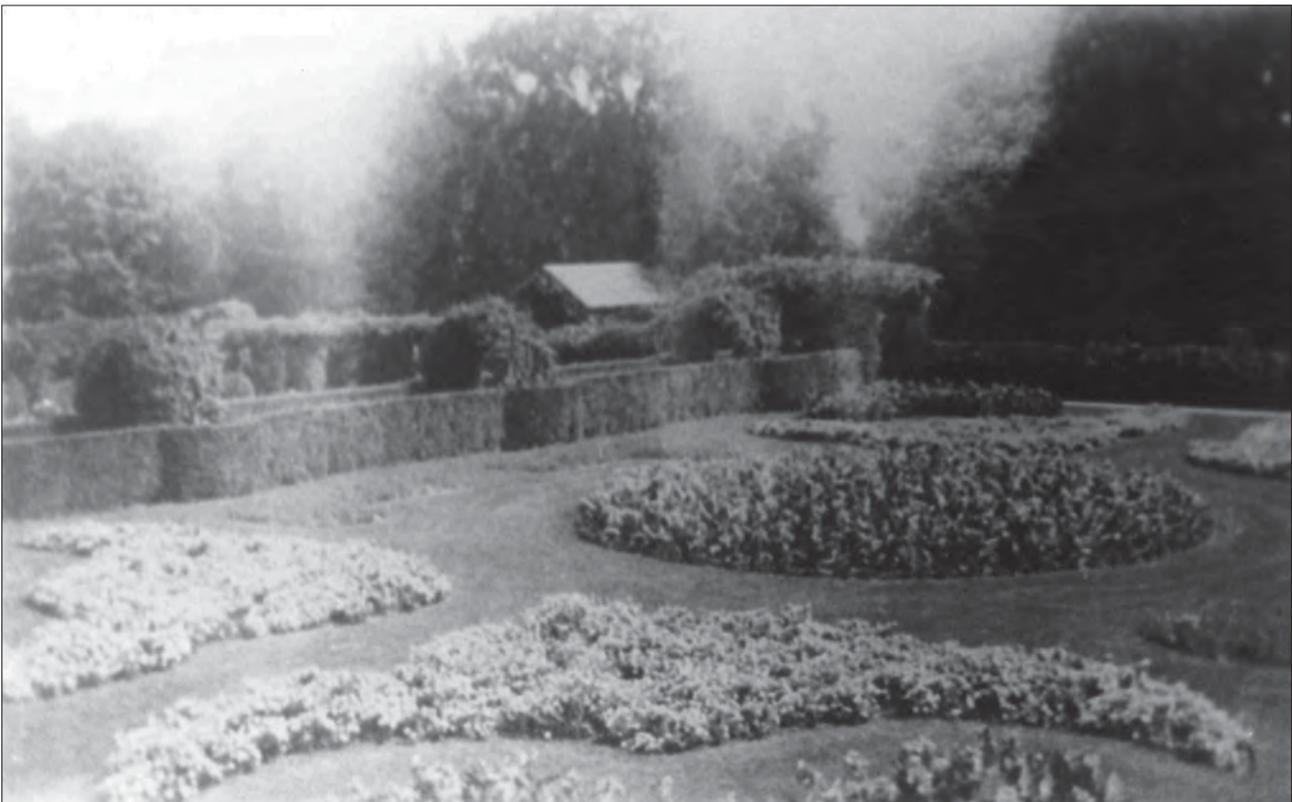


Figure 1.41. View looking southeast showing the lower annual garden with solid center bed layout and Cridland's arborvitae hedge and three trellis structures in the background, circa 1930s (VAMA, V-1028, Alex Knauss Collection).

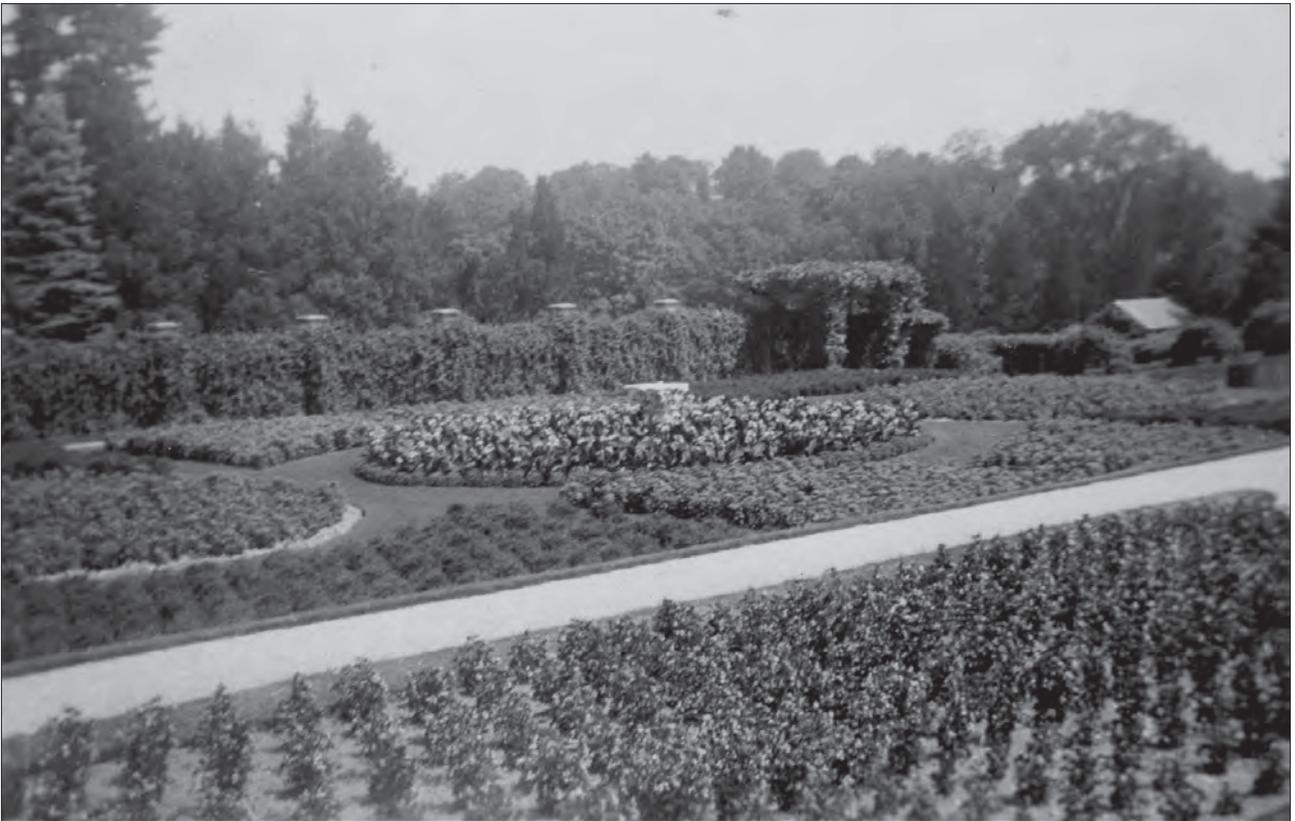


Figure 1.42. View looking southeast showing the upper annual garden, post 1922. The center bed is planted with canna with a low border, and the two circular beds flanking it also show a low flowering border of possibly alyssum. The tall evergreens of what was at this time the Italian garden are visible behind the vine-covered wall (VAMA, no. V-83, Alex Knauss Collection).



Figure 1.43. View looking southeast showing the upper annual garden, post 1922 (VAMA no. V-90, Alex Knauss Collection).



Figure 1.44. View looking northeast showing the upper annual garden, circa 1920s (VAMA no. V-1030, Alex Knauss Collection).



Figure 1.45. View looking north showing the lower annual garden, post 1922. The wing -shaped beds, foreground, are planted in pelargonium with an alyssum border. The center bed is solid and has a pennisetum border (VAMA, no. V-1034, Alex Knauss Collection).

In 1967, former Vanderbilt gardener Alex Knauss drew sketches of the annual gardens, indicating the plant arrangements as he remembered them (Figures 1.46 and 1.47). Knauss was a gardener for the Vanderbilts from 1924 through 1938, and his recollections help reveal the garden plantings of the later years of the historic period. Knauss provided only one planting arrangement for each of the two annual gardens, although photographs show that the plantings varied during the period. Nonetheless, the Knauss sketches show what might be considered a typical arrangement of the annual beds, and the annual species and overall planting strategy are consistent with both the historic photographic record and the estate purchase ledgers.

According to Knauss' sketches, the round center beds of the upper and lower annual gardens were planted with pink cannas with a border of pennisetum. This corresponds to nearly all of the historic photos. In the rest of the beds, according to Knauss, were planted with begonias, petunias, zinnias, and heliotrope. Each of these appears repeatedly in the estate purchase ledgers and are identifiable in historic photos.

The only notable change to the bed layout of the annual gardens during the historic period involved a change to central circular bed on the lower annual garden. Some photos show a smaller circular bed surrounded by a perforated ring of eight beds. Later photos show a single larger circular bed. The ring of beds appears in photos along with the arborvitae hedge, indicating that they were present at least as late as 1922.

It is not known who made the decisions about what was planted in the annual gardens. Cridland's only plan for this area, the 1916 plan, does not appear to have been implemented, and no other plans have been located that reflect the layout of the annual gardens as they appear in historic photos. It is possible that the layout of the annual beds were inherited from Langdon's gardens, and that year-to-year decisions about the plantings were made by Vanderbilt, his gardeners, or both.

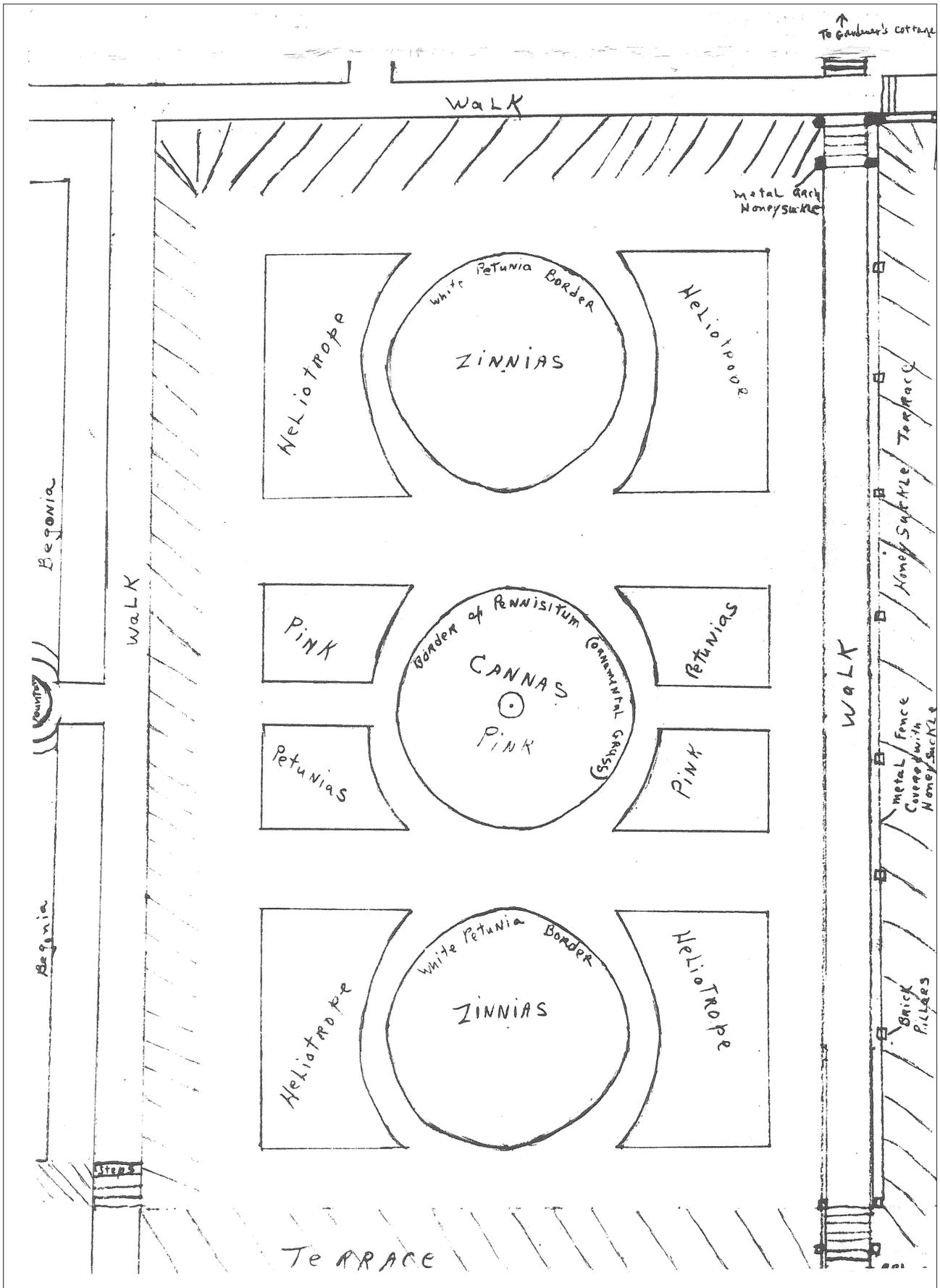


Figure 1.46. "Proposed Improvements in Formal Garden, for F.W. Vanderbilt, Esq., Hyde Park-on-Hudson, N.Y.," April 15, 1922, Robert B. Cridland, Landscape Architect, Philadelphia, No. 430 (VAMA, no. V-131B).

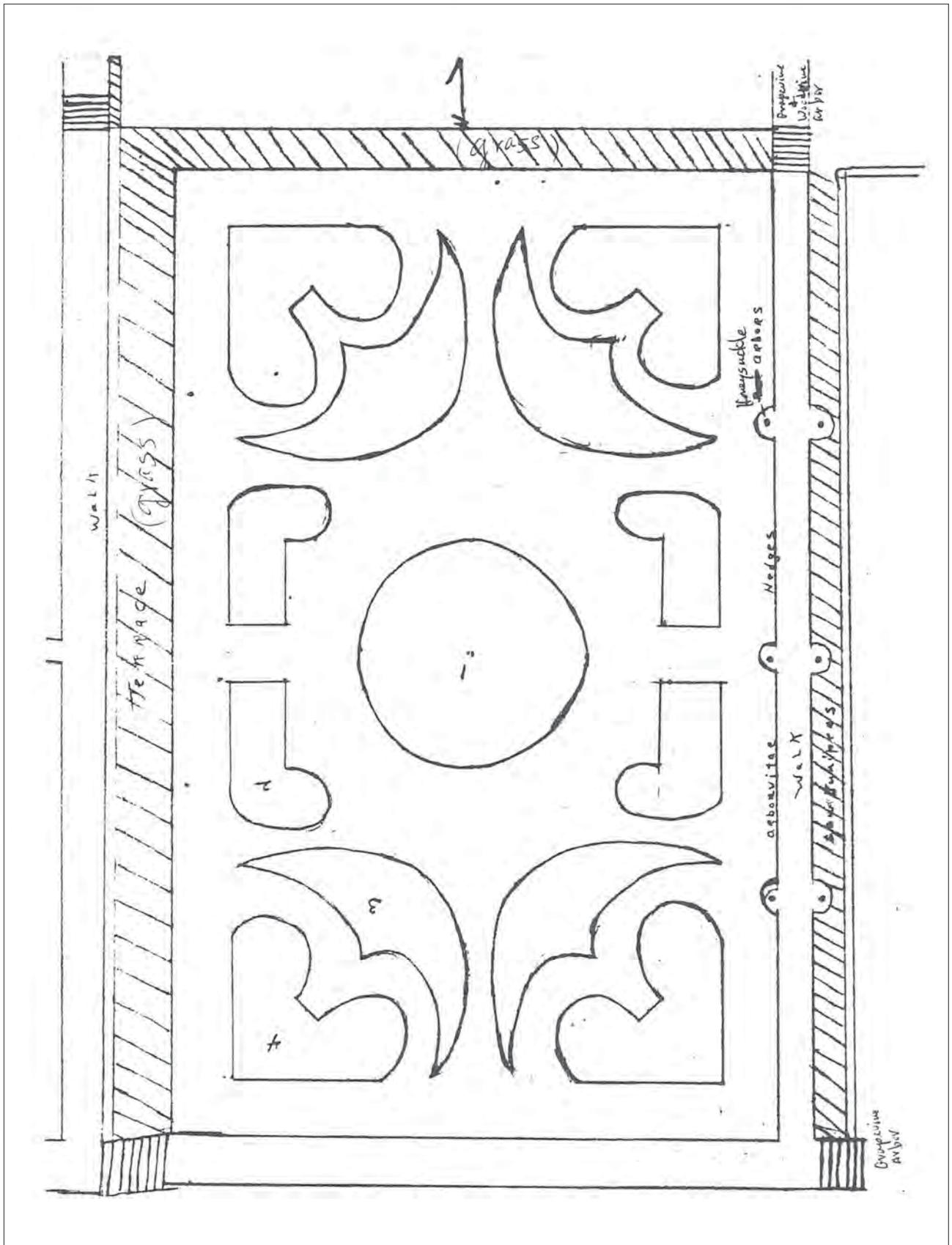


Figure 1.47. "Proposed Improvements in Formal Garden, for F.W. Vanderbilt, Esq., Hyde Park-on-Hudson, N.Y.," April 15, 1922, Robert B. Cridland, Landscape Architect, Philadelphia, No. 430 (VAMA, no. V-131B).

Path above the Lower Perennial Garden

In April 1922, Cridland developed plans that altered a portion of the garden frame and edge plantings between the lower annual terrace and lower perennial terrace. A plan entitled “Proposed Improvements in Formal Garden” includes elevations and plans for wire arches, pergolas, retaining walls and plantings (Figure 1.48). A second plan entitled “Pergola Plan” detailed the wooden lattice to be set on top of the existing pergolas (Figure 1.49). These elements are shown along the east walk of the lower annual garden. The hedge on the east side of the walk also turned at a right angle eastward to connect with the existing walls at the central north-south walk in the perennial gardens. This area was previously enclosed by a continuous trellis wall with window openings, developed by Greenleaf (see Figure 1.14).

Cridland specified hedges to frame both sides of the walk and three wire trellis structures. The hedges were arranged in two straight rows but curved around each of the three wire vine support arches that were evenly spaced along the walk. Figures 1.50 to 1.53 show the dense trimmed arborvitae hedges, each about four feet tall on either side of the walk. The three arches were covered with honeysuckle vine.

North Pergola

In 1922, Cridland developed a “Design for Remodeling Pergola” (Figure 1.54). Cridland retained the brick and stone piers developed by Greenleaf but replaced the former peaked rafters with a series of graceful ogee curved members. Cridland’s modification in the 1920s helps to date photographs in this part of the garden. Historic photographs indicate that when Cridland’s plans were implemented, the vines planted by Greenleaf were either removed or severely pruned.

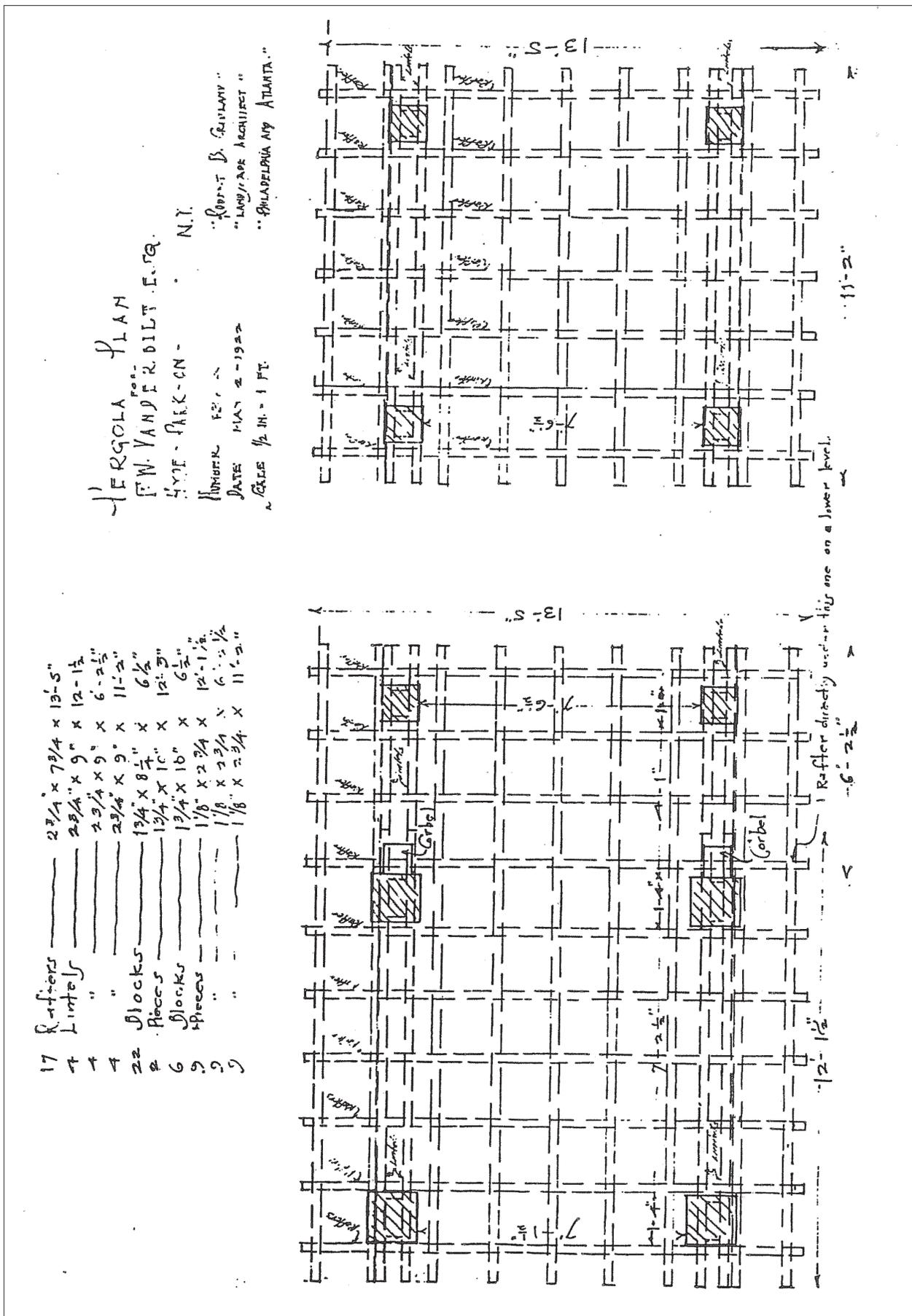


Figure 1.49. "Pergola Plan for F. W. Vanderbilt, Esq., Hyde Park, New York, Plan #V30A, Scale 1/2"=1 ft, Robert B. Cridland, Landscape Architect, Philadelphia and Atlanta," showing specific dimensions for overhead pergolas in the gardens (VAMA).



Figure 1.50. View looking southeast showing the upper annual garden with Cridland's arborvitae hedge and three trellis structures in the background, circa 1922 (VAMA, Molly Tompkins estate, F. W. Vanderbilt Garden Association Collection).

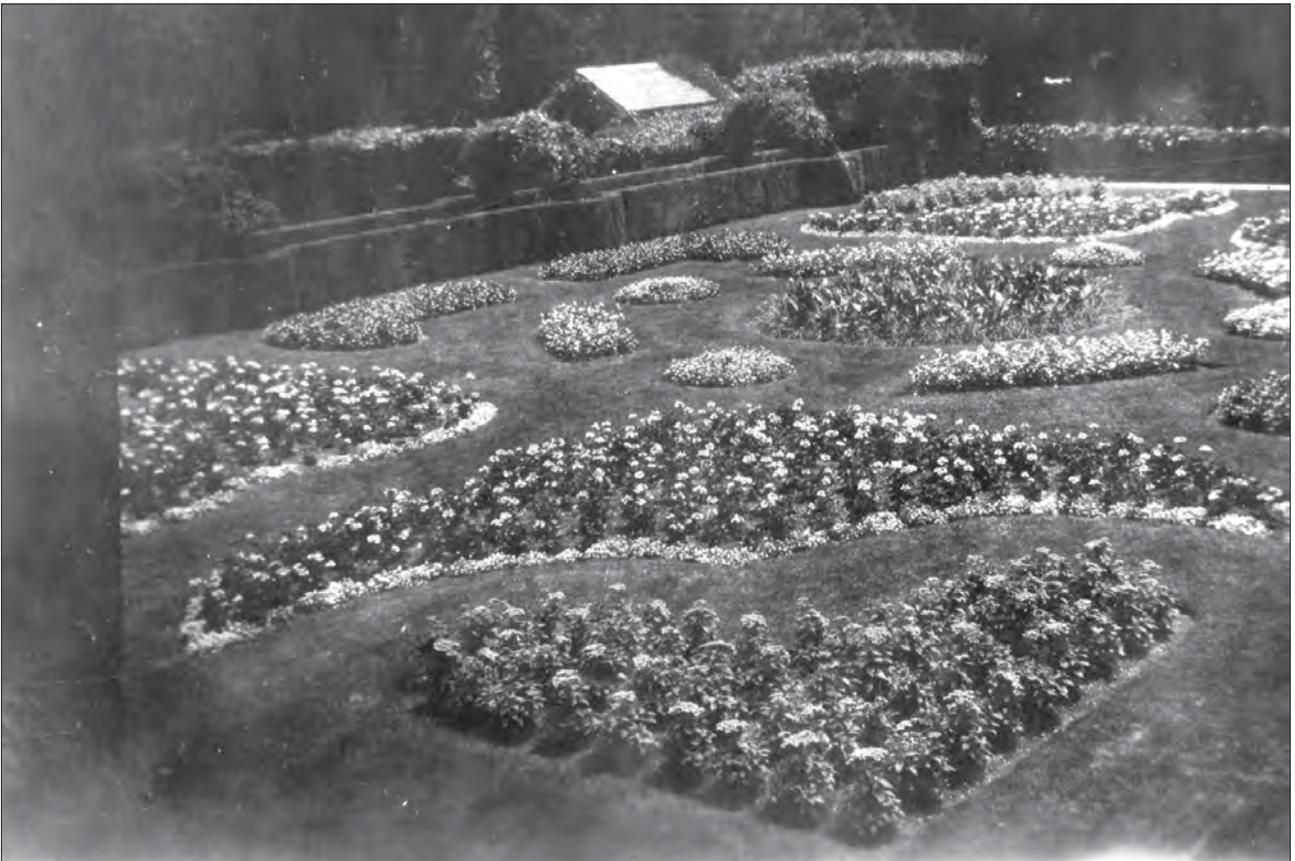


Figure 1.51. View looking southeast showing the lower annual garden with the early bed layout and Cridland's arborvitae hedge and three trellis structures in the background, circa 1920s. The heart-shaped beds appear to be planted with heliotrope and the wing beds are pelargonium with a low alyssum border (VAMA, no. V-1027, Alex Knauss Collection).



Figure 1.52 View looking northeast in the lower annual garden with Cridland's arborvitae hedge in the background, circa 1924. Note the dense stand of evergreens in the Italian garden beyond the new hedge (VAMA, Alex Knauss Album, page 3).



Figure 1.53. View looking north showing Cridland's arborvitae hedge and wire trellis arches between the lower annual and lower perennial gardens, circa 1939. Note the removal of the dense stand of evergreens in the perennial garden (VAMA, no. V-747, Lean Froats Collection).

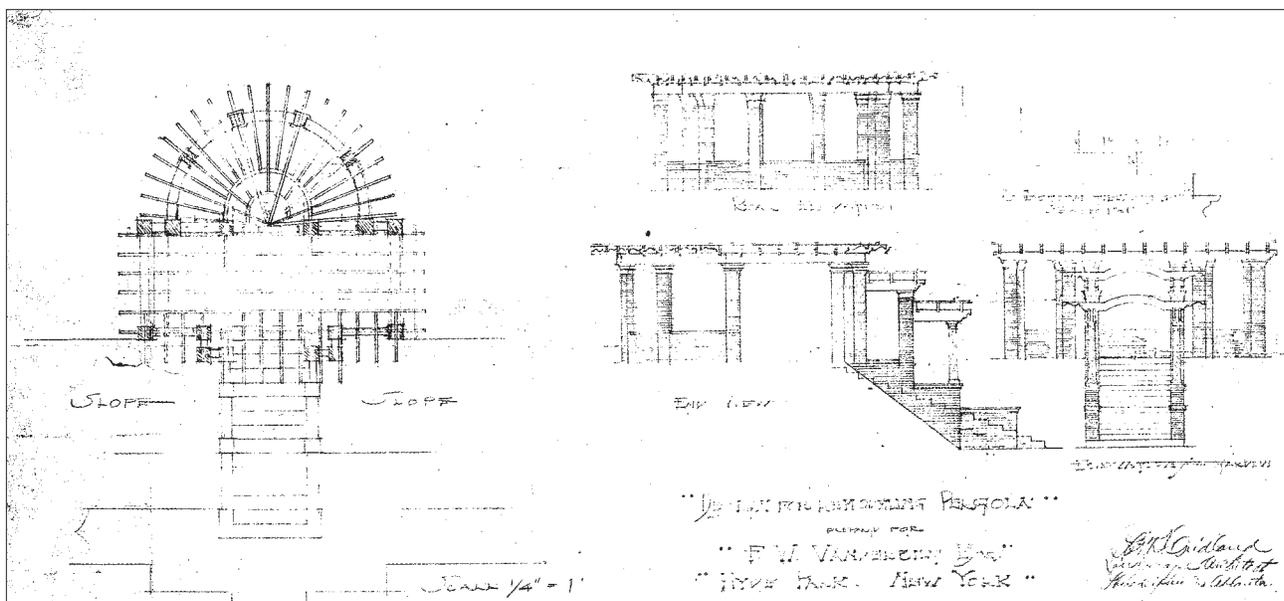


Figure 1.54. Design for Remodeling Pergola, for F.W. Vanderbilt, Esq., Hyde Park, New York," no date, Robert B. Cridland, Landscape Architect, Philadelphia, circa 1922. (VAMA, no. V-130).

Upper Perennial Garden

Around 1934, Cridland re-designed the upper perennial garden area. Cridland's plans included the replacement of overgrown evergreens with smaller flowering trees and shrubs, reshaping of the sloped banks along the central walk, adding low dry laid stone retaining walls to hold the banks, and planting perennials and bulbs on top of and below the stone walls as well as in small pockets in the wall itself.

Cridland's plan for the upper perennial garden, entitled "Garden Plan," is shown in Figure 1.56. It is undated but estate purchase ledger entries place the implementation of this design during 1934. This plan and the companion documents that include construction details, specify the removal of all former plantings from this portion of the Italian garden. Cridland's plan shows a linear design for the space. The grading is changed from slopes flanking the central walk to a pair of dry laid stone retaining walls.

Cridland specified rows of densely planted ornamental trees and shrubs. Closest to the walk were two rows of six, double pink, Japanese cherry trees set in a rectangular lawn panel. Behind the cherry trees stood two pairs of mirror image plant rows at the garden edges paralleling the cherry trees. The first row contained long plantings of hydrangea punctuated with five single blue flowering hibiscus shrubs. The hibiscus plants were centered between the Cherry trees. The back row contained fifteen columnar Japanese cherry trees of the variety 'Amanogawa' (Cridland labeled these 'Amagawa') in five groups of three, and six pyramidal arborvitae.

At the southern end of the upper perennial garden, where the brick walls retained the slope, Cridland called for an evergreen hedge running east to west across the southern end of the upper level to terminate the cherry tree row and linear

plantings (Figure 1.55). This hedge resembled the hedge installed by Greenleaf, which had become overgrown.

At the lower level clusters of paired baptisia added an element of height to the low perennial plantings which were followed by a mass of delphinium and lilies. Matching bay plants were shown at the corner of each wall and the periwinkle border extended around to the end of the bed.

A plan prepared by Cridland in September 1934 detailed the contents of the long narrow beds in front of the dry laid stone retaining walls (Figure 1.57). The beds were designed to showcase a mix of seasonal color including yellow, blue, lavender, pink, and white as described above. The plants included 9 types of assorted bulbs and 50 species of perennials. An additional sixteen species were specified to be planted in wall pockets including creeping phlox, alpine aster, and sedum (Figures 1.58 to 1.60). The lower ends of the beds were punctuated with stands of assorted delphiniums, Madonna lilies, and periwinkle. While the overall design shown in Figure 1.57 was implemented and many of the individual plants can be identified, it is unclear whether all the specified plant materials were used.⁷⁴ Figures 1.61 and 1.62 show masses of blooming delphinium on both sides of the walk.

Cridland also added a new retaining wall along the west and north side of the lower perennial garden, between the steps on the southeast corner and the central walk, connecting to an existing wall. The wall separated the large pergola and pool house area from the higher level of the terrace to the west.



Figure 1.55. View looking north showing the beds along the central walkway to the north pergola, circa 1930s (VAMA).

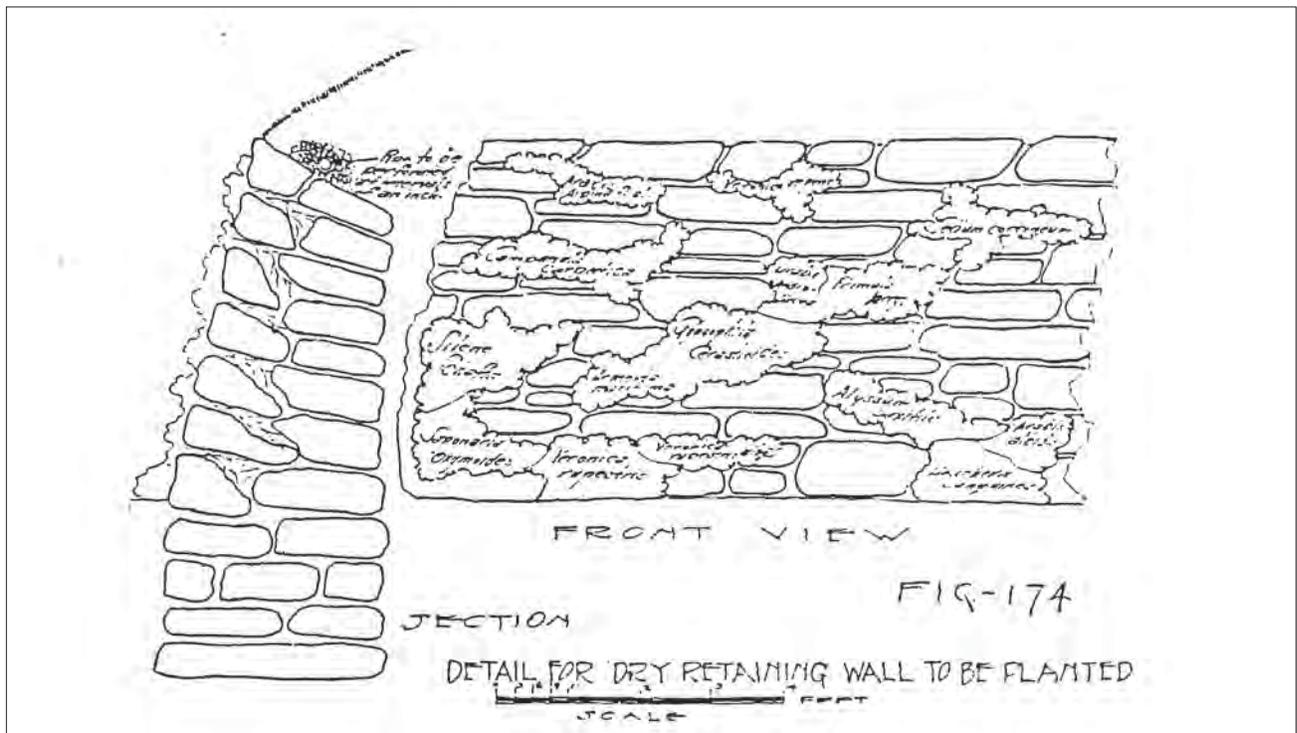


Figure 1.58. Detail for dry laid stone retaining wall to be planted from Cridland's book, *Practical Landscape Gardening*, 1925.



Figure 1.59. View looking south showing the upper perennial garden as redesigned by Cridland with rows of flowering cherry trees, dry laid stone retaining walls and mixed perennial beds, 1930s (VAMA, V-111, Alex Knauss Collection).



Figure 1.60. View looking north showing the upper perennial garden as redesigned by Cridland, 1930s (VAMA, no. V-3117 Rodney McKay Morgan Collection).



Figure 1.61. View looking northeast showing delphiniums at the lower end of the dry laid stone wall between the upper and lower perennial gardens, 1930s. Note the wrought iron arch on the north side of an arborvitae hedge, the “overthrow” of the faux wellhead in the lawn near the south end of the row of cherry trees along the west side of the central walk (VAMA).



Figure 1.62. View looking north showing the delphiniums at the lower end of the dry laid stone walls and the central walkway to the north pergola, 1930s (VAMA).

Lower Perennial Garden

Cridland's overall plan for the garden in 1916 included a redesign of the lower perennial garden, which was partially implemented in the 1920s (Figure 1.63).⁷⁵ This plan for the gardens offered a detailed planting plan of perennials for these beds. The plant list for the lower perennial garden contained over fifty different species and varieties. This planting plan was likely implemented, at least in part, but was modified through the years. Although the plants planted in these garden beds changed over the years, the character of this terraces remained relatively static.

Structural elements around the lower perennial garden were also modified by Cridland. The piers punctuating the wall between the lower perennial garden and the rose garden were raised and fanciful iron arches were added between them to provide picture-frame views of the garden below (a technique similar to Greenleaf's lattice wall).

Plantings around the pool appear to have been carried out in accordance with Cridland's design. Two views portray the evolution of the garden plantings surrounding the large pergola and pool, beyond the low, north-south wall. The conical evergreens are keyed as fern-leaved arborvitae (*Thuja plicata*) while approximately one hundred perennials are indicated. Figure 1.64 shows this area with a combination of conical evergreens and perennials in two generally

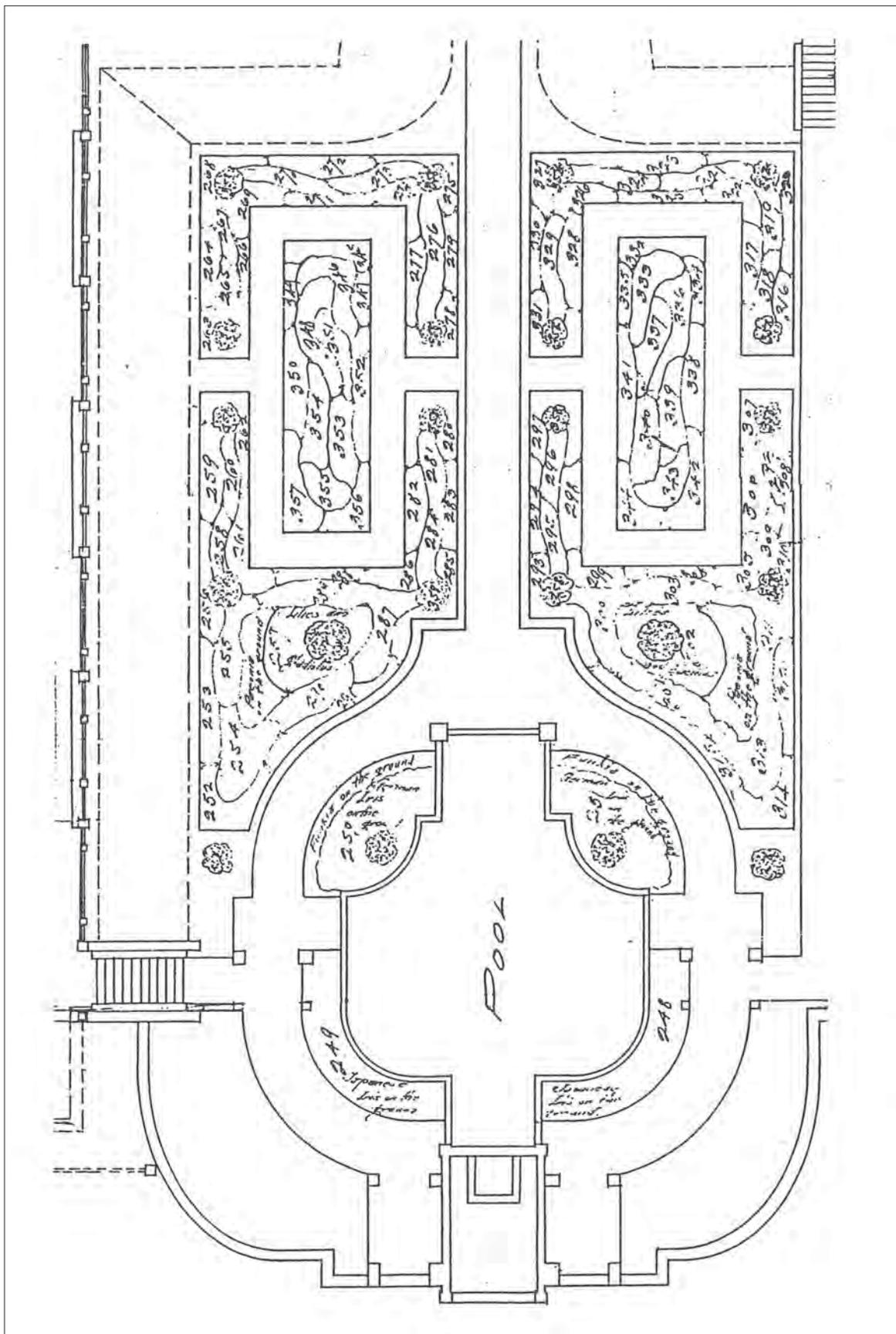


Figure 1.63. Planting plan for the lower perennial garden by Robert B. Cridland, Landscape Architect, 1000 Bailey Bldg., Philadelphia, circa 1916 (VAMA).

rectangular masses edged by turf borders. The bay plants in pots were similar in form and scale and were positioned at the pool.

Photographs taken between 1932 and 1935 by Alex Knauss show that the conical evergreens were removed by this time and beds of perennials in bloom appear with interior turf walks separating planted areas (Figures 1.65 and 1.66). *Digitalis* was placed sporadically throughout the beds punctuating the perennial masses. The juniper banks above the walls designed by Cridland in 1922 are also visible. Figures 1.67 to 1.70 show the beds closest to the pool. All areas were heavily planted, full of blooms, and well maintained.⁷⁶



Figure 1.64. View looking south showing the lower perennial garden, circa 1920s. Each bed is punctuated with sheared arborvitae. The groundcover in the foreground and the evergreen visible on the far left of the photo were part of the Italian garden planting scheme prior to 1934 (VAMA, V-121, Molly Tompkins estate, F. W. Vanderbilt Garden Association Collection).



Figure 1.65. View looking northeast showing the lower and upper perennial garden beds, circa 1930s. The arborvitae were removed from the lower beds and the cherry trees were planted above the upper beds around 1934 (VAMA, no. V-109, Alex Knauss Collection).



Figure 1.66. View looking southeast showing the lower perennial garden after the arborvitae had been removed, circa 1934 (VAMA, no. V-110, Alex Knauss Collection).

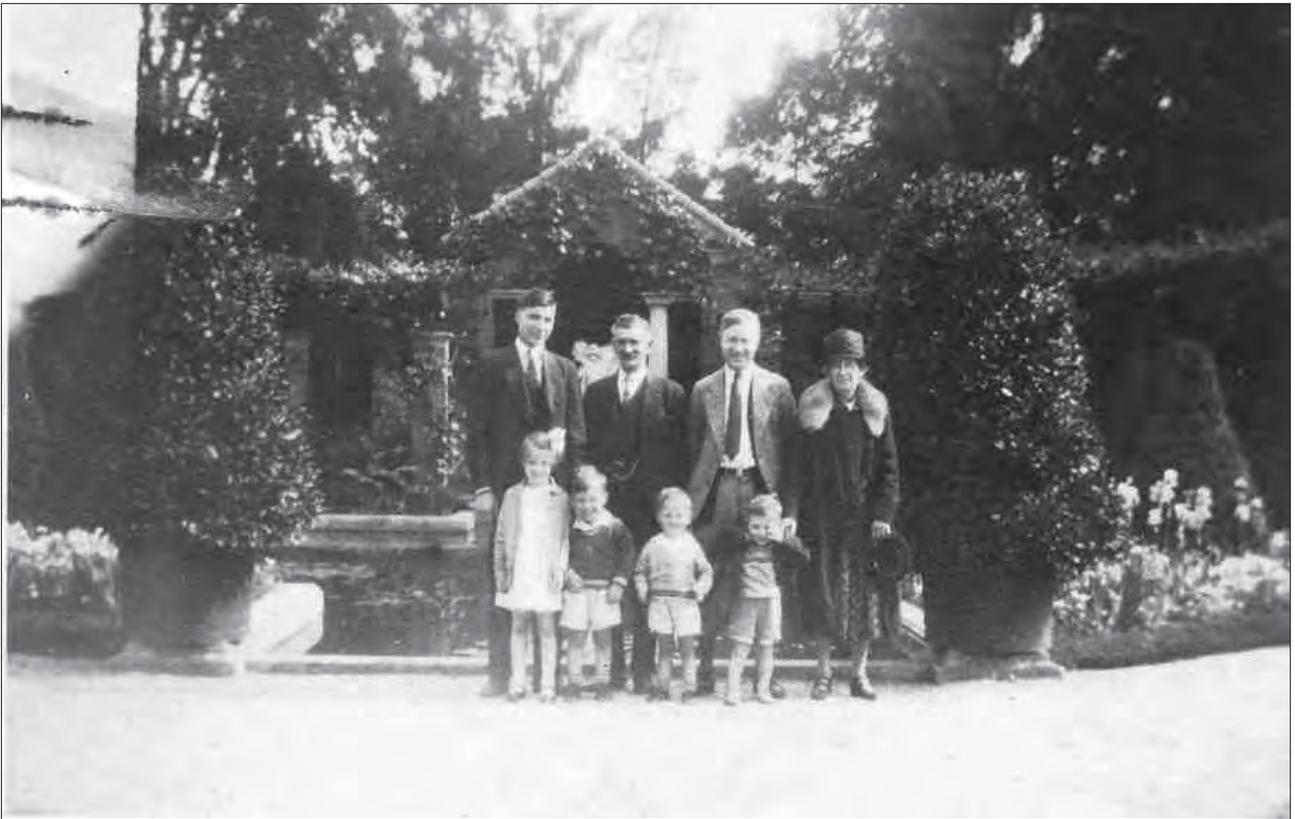


Figure 1.67. View looking south showing the pool house and reflecting pool with potted bay plants and iris blooming, circa 1920s (VAMA, V-18, Alex Knauss Collection).



Figure 1.68. View looking northwest showing the reflecting pool with water lilies, iris, and sheared arborvitae in the adjacent bed, and one of two potted bay plants, circa 1920s (VAMA, no. V-121, Molly Tompkins estate, F. W. Vanderbilt Garden Association Collection).



Figure 1.69. View looking east showing John Moore in the pool and two gardeners tending the adjacent bed, circa 1920s. Sheared arborvitae and the vine-covered arbors above the rose garden are visible in the background (VAMA, no. V-107).



Figure 1.70. View looking south showing the pool house and statue of an odalisque, with iris in the foreground, post 1904 (VAMA).

Rose Garden

Cridland prepared an undated plan entitled “Rose Garden Arrangement for F.W. Vanderbilt Esq.” in about 1916 (Figure 1.71). Cridland also designed and oversaw the construction of the rose garden loggia (Figures 1.72 to 1.75). Cridland organized the rose beds by color and form rather than by cultivars. He specified assorted roses in the edge beds with climbers on the fence and white climbing roses at each brick pier.⁷⁷ White roses were to be planted at the face of the upper brick wall between the two steps. The two upper parterres are shown in mirror image arrangements of pink, white, yellow, and red roses around the edges. A note to these center beds states, “See plan from Wadley and Smyth for baby ramblers and bedding roses.” No plan by Wadley and Smyth is in the park’s collection. These baby rambler, or polyantha roses, would have been full and short and were likely intended to fill in the bed below the standards. Six rose standards are also lined up on each side of the central steps at the upper level while climbing roses and assorted hybrid teas are shown at the base of the wall flanking the steps. At the lower level the parterres are also arranged in mirror image by color. Two central beds on each side are shown with five standards each and bear the same note regarding baby ramblers and bedding roses as the one above.

Former Vanderbilt gardener Alex Knauss recalled that red and crimson carnations and roses were a favorite of Fredrick Vanderbilt, and they were sent to his bedroom each morning. Louise Vanderbilt had a passion for yellow and insisted that yellow roses be placed on the French desk in the drawing room each morning. These color preferences, together with white and pink, were featured in Cridland’s layout. Deep red roses, Frederick Vanderbilt’s favorite, were placed around the fountain pool as a focal point, with pink and white roses in adjacent beds. Mrs. Vanderbilt’s favorite, yellow roses, were placed along the outer walkways and along the center walkway of the upper terrace. White and pink roses fill out the balance of the internal bed, with assorted roses in the perimeter beds and white climbers on all of the brick piers and the west wall.

The narrow beds on the lower terrace appear to have been used to showcase specific varieties of roses. These were mostly tea roses, hybrid teas, and hybrid perpetuals, and like the other beds, were arranged by color. Cridland favored hybrid teas, offering his assessment of them in his 1916 book *Practical Landscape Gardening*:

The hybrid tea Roses are popularly known as monthly or ever-blooming sorts. They are most satisfying for garden purposes, as they are usually of neat habit with pleasing foliage and fragrant flowers, in many delicate and beautiful colors. There are so many varieties to choose from now, that a selection must depend largely on the taste of the individual.⁷⁸

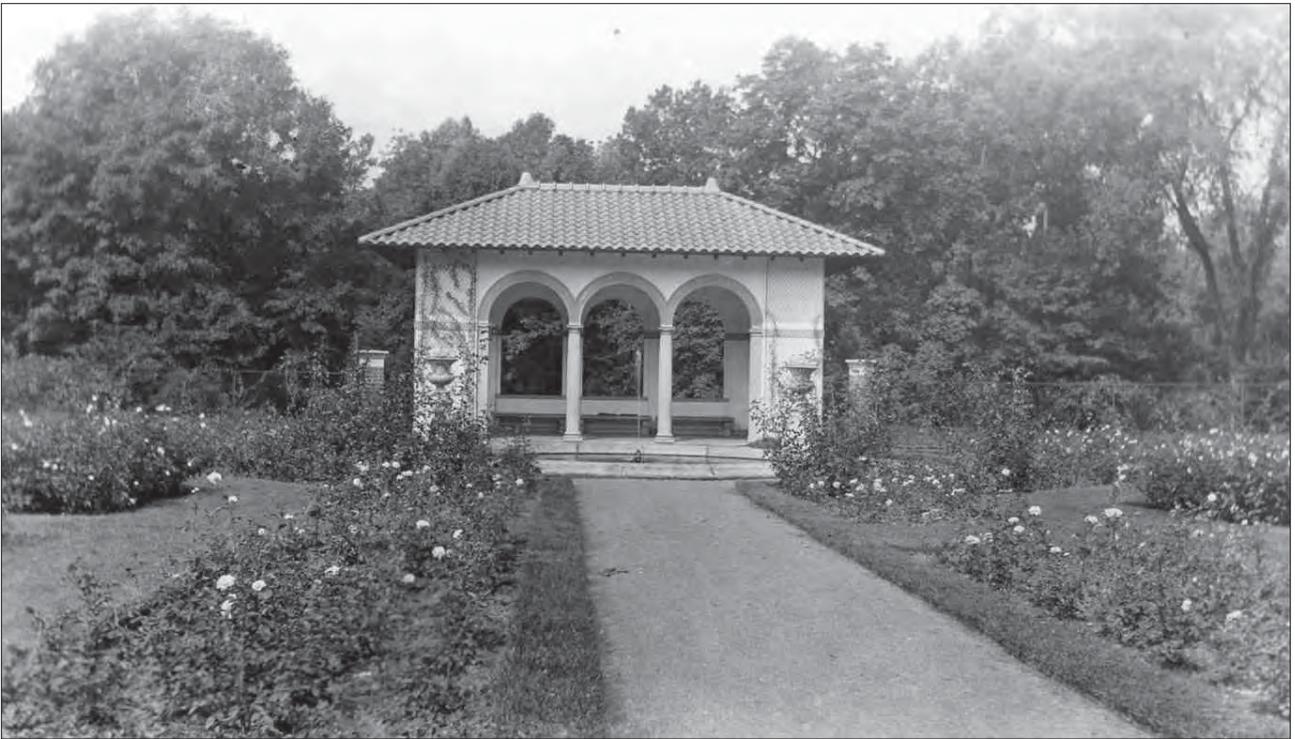


Figure 1.72. View looking east showing the rose garden loggia flanked by ornamental vases with the frog fountain at center, circa 1922. Shrubs planted outside the perimeter fence are barely visible (VAMA, no. V-41, Alex Knauss Collection).



Figure 1.73. View looking east showing the loggia without vases or bay plants, circa 1930s. The frog fountain has been replaced with the Orpheus fountain and pedestal. The roses have overgrown their beds (VAMA, 6020, F. W. Vanderbilt Garden Association Collection).



Figure 1.74. View looking southeast showing the rose garden (VAMA, V-33, Alex Knauss Collection).



Figure 1.75. View looking northeast showing the rose garden and loggia with beds of canna visible in the foreground, circa 1924 (VAMA, Molly Tompkins estate, F.W. Vanderbilt Garden Association Collection).

Cridland also recommends the incorporation of hybrid perpetuals or June roses as they:

...make a splendid showing in June when the plants are in full bloom. After that they have but a scattering bloom during August and September. A few of the best varieties are Frau Karl Druschki, white; General Jacqueminot, crimson; Ulrich Brunner, cherry red; Mrs. R. Sharman-Crawford, deep pink; Magna Charta, bright pink.⁷⁹

While these roses do not appear specifically on Cridland's plan, they do, with the exception of Magna Charta, appear as entries in the ledgers between 1913 and 1917. Cridland's Plan also indicates the use of assorted roses in the beds skirting the perimeter pathway, and it is likely that hybrid perpetuals were included in these borders as well.

Cridland's plan does not specify rose varieties, but only indicates the color and form of the roses to be planted. A separate plan has hand-written notes (in handwriting different than Cridland's) identifying rose varieties that correspond to the colors indicated by Cridland (Figure 1.76). These notes may have been added by one of the gardeners or by Vanderbilt himself. The varieties do, however, correspond to rose varieties Cridland recommends in *Practical Landscape Gardening*. The rose varieties indicated on the unattributed plan are listed in Table 1.2.

The Vanderbilt purchase ledgers list "900 roses" at the time of the original design, with no indication of variety. However, rose purchases over the next several years, ordered in small quantities likely as replacement roses, give an idea of how the colors were filled out. Deep red and crimson roses such as Hadley, General Macarthur, and Gruss an Teplitz surrounded the fountain pool. White Augusta Victoria roses provided calmness from the intensity of the crimsons before giving way to the soft creamy pink tones of Vicountess Folkstone that flanked the central axis of the garden. The perimeter path was surrounded on either side by the apricot hue of Lady Hillington, the deep rose of Jonkeet J L Mock, and the silvery pale pink of La Tosca, amongst others. On the upper level of the rose garden two long beds were filled with the deep crimson of Hoosier Beauty and contrasted with the white standards that lined the retaining wall overlooking the lower rose garden. Molly Sharman Crawford added the white accent, while Mme Abel Chatenay and Mme Ravary provided delicate pink. Turf paths connected each of the beds allowing access to the beds.

Many of the roses selected also are characterized by their deep fragrance and the most fragrant were planted in beds adjacent to central pathways and the loggia pool and building, further enhancing the sense of romance of the location. The location of the garden was also conducive to enjoying the garden in the later afternoon and early evening when the sun bathed the loggia in soft sunlight and allowed the fragrance to develop.

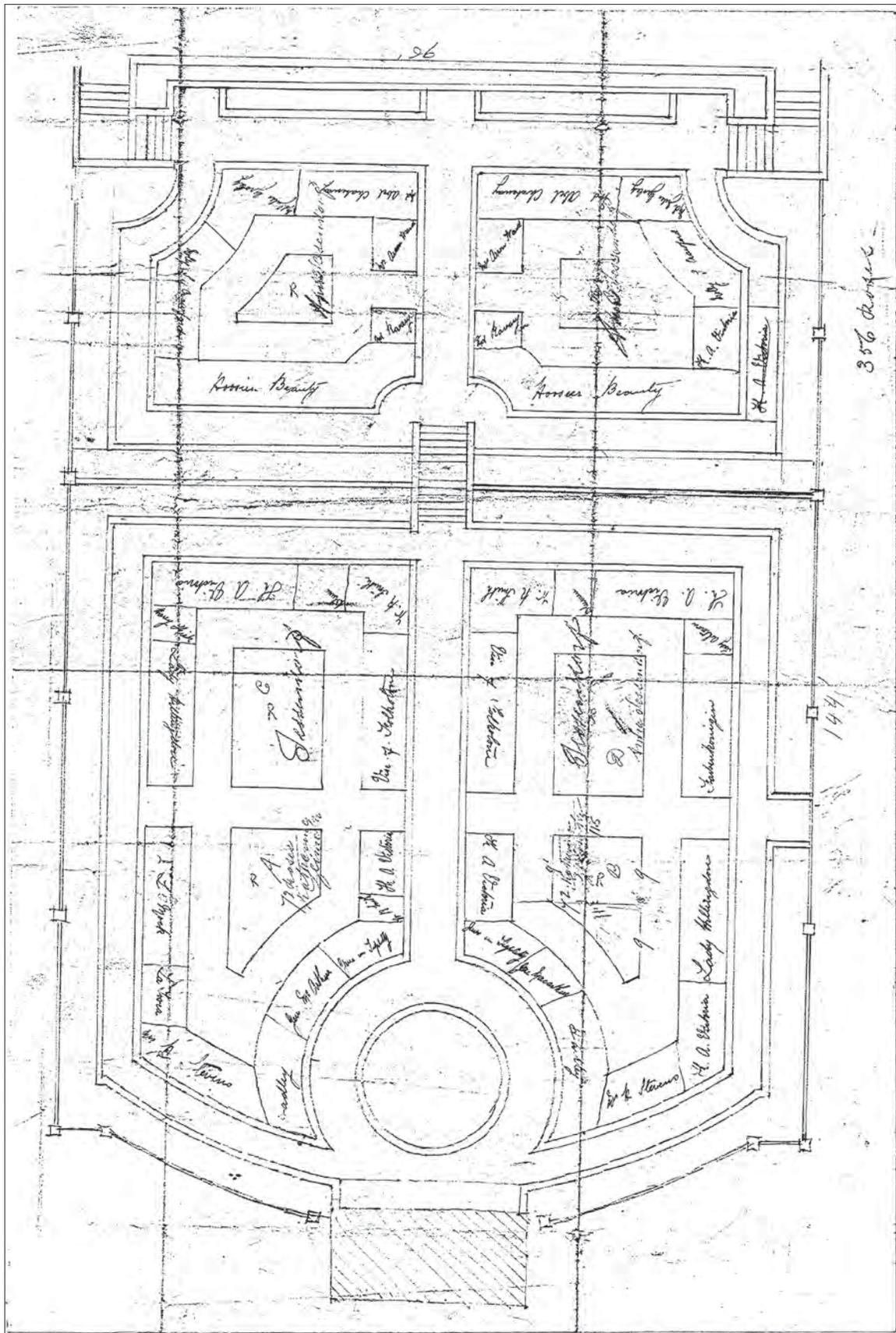


Figure 1.76. Drawing of the rose garden with handwritten rose varieties, circa 1916. The drawing is unattributed and is written in a different hand than Cridland's (VAMA, no. V-124).

Table 1.2. Rose Varieties

Red	Yellow
Crimson Baby Rambler	Harry Kirk
Hadley	Lady Hillingdon
Gruss an Teplitz	Mrs. Aaron Ward
General MacArthur	Mme. Ravary
Hoosier Beauty	
Pink	White
La Tosca	White Baby Rambler (Katharina Zeimet)
Lady Ashtown	Kaiserin Augusta Victoria
Jonkheer J. L. Mock	Mrs. Herbert Stevens
Viscountess Folkstone	Molly Sharman Crawford
Mme. Abel Chatenay	William R. Smith
Mme. Jules Grolez	
Fabekonigen	

Neither Cridland's plan nor the unattributed plan listing rose varieties specifies the variety of white climbing roses adjacent to the brick piers, but Cridland does recommend Alberic Barbier, a double pure white, and Gloire de Dijon, a white shaded with salmon, in *Practical Landscape Gardening*.⁸⁰ There is no photographic evidence that the standard roses depicted on the plan were ever planted, or perhaps they were planted and failed and then substituted with something more suitable.

Cridland's undated drawing for the loggia garden specifying rose plantings most closely corresponds to historic photos and to entries in the purchase ledgers. This plan, or something similar, appears to have characterized this terrace for about twenty years, from its inception in the 1910s until the end of the historic period. Some of the earlier photos show perennials on the upper terrace and roses on the lower terrace, suggesting a possible phased implementation of the switch from perennials to roses, but later photos show the entire loggia garden planted with roses.

Shrub Plantings around the Gardens

A drawing done by Cridland in April 1917 shows additions to the perimeter planting around the rose garden originally designed by Meehan and Sons (Figure 1.77). In his book Cridland writes about the technique of screening the garden:

The outside line of the garden on the lawn side should always be hidden with foliage. A mixed plantation of flowering shrubs, with a few pyramidal evergreens at the corners, is very effective . . . The flowering shrubs outside the garden, lifting their heads above the garden enclosure, add a charm to the scene quite in tune with the floral effects within, and the sinuous outline of the border plantation is in perfect harmony with the naturalistic aspect of the garden from without. At desirable viewpoints, the planting should be low so that a glimpse may be had of the lawn, plantations or distant scenes.⁸¹

Cridland recommended in general upright shrubs that “... produce their greatest wealth of bloom toward the top,” and specifically mentioned lilacs, Japanese snowball, deutzia, honeysuckle, and privet, which were included in his specifications for shrub planting around the Vanderbilt formal gardens.⁸² Other species included in Cridland’s planting plan included viburnum, spirea, hydrangea, barberry, stephanandra, forsythia, weigela, mock orange, yew, Virginia creeper, and English ivy. At the corners Cridland specified nine Oriental spruce and eleven arborvitae.

The purchase ledgers indicate that the Vanderbilts acquired numerous shrubs through Cridland between 1916 and 1919 including 36 rhododendron in 1916, unspecified quantities of nursery stock in 1917, 100 Japanese barberry in 1918,

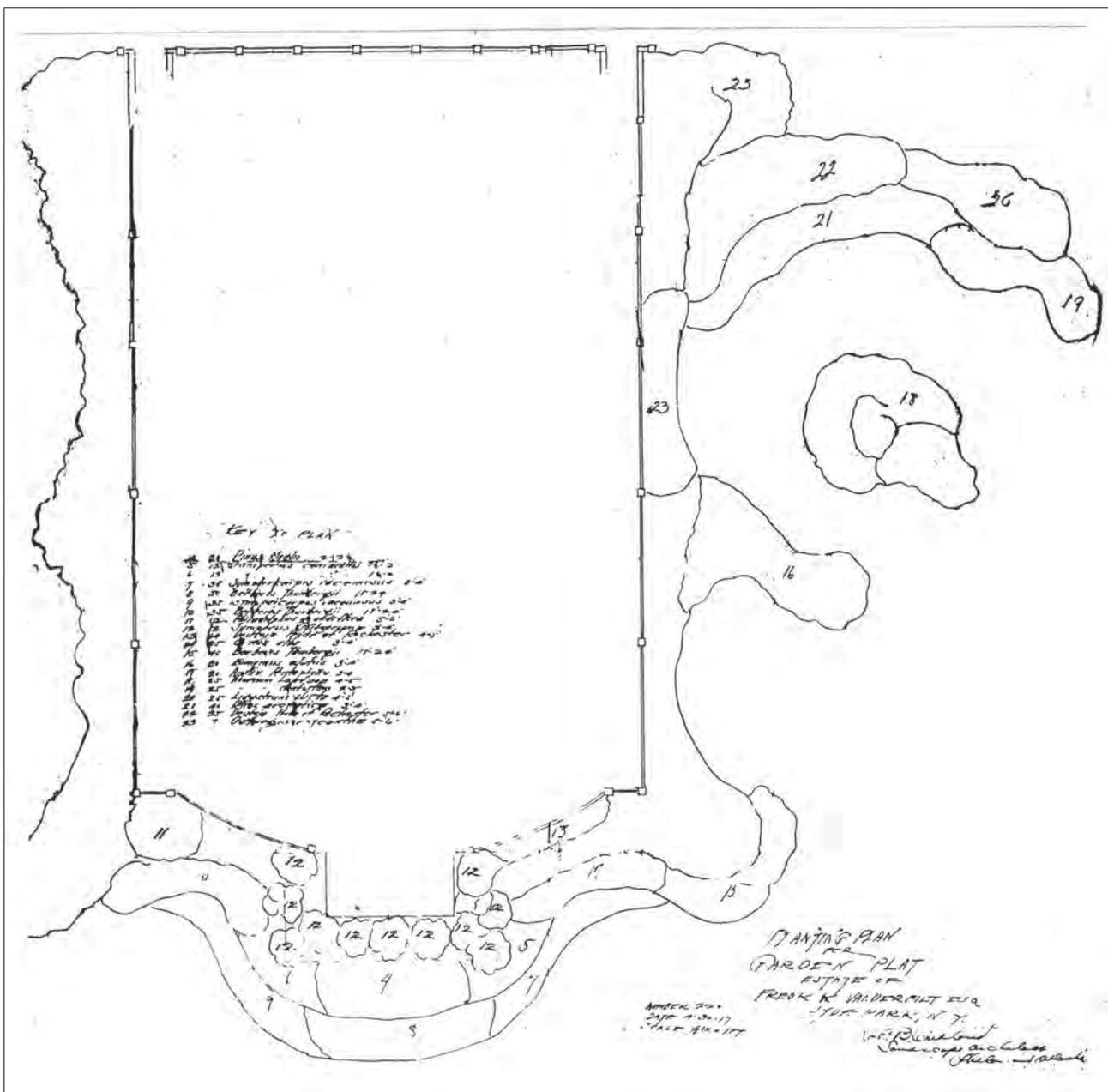


Figure 1.77. Planting plan by Robert B. Cridland for trees and shrubs surrounding the rose garden prepared April 30, 1917 with twenty flowering shrubs and evergreen trees specified (VAMA).



Figure 1.78. View looking east showing the southwest corner of the garden and south ends of the rose houses, circa 1920s or 1930s. A portion of the gate is visible and a decorative vase (VAMA, no. 3009, F.W. Vanderbilt Garden Association Collection).



Figure 1.79 View looking northwest showing one of the decorative vases by the south end of the rose house, circa 1920s (VAMA, no. V-11).

and many additional evergreen trees and shrubs in 1918 and 1919. Some of these shrubs may have been installed around the formal gardens while others many have been incorporated into Cridland's foundation planting for the mansion.

Garden Ornaments

Numerous garden ornaments are visible in photos from this period. The sculpture of the odalisque in the pool house remained, as did the boy and dolphin fountain on the fountain terrace. The frog fountain in the rose garden was replaced in 1925 with a much larger fountain featuring Orpheus with a dolphin. A large carved marble vase was located between the two wings of the rose house on the south edge of the gardens, as visible in Figures 1.78 and 1.79, and was likely matched by a second one between the wings on the north side of the rose house, as visible in the 1938 aerial (Figure 1.80). The Corinthian capitals, initially placed near the reflecting pool were moved to the upper annual terrace and the north side of the rose house as captured in c. 1940s photograph (see Figures 1.16, 1.19, 1.22, and 1.81). Metal gates marked the entrances to the gardens, including an ornate iron gate at the entrance on the palm house terrace and a more simple iron gate at the southwest entrance near the rose houses (see Figures 1.78 and 1.82).

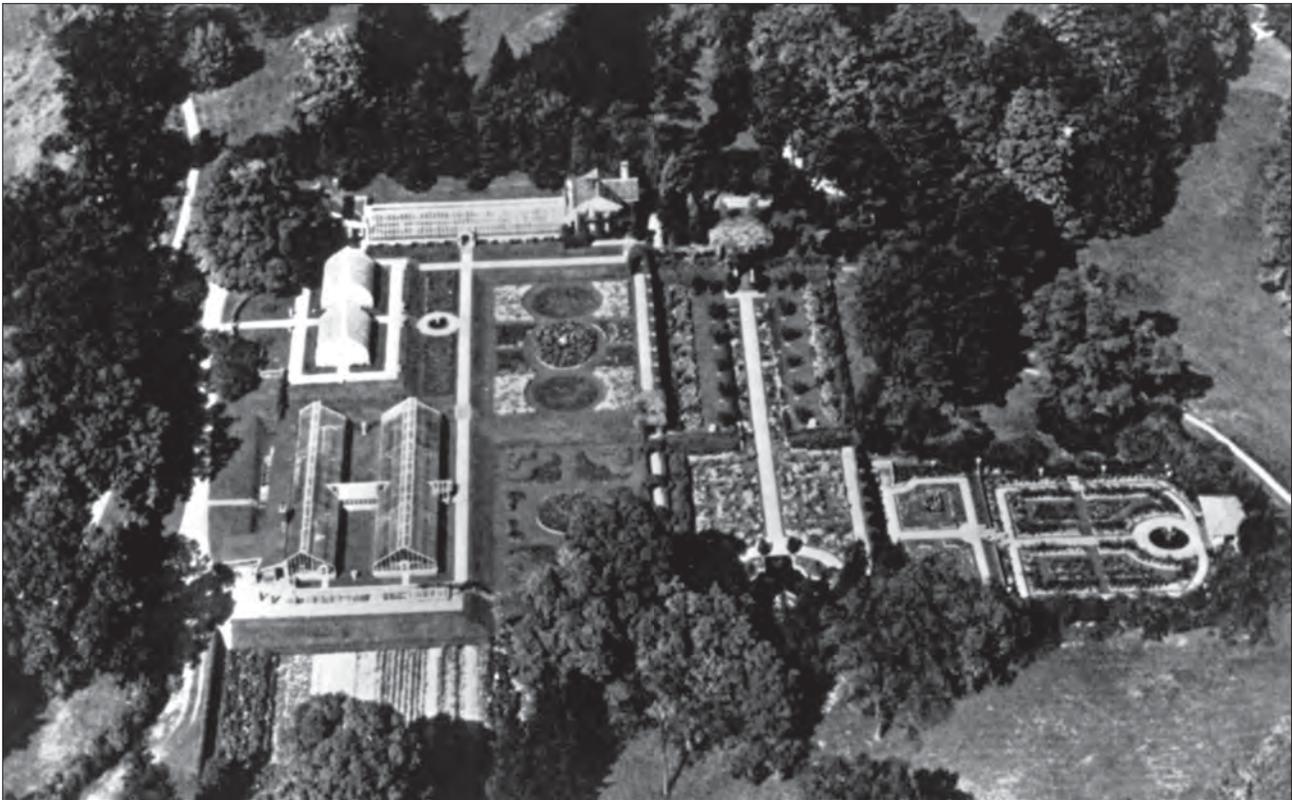


Figure 1.80. Aerial view of the formal gardens and surrounding landscape, late 1930s (VAMA, no. 71592).

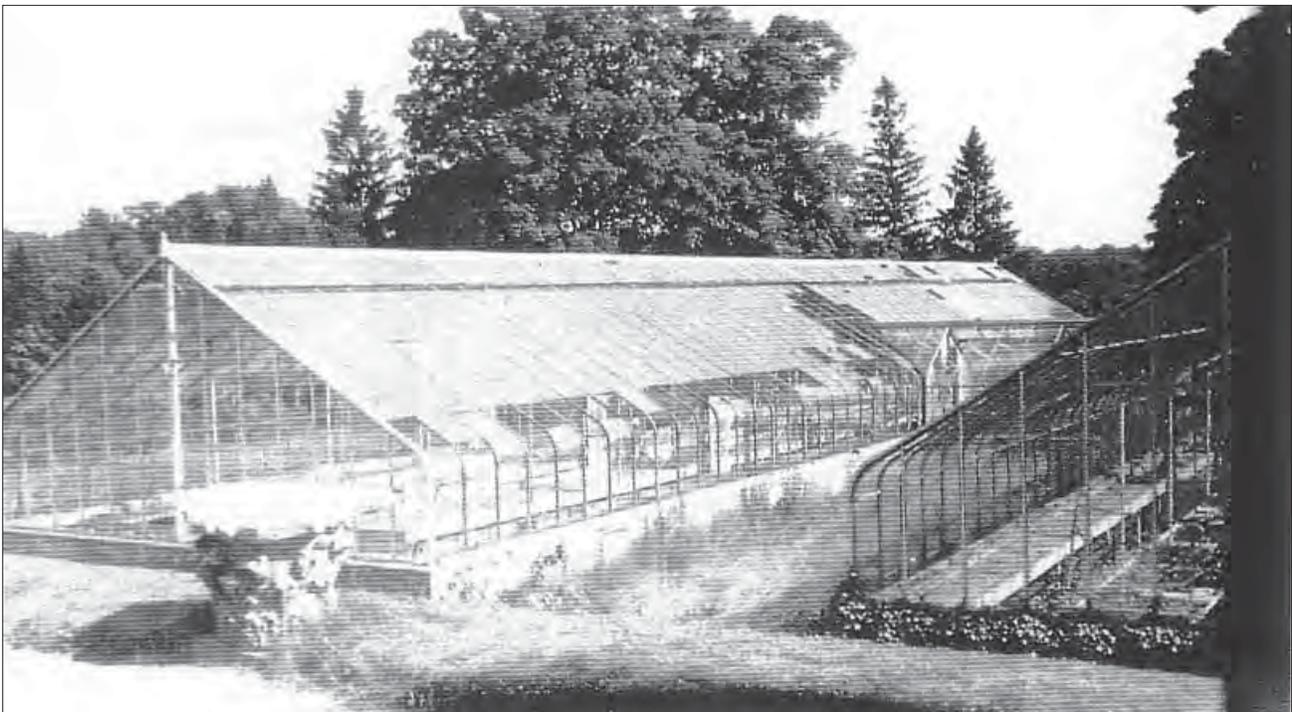


Figure 1.81 View looking southeast showing the abandoned rose house with a Corinthian capital at the southern edge of the palm house terrace, circa 1940s. The capital was originally placed by the reflecting pool in the early 1900s but moved to the palm house terrace in about 1910 (VAMA, no. 3000, F. W. Vanderbilt Garden Association Collection).



Figure 1.82. View looking east showing three gardeners standing at the southwest corner of the formal gardens near the Rose House, circa 1920s. The metal gate is visible behind them showing its simple design (VAMA, no. 3010, F.W. Vanderbilt Garden Association Collection).

FORMAL GARDENS IN 1938

At the time of Frederick W. Vanderbilt's death in 1938 the gardens and greenhouses were in excellent condition with a staff of several gardeners. The layout of the garden beds at this time is shown in an aerial photograph, axonometric drawing, and period plan (Figures 1.80 and 1.83 and Drawing 2). While most of the garden beds contained design modifications by Cridland, the overall framework of the garden terraces, walls, and associated structures remained intact from the early 1900s. Unfortunately, the exact planting bed contents are undocumented in 1938. However, two years later the National Park Service inventoried the contents of the garden beds and prepared a Master plan in the following year, which will be discussed in the next section.

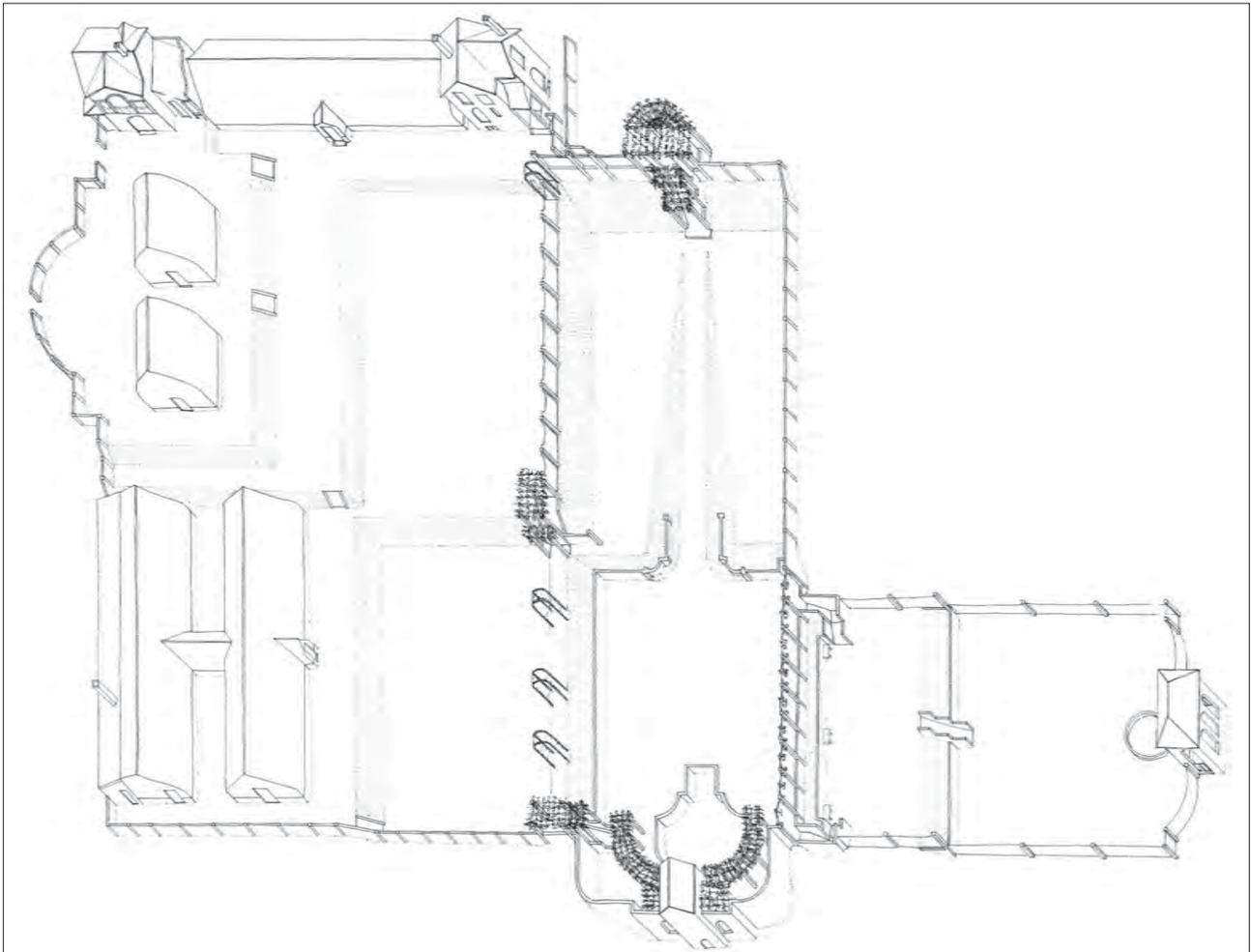


Figure 1.83. Axonometric of Formal Gardens 1922–1923 showing Meehan addition of Rose Garden structures and Cridland modifications to Italian garden structures and walls, John Robbins, NPS North Atlantic Region, 1981 (VAMA).

POST-VANDERBILT YEARS, 1938–PRESENT

When Mr. Vanderbilt died in 1938, the Hyde Park estate was bequeathed to Mrs. Vanderbilt's niece Mrs. James Van Alen, who in turn donated it to the United States government in 1940. President Franklin Delano Roosevelt, a friend and neighbor of the Vanderbilts, took an active interest in acquiring the estate for the American people, and continued to make suggestions and recommendations as the house and grounds were prepared to be opened to the public. Implementing Roosevelt's outline for development proved difficult, however, because of limited funds.⁸³

The estate was opened to the public in July of 1940. The Regional Landscape Architect and the Regional Supervisor of Historic Sites made the initial recommendations.⁸⁴ They noted that the greenhouses and formal gardens had already begun to decline in the two years since Mr. Vanderbilt's death as only three men were employed to care for the gardens and grounds. Roosevelt's request, however, that the greenhouses be restored to their original purpose and usefulness and the gardens maintained with simple planting initiated a discussion about their rehabilitation and upkeep.

An inventory of the contents of the formal gardens completed in August, 1940 is the only written document that records the contents of Vanderbilt gardens. Shortly thereafter, as part of the 1941 Master Plan, Associate Landscape Architect Walter A. J. Ewald completed a "Planting Guide for Perennial Borders for the Vanderbilt Gardens."⁸⁵ Initially the Civilian Conservation Corps (CCC) helped maintain the gardens. The use of CCC labor was soon curtailed by World War II

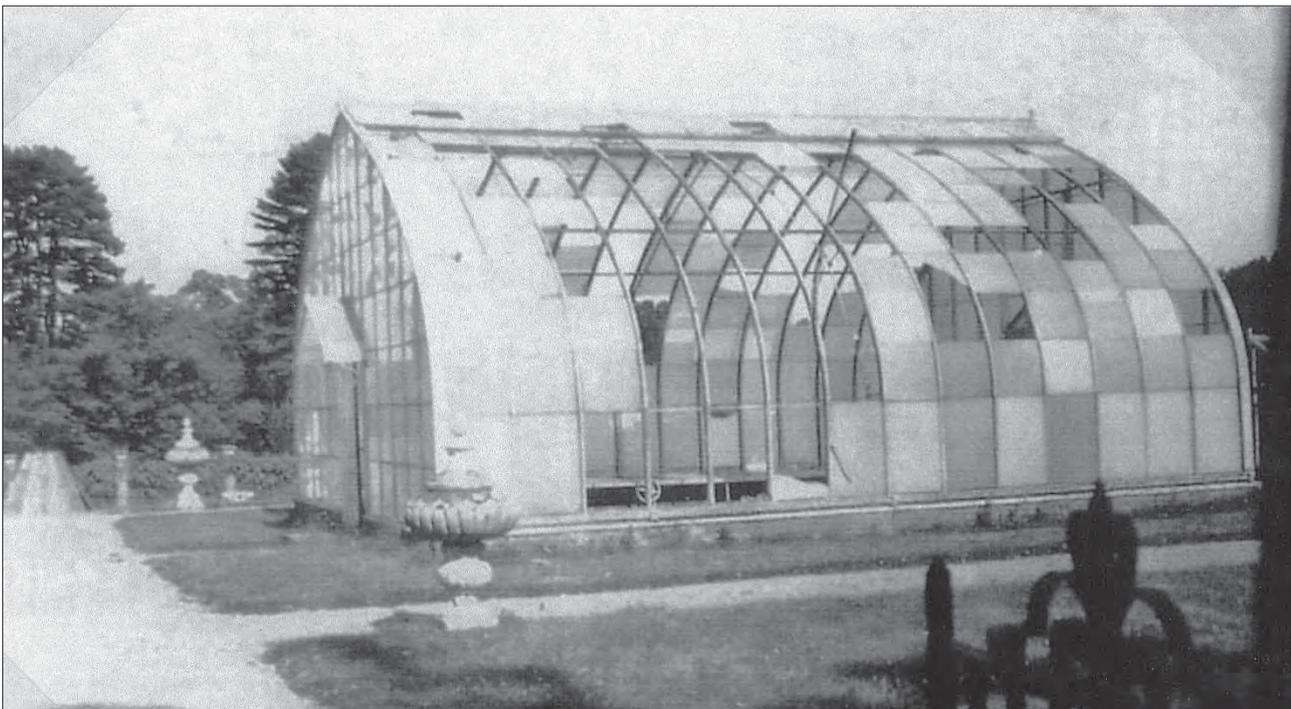


Figure 1.84. One of the Palm houses in disrepair, circa 1940s. (VAMA, no. 1001, F. W. Vanderbilt Garden Association Collection).

and the maintenance of the greenhouses and gardens proved to be “extremely difficult . . . terribly discouraging and very impractical.”⁸⁶

The formal gardens were closed to visitation in 1943 and gradually dismantled throughout the next two decades. In 1946, the rose and palm houses were put up for sale as surplus property (Figure 1.84). Only the rose house sold in 1947. In 1950, one palm house was destroyed, and all glass was removed from the remaining palm house. The dismantling of the timber framing of the pergolas occurred in 1951, and 1954 saw the removal of the remaining palm and carnation houses.

When the Park Service initiated the Mission 66 program in the 1950s, the park developed a master plan. The plan records that the Gardener’s Cottage was used as quarters for employees, and the Tool House served its original purpose. The greenhouses, however, were removed. The report also noted that between 1940 and 1956, visitation increased from 15,822 to 105,662.

Beginning in the 1960s, the condition of the gardens improved, first with an infusion of government funds and second with the establishment of the Frederick W. Vanderbilt Garden Association, Inc. (Figures 1.85 to 1.92). Work began in earnest in the 1980s with the restoration of the pergolas, trellises, and walls.⁸⁷ The Frederick W. Vanderbilt Garden Association was formally established in 1984 and continued to restore the gardens to their former elegance. This work continues to the present.



Figure 1.85. View looking south showing the perennial garden maintained as lawn, circa 1970s (VAMA,5063, F. W. Vanderbilt Garden Association Collection).



Figure 1.86. View looking west showing Cridland's wire arbors above the lower perennial garden, circa 1970s (VAMA, no. 5064, F. W. Vanderbilt Garden Association Collection).



Figure 1.87. View looking northeast showing the damaged Potting Shed with stockpiled elements including columns and bluestone steps, circa 1970s (VAMA, no. 71592).



Figure 1.88. View looking southeast showing the remnants of the north pergola, circa 1970s (VAMA,5006, F. W. Vanderbilt Garden Association Collection).



Figure 1.89. View looking north showing the north pergola under rehabilitation, circa 1970s (VAMA, no. 5012, F. W. Vanderbilt Garden Association Collection).



Figure 1.90. View looking east showing the rose garden area maintained as lawn, circa 1970s (VAMA, 6007, F. W. Vanderbilt Garden Association Collection).



Figure 1.91. View looking south showing repairs being made to the garden wall, circa 1970s (VAMA, no. 1025, F. W. Vanderbilt Garden Association Collection).

ENDNOTES

- 1 There are a number of gaps in the ledgers reviewed, including the periods 1904-1905, 1918-1919, and 1928-1934.
- 2 USGS Regional Geology, Hudson River Valley Region, <http://3dparks.wr.usgs.gov/nyc/valleyandridge/hudsonvalley.htm> (accessed, 2/9/2009).
- 3 Patricia O'Donnell, Charles Birnbaum and Cynthia Zaitsevsky, Ph.D. *Cultural Landscape Report for Vanderbilt Mansion National Historic Site* (Boston, MA: National Park Service Cultural Landscape Program) 1992, 5-6.
- 4 O'Donnell, 11.
- 5 Samuel Bard to John Bard from Edinburgh, April 1 1764, quoted in CLR Volume 1, originally published in John McVickar, *A Domestic Narrative of the Life of Samuel Bard* (New York 1822), 56-59.
- 6 McVickar, *Domestic Narrative*, 58.
- 7 Quoted in O'Donnell, 11 and Charles W. Snell, Historian. The Early History of the Hyde Park Estate Vanderbilt Mansion National Historic Site, Report prepared for the National Park Service. 17 February 1955, 6.
- 8 Quoted in O'Donnell, 20, from McVickar, *Domestic Narrative*, 209-210.
- 9 John McVickar. *A Domestic Narrative of the Life of Samuel Bard, M.D. LL.D.* New York: the Literary Rooms, 1822, quoted in O'Donnell, 20.
- 10 Ibid.
- 11 Claire K. Feins. "Doctor David Hosack at Hyde Park" A Report for the Vanderbilt Mansion National Historic Site, 1950, 19.
- 12 O'Donnell, 53.
- 13 Rieley and Associates, 7; Andrew Jackson Downing. *A Treatise on the Theory and Practice of Landscape Gardening Adapted to North America*. Ninth edition. New York: Wiley & Putman, 1875, 25.
- 14 James Thacher, "An Excursion on the Hudson – Letter II;: *New England Farmer*, Vol. IX, no. 20 (December 3, 1830), quoted in O'Donnell, 31.
- 15 Ibid., 52.
- 16 Andrew Jackson Downing, *A Treatise on the Theory and Practice of Landscape Gardening Adapted to North America*, Sixth Edition, New York: A. O. Moore and Co., 1859, 381.
- 17 Ibid.
- 18 Extract from A Tour through North America; together with a comprehensive view of the Canadas and United States, as adapted for Agricultural Emigration. By Patrick Shirreff, Farmer, Mungoswells, East Lothian. Edinburgh: 1835, *American Quarterly Review*, XXXIV, June 1835, 384.
- 19 O'Donnell, 63-64; Rieley, 10.
- 20 Downing, 394.
- 21 O'Donnell, 60 from *Poughkeepsie Record*, quoted in Snell, "Early History," 54.
- 22 O'Donnell, 69.
- 23 Ibid.
- 24 Ibid.
- 25 Poughkeepsie Sunday Courier, July 19, 1896, p. 2, quoted in Snell, "Early History," 60.
- 26 Rieley and Associates, 12.
- 27 Ibid., 13.
- 28 Ibid.
- 29 Ibid., 14.

- 30 Excerpted from Rieley and Associates; quote from Charles W. Snell. Vanderbilt Mansion National Historic Site, National Park Service Historical Handbook Series No. 32, Washington, D. C., 1960, 3.
- 31 O'Donnell, 106.
- 32 Park web site.
- 33 A New York Times article dating from April 16th 1901 indicates otherwise "The lease on the Fredrick Vanderbilt mansion on Fifth Avenue and Fortieth St to E Rollinsmore of Boston created no surprise, as Mr. Vanderbilt has had his house on the market for some time. He & Mrs. Vanderbilt have concluded to make their headquarters at Hyde Park, on the Hudson, where he has recently built a very handsome country house."
- 34 Excerpted from Rieley and Associates.
- 35 Excerpted from Rieley and Associates; Alex Knauss. Interview by National Park Service Staff, 1975, 2.
- 36 Ibid, p. 2.
- 37 Keith N. Morgan, Charles A. Platt, *The Artist as Architect* (Cambridge, MA:MIT Press, 1985), 24-64, 241-242.
- 38 Charles Adams Platt. "F. W. Vanderbilt, Esq.", Drawing housed at Vanderbilt Mansion National Historic Site, 1901. Copies of the Burley survey surrounding the garden area are not included in the earlier cultural landscape reports.
- 39 Charles Adams Platt. Drawing housed at Vanderbilt Mansion National Historic Site. 1901.
- 40 O'Donnell, 142 and Rieley and Associates, 19-20.
- 41 Estate purchase Ledgers, 1904.
- 42 From his college graduation in 1880 until he began private practice as a landscape architect in 1894, he taught engineering at Columbia University. Rieley and Associates, 20. His obituary in *Landscape Architecture* magazine listed among his best known works the Vanderbilt Mansion. *Landscape Architecture*. "James L. Greenleaf: A Minute on his Life and Service", 24, no. 1 (October 1933),1-4.
- 43 In a speech before country estate owners, however, although he cited several other examples of his work, he made no mention of the Vanderbilt project, for which he completed more than 60 drawings in a two year period. James L. Greenleaf. "The Place, The Man and The Garden." Address presented to New York Farmers. New York, 16 February 1915.
- 44 Edith Wharton, in her book, *Italian Gardens*, writes that the architect was discovering "... the means by which nature and art might be fused in his picture." Edith Wharton. *Italian Villas and Their Gardens*. New York: Century Company, 1904, 7.
- 45 Again, Mrs. Wharton writes, "The inherent beauty of the garden lies in the grouping of its parts ... in the converging lines of its long Ilex (holly) walks, the alternation of sunny open spaces with cool woodland shade, the proportion between terrace and bowling green, or between the height of a wall and the width of a path." Ibid, 8.
- 46 In his letter, Greenleaf depicted a retaining wall overhung by shade trees with an old monastery and tall dark cypresses in the background. He applauded this scene for its dignity and beauty and recommended it as "... a design in distinction from a conglomeration." Excerpted from Rieley and Associates, 22; quote from James L. Greenleaf. "A Letter from Sicily." *Landscape Architecture*. 20 (July 1930), 283-286.
- 47 Excerpted from Rieley and Associates, 22.
- 48 Excerpted O'Donnell, 142.
- 49 The classical proportioning system is based on the golden ratio, an irrational mathematical constant of approximately 1.6180339887. This "... 'ideal' rectilinear shape has appeared again and again in plan and in elevation, in the structures and formed spaces of the Western world. It is a centuries old rule of composition which resulted from the belief that order, beauty, and even truth are functions of mathematical law and proportions." John O. Simonds. *Landscape Architecture*. New York: F. W. Dodge Corp., 1961, 184.
- 50 Excerpted from Rieley and Associates, 23-24.
- 51 Excerpted from O'Donnell, 146.
- 52 The sculpture, referred to by the FWVGA as Barefoot Kate, is described as a mid-nineteenth century Italian white marble Odalisque by Antonio Galli (1812 – 1861). The sculpture was purchased at the P. Baravant Art Gallery in Florence. Paul Miller, Curator, Preservation Society of Newport. "Garden Ornament Inventory." January 2009.

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- 53 Ibid., 22.
- 54 Excerpted from O'Donnell, 147.
- 55 Vanderbilt Estate purchase ledgers, Book 15, 125.
- 56 Excerpted from O'Donnell, 146, 181; The list of plants was taken directly from Greenleaf's plan # 63. He used a combination of common and Latin names to describe the plantings and these have been recorded accurately rather than attempting to alter them.
- 57 Excerpted from Rieley and Associates.
- 58 Ibid., 137.
- 59 Excerpted from Rieley and Associates. Meehan's three sons ran the nursery: S. Mendelson was the sales manager and wrote Meehan's Monthly; Thomas B. was in charge of plant development; and J. Franklin was in charge of the landscape department. Their Uncle Edward, developed new packing methods for the plants, and their Uncle Joseph was an authority on shrubs and trees. The landscape department functioned separately from the nursery, though often relied heavily on plants stocked in large supply. Despite the Meehan Nursery's protestations to the contrary, one example of this surfaces in the Vanderbilt gardens. Their planting plan for the new garden includes a plant called Mallow Marvel, a Meehan nursery specialty. Meehan Nursery Catalogs. Germantown, Penn.: Meehan Nursery, 1900, 1905, 1911, 1915, 1923-1924, 1941.
- 60 Meehan Nursery Catalogs. Germantown, Penn.: Meehan Nursery, Back cover, 1905 edition.
- 61 Excerpted from Rieley and Associates.
- 62 Excerpted from Rieley and Associates. The configuration of the beds differed from plan to plan (although the plants used remained the same), and the boundary of the garden was shown differently. In one plan, the garden was bounded by a hedge interrupted by brick piers; in the other, a fence with brick piers (similar to Greenleaf's Honeysuckle Wall) is shown. Each plan includes a round pool with a small fountain and two changes in level. Both plans also show the garden beds organized around a central line of site and circulation which ends in the pool and a garden bench. Meehan & Sons, "Garden Plan for Frederick W. Vanderbilt," 10 June 1910.
- 63 Excerpted from O'Donnell.
- 64 Ibid.
- 65 Meehan Nursery Catalogs. Germantown, Penn.: Meehan Nursery, 1900, 1905, 1911, 1915, 1923-24, 1941. Excerpted from Rieley and Associates, 31. Perennial borders were an important element in garden design at this time. Their use resulted primarily from the influence of William Robinson and Gertrude Jekyll, English horticulturalists and landscape gardeners. Robinson advocated the creation of a "wild garden" by using hardy plants that would grow unaided and in natural arrangement on the edges of woods or in shrub borders. Gertrude Jekyll refined his theories as she developed a new kind of garden in which common cottage flowers were used in profusion along formal lines. She composed these mixed borders using plants with soft colors and silvery foliage in masterful combinations of shapes and textures. Her work is often compared to Monet's paintings because her color schemes seem impressionistic.
- 66 Excerpted from O'Donnell, 154.
- 67 The Versailles fountain depicts an episode from Ovid's *Metamorphoses* when Latona and her children, Apollo and Diana, were being tormented with mud slung by Lycian peasants. Latona appealed to Zeus who responded by turning the Lycians into frogs. Vanderbilt Garden Ornament Inventory by Paul Miller, Curator, Preservation Society of Newport, Rhode Island, January 2009.
- 68 Excerpted from Rieley and Associates and O'Donnell.
- 69 Robert B. Cridland. *Practical Landscape Gardening*. New York: A.T. De La Mare Co., Inc., 1925, frontispiece. The elder Meehan's obituary in 1901 lists Cridland as one of the pallbearers, possibly an indication that he had already been employed by the firm for some time. Germantown Newspaper, "Death Ends Work of Thomas Meehan," 22 November 1901.
- 70 Excerpted from O'Donnell, 157. For Robert B. Cridland, see Sybil H. Argintar, "Robert Cridland Gardens in Atlanta," *Atlanta Historical Society, Journal* (summer 1983), 25-38. Robert B. Cridland was the author of *Practical Landscape Gardening* (New York: A. T. De La Mare, 1916).
- 71 Robert B. Cridland. "Detail Arrangement of Gardens prepared for Frederick W. Vanderbilt, Esq., Hyde Park on Hudson, N.Y." Drawing housed at Vanderbilt Mansion National Historic Site, 2 February 1916. Cridland was still employed by Meehan in 1914, which indicates that he was indeed working in the office during the preparation of the initial plans

for the Vanderbilts. In 1914, however, the Philadelphia City Directory records an office address for him. It is this address that appears on the 1916 drawing.

72 Robert B. Cridland. *Practical Landscape Gardening*. New York: A. T. De La Mare Col, Inc., 1925, 163.

73 Rieley and Associates, 33-34.

74 Excerpted from O'Donnell, 165.

75 Ibid, 157 and Rieley and Associates, 33.

76 Excerpted from O'Donnell, 165.

77 While Cridland specifies "climbing roses" on his plan for the rose garden, he likely used the term generically to mean either climbers or ramblers, or more broadly, any rose that has a climbing growth character. In *Practical Landscape Gardening*, in a section titled "Climbing Roses," he lists examples of roses that fall into a number of categories, including climbers, ramblers, and hybrid multiflora roses.

78 Robert B. Cridland, *Practical Landscape Gardening* (New York: A. T. DeLaMare Company, Inc., 1920), 219.

79 Ibid.

80 Ibid.

81 Cridland, 163, 170.

82 Cridland, 170.

83 Walter A. J. Ewald, Assoc. Landscape Architect. Job Status Report and Recommendations for Estate Improvement at the Vanderbilt Mansion National Historic Site. 25 September 1940, p. 1.

84 Ibid., and Roy Edgar Appleman, Regional Supervisor of Historic Sites. Report on Visit to the Vanderbilt Mansion National Historic Site. Report prepared for the National Park Service. 18 July 1940.

85 O'Donnell, 255.

86 Ibid., 213-214; Snell, "Administrative History," cites Cecil E. Halperin to Supt. Cooper, May 28, 1941.

87 O'Donnell, 253.

Cultural Landscape Report

Vanderbilt Mansion
Formal Gardens
Hyde Park, New York

1938 Period Plan



National Park Service
Olmsted Center for Landscape Preservation
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SOURCES

1. Aerial Photograph: NY GIS, 2006
2. USGS Map, 1946

DRAWN BY:

John Hammond, OCLP
Adobe Photoshop CS3, 2011

LEGEND

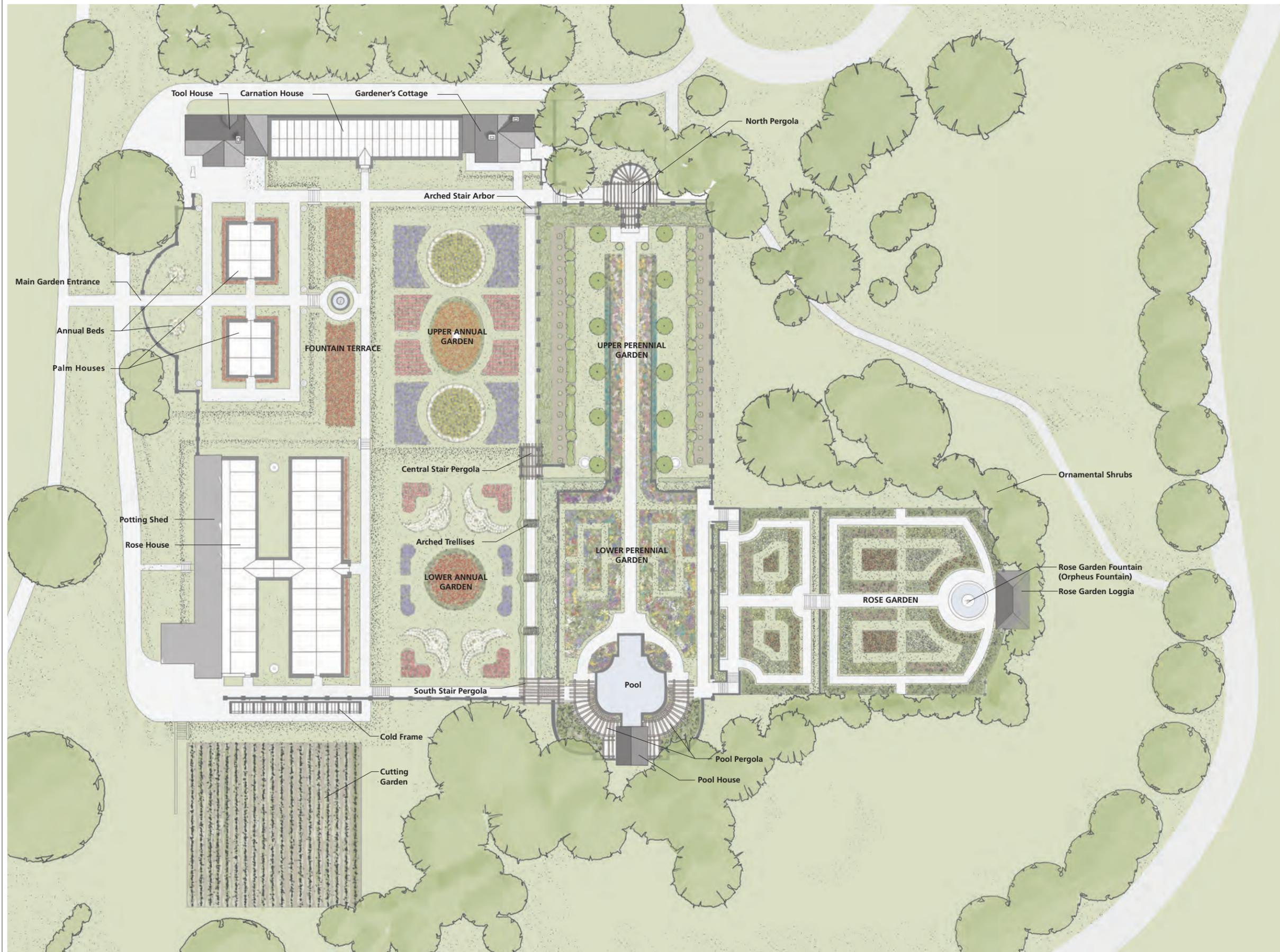
	Trees
	Shrubs
	Lawn
	Perennial Beds
	Annual Beds
	Rose Beds
	Water Feature
	Wooden Trellis

NOTES

1. All features shown in approximate scale and location.
2. Planting bed graphics are representational and do not indicate species or arrangement.
3. Feature and terrace names indicated are those in current use.



Drawing 1





2. EXISTING CONDITIONS

This chapter describes the current condition of landscape characteristics and features of the formal gardens at Vanderbilt Mansion National Historic Site as documented between 2008 and 2011. Numerous photographs in the gardens during this period accompany the narrative and Drawings 2 and 3 also illustrate the existing conditions. Appendix C contains field notes on the location and condition of individual features in the garden including circulation, buildings and structures, vegetation, and small-scale features.

The existing conditions of Vanderbilt Mansion National Historic Site were documented as part of Volume I of the Cultural Landscape Report in 1990 to 1992. A subsequent Historic Plant Inventory conducted in 1994 recorded the location and species of specimen trees and shrubs in the historic core of the property and surrounding the gardens. In the fourteen years that have elapsed since the conditions were documented, the landscape has changed enough to warrant a summary and update of existing conditions.

PHYSICAL SETTING

Vanderbilt Mansion National Historic Site is located in Hyde Park, New York. Situated on the eastern bank of the Hudson River, the magnificent mansion, representative of the Gilded Age of American wealth, dominates the high terrace that slopes down to the water's edge (see Figure 0.1). The current site, under the stewardship of the National Park Service, sits at the historic core of what was once an impressive and productive 700 acres of pleasure grounds and farmland owned by the Vanderbilts. Over a mile in length, north to south, and less than half a mile in width at its broadest point, the current estate is bound by the Hudson River on the west and Route 9 on the east. On the southeast corner of the property, Crum Elbow Creek flows through a series of dams and ponds before emptying into the Hudson River. In order to maximize the dramatic views afforded by topography of this landscape, a succession of landscape architects placed the key structural elements along the edge of this natural terrace or adjacent to the animated creek.

South of the Vanderbilt Mansion, the formal gardens cover a 1.8 acre area and are enclosed by low brick walls capped with triangular terra-cotta coping tiles. The walled garden is an essential element of this estate, and has endured for over a century.

Adjacent to the town of Hyde Park and in close proximity to the Franklin D. Roosevelt National Historic Site, the Vanderbilt Mansion National Historic Site property and the formal gardens are an asset to the local community and out-of-town visitors alike, and are visited frequently as part of a short circuit for walking or as part of a wider path network that traverses along the banks of the Hudson River. Open daily, except Thanksgiving, December 25, and January 1, Vanderbilt Mansion National Historic Site welcomes visitors and conducts tours throughout the year.

While the property in its entirety is in overall good condition, the formal gardens during the initial phase of NPS stewardship fell into disrepair and over the past 25 years have undergone a revival due to the dedication of the Frederick W. Vanderbilt Garden Association (FWVGA). The Association is a group of enthusiastic and proactive volunteers that is responsible for the day to day maintenance involved in presenting the garden to the visiting public. The volunteers donate thousands of hours to the garden and fundraising activities needed to raise capital for the preservation of the formal gardens.

LANDSCAPE CHARACTERISTICS

Landscape characteristics are the broad patterns, systems, and feature categories that compose the landscape and determine how people interact with it. The landscape characteristics present in the formal gardens are spatial organization, buildings and structures, circulation, vegetation, small-scale features, and views and vistas.

SPATIAL ORGANIZATION

The formal gardens are sited on the southeast aspect of a broad sloped terrace above the Hudson River. The distinct topography of the walled garden consists of a series of nearly flat terraces with steep banks and retaining walls that contrast with the undulations of the surrounding hillside (Figure 2.1). The difference in elevation from the upper terrace to the lowest garden level is 35 feet. The gardener's cottage, the tool house, the potting shed, and the upper and lower annual gardens occupy the highest terraces, the perennial gardens are on the middle terraces, and the rose garden is on the lowest elevation.

The garden perimeter is defined by low brick walls capped with terra-cotta tiles or by a temporary mesh fence. The gardens are divided by elements including stairs, slopes, low walls, and pergolas. Structurally, the grassy banks, low walls, and stairs that maintain the terracing are sound, and show only minimal signs of slippage or damage. Flights of stone steps connect the terraces, and a network of pea stone pathways provide pedestrian circulation through the gardens. Brick columns, trellises, and pergolas define the vertical and overhead planes and provide a sense

of enclosure. Immediately beyond the gardens, clusters of mature trees and shrubs further enclose the gardens and occlude any views of the surrounding landscape.

In plan, the gardens reflect a strong rectilinear organization, with six rectangular terraces arranged in nearly a square. A seventh terrace holding the rose garden extends from the southeast corner of this square, and a long narrow terrace holding the tool house and gardener's cottage spans the north side of the gardens. Two of these terraces are further subdivided into smaller terraces, including the northwestern-most terrace, which is divided into the palm house terrace and the fountain terrace, and the rose garden terrace, which is divided into an upper and lower rose garden.

The palm house terrace, in the northwest corner of the gardens, once held the twin wings of the palm house. Today this terrace is largely empty, containing only turf grass, fragments of historic garden ornaments, and the primary entrance path that bisects the terrace (Figures 2.2 and 2.3). The foot print of the glass palm houses is barely discernable as square depressions in the terrace. The path connects the entrance gate to a flight of steps that descends to the long rectangular fountain terrace that borders the east side of the palm house terrace. The fountain terrace features a fountain at its center, which is encircled by the path and flanked by long planting beds. The fountain, generally referred to today as the boy and dolphin or boy-dolphin fountain, features a putto and dolphin within the basin of the fountain. The beds are typically planted with roses, sometimes with a marigold border (Figure 2.4).

To the south of the palm house and fountain terraces is the rose house terrace, which once held the large two-wing greenhouse known as the rose house. While the rose house is no longer extant, the brick potting shed, which dates to the Langdon period and was once integrated into the rose house, remains (Figure 2.5). The long, narrow potting shed borders the entire west side of the terrace, and a brick wall encloses the south side of the terrace. Beyond this wall is a row of cold frames and an embankment that leads to the volunteer parking area.

East of the palm house and rose house terraces are the upper and lower annual garden terraces. These contain geometric parterre gardens planted in summer-blooming annuals. These parterre gardens are composed of symmetric beds in the form of circles, ovals, hearts, modified rectangles, and other shapes. The beds are typically planted in low-growing, solid blocks of annuals that create a two-dimensional display of geometric color. This effect is accentuated when viewed from above from any one of the higher terraces (Figures 2.6 and 2.7). The upper annual garden is bordered on the east by a wire fence with brick columns, which is typically covered in vines. The transition to the lower annual garden is via a pergola-covered flight of bluestone steps in the southeast corner of the terrace. The lower annual garden is open to the south and east. A second pergola-covered

flight of steps leads down toward the lower perennial garden in the southeast corner of the lower annual garden.

Along the north side of the gardens is the long Carnation House terrace that spans both the palm house and upper annual garden terraces (Figure 2.8). The tool house and gardener's cottage mark the ends of the terrace on the west and east respectively. During the Vanderbilt period these buildings were connected by a greenhouse used to raise carnations. Today, the Carnation House is not extant, its former presence marked only by a short flight of steps and a long central walkway that spans the length of the terrace.

East of the upper and lower annual garden terraces are the upper and lower perennial garden terraces. These terraces contain the most substantial architectural garden elements, including walls, fences, and pergolas that enclose the terraces and define their vertical edges. Similar to the upper and lower annual garden terraces, the two perennial garden terraces are rectangular and oriented such that the north, or upper, terrace is a few feet higher than the south terrace. Unlike the other terraces, which are connected by short flights of steps typically at the corners of the terraces, the upper and lower perennial garden terraces are connected by a long, sloping axial pathway that travels the entire length of both terraces from north to south (Figure 2.9). On either side of the central walkway, the upper terrace is retained by low walls made of brick or stone.

The upper perennial garden is axially symmetric, with long perennial beds and a row of flowering cherries on each side of the central walkway. The flowering cherries are planted in long panels of turf grass, which are in turn bordered by rows of arborvitae and columnar cherries, which were recently reinstated. The terrace is bordered by high walls and the north pergola on the north, a steep bank and wire fence on the west, and a brick wall on the east. The south is open to the lower perennial garden.

The lower perennial garden contains geometric planting beds that are reflected symmetrically about the central walkway. The beds are planted with a variety of flowering perennials planted in bands or clusters. Low retaining walls border the terrace on the north and west, and a brick wall with high brick columns and ornamental iron trellises borders the terrace on the west. The south end of the terrace features the reflecting pool, pool house, and south pergola (Figure 2.10). The pool house is an open-sided pavilion that houses a sculpture of an odalisque.

Below the east side of the lower perennial garden, the split-level rose garden extends eastwards. A pair of el-shaped stairs gives access to this area which is planted with a profusion of modern and old fashioned rose varieties, arranged in mirror shaped geometric beds, defined by grass panels and circumnavigated by narrow pea stone paths. The broad central pathway is terminated by an Italianate loggia complete with a fountain pool (Figure 2.11).



Figure 2.1. Oblique aerial view north of the formal gardens which descend from the greenhouse terraces (left) to the loggia (right). The walled gardens are surrounded by groupings of trees and shrubs (Microsoft Live Maps, 2008).



Figure 2.2. View east from the west gate and path that formerly led between the Palm Houses. The boy dolphin fountain is visible on the central path at a lower terrace and is temporarily covered. Note the metal edging along the path (OCLP 2008).



Figure 2.3. View west from the palm house terrace of the west gate and an ancient finial in its historic location near the palm houses (OCLP 2008).



Figure 2.4. View west of the greenhouse terraces from the site of the former Rose House (OCLP 2008).



Figure 2.5. View northeast of the Tool House and site of the former Carnation House. Three steps that formerly led into the center of the Carnation House are visible on the left. The benches have recently been painted black (OCLP 2008).



Figure 2.6. View southeast of two terraces, the palm house fountain terrace with the boy dolphin fountain, planted with roses and marigolds; and the upper annual terrace, planted with cannas, pennisetum grass, zinnias, begonias, and blue salvia (OCLP 2008).



Figure 2.7. View south of the upper annual terrace beds. The path along the eastern side of the terrace is lined with brick pillars that support wire lattice panels and vines. The central stair pergola, covered with vines, is visible along the path between the upper and lower terrace (OCLP 2008).



Figure 2.8. View northeast of lower annual terrace. Parterre beds are referenced by FVWGA as hearts (foreground), crescents (center and right), and socks (left). The central stair pergola at center is obscured by overgrown trumpet vine (OCLP 2008).



Figure 2.9. View east of the upper perennial garden central walk framed by perennials and cherry trees. The perennials obscure dry laid field stone retaining walls (OCLP 2008).



Figure 2.10. View east of the pool and pavilion in the lower perennial garden. The pool contains water lilies and is flanked by beds containing iris and other perennials. The white marble statue is of an Odalisque by Antonio Galli, which was purchased from Florence, Italy by the Vanderbilts (OCLP 2008).



Figure 2.11. View southeast of the rose garden and loggia (OCLP 2008).

BUILDINGS AND STRUCTURES

The structure and spatial characteristics of the formal gardens are defined as much by the extensive system of buildings and structural elements as by topography and vegetation. Five buildings remain from the historic period, including the tool house, gardener's cottage, potting shed, pool house, and rose garden loggia. In addition to these buildings, the numerous structures include walls, pergolas, arbors, and cold frames.

The tool house and gardener's cottage were built during the Langdon ownership and were retained during the Vanderbilt period. The two-story Italianate buildings date to circa 1875 and were designed by John Sturgis and Charles Brigham and are in fair condition. The Tool house is currently utilized by the Frederick W. Vanderbilt Garden Association as its meeting and office space. The building was rehabilitated in the late 1980s and early 1990s, including repairs to the stucco on greenhouse end, a new roof, repointing of the masonry, and repairs and paint on the woodwork. The work was done by park staff as well as the regional preservation crew. (Figure 2.12). The gardener's cottage, most recently rehabilitated in 2008, is currently a residence and is in good condition externally (Figure 2.13).

The potting shed, on the west side of the gardens, is a long narrow brick building that was once integrated into greenhouses, first as part of Langdon's conservatory and then retained and integrated into Vanderbilt's rose house. The potting shed

has doors on the east and south facades and five boarded-up windows on the west façade, and is currently used to store tools and materials (Figure 2.14).

The pool house with its associated pool and pergolas, dominates the south end of the lower perennial garden, while a large brick, timber, and limestone semi-circular pergola towers above the upper perennial garden (Figures 2.15, 2.16 and 2.17). The pastel colored, triple-arched rose garden loggia sits at the most easterly boundary of the terraces at the foot of the rose garden (Figure 2.18). Metal arbors and pergolas made of timber, brick, and stone span the pathways in several places in the gardens. Walkways and bluestone stairs connect different garden rooms.

Several areas of brick walls and piers are showing substantial surface erosion and loss of mortar. Many of the red clay finials have been broken off of the red clay cap stones (Figures 2.19 and 2.20). Other cap stones are misaligned, allowing water ingress in the walls. Two segments of brick wall are missing: the wall along the south edge of the gardens along the lower annual bed and a short section beside the gardener's cottage (Figure 2.21). Another section of wall is missing from the rose garden (Figure 2.22). Brick piers and metal fence panels previously enclosed the rose garden, providing a boundary between the rose garden and dense shrubbery beyond. Some of the timber associated with the various pergolas is deteriorating (Figures 2.23 and 2.24).

The garden drainage system was constructed in the early years of development of the formal gardens. A series of drain covers are located near the pathways. Many are blocked and broken (Figure 2.25). The weep holes that are present in some of the retaining walls of the terraces and garden structures appear to be functional (Figure 2.26). Excess water drains downhill to the margins of Crum Elbow Creek. The water supply for the annual gardens consists of a series of irrigation heads



Figure 2.12. View north of the Tool House, an Italianate building constructed in circa 1875, which is now used by the FWVGA as its meeting and office space (OCLP 2008).



Figure 2.13. View northeast of the Gardener's cottage, an Italianate building constructed in circa 1875, which now serves as a park staff residence. The outline of the connection to the former carnation house is visible on the west wall of the building (OCLP 2008).



Figure 2.14. View east of the potting shed at the southwest corner of the garden. The building is used by the FWVGA for tool storage (OCLP 2008).



Figure 2.15. View north from within the north pergola, which is topped with heavy timbers and vines (OCLP 2008).



Figure 2.16. Close up view of the vines encircling the brick piers of the north pergola (OCLP 2008).



Figure 2.17. View east of the pergola surrounding the pool house (OCLP 2008).



Figure 2.18. View northeast of the triple arched rose garden loggia, which was designed and built in 1916 under the direction of Robert Cridland (OCLP 2008).



Figure 2.19. View north of the garden entrance at the upper west end of the garden. The entrance formerly led between the Palm Houses. An interpretive sign and donation collection pipe are installed to the south of the iron entry gate (OCLP 2008).



Figure 2.20. View east of a remaining red clay finial on top of the garden wall. Most of the finials have been broken off by vandals. The capstones are intact and the wall section is in good condition with only minor cracks (OCLP 2008).



Figure 2.21. View south of the lower annual terrace, the south stair arbor, pool house, and the missing wall section along the south side of the garden. Cars are visible in the flat area near the cold frames and former cutting garden, which is the designated parking area for garden volunteers (OCLP 2008).



Figure 2.22. View south of the beds and a bench in the lower rose garden. The bench is placed at the southern edge of the rose garden, which is missing a wall of brick piers and wire lattice. The edge is now lined with a mesh deer fence, which is difficult to see in the photograph. The tall black posts of the deer fence are spaced at about ten foot intervals (OCLP 2008).



Figure 2.23. View southeast of the central stair pergola. Rot is present in several of the wooden beams above the walkway, which support the weight of the vines (OCLP 2008).



Figure 2.24. Close-up view of the south stair pergola with rot in one of the beams (OCLP 2008).



Figure 2.25. Close-up of a drain in the north pergola, a detail specified on the original construction drawings by James Greenleaf (OCLP 2008).



Figure 2.26. View northeast of the north pergola and mature vines. A weep hole in the wall at left allows water to drain from the interior of the pergola (OCLP 2008).

located in the planting beds. In the fern beds, beside the pool house irrigation heads are also visible; elsewhere spigots are available. In the rose garden drip irrigation hoses are placed on the planting beds.

CIRCULATION

The circulation through the gardens is accommodated by a system of gravel footpaths, turf grass panels, stone and concrete steps, and garden gates. The footpaths are found on every terrace, either skirting the edges of the terraces or bisecting them. These paths bring visitors through the gardens in a more or less sequential manner, from the highest terrace, the palm house terrace in the northwest corner of the gardens, to the lowest point in the rose garden. Less formal circulation provided by turf grass panels between the geometric planting beds in the annual gardens, perennial gardens, and rose garden, allow visitors to meander through the terraces and view the flowers more closely.

The paths are connected from one terrace to the next by flights of steps. The older steps, which date to the Langdon period, are constructed of bluestone treads and inclined cheek walls and are located on the upper terraces. The lower terraces feature concrete steps, often integrated into brick walls and pergolas.

The primary entrance to the gardens is in the northwest corner via the gate in the garden wall on the palm house terrace, although visitors may enter the gardens by a number of other entrances, including at the tool house, at the south side of the rose house or lower annual garden, or at the north pergola. At the palm house entrance, a narrow metal gate hangs between the piers, and a sunken bluestone step connects the road to the gate (see Figure 2.3). An interpretive panel adjacent to the gate details the Frederick W. Vanderbilt Garden Association involvement in the garden (see Figure 2.19). At a second entrance located further south along the west perimeter wall, the gate was removed to park storage. This entrance provides access to the rose terrace and the cold frames and former cutting garden. The site of the former cutting garden is currently used for parking.

Walkways run east to west and north to south. Each of the garden terraces has its own path system, surfaced with pea stone and edged with metal, varying in width from three and a half feet to seven and a half feet (Figure 2.27). In some places, the pea stone is deep and difficult to walk through, and is spilling onto the lawn. In other places the pea stone cover is sparse. In places the metal edges have been damaged by machinery.

A narrow path crosses the lawn on the palm house terrace. A steep stair facilitates the descent onto the palm house fountain terrace, where floribunda roses are organized in alternate linear plantings in rectangular beds that flank the central fountain (see Figure 2.4). Passing the fountain, a pathway runs in a north-south direction, bisecting the garden. Turning north, the path terminates at another cross path that runs east to west, parallel to the carnation house terrace (see Figure 2.8).

The path along the east side of the annual terraces is edged by a row of tall square brick columns topped by limestone capitals that support wire trellises with a diamond shaped lattice (Figure 2.28). This screen affords partial views out and over the upper perennial garden to the landscape beyond. This path terminates on the southeast corner of the lower annual terrace, intersecting the east-west path at the southern edge of the lower annual garden. To the west, the path passes by a series of wood and metal seats along the southern edge of the lower annual garden and arrives at a steep flight of steps that lead up to the rose house terrace. The wall that formerly lined the steps is missing. At the top of the steps and adjacent to this walk, the brick perimeter wall still stands. On the south side of this wall, a range of cold frames is functional but in poor condition (Figure 2.29). Overlooking the lower annual garden at the southeast corner, a low interpretation panel displays a historic photograph showing the former greenhouses and planting beds. To the east, the path leads through the south stair pergola, a six-column timber, brick, and limestone pergola overlaid by a wooden lattice framework. A steep flight of steps leads down to the pool and pergola and lower perennial garden. The vine-clad pergola frames the southern edge of the pool (Figure 2.30).

Circulation through the perennial garden terraces is by a long axial walkway that links the north pergola at the north end of the upper perennial garden to the pool and pool pergola at the south end of the lower perennial garden (Figure 2.31). Low retaining walls running east to west hold back the higher terraces of the upper perennial garden, and large antique artifacts, a cistern and wellhead, placed on the level above these walls further frame the main axial path. Flowering cherries placed along the high level of the upper perennial garden emphasize the main axial line further, as do the flanking narrow flowerbeds and two low dry-laid stone retaining walls. Along the east perimeter of the lower perennial garden, a short path is bounded by an ornamental wall that allows glimpses to the rose garden through a series of rose-framed windows supported on square brick pillars with limestone caps (Figure 2.32). The brick pillars hold an elaborate wire scroll. An Italianate stone seat is set in an alcove at the north end of the short path.

Twin el-shaped stairs located at the north and south end of this short path lead down to the upper level of the rose garden (Figures 2.33 and 2.34). Three seats are recessed in a regular fashion at the base of a recently repaired retaining wall covered with honeysuckle and climbing roses. The path running parallel with the wall connects the two stairs. Narrow pea-gravel paths circle the upper rose garden. Beds lined with turf are filled with varieties of roses. The Frederick W. Vanderbilt Garden Association's dedication to the site is acknowledged on an interpretation panel in the rose gardens. The paths from the el-shaped stairs join and descend a central stair to the lower level.

The circulation through the lower rose garden is accommodated by perimeter pathways that follow the north and south edges of the garden, as well as a central walkway running east and west. The central walkway divides at the east end to



Figure 2.27. View north of pea stone walkway and granite steps between the annual and fountain terraces. A temporary tent protects the boy and dolphin fountain during repairs. The Tool House at left and Gardener's Cottage at right are visible in the background (OCLP 2008).



Figure 2.28. View south of the upper annual terrace edged by a pea stone walkway and trellis structure. The trellis consists of brick piers with limestone capitals that support a wire lattice and vines (OCLP 2008).



Figure 2.29. View east of the cold frames along the outer side of the south wall of the garden near the former greenhouse site. The cold frames are used by FWVGA for young plants (OCLP 2008).

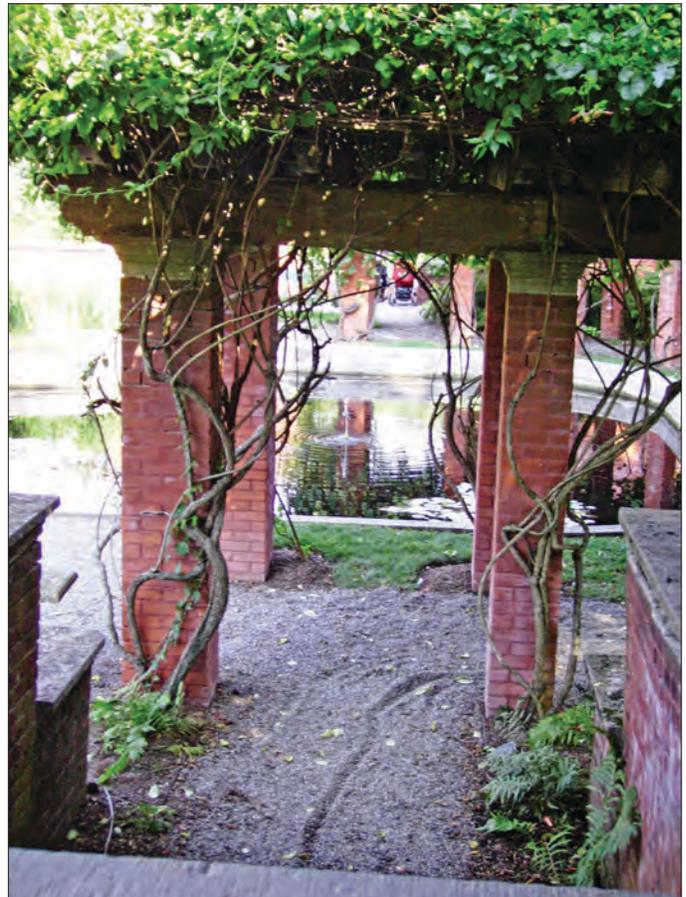


Figure 2.30. View east from the south stair pergola through the brick piers of the pool pergola to the reflecting pool (OCLP 2008).



Figure 2.31. View north of the reflecting pool and lower perennial garden with the central walkway leading to the north pergola (OCLP 2008).



Figure 2.32. View east of the reflecting pool, lower perennial garden and the brick pillars along the east edge of the garden space. Wire scrolls mounted to the brick pillars support roses that climb from the rose garden below (OCLP 2008).



2.33. View south of repairs to the retaining wall on the upper west end of the rose garden. Climbing roses in the bed above the wall extend up to the wire scrolls between brick pillars, which also frame the east edge of the lower perennial garden (OCLP 2008).



Figure 2.34. View north of the el-shaped steps leading from the lower perennial garden down to the rose garden. A recently rebuilt brick retaining wall supports a bed of climbing roses that reach the wire scrolls above (OCLP 2008).



Figure 2.35. View east of the loggia at eastern lower edge of the rose garden. A central walkway framed by rose beds leads to the now empty pool in front of the loggia (OCLP 2008).

circle around the empty rose garden fountain. The brick piers and metal fence that once enclosed the rose garden are gone, and only a tall mesh deer fence separates the lower rose garden from the landscape beyond (see Figure 2.22).

The central axis terminates at a triple arched loggia set behind a large 20-foot circular concrete and limestone edged fountain basin. The loggia defines the outer limits of the formal garden to the east (Figure 2.35).

VEGETATION

The vegetation in the formal gardens, comprising annuals, perennials, roses, vines, shrubs, turf grass, and cherry trees, is installed and maintained each year by volunteer members of the Frederick W. Vanderbilt Garden Association. The vegetation is organized according to terrace in a manner consistent with the historical organization of the gardens, with annuals in beds on the upper two terraces, perennials on the two middle terraces, and roses in the lowest terrace. Vines cover pergolas and trellis fences and a limited number of shrubs and small trees supplement the perennial plantings on the perennial garden terraces. Planting beds and circulation paths throughout the gardens are set within panels of turf grass that covers the terraces and the steep terrace slopes.

The upper and lower annual gardens are planted each May with a variety of annuals, laid out in block plantings of uniform color and variety (Figure 2.36).

The current selection of plant material is influenced by the recollections of Alex Knauss, one of the gardeners in the glasshouses, who records schemes implemented during the Vanderbilt period. Heliotropes, petunias, and begonias fill the beds that surround the central circular planting of cannas and pennisetum. Estate purchase ledgers and historic photographs indicate that the current planting practiced is similar to those present at the end of the Vanderbilt period of 1938.

Perennial plantings dominate the lower perennial garden terrace and provide seasonal ornamentation (Figure 2.37). The pergola associated with the pool house is clad in grape vines and bittersweet, and ferns fill the shaded alcoves of the pergola wall on either side of the pool house. Water lilies float in the reflecting pool and masses of irises grow in the beds adjoining the reflecting pool. Replanted in the late 1980s the perennial beds in this garden are loosely based on previous known estate planting plans pertaining to the Vanderbilt period.

In some of the perennial beds, robust plants dominate. The plants were originally placed in long linear ribbons, but over time, these have assumed a more globular pattern. Masses of iris are planted in association with the reflecting pool (Figure 2.38). The plants appear to be in good health although some struggling plants have led to bare spots. The banks enclosing the upper perennial garden are covered during the summer months by a variety of vines and shrubs, including honeysuckle vine. The steepness of the slope makes management of this area difficult (Figure 2.39).

The rose garden is planted with a variety of both modern and old rose cultivars. Estate plans indicate previous planting varieties, planting patterns and color combinations (see Figure 2.11). The current selection, mostly dominated by hybrid tea roses, is dependant more on the hardiness and disease resistance of certain cultivars. The symmetrical beds are planted in a mirror like fashion on either side of the central pathway. Rose varieties such as 'Brigadoon', 'Mrs John Laing' and 'Milestone' ornament the upper terrace, while 'Radiance', 'Headliner', 'Love' and 'Red Fairy' form part of the selection for the lower terrace. Modern 'Knockout' roses edged with annual plants are used in the boy and dolphin fountain terrace in the upper garden (see Figure 2.4). The 'New Dawn' rose is combined with honeysuckle on the west bank of the upper rose garden.

Vines are used to provide verticality to the garden and soften the lines of the built structures. They scramble over trellises, pergolas, pavilions, screens, and archways. The selection of plant material used includes wisteria, grape, trumpet vine, honeysuckle, bittersweet, and roses (see Figures 2.17, 2.23, 2.26, 2.30, and 2.40). Many of the vines are overgrown and are beginning to cause damage to the latticework, stone, brick, and timber frames (Figures 2.41 and 2.42).

Trees and shrubs in the landscape immediately surrounding the gardens are visible from within the garden walls. These trees and shrubs help enclose the gardens,



Figure 2.36. View looking northeast showing the plantings in the lower annual garden (Frederick W. Vanderbilt Garden Association, 2010).



Figure 2.37. View east of the lower perennial garden. As recommended by Robert Cridland, the early summer garden predominantly consists of yellow, blue, lavender, purple, and white flowering perennials (OCLP 2008).



Figure 2.38. View northwest of the iris along the edge of the pool. The central stair pergola is visible in the background (OCLP 2008).



Figure 2.39. View north of a tangle of vines and shrubs growing along the steep slope on the east side of the wire lattice wall between the upper annual terrace and upper perennial garden. Greenleaf specified honeysuckle vine, a non-native which has become invasive in other areas within the park (OCLP 2008).

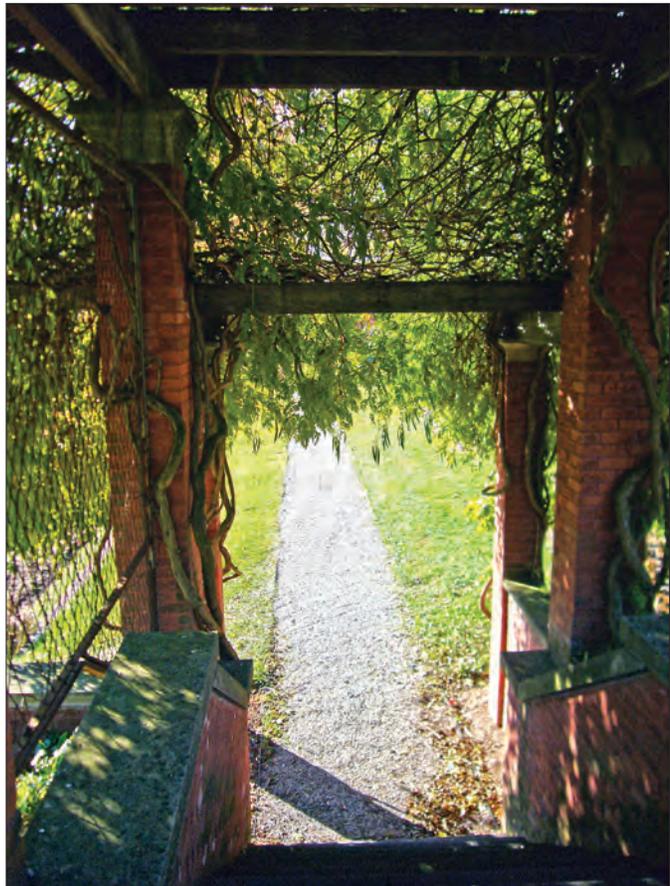


Figure 2.40. View east of the shady steps in the central stair pergola. The vines and pergola structures frame views of the garden (OCLP 2008).



Figure 2.41. Close-up of a wisteria vine encircling a brick support on the north pergola (OCLP 2008).



Figure 2.42. Close-up of a trumpet vine by the south stair pergola. The vine is growing between two cap stones, forcing them apart (OCLP 2008).



Figure 2.43. View north of the lower annual terrace and upper annual terrace in the distance, with mature pines framing the north side of the garden (OCLP 2008).

obscure outward views, and provide a visual backdrop for the gardens (see Figure 2.22). The tree line beyond consists mainly of large deciduous trees and a series of white pines just beyond the north pergola in the upper perennial garden (Figure 2.43).

SMALL-SCALE FEATURES

In addition to the network of perimeter walls, pergolas, trellises, and columns, a number of statuary elements and ornaments are located within the walled garden. These range from elaborate fountains, remnant elements of vases, Italianate seats, life-size figures, and fragments of ancient artifacts. This diverse collection ranges in age from the Early Roman Empire period to the era contemporary with the Vanderbilt ownership. Such elements are intended to enhance the garden, to punctuate an otherwise flat plain, to frame an architectural element, to act as focal points, and to enhance the feeling of antiquity.

Over the years these features have changed location and many of these elements have suffered from exposure to the elements, vandalism, or have been removed from the gardens. Some of the features have been removed to storage for their protection, including a stone bench ornately carved with gryphon armrest and lion supports once located in north pergola of the upper perennial garden and the Orpheus fountain. Also absent from the garden are a pair of large, ornate vases, approximately three feet tall with a scallop relief motive, which were previously located on the rose garden terrace between the west and east span, north and south of the connecting range.

Remnants of six sandstone finials, placed in the garden before 1908, still ornament the palm house terraces, but they are in poor condition and only fragments remain (Figures 2.44 and 2.45). Two ornately carved Early Roman Empire Corinthian capitals are in good condition and located in the upper sections of the garden (Figures 2.46 and 2.47). However the capital located in the center of the upper annual garden terrace sits on an unstable plinth of un-mortared stacked stones and the capital in the lawn area is vulnerable to mowing equipment.

The boy and dolphin fountain defines the center of the fountain terrace. The fountain is set in a scalloped basin on a barley twist stem and an inverted vase pedestal is set on a low square plinth in a circular pool (Figure 2.48). A terra-cotta wellhead, decorated with putti and acanthus relief with an octagonal lip and associated metalwork is sited on a concrete octagonal base, which is located in the upper perennial garden west of main axial path (Figure 2.49). A carved marble circular cistern with a figure blowing a horn and lion attacking an antelope, is located on the opposite side of the upper perennial garden axial path (Figure 2.50). The large statuary figure of an odalisque, framed by a pair of limestone Doric columns, is located in the pool pavilion and draws the eye down the main

axis of the perennial gardens (Figure 2.51). The Orpheus fountain pool in front of the loggia is now empty and in need of repair (Figure 2.52).

Located in the upper terraces and annual gardens are a series of utilitarian wood and metal frame benches, placed for visitors to enjoy views across the garden (see Figures 2.5 and 2.43). The lower terraces are adorned by reproduction Italian style

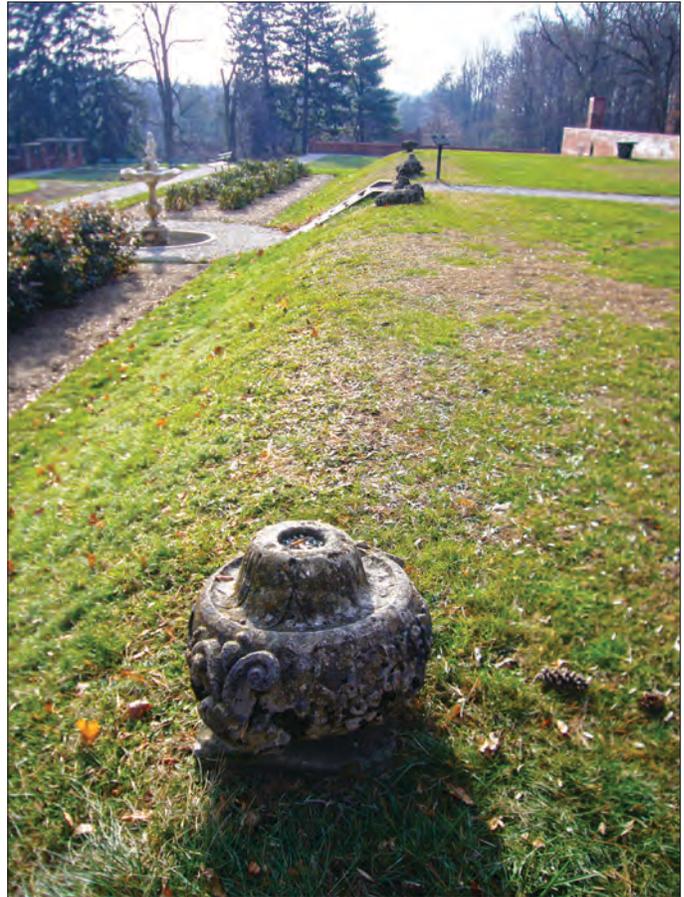


Figure 2.44. View south of sandstone pieces that were once part of late nineteenth-century Baroque style vases. The objects line the eastern edge of the palm house terrace (OCLP 2008).



Figure 2.45. Close-up of elements of sandstone vases set along the edge of the palm house terrace. An intact vase is captured in a historic photograph on the title page. The elements are eroded and encrusted with lichen (OCLP 2008).



Figure 2.46. One of a pair of antique Corinthian capitals of the Eastern Roman Empire that dates to the second or third century AD. This capital is placed in the lawn area on the palm house terrace and would benefit from greater protection from mowing equipment (OCLP 2008).



Figure 2.47. View east of an antique white marble Corinthian capital from the Eastern Roman Empire that dates to the second or third century AD. The capital is set in the center of the upper annual terrace and is surrounded by a circular flower bed (OCLP 2008).

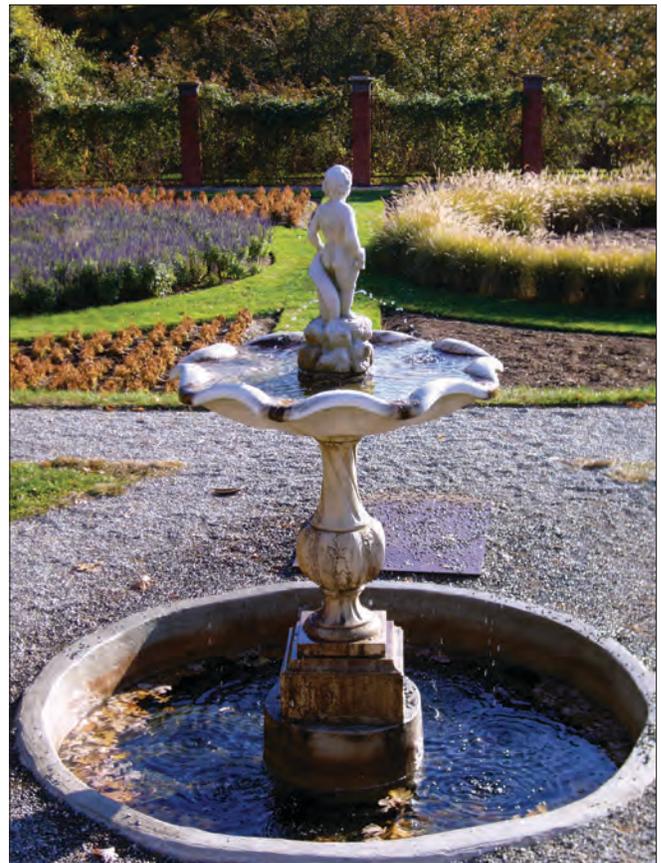


Figure 2.48. View east of the brecciated stone Italian garden fountain on the terrace overlooking the upper annual garden. The fountain consists of a spiral fluted baluster pedestal supporting a scallop shell basin with a Renaissance-inspired fountainhead of Putto with a recumbent dolphin (OCLP 2008).



Figure 2.49. View southwest of cast faux wellhead with decorative wrought iron overthrow. The bas relief contains unfurling acanthus fronds, masks, and heraldic shields. The wellhead is set on an octagonal concrete base (OCLP 2008).



Figure 2.50. View north of an antique white marble cistern with a bas relief of a lion devouring an antelope with a trumpeter in the background. The cistern was purchased by Stanford White in 1899 for Frederick W. Vanderbilt from Paris, France. It is set on an octagonal concrete base (OCLP 2008).

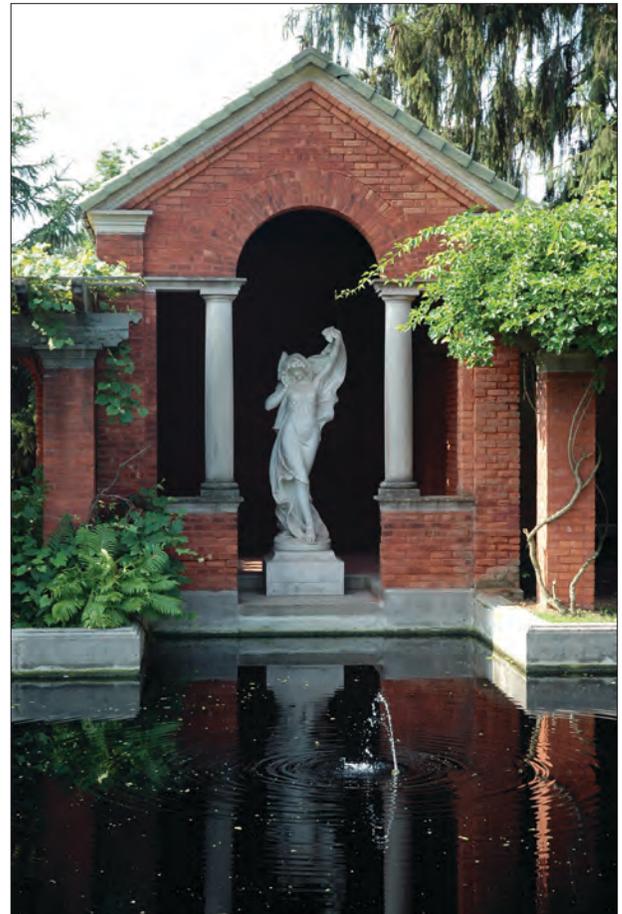


Figure 2.51. View south of the Italian white marble sculpture of an Odalisque. The feather fan in her right hand was broken off by vandals (OCLP 2008).



Figure 2.52. The shell of the Orpheus fountain in the lower rose garden is cracked and in need of repair. The Orpheus fountain and pedestal which were placed at the center of the fountain in 1925 were removed in 2005 due to overall spalling and erosion and are currently undergoing conservation treatment (OCLP 2008).



Figure 2.53. A cast stone bench with dolphin supports placed at the northwest end of the pool pergola (OCLP 2008).

cast stone seats set on dolphin supports, affording views over the garden and into the landscape beyond (Figure 2.53). Additional seats located in the built structures provide shade from the summer sun.

A series of interpretation panels located throughout the garden give brief descriptions of the garden's history and the Frederick W. Vanderbilt Garden Association involvement.

VIEWS AND VISTAS

The gardens contain many framed vistas within the garden as well as views from one terrace to the next below, or view to the picturesque landscape beyond the walls (See Figures 2.30, 2.31, 2.54 and 2.55). Historically views of the landscape were limited by the surrounding vegetation external to the garden. Tall evergreens were used as a backdrop to enclose the north pergola. Mature tree canopies were visible in the landscape beyond. Ornamental shrubs previously surrounding the rose garden are gone and therefore views are gained outwards at the wider landscape.

Within the garden, ornaments and statuary are carefully placed along axial lines to draw one's eye or frame certain features. The rose garden loggia is placed as an elegant terminus to the east west axis of the garden (see Figure 2.35). The north pavilion and pool garden pavilion define the north and south axis of the



Figure 2.54. View east from the arched window of the rose garden loggia. Note the narrow footpath that extends from the garden toward Crum Elbow Creek to the east across the road (OCLP 2008).



Figure 2.55. View southeast from the arched window of the pool house (OCLP 2008).

perennial gardens (see Figures 2.10 and 2.31). The reflecting pool at the lower pavilion reflects the built structure, vine plantings and sky. The natural advantage of the steep terracing on the upper levels of the garden affords views to the annual gardens below (see Figure 2.4). Views are further manipulated by the use of vine clad picture windows permitting the viewer to gaze across to areas of the garden not yet visited (see Figures 2.40 and 2.56).



Figure 2.56. View east of the brick piers and wire scrolls that frame the view of rose garden from the lower perennial garden (OCLP 2008).

Cultural Landscape Report

Vanderbilt Mansion Formal Gardens Hyde Park, New York

Existing Conditions



National Park Service
Olmsted Center for Landscape Preservation
www.nps.gov/oclcp

SOURCES

1. Aerial Photograph: NY GIS, 2006
2. USGS Map, 1946

DRAWN BY:

John Hammond, OCLP
Adobe Photoshop CS3, 2011

LEGEND

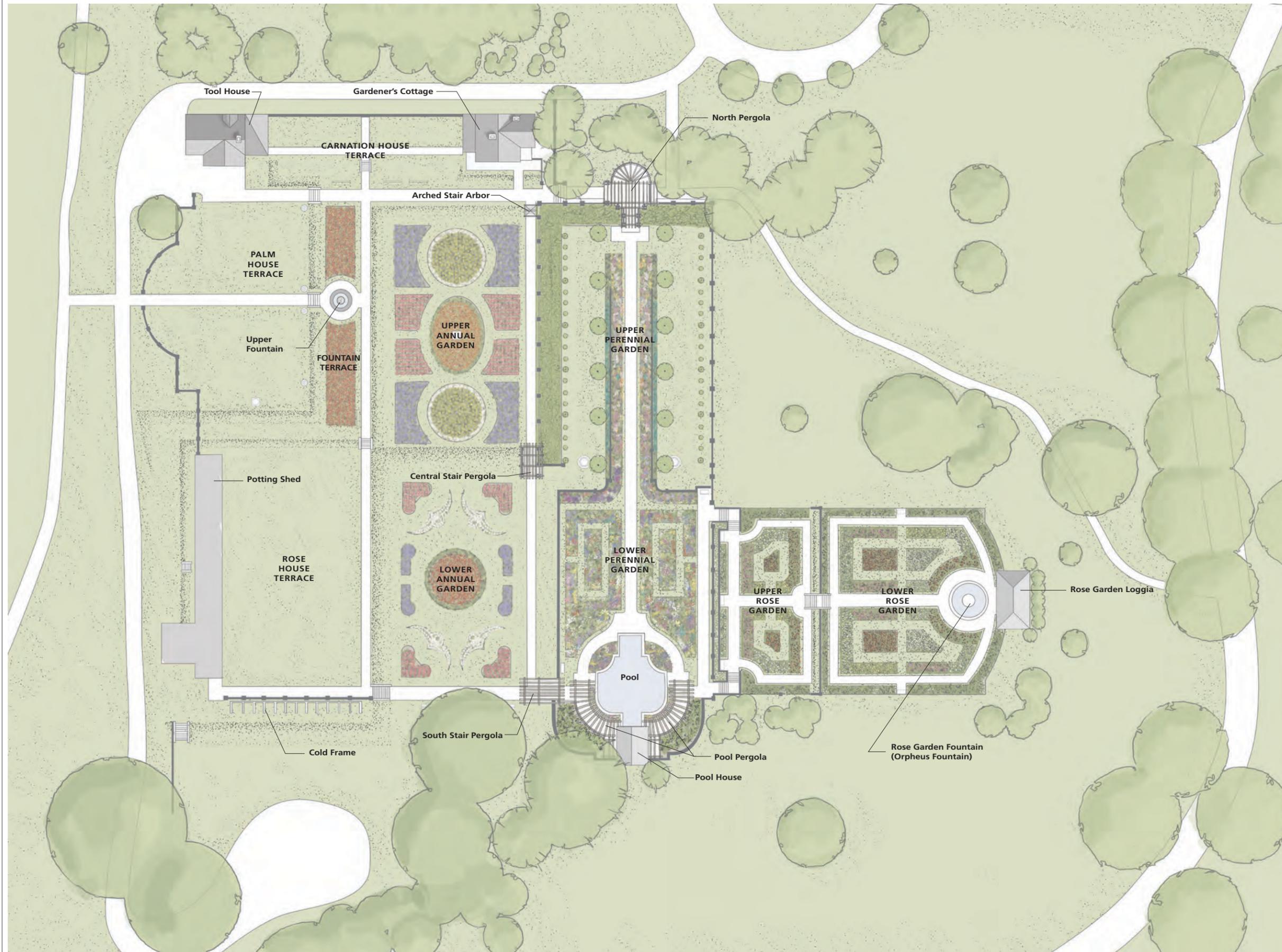
	Trees
	Shrubs
	Lawn
	Perennial Beds
	Annual Beds
	Rose Beds
	Water Feature
	Wooden Trellis

NOTES

1. All vegetation shown in approximate scale and location.
2. Planting bed graphics are representational and do not indicate species or arrangement.
3. Feature and terrace names indicated are those in current use.



Drawing 2



Cultural Landscape Report

Vanderbilt Mansion
Formal Gardens
Hyde Park, New York

Existing Conditions
Upper Perennial Garden



National Park Service
Olmsted Center for Landscape Preservation
www.nps.gov/oclp

SOURCES

1. Aerial Photograph: NY GIS, 2006
2. USGS Map, 1946

DRAWN BY:

John Hammond, OCLP
Adobe Photoshop CS3, 2011

LEGEND

- Trees
- Shrubs
- Lawn
- Perennials
- Annual Beds
- Groundcover
- Roses
- Vine-covered Trellis

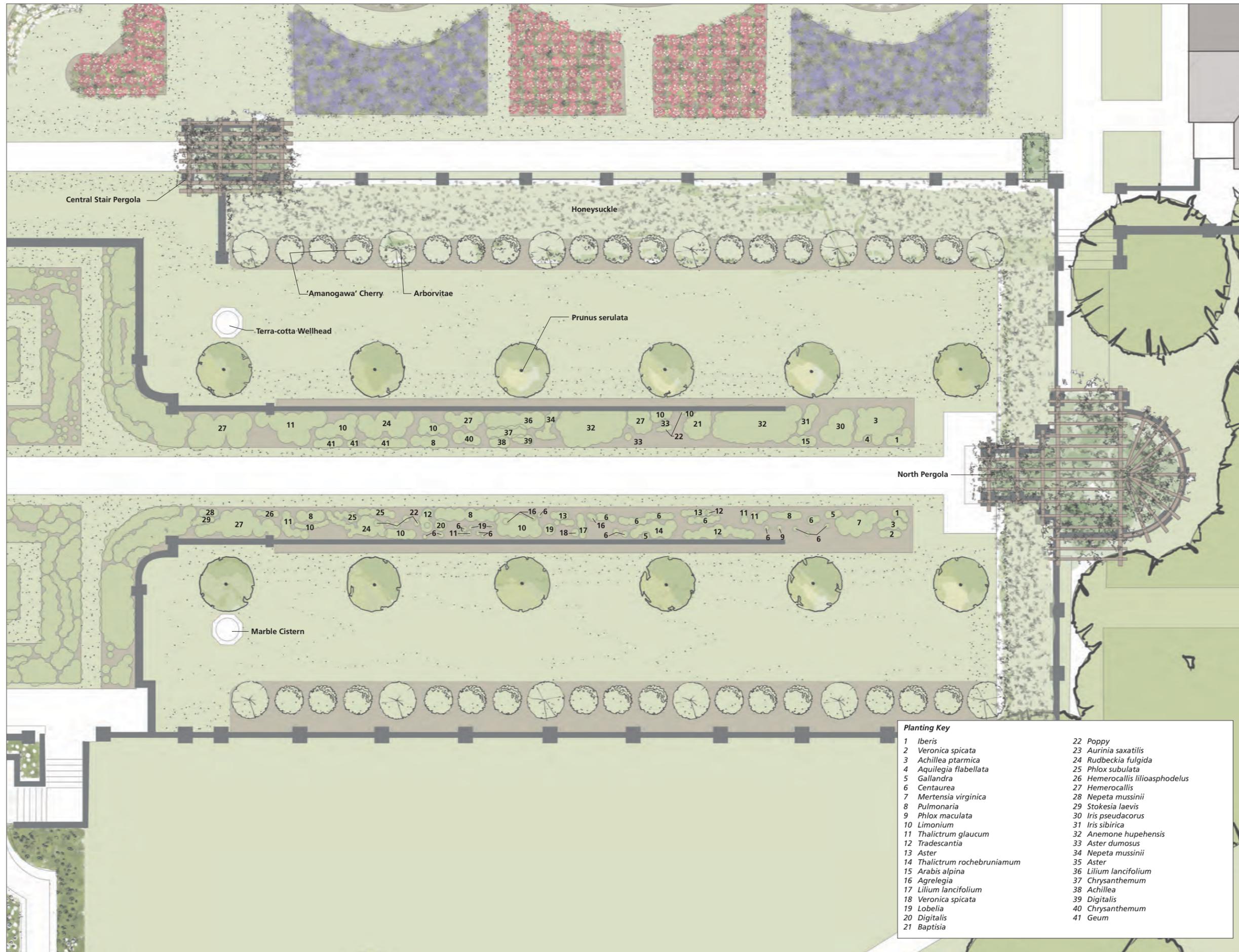
NOTES

1. All vegetation shown in approximate scale and location.
2. Perennial species and locations were determined by visual inspection in the late summer and fall of 2009, and may not represent all perennials present.
3. Annual beds are representational and do not indicate species or arrangement.



0 15 30 FEET

Drawing 3



Planting Key

1 Iberis	22 Poppy
2 Veronica spicata	23 Aurinia saxatilis
3 Achillea ptarmica	24 Rudbeckia fulgida
4 Aquilegia flabellata	25 Phlox subulata
5 Gallandra	26 Hemerocallis lilioasphodelus
6 Centaurea	27 Hemerocallis
7 Mertensia virginica	28 Nepeta mussinii
8 Pulmonaria	29 Stokesia laevis
9 Phlox maculata	30 Iris pseudacorus
10 Limonium	31 Iris sibirica
11 Thalictrum glaucum	32 Anemone hepheensis
12 Tradescantia	33 Aster dumosus
13 Aster	34 Nepeta mussinii
14 Thalictrum rochebruniumum	35 Aster
15 Arabis alpina	36 Lilium lancifolium
16 Agrelegia	37 Chrysanthemum
17 Lilium lancifolium	38 Achillea
18 Veronica spicata	39 Digitalis
19 Lobelia	40 Chrysanthemum
20 Digitalis	41 Geum
21 Baptisia	

Cultural Landscape Report

Vanderbilt Mansion Formal Gardens Hyde Park, New York

Existing Conditions Lower Perennial Garden



National Park Service
Olmsted Center for Landscape Preservation
www.nps.gov/oclp

SOURCES

1. Aerial Photograph: NY GIS, 2006
2. USGS Map, 1946

DRAWN BY:

John Hammond, OCLP
Adobe Photoshop CS3, 2011

LEGEND

- Trees
- Lawn
- Perennials
- Annual Beds
- Groundcover
- Roses
- Vine-covered Trellis
- Ferns
- Water

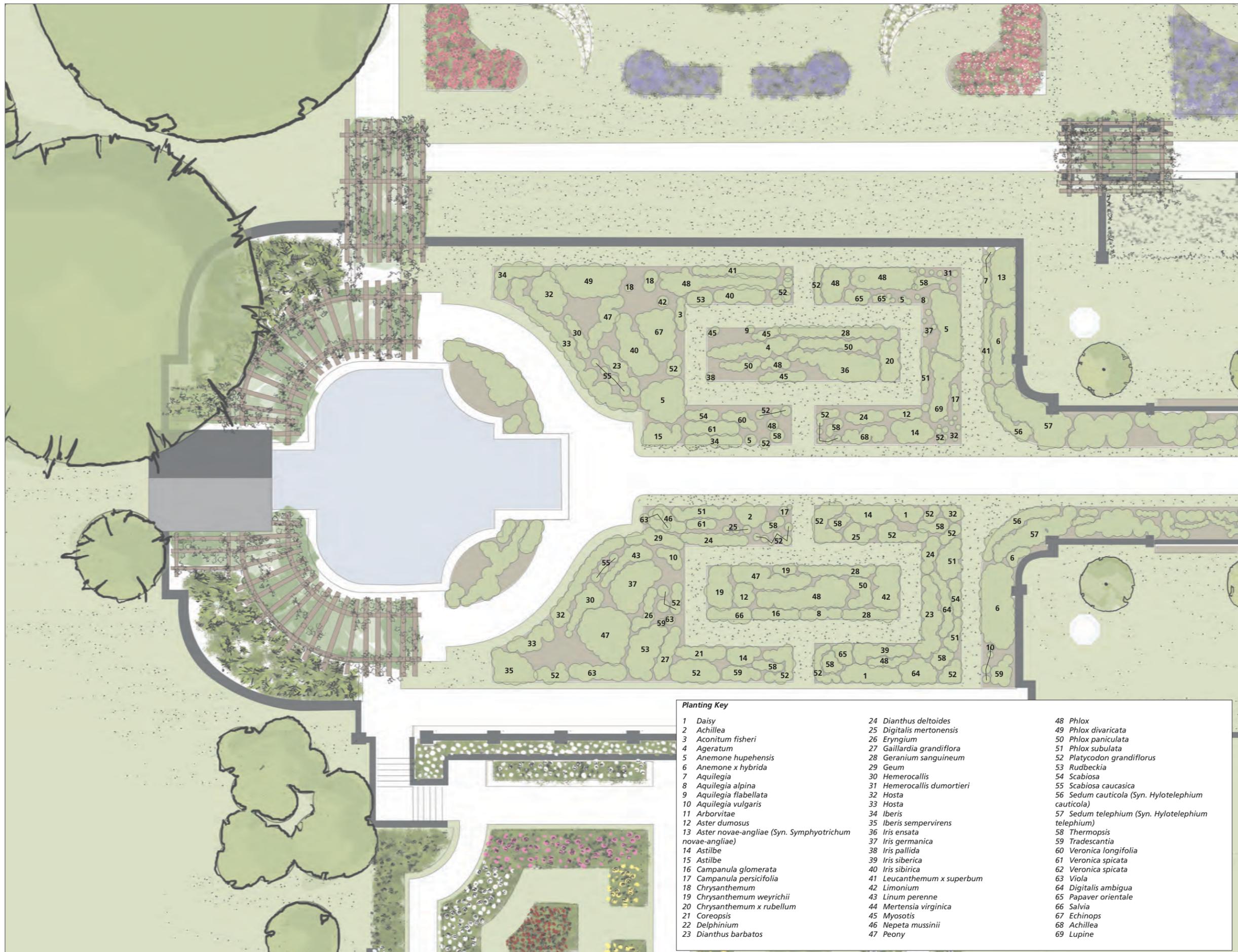
NOTES

1. All features shown in approximate scale and location.
2. Planting bed graphics are representational and do not indicate species or arrangement.
3. Feature and terrace names indicated are those in current use.



0 15 30 FEET

Drawing 4



Planting Key

- | | | |
|--|----------------------------|---|
| 1 Daisy | 24 Dianthus deltoides | 48 Phlox |
| 2 Achillea | 25 Digitalis mertonensis | 49 Phlox divaricata |
| 3 Aconitum fisheri | 26 Eryngium | 50 Phlox paniculata |
| 4 Ageratum | 27 Gaillardia grandiflora | 51 Phlox subulata |
| 5 Anemone hupehensis | 28 Geranium sanguineum | 52 Platycodon grandiflorus |
| 6 Anemone x hybrida | 29 Geum | 53 Rudbeckia |
| 7 Aquilegia | 30 Hemerocallis | 54 Scabiosa |
| 8 Aquilegia alpina | 31 Hemerocallis dumortieri | 55 Scabiosa caucasica |
| 9 Aquilegia flabellata | 32 Hosta | 56 Sedum cauticola (Syn. Hylotelephium cauticola) |
| 10 Aquilegia vulgaris | 33 Hosta | 57 Sedum telephium (Syn. Hylotelephium telephium) |
| 11 Arbovitae | 34 Iberis | 58 Thermopsis |
| 12 Aster dumosus | 35 Iberis sempervirens | 59 Tradescantia |
| 13 Aster novae-angliae (Syn. Symphyotrichum novae-angliae) | 36 Iris ensata | 60 Veronica longifolia |
| 14 Astilbe | 37 Iris germanica | 61 Veronica spicata |
| 15 Astilbe | 38 Iris pallida | 62 Veronica spicata |
| 16 Campanula glomerata | 39 Iris sibirica | 63 Viola |
| 17 Campanula persicifolia | 40 Iris sibirica | 64 Digitalis ambigua |
| 18 Chrysanthemum | 41 Leucanthemum x superbum | 65 Papaver orientale |
| 19 Chrysanthemum weyrichii | 42 Limonium | 66 Salvia |
| 20 Chrysanthemum x rubellum | 43 Linum perenne | 67 Echinops |
| 21 Coreopsis | 44 Mertensia virginica | 68 Achillea |
| 22 Delphinium | 45 Myosotis | 69 Lupine |
| 23 Dianthus barbatus | 46 Nepeta mussinii | |
| | 47 Peony | |

Cultural Landscape Report

Vanderbilt Mansion Formal Gardens Hyde Park, New York

Existing Conditions Walls, Circulation, and Small-Scale Features



National Park Service
Olmsted Center for Landscape Preservation
www.nps.gov/oclp

SOURCES

1. Aerial Photograph: NY GIS, 2006
2. USGS Map, 1946

DRAWN BY:

John Hammond, OCLP
Adobe Photoshop CS3, 2011

LEGEND

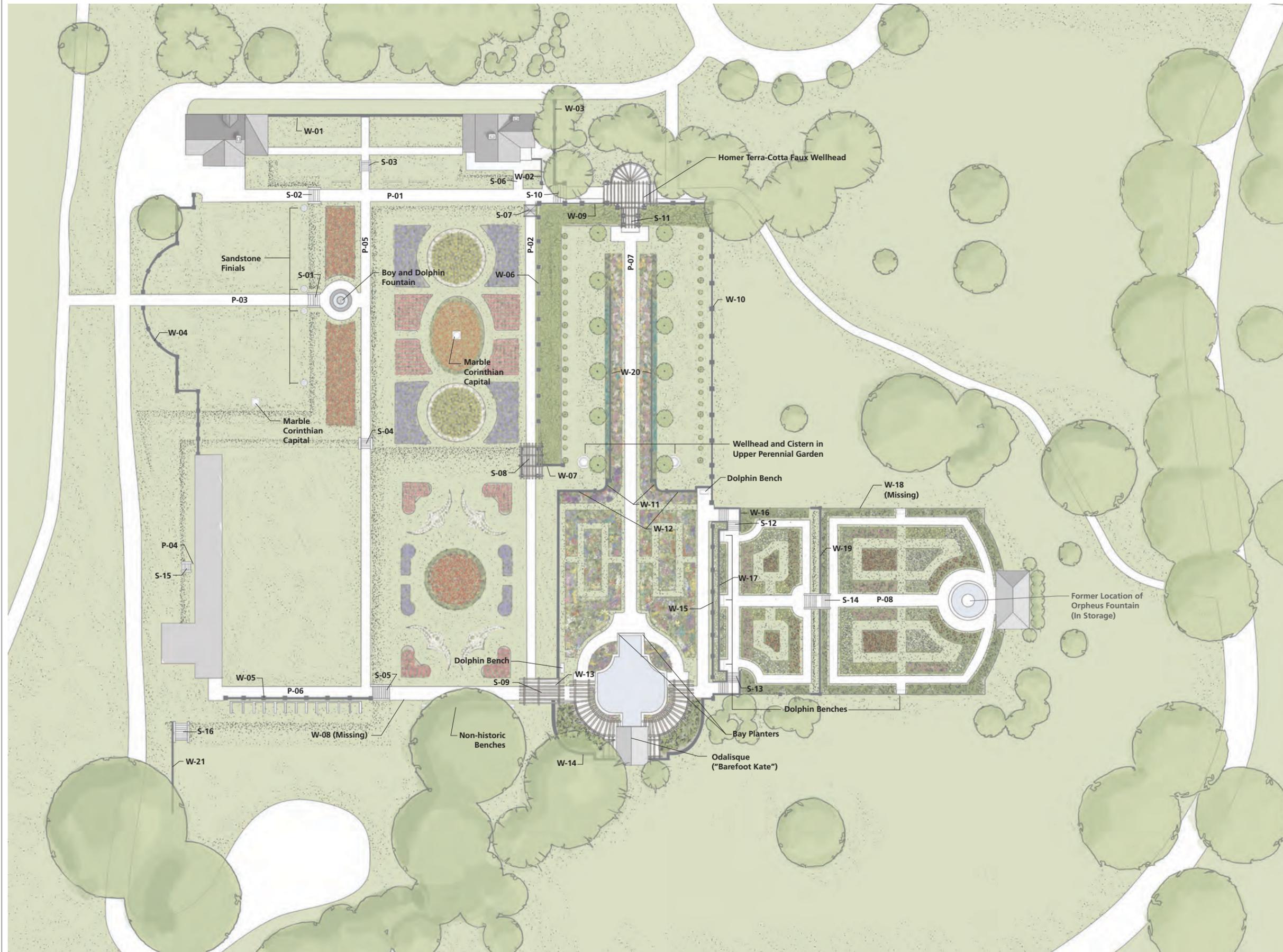
-  Trees
-  Shrubs
-  Lawn
-  Perennial Beds
-  Annual Beds
-  Rose Beds
-  Water Feature
-  Wooden Trellis

NOTES

1. All features shown in approximate scale and location.
2. Planting bed graphics are representational and do not indicate species or arrangement.
3. Feature and terrace names indicated are those in current use.
4. Codes correspond to features lists in the Analysis and Evaluation section of this report.



Drawing 5





3. ANALYSIS AND EVALUATION

This chapter provides a summary of the historical significance of the Vanderbilt Mansion National Historic Site and the formal gardens as a contributing resource to the property. It also provides an evaluation of the gardens' historic character based on the findings of the site history and existing conditions chapter. The analysis and evaluation have been developed in accordance with the National Register of Historic Places Program, which lists properties that are significant to our nation's history and prehistory, and the National Park Service's *Guide to Cultural Landscape Reports: Contents, Process, and Techniques* (1998).

The chapter begins with an evaluation of the historical significance of the landscape according to the *National Register Criteria for the Evaluation of Historic Properties*. Included in the evaluation is a summary of existing National Register documentation, a statement of significance, and an evaluation of the historical integrity of the formal gardens according to the seven aspects defined by the National Register. The chapter then presents an analysis of the historic character of the formal gardens according to National Park Service methodology that organizes the landscape into landscape characteristics and their associated features. Historic and existing conditions of extant features are compared to assess historic character and change over time. Each feature is evaluated to determine whether it contributes to the historic character of the landscape. The findings are summarized in Table 3.1 at the end of the chapter.

NATIONAL REGISTER EVALUATION

SUMMARY OF EXISTING NATIONAL REGISTER DOCUMENTATION

Vanderbilt Mansion National Historic Site was automatically placed on the National Register of Historic Places in 1966 by virtue of its status as a National Historic Site. At the time the park was created in 1940, its significance was specifically tied to the Vanderbilts during the period of their residency. A National Register nomination form was completed for the estate in 1978, providing documentation for the site's significance and contributing features. Contributing features enumerated in the nomination form include the Mansion and other principal buildings, bridges, dams, walls, and gates, as well as the formal gardens and the buildings and major structures associated with them. At the time the nomination form was complete, the gardens were described as "remnants" and many of the vegetation features, including the vines, roses, and planting beds,

were not present. Contributing features associated with the formal gardens listed on the nomination form include the tool house, gardener's cottage, pool house, rose house loggia, and the north and pool pergolas, as well as the gardens themselves, which were divided into the Greenhouse Gardens, the Cherry Walk and Pool Gardens, and the Rose Garden.

The estate landscape was documented in detail and evaluated in the *Cultural Landscape Report for Vanderbilt Mansion National Historic Site, Volumes 1 and 2* in 1992 and 2009 respectively. These reports detailed the site's history, historical significance and integrity, and contributing features. The formal gardens are considered a contributing resource of the larger landscape and are not being evaluated for individual significance. The significance of the estate landscape is summarized here; a more complete discussion is contained in the two volumes mentioned above.

STATEMENT OF SIGNIFICANCE

The National Park Service evaluates the historical significance of properties through a process of identification and evaluation defined by the National Register of Historic Places program. According to the National Register, historic significance may be present in buildings, sites, districts, structures, or objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property can be found to have significance on a national, state, or local level, but must meet one of more of the following criteria in order to be considered eligible for the National Register:

- A. Association with events that have made a significant contribution to the broad patterns of history;
- B. Association with the lives of persons significant in our past;
- C. Retention of distinctive characteristics of a type, period, or method of construction, or the work of a master, or that possess high artistic value, or that represents a significant and distinguishable entity whose components may lack individual distinction; or
- D. Has yielded or may be likely to yield information in prehistory or history.

The formal gardens are a contributing resource to the Vanderbilt Mansion National Historic Site, a historic district listed on the National Register of Historic Places. As a contributing resource, the significance of the formal gardens is related to the significance of the larger landscape.

Vanderbilt Mansion National Historic Site is nationally significant under National Register of Historic Places Criterion A, in the area of economics, for its association with the Gilded Age of American wealth in the late nineteenth and early twentieth centuries. The site is also nationally significant under Criterion C, in the areas

of architecture, as an example of the academic neoclassical architectural style typified by the teachings of the École des Beaux Arts in Paris; and landscape architecture, for exhibiting the distinctive characteristics of Country Place Era landscapes and as a rare example of early picturesque landscape design in America.

The Gilded Age

Vanderbilt Mansion National Historic Site is significant as a preeminent example of a country estate from the Gilded Age of American wealth. The Vanderbilt family epitomized the patterns of the Gilded Age, a period in America between Reconstruction and the early twentieth century marked by extravagant displays of wealth and excess by the country's upper class. Beginning with Cornelius Vanderbilt, who began building his fortune in the middle of the nineteenth century in the railroad industry, the family amassed great wealth over three generations. Frederick Vanderbilt, the grandson of Cornelius, inherited the railroad business and a fortune from his father, William Henry Vanderbilt. Frederick bought Hyde Park in 1895, toward the end of the Gilded Age, and proceeded to develop his grand estate. The Vanderbilts were typically in residence at Hyde Park in the spring and fall, spending winters and summers at their other residences or traveling.

Looking to the old European estates as models, the Vanderbilts built their Hudson Valley estate in typical grand fashion with a large mansion, several elaborate outbuilding, and extensive grounds. Formal gardens were developed as a featured element of the estate grounds, and like the mansion and grounds, the gardens reflected the values and tastes of their owners. Typical of estate gardens of the period, the Vanderbilts' gardens featured a formal layout, exuberant floral displays, substantial architectural elements, and decorative art objects. As with the design and furnishing of the house, the Vanderbilts looked both to contemporary Europe and the classical world for design elements. Influences included Italian and French gardens, Mediterranean villas, Italian Renaissance styles, and ancient Greek and Roman art and architecture, as well as the fashionable architectural and decorative styles of the time.

Gilded Age Architecture

The Vanderbilt Mansion National Historic Site is significant under Criterion C as an example of a Gilded Age country estate with a number of buildings and structures representative of the styles that typify the period. Notable buildings within the estate-wide landscape include the Mansion, Pavilion, and two guesthouses, all designed by the firm McKim, Mead & White with Charles F. McKim as the partner in charge. Within the gardens, three buildings survive from

before the Vanderbilt period. These buildings, the tool house, the gardener's cottage, and the potting shed, were designed by John Sturgis in 1875. To these, the Vanderbilts added extensive architectural elements, including greenhouses, walls, fences, pergolas, arbors, pools, and steps. While the greenhouses are no longer extant, the majority of the garden buildings and structures remain or have been rebuilt using historic plans. All of these structures exhibit grand scale, elaborate ornamentation, and classical references typical of architecture associated with the Gilded Age.

Country Place Landscape Design

Vanderbilt Mansion National Historic Site is significant under Criterion C as an example of Country Place Era landscape design as it was practiced in the late nineteenth and early twentieth centuries. The Country Place Era in American landscape design refers the period of design practice between 1880 and 1929 when the profession of landscape architecture was preoccupied with residential design commissions for the wealthy. The period spanned stylistic sub-periods, trends, and labels including Romantic, Victorian, Neoclassical, and Beaux-arts. Consistent throughout the period, however, were a number of principles that reflected the fashions and desires of an affluent class of clientele, including privacy, grandeur, neoclassical elements, and an integration of architecture and landscape. Many of these characteristics were evident in the Vanderbilts' estate and gardens.

The inclusion of clearly defined formal gardens in the large country estates was characteristic of Country Place Era landscape design. These were typically enclosed, private areas where the owners and their guests could partake in leisurely strolls, enjoy the beauty of the outdoors, and indulge in their horticultural interests. The formal gardens at the Vanderbilts' estate clearly exhibit many of the defining characteristics of gardens associated with the Country Place Era, including enclosed garden spaces, a formal layout, geometric flower beds, integration of greenhouses and architectural features, and the extensive use of ornamental sculpture, fountains, and other art objects. Much like the architecture, the design of the gardens were influenced by European and neo-classical styles and reflected the extravagance of their owners.

Rather than create the gardens from scratch, the Vanderbilts decided to adapt existing gardens that had been built by Walter Langdon Jr. in 1875. Over the course of more than three decades, the Vanderbilts employed some of the most prominent landscape designers of the time to make alterations to the gardens, from changes to the plantings to major redesigns of the garden spaces. The first of these, James L. Greenleaf, was strongly associated with the Country Place Era, working on numerous commissions for large country estates. While the gardens at Hyde Park were one of his earlier works, Greenleaf continued on in

the field to complete a large body of design work, and was later recognized for his contribution to the field of landscape architecture. Subsequent designers, Thomas Meehan and Sons and Robert Cridland, were not as well known as Greenleaf, but were nonetheless important practitioners of the period. Cridland, in particular, was a prominent residential designer of the early twentieth century specializing in elaborate residential grounds and country estates. His 1922 book *Practical Landscape Gardening* was an important source that articulated the principles of the country place style of landscape design.

Today, the formal gardens continue to reflect the opulence, refinement, and grand ornamentation that characterized Frederick Vanderbilt's estate. The garden spaces, vegetation, and architectural elements, designed by some of the most prominent landscape architects of the age, display the scale and classical style typical of the estates and mansions of the time.

Picturesque Landscape Design

Vanderbilt Mansion National Historic Site is significant under Criterion C as a leading example of early American picturesque landscape design as it was practiced in this country in the early nineteenth century is the only known landscape in America designed by Andre Parmentier (1780–1830) to survive. The significant characteristics of picturesque landscape design are embodied in the larger estate landscape, but they are not evident in the design or character of the formal gardens themselves.

Period of Significance

The period of significance for the district spans the years from 1828, when then-owner David Hosack and landscape designer Andre Parmentier began developing the estate layout, to 1938, which marks the end of the site's association with Frederick Vanderbilt and includes a number of changes to the landscape implemented during the 1930s. While the period of significance for the estate landscape begins in 1828, extant features and characteristics within the formal gardens span the period between 1875, when Walter Langdon, Jr. built the first gardens at their present location, and 1934, when Robert Cridland implemented a new planting plan for the upper perennial garden.

EVALUATION OF LANDSCAPE INTEGRITY

Integrity is the ability of a property to convey its historical identity during the period of significance. The National Register program identified seven aspects of integrity that include: location, design, setting, materials, workmanship, feeling,

and association. To retain integrity, a property must possess the aspects that best convey the sense of a particular time and place.

Many aspects of integrity remain at Vanderbilt Mansion National Historic Site, so much so, that if the Vanderbilts were to return to the site today, they would clearly recognize their home. The National Park Service has made changes to the landscape but they do not detract from conveying the character of the historic resources.

Location

Location is defined by the National Register as the place where the historic resource was constructed, or the place where the historic event took place. The location of the formal gardens has not changed since their initial development in 1875, and their extent and footprint have remained the same since the last expansion with the construction of the rose garden in 1910.

Design

The essential elements of the design of the formal gardens have remained the same or have been reestablished since the period of significance. Like that of the larger mansion property, the design of the formal gardens evolved from its initial construction in 1875 through the end of the period of significance in 1938, with much of the previous design retained and embellished in each successive modification. Today, the overall structure of the gardens, stepped terraces, enclosing walls, buildings, circulation system, and major structures remain as they were in 1938. The most substantial change in the design of the gardens is the loss of the greenhouses, which were removed during the 1950s. While the garden beds were lost after the end of the period of significance, they have been reestablished in their historic configurations. Despite the changes, the formal gardens retain the integrity of their design.

Setting

Setting is the character of the physical environment of a property. Historically, the Vanderbilt estate was surrounded by agricultural land, forests, open meadows, and rural communities. Open views across the Hudson River were of largely undeveloped rolling land rising toward the distant Catskill Mountains. Today, the area around Vanderbilt Mansion is more developed and populated than it was in 1938, but it remains largely rural with substantial forested and agricultural areas. The setting for the formal gardens is the estate property itself, which retains its historic character. During the historic period, the formal gardens were surrounded by trees and shrubs to create an enclosed setting and limiting the views out of the gardens. Today, many of the shrubs have been lost, but the extant shrubs and tall

trees visible over the garden walls continue to create a sense of enclosure. Overall, the formal gardens retain integrity of setting.

Materials

Materials are the physical elements that were combined or deposited during the period of significance in a particular pattern or configuration to give form to the property. Much of the historic materials that composed the gardens during the historic period remain today. Extant historic materials include brick and stone materials used in the tool house, gardener's cottage, potting shed, and in the many walls and pergolas. Although many of these structures were rebuilt in the 1970s, they were largely reconstructed using salvageable historic materials. Other historic materials include the bluestone steps, concrete pool and fountains, and original garden ornaments. Many of the vines also date to the historic period. Together these materials contribute to the site's historic character and convey its significance.

Workmanship

Workmanship is the physical evidence of the crafts and methods of construction used during the specified historic period of significance. Evidence of the historic workmanship of the Vanderbilt landscape is evident in the brickwork, stone features, ornate ironwork and trellises, rough-hewn timbers, and carved garden ornaments. The workmanship is evocative of the methods of craft and construction that characterized the historic period and helps convey the site's significance.

Feeling

Feeling is the expression of the aesthetic or historic sense of a particular time resulting from the presence of physical features that, taken together, convey a property's historic character. The Vanderbilt landscape is evocative of the sense of place created by the turn of the century during the Country Place Era. Most of the significant features and the setting remain from the historic period to convey the feeling of the grand estate. The loss of greenhouses and growth of vegetation that blocks views to the Hudson River diminish the feeling of the grand estate, yet overall the property retains integrity of feeling.

Association

Association is the direct link between the property and an important historic event or person. Although the property is no longer a private home, evidence of the site's association with the Vanderbilts is readily available through the designed landscape and ornate buildings, bridges and gatehouses. The Vanderbilt Mansion thus retains integrity of association.

ANALYSIS OF LANDSCAPE CHARACTERISTICS AND FEATURES

Landscape characteristics are the broad patterns, systems, and feature categories that compose the landscape and determine how people interact with it.

The analysis of landscape characteristics and features serves to identify the components of the landscape that define the historic character of the landscape and contribute to its ability to convey the significance. The analysis entails comparing existing conditions to what was present during the historic period and making an evaluation of whether the landscape characteristic or feature contributes to the landscape's historic character.

The landscape characteristics evaluated for the formal gardens include spatial organization, buildings and structures, circulation, vegetation, small-scale features, and views and vistas. For each characteristic, the analysis is broken into the following components:

Historic Condition, a brief discussion of the feature's history and evolution as it relates to the period of significance;

Existing Condition, an overview of changes that have occurred since the end of the period of significance; and

Evaluation, a determination of whether the feature contributes to the historic character of the landscape.

Contributing features generally date to the period of significance and help convey the gardens' historic design and character. Non-contributing features generally post-date the period of significance or have been so altered from the historic condition that they no longer help convey the site's significance. The analysis is based on archival resources, secondary sources, and site documentation between 2008 and 2011.

SPATIAL ORGANIZATION

Spatial organization is the three-dimensional organization of physical forms and visual associations in the landscape, including the articulation of ground, vertical, and overhead planes.

Historic Condition: In 1875, Walter Langdon, Jr.'s gardens comprised a series of terraces enclosed by a brick wall (see Figure 1.6). The overall footprint of the gardens was nearly square and composed of six almost equal rectangular terraces, with three across the north and three across the south. The highest or northwestern terrace was further divided into two terraces, and another long narrow terrace extended across the gardens on the north, making a total of eight terraces. The level terraces were separated from each other by four-foot-high sloped embankments stepping down the hillside from the highest terrace in

the northwest corner to the lowest terrace in the southeast corner. These were completely enclosed by a low brick wall with peaked terra-cotta tile caps and spherical finials. Orthogonal pathways led along the edges of the terraces and descended the gardens from one terrace to another via ten sets of bluestone steps.

The buildings and greenhouses were concentrated on the upper terraces along the north and west sides of the garden. On the long northern terrace, two brick buildings—the tool house and the gardener’s cottage—were joined by a long greenhouse, known as the Grapery. On the westernmost highest terrace was a large, ornate conservatory, and to the south was a set of four joined greenhouses. The other terraces featured geometric planting beds.

When the Vanderbilts bought the property in 1895, they retained the basic structure of the gardens while replacing many of the greenhouses and making alterations to the overall garden design. Between 1904 and 1908, they replaced all of the greenhouses with new ones in their original locations. Also in 1904, the Vanderbilts hired landscape architect James L. Greenleaf to redesign the two easternmost terraces into an Italian garden. Greenleaf regraded the two terraces to create a sloping central path lined with planting beds.

In 1910, the Vanderbilts hired Meehan and Sons to design the loggia garden, an eastern extension of the garden on a lower level that was later known as the rose garden (see Figure 1.28). Beginning in 1913 and continuing until 1934, the Vanderbilts retained Robert Cridland, an architect who initially worked for Meehan and Sons. Cridland added the loggia in the rose garden, redesigned Greenleaf’s upper terrace, and reconfigured most of the planting beds within each garden space (see Figures 1.32, 1.48, 1.49, 1.54, 1.56, 1.57, 1.63, and 1.71).

Existing Condition: The garden terraces remain and are in good condition (see Figure 2.1). Three buildings remain and are in good condition but the greenhouses are gone. Most of the walls and pergolas remain but many are in fair to poor condition. Some sections of the boundary wall are missing to the south of the lower annual garden and around the rose garden (see Figures 2.11 and 2.15).

Evaluation: Contributing. Most of the spatial relationships within the formal gardens remain as they were designed during the Langdon period and modified and expanded during the Vanderbilt Period. Defining elements that have been lost are the greenhouses and sections of the boundary wall by the lower annual garden and surrounding the rose garden.

BUILDINGS AND STRUCTURES

The buildings and structures frame the formal gardens and serve vital roles in the spatial organization, circulation, and operations of the space. Brick and limestone

are the predominant finishes. The warm red bricks and tiles contrast with the verdant plants and cool bluestone steps within each space.

Tool House

Historic Condition: The tool house and gardener's cottage were part of the formal gardens complex that was designed by Sturgis and Brigham for Walter Langdon, Jr. in 1874-1875. Originally these two buildings had a greenhouse that spanned the distance between them, referred to as the grapery. In 1907, Vanderbilt had this greenhouse replaced with a new one, thereafter called the carnation house. The carnation house was removed in 1954, but the tool house and the gardener's cottage remain. The tool house is the westernmost of the two structures.

Existing Condition: The tool house remains today a prominent element of the gardens. Architecturally, the tool house has changed little since the historic period. The two-story brick building is currently being used by the Frederick W. Vanderbilt Garden Association as office, meeting space, and storage. Building access is by concrete ramp that leads to double doors on the ground level and by three bluestone steps that lead to the upper level. Some spalling is present in the bluestone, but overall the steps are in good condition.

Evaluation: Contributing. The tool house contributes to the historic character of the formal gardens.

Gardener's Cottage

Historic Condition: The gardener's cottage was the easternmost of the two structures built by Sturgis and Brigham in 1875 (see historical description of the tool house). During the Vanderbilts' tenure, the building served as the residence of the Head Gardener. Historic photos show the facade of the building covered with ivy and vines up to the top of the brick. An el-shaped wooden fence (also covered in vines and ivy, screened the western door of the cottage.

Existing Condition: The gardener's cottage remains today with few alterations since the historic period. Notably, the wooden fence has been removed and the façade is no longer covered in vegetation. Today the gardener's cottage is used as park housing. The steps and landing at the entrance to the Gardeners Cottage entrance are in good condition and even.

Evaluation: Contributing. The gardener's cottage contributes to the historic character of the formal gardens.

Potting Shed

Historic Condition: The potting shed in the southwest corner of the gardens was originally part of the two-winged greenhouse built by Vanderbilt in 1908 and referred to as the rose house. The brick portion comprised the western half of the western wing of the greenhouse. The rose house was sold in 1947, but the potting shed was retained and is extant today.

Existing Condition: The potting shed is located on the western edge of the rose house Terrace. The long low brick building is approx 113 feet long and 13 feet wide with a metal roof. The building has doors on the east and south facades and five boarded-up windows on the west facade.

Evaluation: Contributing. The potting shed contributes to the historic character of the formal gardens.

Pool House

Historic Condition: The roofed pool house on the southern end of the Italian garden was part of the Greenleaf plan for the garden in 1906. Most photos of the pool house show its current configuration with the flanking trellises and vines and with the statue of an odalisque. At least two undated historic photos show no statue in the pool house.

Existing Condition: The pool house is a single-story brick structure at the southern end of the lower perennial garden. The building features openings on the north, east, and west sides and has a tiled gable roof. The arched north opening is flanked by a pair of limestone Doric columns and looks out over the ornamental pool. The pool house holds a large statue of an odalisque (Barefoot Kate).

Evaluation: Contributing. The pool house contributes to the historic character of the formal gardens.

Rose Garden Loggia

Historic Condition: The drawings completed by Thomas Meehan and Sons in 1910 for the eastern extension of the formal gardens did not include a structure at the eastern end. In 1916, when Robert Cridland devised a new planting plan for the garden extension, he added the loggia, which was called the garden house at the time.

Existing Condition: The rose garden loggia is a single-story stucco structure with a tiled hip roof. The structure has three arched openings on the west side toward the rose garden and arched window openings on the other sides.

Evaluation: Contributing. The rose garden loggia contributes to the historic character of the formal gardens.

Arched Stair Arbor

Historic Condition: The arched stair arbor was part of Greenleaf's design for the garden in 1903. Spanning the steps from the gardener's cottage to the upper annual garden, the arbor was constructed of metal mesh to accommodate climbing vines and was integrated into the iron mesh fence that extended down the eastern side of the upper annual garden. Historic photos show the arched stair arbor completely covered in vegetation so that the metal structure is not visible.

Existing Condition: The arched stair arbor remains today in its original location over the steps between the carnation house terrace and the upper perennial garden. The metal mesh shows some rust, and mature vines that are growing within the metal work may cause substantial damage to the structure.

Evaluation: Contributing. The arched stair pergola contributes to the historic character of the formal gardens.

Central Stair Pergola

Historic Condition: Part of the Greenleaf design in 1903 included four timber pergolas along the walk between the lower annual garden terrace and the lower perennial garden terrace. The two pergolas in the middle of the walk were later removed, but the two pergolas over the steps were retained. The pergolas consist of brick piers with timber arbors above. The central stair pergola spanned the steps between the upper and lower annual gardens, and was integrated into the metal mesh fence along the eastern edge of the upper annual garden.

Existing Condition: The central stair pergola shows signs of weathering and deterioration in both the brickwork and in the wood.

Evaluation: Contributing. The central stair pergola contributes to the historic character of the formal gardens.

South Stair Pergola

Historic Condition: The south stair pergola was part of the 1903 Greenleaf design. Originally, the pergola not only covered the steps, but extended a short way up the walk, forming an el shape. The portion covering the walk was removed along with the other two portions over the walk in 1922.

Existing Condition: The south stair pergola is at the south east corner of the lower annual garden connecting to the pool house pergola. Like the central stair pergola, this is a wooden lattice arbor supported by brick columns with limestone capitals.

Evaluation: Contributing. The south stair pergola contributes to the historic character of the formal gardens.

North Pergola

Historic Condition: In 1903, James L. Greenleaf designed a pergola for the north end of his Italian garden. The pergola consisted of a brick wall and large brick and stone piers topped with a peaked chestnut timber arbor. In about 1922, Robert Cridland redesigned the timber arbor for the pergola with a flat top and ogee curved members at the southern steps.

Existing Condition: The pergola at the north end of the upper perennial garden is a semi-enclosed structure with low brick walls and brick columns supporting a timber lattice arbor. The arbor is open to the west toward the gardener's cottage and to the south down a flight of steps into the perennial garden.

Evaluation: Contributing. The north pergola contributes to the historic character of the gardens.

Pool Pergola

Historic Condition: The pool pergola or south pergola was part of Greenleaf's design for the Italian garden in 1903. The two-part pergola was a part of a system of pergolas that included the north pergola and the four pergolas that spanned the path on the west side of the lower Italian garden.

Existing Condition: The pool pergola at the southern end of the lower perennial garden is a two-part timber pergola that wraps around either side of the aquatic plant pool. The curved pergolas meet in the middle at the pool pavilion.

Evaluation: Contributing. The pool pergola contributes to the historic character of the formal gardens.

Pool

Historic Condition: The aquatic plant pool at the south end of the Italian garden was built as part of the Greenleaf design in 1903.

Existing Condition: The flatted spade shaped pool is edged with limestone and in good condition. The pool recently had a false bottom/platform installed to reduce the depth of the water for safety reasons.

Evaluation: Contributing. The pool contributes to the historic character of the formal gardens.

Upper Fountain (Boy and Dolphin Fountain)

Historic Condition: The upper fountain is located in the long narrow terrace directly east of the palm house terrace. Plans for the Langdon gardens in 1876 show a fountain in this location, but it is unknown if the existing fountain dates from this time, or if it was replaced during Vanderbilt's ownership.

Existing Condition: The boy and dolphin fountain consists of a circular basin with a spiral-fluted baluster pedestal supporting a scallop shell basin and Renaissance-inspired fountainhead in the form of a *putto* with a recumbent dolphin.

Evaluation: Contributing. The upper fountain contributes to the historic character of the formal gardens.

Rose Garden Fountain (Orpheus Fountain)

Historic Condition: The circular fountain pool at the eastern end of the rose garden was part of the Meehan design for that garden. Originally the fountain had a frog fountainhead at its center that spurted water from its mouth. The frog was replaced in the 1925 by a statue of Orpheus, which remained in the garden until 2005, when it was removed to storage to protect it from further deterioration.

Existing Condition: The pool stands empty. The pool is cracked and no longer water tight.

Evaluation: Contributing. The rose garden fountain contributes to the historic character of the formal gardens.

Cold Frames

Historic Condition: During the historic period, a row of cold frames lined the outside of the garden wall to the south. The cold frames were part of a larger cutting garden area dedicated to the cultivation of plants (see Figure 1.71). The Vanderbilt's garden staff used the cold frames for raising seedlings, which would eventually be planted out in the cutting gardens or in the formal gardens.

Existing Condition: The cold frames are partially extant. The covers which would have protected the seedlings from frost on cool spring nights are no longer present. The Frederick W. Vanderbilt Garden Association uses the cold frames for potted plants.

Evaluation: Contributing. The cold frames contribute to the historic character of the formal gardens.

Brick Walls and Piers

Historic Condition: The perimeter brick wall was part of the formal gardens complex that was designed by Sturgis and Brigham for Walter Langdon, Jr. in 1874-1875. During the Vanderbilt period of ownership, sections of the garden wall surrounding the lower perennial garden were altered and rebuilt as part of Greenleaf's c. 1904 Italian garden. Within the next ten years Meehan and Sons and Cridland added the wall piers and fence around the Rose Garden, which required reconfiguring the section of garden wall on the east side of the lower perennial garden.

Existing Condition: After the death of Frederick Vanderbilt in 1938, the garden wall was not maintained and its condition deteriorated. Rehabilitation efforts in the 1970s and 1980s resulted in the rebuilding of much of the brick garden walls and piers. Some sections of the garden wall and some of the freestanding piers are in poor condition with erosion of bricks and loss of mortar.

- W-01. Carnation house terrace wall: It is unknown whether this wall was constructed as part of the original greenhouse built by Walter Langdon, Jr. in 1875 when the tool house and gardener's cottage were built, or if it was built as part of the carnation house built by Vanderbilt in 1907. This wall extends along the north edge of the carnation house terrace between the tool house and the gardener's cottage. The wall ranges between 3½ to 5 feet high and is constructed of brick with a stucco surface on the north side. The stucco finish is spalling, exposing much of the red brick underneath. On the south side, the bricks are covered with the remnants of a light colored paint. Vines cover the wall on both sides.
- W-02. Gardener's cottage short wall: Based on the similarity of style and materials to the other perimeter walls that date to the Langdon period, it is likely that this wall section was constructed with the gardener's cottage in 1875. The short el-shaped wall extends from the southeast corner of the gardener's cottage to the east and then south. The brick wall has four piers. The wall and the piers have terra cotta caps.
- W-03. Gardener's cottage long wall: This longer el-shaped wall extending along the east side of the gardener's cottage north of the upper perennial garden was constructed with the north pergola and the redesign of the Italian Garden by James L. Greenleaf in 1903. The wall ranges from 3½ to 5½ feet high and is brick with a stone cap and has five piers.
- W-04. Palm house terrace wall: This wall, along with several of the other brick walls in the gardens, was part of the Langdon gardens that was incorporated into Vanderbilt's gardens. The wall marking the northwest corner of the formal gardens is a curved brick wall with a gated entry that leads onto the uppermost (palm house) terrace. The brick wall is capped with terra cotta coping tiles with brick piers.
- W-05. Rose house terrace wall: Built in 1875 as part of the original perimeter wall for Langdon's garden. The perimeter wall marks the south boundary of the rose house terrace. The brick wall is approximately 3½ feet high and is capped with terra cotta.
- W-06. Upper annual terrace trellis fence: Designed by James L. Greenleaf and built in 1903, the fence consists of nine tall brick piers supporting metal trellis panels that extend along the east side of the upper annual terrace.

- W-07. Central stair pergola wall: Designed by James L. Greenleaf and built in 1903, this short section of wall extends from the central stair pergola eastward to mark the transition between the upper and lower perennial gardens. The wall is brick with a stone cap.
- W-08. Lower annual garden wall: The wall marking the southern border of the rose house terrace was also part of the Langdon gardens and is similar in form to the arced northwest wall. Originally, this wall continued eastward along the southern edge of the lower annual bed terrace, but this section of the wall is no longer there.
- W-09. North perimeter wall of upper perennial garden, east and west section: Designed by James L. Greenleaf and built in 1903, the low brick wall is approximately 3 ½ feet high and is capped with terra cotta tiles. Three brick columns extend above each section of the wall supporting timber bracing between them. The columns are capped with stone.
- W-10. East perimeter wall of upper perennial garden: Part of the original Langdon perimeter wall from 1875, the low brick wall incorporates a series of brick pillars flush with the terra cotta capping. The four-foot-high wall extends along the eastern edge of the upper perennial garden forming the eastern perimeter of the formal gardens.
- W-11. Curved brick retaining walls, lower perennial garden: Designed by James L. Greenleaf and built in 1903, the flanking brick retaining walls demark the corners of the upper perennial garden terrace where the path emerges into the lower perennial garden terrace. These walls feature an elaborate shape with curved corners and are made of mortared brick with a stone cap.
- W-12. Brick retaining walls, lower perennial garden, east and west side: Designed by Robert Cridland in 1922, these flanking walls replaced the slope that had been part of the Greenleaf design. The brick retaining walls mark the transition between the upper and lower perennial gardens, extending from the curved brick retaining walls. The walls are of simple design of red brick capped with a brick rowlock course.
- W-13. Side walls at the base of the stair pergola at the south west corner of the lower perennial garden: Stairs in this location were part of the Langdon period garden, although the area was reconfigured as part of the Greenleaf design in 1903.
- W-14. Pool pergola outer wall: The tall curved wall behind the pool pergola was designed by James L. Greenleaf and built in 1903 and marks the garden boundary at the lower perennial garden.

- W-15. Wall at the east side of the lower perennial garden overlooking the upper rose garden: Originally part of the outer wall of the Langdon garden, the wall was modified by James L. Greenleaf in 1903 and modified again in 1910 by Meehan and Sons to create openings to the Rose Garden below.
- W-16. Sidewalls for el-shaped staircase descending to the upper rose garden (north and south flights): The mirrored flights of stairs were part of the Meehan and Sons rose garden installed in 1910.
- W-17. Retaining wall at the west end of the upper rose garden: The low brick retaining wall, which retains the bank above the rose garden, was part of the Meehan and Sons rose garden installed in 1910. The wall was rebuilt in 2009.
- W-18. Perimeter fence around the upper rose garden: The wire fence with brick piers was part of the Meehan and Sons rose garden installed in 1910. The fence is now missing, and only one brick pier remains.
- W-19. Low retaining wall marking the transition between the upper and lower rose gardens: part of the Meehan and Sons rose garden installed in 1910. The wall was rebuilt in 2008.

Evaluation: Contributing. Although some sections of the wall are missing and others have been rebuilt, overall the walls contribute to the historic character of the landscape.

Field Stone Dry Laid Retaining Wall

Historic Condition: The dry laid field stone walls were designed by Robert Cridland when he redesigned the perennial gardens in 1932.

Existing Condition: W-20. Two dry-laid stone retaining walls flank the central path of the upper perennial garden, accommodating the change in grade as the path descends to the lower perennial garden. The wall ranges from six inches to three feet high at its southern terminus and features pockets for vegetation.

Evaluation: Contributing. The two long field stone walls contribute to the historic character of the formal gardens.

Field Stone Mortared Retaining Wall

Historic Condition: The high mortared fieldstone wall running north to south along the west perimeter of the former cutting garden likely dates to the Langdon period or earlier, but no documentation found.

Existing Condition: W-21. The mortared wall is in good condition.

Evaluation: Contributing. The mortared field stone wall contributes to the historic character of the formal gardens.

CIRCULATION

Circulation includes the spaces, features, and applied material finishes that constitute the systems of movement in a landscape. Within the formal gardens, the circulation system allows for walking along the edges of the terraces and through the gardens from one level to another via sets of bluestone steps. Access into the garden is by a few openings in the garden wall.

Garden Paths

Historic Condition: During the Langdon period of ownership, the formal garden included a grid of walking paths from one terrace to the next as seen on the 1897 survey (see Figure 1.6). The Vanderbilts expanded the network of paths and steps to incorporate new garden spaces, the terraced rose garden. The three designers retained by the Vanderbilts, Greenleaf, Meehan and Sons, and Cridland, used techniques that were commonly employed in Italian gardens, notably diverging and reconnecting paths along a central axis with a terminal focal point. Transitions between garden spaces were by sets of steps, which are described separately.

In Greenleaf's Italian Garden, a central walk extended from the north pergola to the reflecting pool in c. 1903. Paths diverged around perennial beds but rejoined by the reflecting pool and in the pool house. A reflecting pool and white marble odalisque served as the focal point. In the rose garden designed by Meehan and Sons 1910 and completed by Cridland between 1913 and 1916, paths diverged and reconnected along a central axis. A loggia and circular pool with a fountain served as focal points. Secondary axes aligned with garden benches at the perimeter of the garden.

During the historic period, the primary entrance for garden guests was by the central path on the palm house terrace. From this high point, one could descend from level to level, discovering each garden room. Greenhouse staff used several other secondary entrances which provided direct access to the tool house, gardener's cottage, and rose house.

Existing Condition: The following narrative describes the paths from the northwest or upper corner of the garden to the southeast or lowest corner of the garden. Overall the gravel paths are in good condition.

- P-01. From the northwest corner of the gardens, a path from the opening in the wall near the tool house extends east to the south side of the gardener's cottage. The path was retained through subsequent redesigns of the garden. During the Langdon period, the path extended along the south side of the Grapery and gardener's cottage, and then led out of the walled garden. The path was kept by the Vanderbilts and extended along the south side of the carnation house, which replaced the Grapery. However, the eastern end of the path near the gardener's cottage was redesigned by James Greenleaf as part of

his design for an Italian garden, which included a retaining wall leading to the north pergola. The gravel path terminated at the red tiled floor of the north pergola. The path surface consists of concrete near the tool house and gravel along most of its length. The walking surface expands on the south side of the tool house and includes a concrete ramp into the south side of the building. Also next to the tool house, three bluestone pavers form a small landing at the base of the steps into the building. Two of the pavers are similar while the third is smaller and sunk and partially covered in soil and gravel. A concrete pad approximately eight feet by twelve feet lies outside of the southeast door of the tool house. The concrete pad contains a rectangular skylight of small round purple glass lights (which would have originally been clear). The concrete surface near the tool house is cracked and crumbled. Some of the glass lights are missing and have been replaced with concrete.

- P-02. The path leading south from the gardener's cottage along the east side of the upper annual garden and lower annual garden is shown on the 1897 garden survey and dates to the Langdon period of ownership. The path was enhanced during the Vanderbilt's ownership by James Greenleaf as part of his design for an Italian garden. Greenleaf constructed pergolas over the steps. Cridland further enhance the lower end of the path by enclosing it with arborvitae hedges and three wire arbors.
- P-03. The central path on the palm house terrace is shown on the 1897 garden survey and dates to the Langdon period of ownership and would have led directly into the conservatory. The Vanderbilts removed the conservatory and erected the twin wings of the palm house. The path was modified in around 1906 to lead directly between the palm house wings to a set of step to the fountain terrace. This central walk would have served as the primary entrance point for garden guests. The path also included branches to entrance doors to the palm house wings. Four ornamental vases were set along the path (see Figure 1.21). The path remains from the historic period. The branching paths to the palm house wings are barely evident in the grass. The gravel walk includes a bluestone step set at grade just west of the gate outside of the garden wall. Metal edging was added as part of the garden rehabilitation in about 1985.
- P-04. The short bluestone path, two feet by five-and-a-half feet, extends between a short flight of steps and the west door of the potting shed, which dates to 1908. The steps terminate on a platform of three pavers, the southernmost of which has a broken edge and is irregular, and is possibly a replacement.
- P-05. The path from the carnation house to the fountain terrace is shown on the 1897 survey, but at that time the carnation house had not yet been built and was still the Langdon's "Grapery" glass house. The path continues south

from the fountain terrace down a flight of bluestone steps to the rose house terrace and is shown on the 1897 survey.

- P-06. From the southwest corner of the gardens, a path leading east between the greenhouses and southern garden wall is shown on the 1897 survey. The path descended a steep flight of steps to the lower annual garden terrace, though the adjacent greenhouse structures were still present from the Langdon period of ownership. An entrance to the garden from the southwest corner is not indicated on the 1897 survey. The entrance may have been added by the Vanderbilts at the time of the construction of the rose house in 1908.
- P-07. The path leading south from the north pergola to the pool house was laid out during the Vanderbilt's ownership by James Greenleaf as part of his design for an Italian garden. Greenleaf constructed the structural elements including the north pergola and pool house. The path served as the central axis through the two-level garden. Smaller pathways diverged in the lower perennial garden, and then merged by the reflecting pool and pool house. In the 1920s and 30s, the paths were slightly modified as part of Robert Cridland's redesign of the garden space.
- P-08. The paths within the rose garden were designed by Meehan and Sons in 1910 as part of an extension to the formal gardens area. Two sets of steps lead to the paths, which then split and rejoin from a central axis, which aligns with the loggia.

Evaluation: Contributing. The path system within the formal gardens remains intact from the Vanderbilt period of ownership (see Figure 2.1). The eight garden paths contribute to the character of the formal gardens.

Garden Steps

Historic Condition: Several sets of bluestone steps between the palm house terrace, rose house terrace, carnation house terrace, and annual terraces date to the Langdon period of ownership, c. 1875 and are shown on the 1897 survey. The steps in the perennial garden were reconfigured as part of Greenleaf's design for the Italian garden. Greenleaf may have also reconfigured the steps above along the east side of the annual gardens. The steps in the rose garden were part of Meehan and Son's addition of the rose garden in 1910.

Existing Condition: The following section details the appearance and condition of each set of steps in the garden.

- S-01. A set of six bluestone steps with two coping stones descends from the center of the palm house terrace to the center of the fountain terrace (see Figures 2.4 and 2.44). The steps are approximately 7 ½ ft. long, and the coping stones are approx. 16 in. wide. The steps are steep and currently uneven and

pitching both forwards and backwards. The third step down has a mended crack at the north end. The coping stones are in good condition but pulling away from the steps. The loose gravel from the walk spills onto the steps, which creates a potential tripping hazard.

- S-02. A set of six bluestone steps with two coping stones descends from the northeastern corner of the palm house terrace near the tool house to the north side of the fountain terrace (see Figure 2.8). The steps are now uneven, particularly the bottom step which has settled. The ends of the steps are chipped and the coping stones are pulling away from the steps.
- S-03. Two large bluestone steps and one smaller step plus sections of concrete walkway and another smaller step ascend from path along the north side of the fountain terrace onto the carnation house terrace (see Figure 2.8). The upper large step is spalling. The twin coping stones on each side of the large steps are in fair condition—the lower east stone is cracked.
- S-04. A set of six bluestone steps with two coping stones descends from the southeast corner of the fountain terrace to the rose house terrace above the lower perennial garden (see Figure 2.27). The steps are uneven and cracked—the fifth step is pulling out and the sixth step is tilting inward. The corners are cracked off of some of the steps and there is some spalling on the west side coping stone.
- S-05. A set of ten steep bluestone steps with coping stones descends from the rose house terrace to the lower annual garden. This stairway is in good condition, but the adjacent wall is gone—the footings for the brick wall are visible. This lost feature would have provided support when using the stairway.
- S-06. A set of four bluestone steps with two coping stones descends from the southeast corner of the gardener's cottage to the upper annual garden terrace and are approximately 5 ½ ft. from southeast corner of gardener's cottage. The steps are in good condition and even, though some spalling on the top step. A gap of 5 ½ ft. above steps is out of character with the other steps, suggesting that paver(s) are missing.
- S-07. A set of five bluestone steps with two coping stones descends under an arbor at the northeast corner of the upper annual garden. The steps are uneven—the top step is tilted and the nosing of the bottom step is pulled out and out of alignment. The coping stone on the east side of the steps is also misaligned.
- S-08. A set of eleven bluestone steps with coping stones descends under the central stair pergola at the southeast corner of the upper annual garden (see Figure 2.40). Where the path connects with the steps there is a change in level

which is a potential trip hazard. The eleven steps are in good condition except the third step from the top is cracked.

- S-09. A set of ten bluestone steps with coping stones descends under the south stair pergola from the southeast corner of the lower annual garden into the lower perennial garden. The pergola structure ties into the pool pergola. While the steps themselves are in good condition, the supporting walls are in poor condition. The top step has settled. The north wing wall is cracked and the south coping stone is cracked.
- S-10. A set of four steps lead from the path on the south side of the gardener's cottage into the north pergola. The steps are 9 ft. long, 16 in. wide and 6 in. high. The top step is chipped but otherwise the steps are in good condition.
- S-11. A set of fourteen steps descends from the north pergola to the upper perennial garden. The steps are 12 in. wide and are in fair condition with minimal spalling. The top step is slightly settled and the west wing wall is cracked near the base. The concrete foundation for the east wing wall is visible on the east face and the pointing is somewhat displaced.
- S-12. A set of el-shaped steps descend from the lower perennial garden to the north side of the rose garden (see Figure 2.34). These two sets of five bluestone threads are in fair condition with only a small amount of spalling. The midway single stone platform spanning 6' x 6' is in good condition.
- S-13. A set of el-shaped steps descend from the lower perennial garden to the south side of the rose garden (see Figure 2.34). These two sets of five bluestone threads are in fair condition with some cracking and spalling. The midway single stone platform spanning 6' x 6' is in excellent condition.
- S-14. A set of steps descends on the central axis from the upper rose garden to the lower rose garden. This set of five bluestone steps leads to a landing then descends five more steps. The steps are overall in fair condition with some spalling. However the second step from the bottom is loose and should be reset. The brick side walls and stone coping are in poor condition. There is a loss of pointing and fracturing on the south side wall. The north side wall is leaning north and has a number of loose bricks and mortar.
- S-15. The five steps leading into the west side of the potting shed are approximately 5 ft. wide by 1 ft. wide with 3 in. bluestone risers atop a layer of brick risers bound by two narrow coping stones and are in good condition. The top step is flush with the turf and the steps descend the grassy terrace on the west side of the potting shed to the door. They are different in character from the steps in the gardens. Their smaller dimensions reflect their utilitarian function to access the work area beyond the glass houses.

- S-16. A set of nine field stone steps descends from outside of the southwest corner of the garden to the parking area on the site of the former cutting garden. The origin of the field stone wall and steps is unknown. The F. W. Vanderbilt Garden Association added a handrail.

Evaluation: Contributing. The steps within the formal gardens remain intact from the Vanderbilt period of ownership. The sixteen sets of steps contribute to the historic character of the formal gardens.

Carnation House Walkway

Historic Condition: The concrete walkway between the tool house and gardener's cottage was originally the interior central aisle in the glass greenhouse that extended between the two buildings. Although the walkway may have been carried over from Langdon's 1875 greenhouse, it was likely constructed in 1907 when the Vanderbilts replaced the "grapery" structure with their own carnation house.

Existing Condition: The concrete walkway extends approximately 95 feet east to west between the tool house and the gardener's cottage. The walkway is approximately three feet wide and is predominantly poured Portland cement concrete, although there is a short section of bluestone near the center of the sidewalk. The walkway is in fair condition with a few cracks and some sections heaving and uneven.

Evaluation: Contributing. The walk is a remnant of the former carnation house and contributes to the character of the space.

Paved Surfaces Outside of the Gardens

Historic Condition: Several paved areas are located close to the tool house and gardener's cottage, but outside of the garden wall to the north and west. The origin of the concrete pad located on the north side of the tool house with three manholes and parking barriers is unknown. A remnant concrete pad beyond the southwest corner of the gardener's cottage is possibly a footing for a porch. It is partially exposed and in fair condition. The origin of a bluestone paver on the north side of the carnation house wall near the fuel intake is unknown.

Existing Condition: The concrete pad with the three manhole covers has some slight heaving but overall is in good condition as are the other paved areas.

Evaluation: Unknown. The paved surfaces, utilitarian in function, are undocumented and their age unknown.

Tool House Wooden Deck

Historic Condition: The wooden deck on the east side of the Tool house was not present during the historic period. The wooden deck was added by the National Park Service at an unknown date to make the door accessible.

Existing Condition: The deteriorated wooden deck was replaced in 2010.

Evaluation: *Non-contributing.*

VEGETATION

For the successive owners of the property, exotic and showy vegetation has always been a defining characteristic. Both the park-like setting of the larger property and the formal gardens and greenhouses were developed with an interest in horticulture and display. The Vanderbilts established a complex, ornamental landscape through the annual acquisition of plants for the garden beds and greenhouses. The Vanderbilts added ornamental trees and flowers to the formal garden spaces to create a largely geometric, classical landscape.

Without the Vanderbilts large dedicated gardening staff, the gardens fell into disrepair after the death of Frederick Vanderbilt in 1938 and most of the plants in the garden beds were lost. Exceptions were some of the most tenacious vines, which without maintenance consumed the wooden elements of the pergolas. Most of the plant material in the gardens has been added since the mid 1980s, when the F. W. Vanderbilt Garden Association was established and resumed a high level of maintenance for the gardens.

Turf Edges and Panels

Historic Condition: Throughout the formal gardens, turf frames the garden beds and holds the terrace slopes. During the historic period, turf framed a number of garden beds around the greenhouse buildings including the carnation house, palm house, and rose house. Upon the removal of the greenhouses, the entire area became broad panels of turf.

Existing Condition: The footprints of the former carnation house, palm house, and rose house are maintained as turf panels. However the outlines of the former structures are still evident. The turf holds the steep slopes of the terrace in place. In the few spots where the turf is weak, erosion is present.

Evaluation: *Contributing/Non-contributing.* The turf edges that frame the garden beds and retain the steep terrace slopes contribute to the character of the historic landscape. The broad turf panels on the sites of the carnation house, palm house, and rose house are non-contributing.

Vines

Historic Condition: During the historic period, vines covered the facades of buildings, garden walls and fences, pergolas, and overhead arbors. Both Greenleaf and Cridland specified multiple types of vines to soften architectural elements in the garden.

Existing Condition: Many vines are thriving in the garden and ascend brick walls, wooden trellises, and wire lattices. Specific vines are called out below.

- V-01. Virginia creeper vine ascends the walls of the tool house, gardener's cottage, and the remnant wall of the former carnation house. The vine both damages the walls as well as holds them together. The vine coverage was present during the historic period, but was subsequently cut back to reduce the amount of moisture held close to the buildings.
- V-02. Honeysuckle vine and wisteria climb on the arched arbor over the stairs between the gardener's cottage and upper annual garden.
- V-03. Honeysuckle vine climbs on the wire lattice fence between the upper annual garden and upper perennial garden. The vines also fill a sloped bed along the west side of the upper perennial garden. These vines are a challenge to maintain because of the mix of weeds and invasive species that take root in the beds.
- V-04. Trumpet vine climbs on the central stair arbor. The vine requires routine pruning to maintain its form in proportion with the trellis structure.
- V-05. Trumpet vine climbs on the south stair pergola at the southeast corner of the lower annual garden.
- V-06. Trumpet vine and wisteria climb on the north pergola.
- V-07. Grape vine and bittersweet climb on the pool pergola.
- V-08. English ivy formerly clung to the pool house during the historic period, but is not longer present.

Evaluation: Contributing. The vines on the building walls, pergola frames, trellises and arbors contribute to the character of the formal gardens. However, the vines require routine maintenance to retain an appropriate scale and form in relation to the structures.

Groundcovers

Historic Condition: During the historic period, groundcovers thrived in the garden, filling beds along the edges of the upper perennial garden and surrounding the field stone wall. Most notably, Cridland specified vinca groundcover and

plumbago to line the edges of the bed along the upper perennial garden (see Figure 1.55).

Existing Condition: Groundcovers are present in the upper perennial garden.

Evaluation: Contributing.

Annual Gardens

Historic Condition: The annual gardens are documented on the 1897 survey of the gardens and likely existed during the Langdon period of ownership. Of all of the garden spaces, the annual terraces remained unchanged except for minor changes to the number and shapes of the garden beds. Historic photographs show that each bed was typically planted with one species, though occasionally low flowering plants, such as alyssum, were used to border and fill the beds filled with another species such as pelargoniums. Plantings were always symmetrical on either side of each garden, with contrasting colors between the beds. Although the plantings in the annual gardens were primarily seasonal annual flowers, other vegetation included vines planted along the fence between the upper annual garden and the upper perennial garden and a double arborvitae hedge planted by Robert Cridland in 1922 separating the lower annual garden and the lower perennial garden. This hedge lined both sides of the walkway along the eastern edge of the lower perennial garden and featured three integrated wire arched arbors that were covered in vines.

Existing Condition: The annual garden beds currently reflect the configuration at the end of the historic period. One exception is the overall size of the crescent shaped beds in the lower annual garden, which are now smaller than during the historic period. The double arborvitae and the wire arched arbors and their vines are no longer present.

Evaluation: Contributing. The annual garden beds contributed to the historic character of the garden.

Upper Perennial Garden Trees and Shrubs

Historic Condition: At the end of the historic period, the upper perennial garden contained an abundance of trees and shrubs, which were planted in accordance with Cridland's plan in the 1930s (see Figure 1.55). Three rows of trees and shrubs were mirrored on each side of the central axis. These included a row of "pink flowering cherries," a row of single blue hibiscus with hydrangea in between, and a row of columnar flowering cherries labeled 'Amagawa' (probably referring to 'Amanogawa') interplanted with arborvitae. At the southern end of the upper perennial garden Cridland specified a hedge of arborvitae and a bed of juniper.

Existing Condition: The “pink flowering cherries” were replanted in the spring of 2009 with ‘Okame’ pink flowering cherries, and the ‘Amanogawa’ cherries and arborvitae in the back row of shrubs on either side of the terrace were replanted in 2010. The front row on each side, comprising the hydrangeas and hibiscus are not extant.

Evaluation: Contributing/Missing. The trees and shrubs in the upper perennial garden contribute to the historic character of the formal gardens.

Upper Perennial Garden Bedding Plants

Historic Condition: Greenleaf’s design for the upper perennial garden consisted of dense evergreens and shrubs, which persisted for most of the historic period and eventually became quite overgrown (see Figures 1.26 and 1.42). In the 1930s, Cridland redesigned the upper perennial garden with long beds flanking the central walk (see Figures 1.56 to 1.60)

Existing Condition: The existing beds are filled with an assortment of perennials, some of which are the same as the historic period and others that have been introduced. Some of the recent introductions are too tall and not representative of the historic period.

Evaluation: Contributing. The perennial beds contribute to the historic character of the garden, but some of the plant species in them do not.

Lower Perennial Garden Trees and Shrubs

Historic Condition: In 1916, Cridland redesigned the lower perennial garden, incorporating arborvitae and juniper in his scheme. Arborvitae were added to each bed as vertical dark green forms surrounded by an assortment of colorful perennials. Within five years however, the arborvitae dominated the garden and all but four were removed. The four that were retained were one in each of the beds flanking the pool and one in each of the beds on the other side of the walkway. Cridland implemented further changes in 1922 when he specified junipers on the slopes on the north and west sides of the lower perennial garden. These shrubs persisted through the end of the historic period.

Existing Condition: The four arborvitae in the lower perennial garden were recently replanted by the F. W. Vanderbilt Garden Association. The junipers are no longer present.

Evaluation: Contributing/Missing. The arborvitae contribute to the character of the garden. The junipers are missing.

Lower Perennial Garden Bedding Plants

Historic Condition: James Greenleaf laid out the lower perennial garden in 1903 with geometric beds of mixed perennials. Within ten years, Greenleaf's Italian garden was overgrown. The Vanderbilts employed Robert Cridland to redesign and rejuvenate the garden. Cridland developed a planting plan that included over fifty different species and varieties (see Figure 1.63). Historic photographs and the estate purchase ledgers suggest that Cridland's plan was implemented.

Existing Condition: The current bed configuration is similar to that specified by Cridland and present during the historic period. The form of the plant masses differs though, as Cridland specified bands of similar perennials and the current configuration consists of some bands and some clumps. The existing beds also have bare areas, where perennials have failed.

Evaluation: Contributing. Appendix A contains a list of plant species that would have been present during the historic period. The bands of perennials that were on Cridland's plant list and that are extant contribute to the historic character of the garden.

Rose Garden

Historic Condition: The Vanderbilts commissioned Meehan and Sons to add the rose garden to the east side of the formal gardens in 1910. The original planting scheme included perennials on the upper terrace and 160 assorted roses on the lower terrace. Three years later the Vanderbilts hired Robert Cridland, who had previously worked for Meehan and Sons, to add the loggia structure and modify the earlier design. Cridland specified 900 roses to fill the upper and lower rose garden terraces and designated rose forms and colors for each bed. Although Cridland did not specify varieties, a separate plan by an unknown person, possibly a gardener or Frederick Vanderbilt, does indicate rose varieties for the interior rose beds.

Existing Condition: The F.W. Vanderbilt Garden Association currently maintains the rose garden with roses of a variety of colors and forms. The roses are predominantly modern varieties, although some heirloom varieties are represented. There are currently none of the rose varieties historically specified in the 1916 plan growing in the rose garden.

Evaluation: Contributing. Overall, the rose garden retains its historic character and contributes to the gardens.

Garden Surround Shrubs

Historic Condition: Meehan and Sons specified the addition of ornamental shrubs around the outside of the walled garden as part of their design for the rose garden in 1910 (see Figure 1.28). Several years later, Cridland specified further additions

to the shrub planting (see Figure 1.77). The abundance of shrubs surrounding the eastern walls of the garden is visible in a 1930s aerial photograph (see Figure 1.80).

Existing Condition: Only a few remnant shrubs remain from these plantings, and these have become overgrown and choked with vines and invasive plants. A row of junipers around the rose garden pavilion are overgrown and in poor health.

Evaluation: Contributing. The remaining shrub plantings contribute to the character of the garden, but are out of scale, incomplete, and in need of replacement.

SMALL-SCALE FEATURES

Small-scale features encompass the minor built features that provide aesthetic detail and function, such as garden ornaments, benches, signs, and hydrants. The Vanderbilts incorporated numerous classical elements to the gardens including fountains, ancient Roman Corinthian capitals, vases, and well heads. All of these elements complimented the overall Italian-inspired landscape design.

Garden Ornaments and Fragments

Historic Condition: Some of the earliest images of the gardens indicate that ornaments were part of the Vanderbilts' gardens. By 1904, the Corinthian capitals were placed along the central walkway in Greenleaf's Italian garden (see Figures 1.16 and 1.23). These were later moved to the upper annual garden and greenhouse terrace. By 1906, Baroque style sandstone vases lined the walks of the greenhouse terrace and the boy and dolphin fountain was partially installed on the fountain terrace (see Figure 1.20). By 1911, the Vanderbilts installed the odalisque in the pool house and commissioned Meehan and Sons to install the frog fountain as part of the new rose garden (see Figures 1.29 and 1.30). In 1925 the frog font was removed and the Orpheus fountain installed in its place (see Figures 1.73 and 1.74). A photograph dated c. 1922 shows two tall ornamental vases by the rose garden loggia, but these were removed before the Orpheus fountain was installed (see Figure 1.72). Benches were installed in the garden in the 1920s or 30s (see Figure 1.31). By the 1930s, but possibly earlier, a terra-cotta wellhead and marble cistern were placed on either side of the central walk in Greenleaf's Italian garden (see Figure 1.59 and 1.61).

Existing Condition: Many of the garden ornaments have deteriorated and some have been placed in museum storage, such as the pair of vases, the original benches, and the Orpheus fountain. Some have been replaced with replicas, such as the benches. Other pieces remain in the landscape but are in poor condition, such as the Baroque style sandstone vases that stand along the edge of the palm house terrace. Now only fragments of the pieces remain.

Evaluation: Contributing. The vase fragments, Corinthian capitals, cistern, wellhead, odalisque statue, all contribute to the character of the historic landscape. The benches are replicas and thus are not contributing resources, although the placement of the replicas in the landscape contributes to the historic feeling and setting of the garden.

Benches

Historic Condition: The lower perennial garden and rose garden contained several ornate stone benches during the Vanderbilt period (see Figures 1.28, 1.30, and 1.31). Some of the benches were placed in the pool house and the Loggia. Additional benches were cast stone with dolphin supports.

Existing Condition: A pair of stone seats that date to the historic period is located in the pool house. The benches are in good condition and protected from the elements by virtue of their location. Three stone benches are located in the rose garden loggia and are also protected from the elements. The cast stone benches with dolphin supports are now in the park's museum collection. However, seven replicas were made to replace the original benches, six of which are currently in the gardens (see Figures 2.22 and 2.53). Locations include:

- One replica by the pool pergola facing the pool.
- One replica in a recess in the low retaining wall of the lower perennial garden facing south.
- Three replica(s) in recesses in the retaining wall of the upper rose garden facing east.
- One replica along the south perimeter of the rose garden facing north, formerly sited in a recess, but now the outer wall is missing.

The seventh replica bench was removed to facilitate access into the rose garden via the north side.

Since the historic period, several long wooden benches were added to give visitors a place to sit and rest while touring the gardens. These benches are approximately eight feet long and constructed of a metal frame with wood back and seat. Once painted green, the benches have recently been painted black. There are eleven wood and metal benches in the garden. (see Figure 2. 8).

- Two benches on the edge of the carnation house terrace facing south and overlooking the upper annual garden.
- One bench also on the edge of the carnation house terrace facing south and overlooking the fountain terrace.
- One bench beside the potting shed facing east.

- One bench on the edge of the fountain terrace facing east and overlooking the upper annual garden.
- One bench on the southeast corner of the lower annual garden overlooking the pool and lower perennial garden.
- Four benches on the southern edge of the lower perennial garden facing north.
- One bench located on the edge of the lower perennial garden facing west and overlooking the reflecting pool and lower perennial garden.

Evaluation: Contributing and Non-contributing. The benches in the pool house and Loggia may date to the historic period, but additional information is needed. The benches with dolphin supports are replicas, which were installed by the Frederick W. Vanderbilt Garden Association. The replicas are not contributing resources, however, the placement of the replicas in the landscape contributes to the historic feeling and setting of the garden. The metal and wooden benches are recent introductions and thus non-contributing.

Signs

Historic Condition: Not applicable.

Existing Condition: Five signs display historic photographs and describe the history of the gardens. The panels are sun-faded and located in the following locations.

- Outside of the garden wall, beside the entrance gate at the palm house terrace
- Outside the garden wall, near the entrance by the gardener's cottage and north pergola
- At the eastern edge of the palm house terrace, overlooking the fountain terrace and annual gardens
- At the southeast corner of the lower annual garden, looking toward the annual gardens
- At the east side of the upper rose garden, overlooking the lower rose garden

Evaluation: Non-contributing. Non-historic signage does not contribute to the historic character of the gardens.

Hydrants

Historic Condition: A fire hydrant was located outside the garden wall, adjacent to the north side of the tool house. While it is not known when the hydrant was installed, it was indicated as an existing feature on a 1941 plan for updating the

park's water system. A second hydrant was installed in 1941 between the tool house and gardener's cottage on the north side of the road.

Existing Condition: Both hydrants are extant today.

Evaluation: Unknown. The older hydrant was likely installed during the Vanderbilt period, and it contributes to the historic character of the gardens. The 1941 hydrant is non-contributing.

VIEWS AND VISTAS

Views are broad prospects of a general area, while vistas are designed and directed views of a particular scene or feature. During the historic period there were expansive views across the Hudson River Valley from the upper terraces of the garden. Most views, however, were directed inward to the garden spaces. Key framed vistas from inside the garden included the open view of the upper and lower annual garden terraces, views of the upper and lower perennial garden terraces, and several framed vistas within the perennial garden and rose garden.

View from Palm House Terrace

Historic Condition: The upper terraces were laid out during the Langdon period to be observed collectively from above. The palm house terrace offers a high vantage point to look out over the parterre beds of colorful flowers.

Existing Condition: The view across the upper and lower annual gardens is extant.

Evaluation: Contributing. The view from the palm house terrace contributes to the historic character of the formal gardens.

View from North Pergola

Historic Condition: The north pergola, designed by Greenleaf in 1903 offered a vantage point for a view south along the central axis of the perennial garden toward the pool and pool house. The north pergola also offered views to the east and north of the surrounding estate.

Existing Condition: The view south along the central walk in the perennial garden is extant. The views north and east from the pergola are partially obscured by the surrounding trees.

Evaluation: Contributing. The view from the north pergola contributes to the historic character of the formal gardens.

View from Loggia

Historic Condition: The loggia, designed by Cridland in 1913 offered a vantage point for views west of the rose garden and north, east, and south of the surrounding landscape, including Crum Elbow Creek.

Existing Condition: The view west of the gardens and the views to the surrounding landscape are extant.

Evaluation: Contributing. The view from the loggia contributes to the historic character of the formal gardens.

Table 3.1. Landscape Features

Characteristic and Feature Name	LCS Number	Contributing	Non-Contributing	Notes
SPATIAL ORGANIZATION				
Formal Gardens		X		Constructed c. 1875, expanded 1910
BUILDINGS AND STRUCTURES				
Tool House	004	X		Constructed c. 1875
Gardener's Cottage	003	X		Constructed c. 1875
Potting Shed	010	X		Constructed c. 1875
Pool House	012	X		Constructed c. 1903
Rose Garden Loggia	011	X		Constructed c. 1916
Arched Stair Arbor	179I014	X		Constructed c. 1903
Central Stair Pergola	179I014	X		Constructed c. 1903, rebuilt c. 1980
South Stair Pergola	179I014	X		Constructed c. 1903, rebuilt c. 1980
North Pergola	014	X		Constructed c. 1903, modified c. 1922, rebuilt c. 1980
Pool Pergola	014	X		Constructed c. 1903, rebuilt c. 1980
Cold Frames	013	X		Constructed c. 1875
W-01 Carnation House Terrace Wall	179IPIWA	X		Constructed c. 1875, modified c. 1908
W-02 Gardener's Cottage Short Wall	179IPIWA	X		Constructed c. 1875, modified c. 1908
W-03 Gardener's Cottage Long Wall	179IPIWA	X		Constructed c. 1875, modified c. 1908
W-04 Palm House Terrace Wall	179IPIWA	X		Constructed c. 1875, rebuilt 1980s
W-05 Rose House Terrace Wall	179IPIWA	X		Constructed c. 1875, rebuilt 1980s
W-06 Upper Annual Terrace Trellis Fence	179IPIWA	X		Constructed c. 1903
W-07 Center Stair Pergola Wall	179IPIWA	X		Constructed c. 1875, modified c. 1903
W-08 Lower Annual Garden Wall	179IPIWA		Missing	
W-09 North Perimeter Wall of Upper Perennial Garden	179IPIWA	X		Constructed c. 1875, modified c. 1903
W-10 East Perimeter Wall of Upper Perennial Garden,	179IPIWA	X		Constructed c. 1875, modified c. 1903
W-11 Curved Brick Retaining Walls, Lower Perennial Garden	179IPIWA	X		Constructed c. 1903
W-12 Brick Retaining Wall, Lower Perennial Garden	179IPIWA	X		Constructed c. 1903
W-13 Side Walls at base of Stair Pergola	179IPIWA	X		Constructed c. 1903
W-14 Pool Pavilion Pergola Outer Wall	179IPIWA	X		Constructed c. 1903
W-15 Wall at East Side of Lower Perennial Garden	179IPIWA	X		Constructed c. 1875, modified c. 1903 and 1910
W-16 Sidewalls for El-shaped Staircase	179IPIWA	X		Constructed c. 1910
W-17 Retaining Wall at West End of Upper Rose Garden	179IPIWA	X		Constructed c. 1910
W-18 Rose Garden Perimeter Fence	179IPIWA		Missing	
W-19 Rose Garden Low Retaining Wall	179IPIWA	X		Constructed c. 1910, rebuilt 2008

Table 3.1. Landscape Features (Cont.)

Characteristic and Feature Name	LCS Number	Contributing	Non-Contributing	Notes
Field Stone Dry Laid Retaining Wall	179ICHWA	X		Constructed c. 1930s
Field Stone Mortared Retaining Wall	1797CUTT	X		Unknown
Pool	179IPOOL			Constructed c. 1903
Upper Fountain				Constructed c. 1875, modified c. 1908
Rose Garden Fountain	179IFOUN			Constructed c. 1910, modified c. 1916
CIRCULATION				
P-01 Garden Path	179IPATH	X		Constructed c. 1875
P-02 Garden Path	179IPATH	X		Constructed c. 1875
P-03 Garden Path	179IPATH	X		Constructed c. 1875
P-04 Garden Path	179IPATH	X		Constructed c. 1875
P-05 Garden Path	179IPATH	X		Constructed c. 1875
P-06 Garden Path	179IPATH	X		Constructed c. 1875
P-07 Garden Path	179IPATH	X		Constructed c. 1875
P-08 Garden Path	179IPATH	X		Constructed c. 1875
S-01 Garden Steps	179ISTEP	X		Constructed c. 1875
S-02 Garden Steps	179ISTEP	X		Constructed c. 1875
S-03 Garden Steps	179ISTEP	X		Constructed c. 1875
S-04 Garden Steps	179ISTEP	X		Constructed c. 1875
S-05 Garden Steps	179ISTEP	X		Constructed c. 1875
S-06 Garden Steps	179ISTEP	X		Constructed c. 1875
S-07 Garden Steps	179ISTEP	X		Constructed c. 1903
S-08 Garden Steps	179ISTEP	X		Constructed c. 1903
S-09 Garden Steps	179ISTEP	X		Constructed c. 1903
S-10 Garden Steps	179ISTEP	X		Constructed c. 1903
S-11 Garden Steps	179ISTEP	X		Constructed c. 1903
S-12 Garden Steps	179ISTEP	X		Constructed c. 1910
S-13 Garden Steps	179ISTEP	X		Constructed c. 1910
S-14 Garden Steps	179ISTEP	X		Constructed c. 1910
S-15 Garden Steps	179ISTEP	X		Constructed c. 1908
S-16 Garden Steps	179ISTEP	X		Unknown, but dates to historic period
Carnation House Walkway	179IPATH	X		Constructed c. 1908
Paved Surfaces Outside of the Gardens			unknown	
Tool House Wooden Deck			X	Constructed by NPS
VEGETATION				
Turf Edges and Panels		X	X	Added c. 1875, modified in early 1900s and by NPS
Vines		X		Added c. 1903, replanted 1980s
Groundcovers		X		Added c. 1930s, replanted 1980s to present
Annual Gardens		X		Constructed c. 1875, Modified 1920s, reestablished 1970s
Upper Perennial Garden Trees and Shrubs		X	Missing	Added c. 1930s, replanted 1980s to present, some missing

Table 3.1. Landscape Features (Cont.)

Characteristic and Feature Name	LCS Number	Contributing	Non-Contributing	Notes
Upper Perennial Garden Bedding Plants		X		Added c. 1930s, replanted 1980s to present, some missing
Lower Perennial Garden Trees and Shrubs		X		Added c. 1920s, replanted 1980s to present
Lower Perennial Garden Bedding Plants		X		Added c. 1920s, replanted 1980s to present, some missing
Rose Garden		X		Added c. 1910, modified 1910s, replanted 1980s to present, different varieties
Garden Surround Shrubs		X	Most Missing	Added c. 1910, modified 1910s, many removed in 2009
SMALL-SCALE FEATURES				
Garden Ornaments and Fragments	179IORNA	X		
Benches		X	X	Some date to historic period, many are additions
Signs			X	Added c. 1980s
Hydrants		X		Date unknown.
VIEWS AND VISTAS				
View from Palm House Terrace				
View from North Pergola				
View from Loggia				



4. TREATMENT

This chapter describes the preservation strategy for long-term management of the Vanderbilt formal gardens based on their significance, existing conditions in 2011, and current use. According to National Park Service policy, the cultural landscape report serves as the primary supporting document guiding the treatment of a cultural landscape, and is required before any major intervention. For the formal gardens, the treatment recommendations address issues associated with deteriorating structures, vegetation, visitor circulation and accessibility, educational and interpretive objectives, and maintenance requirements. The overall goal of the treatment recommendations is to provide a basis for the sound stewardship of the formal gardens as outlined in the National Park Service *Cultural Resource Management Guideline* (1997) and the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (1996). The cultural landscape report also provides documentation that supports park consultation responsibilities under Section 106 of the National Historic Preservation Act.

The National Park Service defines treatment as preservation measures intending to enhance the historic character of a cultural landscape while facilitating contemporary use. This chapter recommends modifications to the cultural landscape to preserve and enhance overall historic character within the context of park management goals, including maintenance, use, and interpretation. Treatment is also a strategy for short- and long-term stewardship of the landscape, providing a framework to inform physical changes at the conceptual level. Treatment does not provide detailed drawings and specifications that can be used to contract construction work, nor does it prescribe actions necessary to maintain the landscape.

The treatment recommendations in this chapter are based on the findings of the site history, existing conditions, and analysis and evaluation chapters of this report, as well as through discussion and collaboration with knowledgeable park staff and volunteers. This includes input from a treatment workshop conducted in November 2010 where general treatment issues, treatment philosophy, and tasks were discussed.

The chapter begins by presenting a framework that, based on applicable policies, standards, and regulations, establishes an overall treatment philosophy that describes the intended historic character of the landscape. Based on this framework and a summary of general treatment guidelines, the chapter provides narrative tasks to preserve and enhance the historic character of the formal

gardens. The narrative recommendations are supported by graphics and by treatment plans (Drawings 6–11).

FRAMEWORK FOR TREATMENT

Treatment of a cultural landscape is framed by the park’s enabling legislation and mission, National Park Service policies, standards and guidelines for the treatment of cultural resources, and the park’s current planning efforts. The General Management Plan is the primary planning document in the National Park Service for determining general treatment of cultural resources. As part of the Vanderbilt Mansion National Historic Site, the formal gardens are addressed in the General Management Plan completed in 2010 for the larger administrative park unit, Roosevelt-Vanderbilt National Historic Sites. This treatment plan incorporates the most recent draft material from the General Management Plan to establish a framework for treatment of the historic formal gardens. This framework reviews the park legislation and purpose, discusses the relationship of the treatment plan to the General Management Plan, and describes a treatment approach for the landscape to structure guidelines and tasks that follow.

RELATIONSHIP TO PARK PLANNING

Treatment of the cultural landscape at Vanderbilt Mansion National Historic Site is developed within the context of park planning efforts, including master plans and general management plans. These documents articulate park goals and priorities and guide management, treatment, and policy actions related to the park’s resources. Three master plans, written in 1941, 1961, and 1976, were developed to help guide the development and management of Vanderbilt Mansion National Historic Site. These master plans were discussed in the Summary of Existing Documentation section of the Introduction chapter of this report.

The current planning document for Vanderbilt Mansion National Historic Site is the 2010 General Management Plan for the Roosevelt-Vanderbilt National Historic Sites, an administrative unit that includes Vanderbilt Mansion National Historic Site, the Home of Franklin D. Roosevelt National Historic Site, and Eleanor Roosevelt National Historic Site. The plan lists a number of overall goals for the three park units in three categories:

Preserving Park Resources

- All resources significant to the purposes of the parks are protected and preserved, with cultural and natural resources maintained in good condition.
- Resource management is guided by the highest quality research and analysis.

- Through National Park Service and/or partner efforts, land outside of National Park Service ownership that constitutes the parks' historic setting is protected from incompatible development.

Providing For Public Use And Enjoyment

- Visitors are informed and oriented before they arrive; are comfortable, safe, and able to navigate easily among the sites throughout their visit; and leave with an enhanced understanding of the parks' resources and National Park Service priorities for stewardship.
- Actual and virtual audiences find interpretive materials, exhibits, and programs appealing and enriching. Interpretive presentations are upgraded in form and content.
- The parks attract new generations of visitors who better reflect the current diversity of the United States population.

Ensuring Organizational Effectiveness

- Partnership development is ongoing and builds constituencies that advocate for the long-term preservation of the sites and of related resources and values beyond park boundaries.
- The three national historic sites are administered in a safe, energy-efficient, and cost-effective manner, with park support facilities located to allow the greatest efficiency with the least impact on park resources and the surrounding community.
- There is sufficient park staff, support facilities, and equipment to protect and preserve resources, with the maintenance backlog largely eliminated. Funding, staffing levels and capabilities, partnerships, volunteer programs, and technology are secure, cost-effective, and used efficiently to enhance overall operations. Staff research, training, scholarship, and professional development are encouraged and facilitated.¹

With respect to the formal gardens specifically, the General Management Plan stipulates that the garden features be rehabilitated to more closely reflect their historic conditions and to replace or interpret missing elements:

Rehabilitation will involve: preserving character-defining features (i.e. structures, circulation, and layout); repairing garden features of the periods; upgrading plantings to be more consistent with historic periods but substituting modern varieties for hard-to-obtain plants or to address pest/maintenance issues; bringing path and roadway surfaces and alignments closer to historic conditions; and indicating missing features through new physical elements of similar massing and scale or through interpretive media.

The plan also mentions the possibility of rebuilding one or more of the greenhouses in the formal gardens if needed for garden operation and if funding for the reconstruction and continued maintenance can be assured.

The treatment principles and recommendations presented below were developed within the context of the guidance in the General Management Plan. In accordance with the plan, the treatment seeks to preserve the historic features, enhance the historic character, and maximize visitor experience of the formal gardens.

TREATMENT PHILOSOPHY AND PRINCIPLES

A treatment philosophy consists of broad principles derived from the site's significance that help guide decisions and provide justifications for design guidelines, recommendations, and specific treatment actions. The treatment philosophy articulates the essential qualities in the landscape that convey its significance and establishes principles intended to preserve those qualities.

The primary park management goals for the Vanderbilt Mansion landscape are to protect and preserve the historic landscape features while developing strategies to enhance public use and enjoyment and managing contemporary needs for safe access, necessary utilities, and resource protection. Of particular importance is the identification of sustainable, collaborative approaches to support the maintenance of historic structures and landscapes and to sustain visitor programs and services in the park.

The intent of the treatment principles that follow is to reestablish the character of the landscape as it developed through the period of the Vanderbilts' residency. Emphasis is on the preservation of extant historic features and the preservation of the visual and spatial relationships that compose the site's historic character. Treatment actions recognize the continued ownership and use of the property by the Vanderbilts from 1895 to 1938 and the park's present and future management goals to sustain visitor programs and services.

The following treatment principles form the foundation on which the treatment recommendations are based. They also provide guidance for treatment decisions that may not be covered specifically in this document or that may arise in the future.

Treatment should preserve the extant historic features associated with the formal gardens.

The formal gardens contain numerous historic features, many of which date as far back as 1875 when the gardens were first laid out by Walter Langdon, Jr. Extant historic features include buildings, garden walls, steps, pergolas, and statues and other ornamental objects. Historic features also include the paths and the

topographic features of the terraces and embankments. These features represent a direct physical connection to the garden's history and contribute strongly to the historic character. Treatment of these structures should aim to preserve their locations, materials, and construction methods. Treatment actions would include protection, necessary repairs using existing or compatible materials and compatible techniques, and limited replacement in kind using new, compatible materials.

Treatment should establish and maintain a full, vibrant, and colorful garden throughout the growing season with trees, shrubs, vines, and seasonal plantings.

The predominant character of the formal gardens during the historic period was of a lush garden full of flowering plants and green foliage. Beds were full to overflowing with a large variety of seasonal plantings that flowered throughout the year. As would have been the case during the historic period, particular attention should be paid to the colors, texture, and timing of the blooms and foliage of the garden plantings, ensuring that the gardens produce interest throughout the season, with emphasis in the early and late summer, when the Vanderbilts were more likely to be in residence. Green hedges, shrubs, and vine-covered walls, pergolas, and building facades created living garden rooms with verdant walls, ceilings, and floors. Full time gardeners maintained the gardens continually to ensure that they were always in top condition with ample color and no unsightly dead flowers, declining plants, or bare areas.

Treatment actions should sustain this character of a lush, full garden through planting and maintenance. Efforts should include seasonal planting of annuals and perennials in the garden beds, planting of trees, shrubs, and hedges where appropriate, and the maintenance of vines and ivies on vertical surfaces. Planting beds should be kept full with no bare spots and maintained to eliminate deadhead flowers, dead stems and foliage, and declining plants. Plants should be selected to ensure success and vigor, with poor performers replaced with another species or variety.

Treatment should preserve the historic organization of the gardens.

The formal gardens were highly ordered during the historic period, with each terrace and each bed designated for a specific garden function. The terraces were considered individual enclosed garden rooms intended to be experienced sequentially. Accordingly, each terrace had its own character, from the formal and geometric annual beds of solid color, to the profusion and variety of the perennial beds, to the quiet simplicity of the rose garden. Garden paths conveyed visitors through the gardens over a limited number of predetermined routes, while walls, pergolas, hedges, and vine-covered trellises restricted and controlled views of adjacent garden spaces. While the species and varieties of the plants in the individual beds varied from year to year, the overall organization of circulation,

constructed features, and planting in the garden was largely stable throughout the historic period with few major changes. The organization of the gardens was a defining characteristic of how the gardens were experienced.

Treatment should preserve the historic organization of the formal gardens. This includes the larger ordering of the terraces and their dedication to specific plant categories as well as the patterns of circulation, the alignment and location of planting beds, and the locations of trees, shrubs, and hedges.

Treatment should preserve the arrangement and character of plants within the beds.

The character of each bed within the formal gardens was determined not only by the plants that it contained, but also by how those plants were combined and arranged. On the annual bed terraces, large blocks of color were created with mass plantings of single species, uniform in size, color, and texture across any given bed. On the perennial terraces, on the other hand, large numbers of different kinds of perennials were grouped to create a profusion of colors, forms, sizes, and textures, with no single clump of plants larger than a few feet in diameter. The arrangement and character of the beds during the historic period should guide current practices for bed planting.

Treatment should employ a flexible palette of plants consistent with the historic character and content of the gardens.

During the historic period, the formal gardens were used as a showcase for hundreds of varieties of annuals, perennials, and roses. What was planted varied from year to year and likely depended on a number of factors, including the wishes of Mr. and Mrs. Vanderbilt, garden fashion, recommendations of garden designers, and what was available. It is also likely that the gardeners themselves had a certain amount of say in what was planted. As such, the formal gardens were living and evolving over the years, maintaining variety to sustain the interest and enjoyment of the owners.

In keeping with the gardening practices during the Vanderbilts' residency, the garden should be planted in a varying palette of plants selected using a number of criteria, including use during the historic period, desired garden effect, current availability, and maintenance needs. These criteria can be prioritized to create a hierarchical palette of plants from which individual species and varieties can be chosen.

If feasible, plants for the formal gardens should be chosen from species and varieties documented in the Vanderbilt estate purchase ledgers and plants that appear in the garden plans by Robert Cridland and James L. Greenleaf. Although a variety's appearance in the ledgers does not indicate for certain whether the plant was used in the garden or how it was used, it does indicate that the variety was

available and favored enough to purchase. Preference should be given to plants that appear repeatedly in the ledgers over several years.

If the documented historic varieties cannot be obtained, if historic varieties are unknown, or if for other reasons they cannot be planted or maintained with sufficient success, substitutions of non-historic varieties of historically documented species may be used. Preference should be for heirloom varieties that were available prior to 1938, although modern varieties may also be used. Any substitute varieties should be selected to replicate the size, texture, and character of historic varieties.

Finally, substitutions of non-historic species may be made to address issues that are irresolvable with historic species. Such issues may include status as an invasive species or susceptibility to browsing deer. Substitute species should be selected to conform as closely as possible to the historic character of the replaced species.

PRIMARY TREATMENT: REHABILITATION

As a federally owned property on the National Register of Historic Places, decisions regarding the treatment of the Vanderbilt Mansion property and formal gardens should be consistent with the 1992 *Secretary of the Interior's Standards for the Treatment of Historic Properties*. These standards specify four distinct, but interrelated, approaches to the treatment of historic properties, preservation, rehabilitation, restoration, and reconstruction. Application of these treatments to historic landscapes is further defined in the Secretary's 1996 *Guidelines for the Treatment of Cultural Landscapes*.

The preferred treatment approach identified in the General Management Plan is rehabilitation based on the extent of changes in vegetation on the property since 1938, as well as considerations of feasibility, maintenance requirements, interpretation, public access and safety, environmental sustainability, cost, and park operations.

Rehabilitation

Rehabilitation acknowledges the need to meet continuing or changing uses through alterations or new additions while retaining the historic character of the property. It allows for repairs and alterations of the cultural landscape, and for improving the utility and function of landscape features. It is used to make an efficient, compatible use while preserving those portions or features of the property that contribute to its historical significance. The Secretary of the Interior identifies the following ten standards for rehabilitation:

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 historical 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 historical 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 historical materials, features and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historical 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.*

For some historic properties, changes are necessary to accommodate visitor use, such as the addition of parking, concessions, and visitor facilities or the modification of circulation surfaces to withstand high use and meet ADA accessibility standards. In other cases, modifications are necessary for sustainable management, such as the reduction of formal gardens or the elimination of agricultural practices. A rehabilitation strategy allows for the replacement of missing features as they existed historically based on documentary evidence, or replacement with compatible features.

In rehabilitation of the formal gardens at the Vanderbilt Mansion, all extant historic features should be preserved and maintained, including the physical features, structures, circulation, topography, bed layout, and overall organization of the gardens. Rehabilitation would allow the gardens to be brought closer to their historic conditions through the replacement of missing features like the statues, arbors, fences, and other garden furnishings. Rehabilitation also allows greater flexibility in the planting of the beds. While historically accurate species and varieties are favored, modern varieties with similar character may be substituted for hard-to-obtain plants or to address pest or maintenance issues. A larger, more flexible plant palette may be used to develop a number of rotating planting schemes for long-term interest and variety.

TREATMENT DATE

As described in the overall treatment plan for the property, the character and composition of the landscape at Vanderbilt Mansion National Historic Site evolved throughout its 110-year period of significance from 1828 to 1938. In order to develop a treatment plan, it is necessary to identify the historic character to which the landscape will be managed. The treatment period provides a reference to guide treatment efforts by identifying a time during the period of significance when the landscape reached its height of development and when it best reflected the characteristics for which it is significant. Further consideration is given to the level of historical documentation and to the existing conditions. The determination of a treatment period is informed by the site's history, documentation, existing conditions, and interpretive goals.

For Vanderbilt Mansion National Historic Site, it is recommended that the landscape be managed to preserve the character as it had developed through 1938, the year Frederick Vanderbilt died and the end of the period of significance. In 1938, the landscape retained much of the character it had exhibited through most of the Vanderbilt ownership. This date incorporates all of the major changes to the landscape that happened in the later Vanderbilt period, including changes to the formal gardens and to the site's trees. Additionally, the following reasons support a treatment date of 1938:

- The Cultural Landscape Report, Volume 1 indicates that after Louise Vanderbilt died in 1926, Frederick Vanderbilt spent even more time at Hyde Park. There is little indication that the property experienced any significant decline in care and maintenance during this period. To the contrary, tree inventories from the 1940s suggest that Vanderbilt planted numerous trees in the later years of his residency at Hyde Park, and purchase ledgers for the estate show that plants and trees for the formal gardens and the estate grounds were purchased throughout the 1930s.

- Significant changes to the landscape in the later Vanderbilt period include a redesign of the Italian garden by Robert Cridland in about 1930. The mature evergreen shrubs and hedges that had comprised the garden since the early twentieth century were replaced with two rows of flowering cherries and perennial border beds. This design is largely reflected in the existing garden. The 1938 date accommodates this change.
- When the National Park Service acquired the property in the early 1940s, they carefully documented the landscape in preparation for the park's master plan. Documentation from this period includes a detailed tree survey, site base maps, photographs, and verbal descriptions. This documentation is augmented by a detailed USGS map from 1946 and aerial photos from 1936 and 1943. The historical record gives a relatively complete picture of the character, composition, and condition of the landscape in the early 1940s, and by reasonable estimation, in 1938. The only period with a comparable level of documentation is the initial construction period of 1895–1906; the record for the intervening years is more fragmented and less complete. This documentation of the landscape at the end of the period of significance will help reduce conjecture and allows a higher level of detail and specificity in treatment recommendations.
- Choosing a date at the end of the period of significance allows the use of the information contained in the estate's purchase ledgers throughout the 1930s. These ledgers contain records of the purchases of plants for the formal gardens which, together with the planting plans drawn up by garden designers Greenleaf and Cridland and the recollections of Vanderbilt gardener Alex Knauss, provide a more complete picture of the gardens' contents. This information will allow for treatment of the gardens in a manner that reflects their cyclical and evolving nature.

TREATMENT TASKS

The following section provides specific treatment tasks associated with implementing a rehabilitation treatment approach at Vanderbilt Mansion formal gardens. The recommended treatment tasks have been developed within the context of the general treatment philosophy and principles outlined above as applied to the formal garden as well as the overall park. The treatment tasks are represented graphically in Drawings 6 through 11.

The tasks are organized by landscape characteristics, including buildings and structures, circulation, vegetation, and small-scale features. Because of its complexity, the vegetation section is further divided into two sections: trees, shrubs, hedges, and vines; and seasonal plantings. The treatment tasks are presented using a code to help organize them and to key them to the treatment drawings. The codes are based on the abbreviations of the landscape characteristics (BS, CR, VG, and SS) followed by a task number, such as task BS-1.

BUILDINGS AND STRUCTURES

The structural elements of the garden, including the walls, steps, pergolas, pavilions, pools, and pathways, form the garden's framework, defining spaces, conveying visitors, and establishing the character. Many of the structures, including the perimeter walls, bluestone steps, and the Gardener's Cottage, Tool House, and Potting Shed, date as far back as Walter Langdon's garden in 1875. Other walls, pergolas, and pavilions were added during Vanderbilt's ownership between the turn of the twentieth century and the early 1930s.

The vast majority of the structural elements that were present in 1938 remain today. Three buildings—the Gardener's Cottage, the Tool House, and the Potting Shed—remain, as well as the pavilions, pergolas, and most of the walls. The notable exception is the greenhouses, all of which were removed after the end of the historic period. The remaining garden structures deteriorated in the years following the National Park Service's acquisition of the property, and by the 1970s, many exhibited extensive weathering, damage, and loss. The structures were restored in the 1970s and 1980s using historic plans and photographs. Following this restoration, however, the structures have continued to weather, and today many show significant damage and erosion.

The treatment tasks for the buildings and structures in the formal gardens primarily address the stabilization of deteriorating features and the selective replacement of lost features. Stabilization work is needed for many of the brick structures, including brick walls and brick pergola supports, as well as the timber pergola elements. Lost elements include a section of wall along the south edge of the lower annual garden, the fence around the rose garden, three arched wire trellises, and a garden gate.

BS-1. Stabilize and repair eroded brick walls and pointing.

Brick was the primary material for the majority of the garden structures during the historic period. Langdon's gardens were enclosed with a brick wall and featured brick buildings. Greenleaf used brick extensively for walls, fence columns, pergola columns, and the pool house. The material was carried through the subsequent designs by Thomas Meehan and sons and Robert Cridland, so that by the end of the historic period, red brick was the predominant material for structures throughout the gardens.

Today many of the brick structures remain, still forming the structural framework of the gardens. Many of the brick walls, columns, and other structures, however, are damaged, eroded, and generally deteriorating (see Figures 2.55 and 2.56). In some cases, the structures appear to be in danger of failure (see Appendix C).

Immediate steps should be taken to stabilize and repair the brick work to prevent further damage and to arrest the gradual wear to the structures. In some structures, damage is light, and small repairs and repointing is needed. Other structures may need to be reconstructed using existing or new materials. Materials should be chosen to match the historic fabric in color, texture, and character. Some modern mortars may cause damage to historic brick structures, causing splitting and spalling of brick faces. Mortar should be of a material compatible with the historic brick.

BS-2. Rebuild missing section of garden wall.

One of the key characteristics of the formal gardens during the historic period was their enclosure, especially in contrast to the open character of the estate grounds and the expansive views of the Hudson River and mountains to the west. Langdon's gardens were originally enclosed by a brick wall with terra-cotta coping tiles. Subsequent redesigns and expansions of the gardens included walls, fences, and hedges that not only enclosed around their perimeter, but also separated the terraces from each other, creating enclosed garden rooms. Since the historic period, some of these structural elements have been lost, reducing the historic sense of enclosure.

To restore the spatial organization of the gardens and the sense of enclosure of the lower annual terrace, the section of wall along the south edge of the lower annual terrace between the existing wall segment on the south edge of the rose house terrace and the south stair pergola should be rebuilt. The wall should match the existing wall in all aspects of design, dimension, and materials. Ideally, the new wall should extend the entire length of the terrace from the end of the existing wall to the stair pergola to create complete enclosure to the lower annual terrace on the south side. This, however, would block access to the gardens from the south and deny access to the annual and perennial gardens by wheeled carts and mowers. To accommodate access for these vehicles, a gate may be installed at the



Figure 4.1. Photo simulation showing the location and design of the missing wall on the southern edge of the lower annual garden. The simulation shows the inclusion of a gate at the eastern end of the new wall (OCLP 2011).

eastern end of the new wall. A simple iron gate should replace the easternmost section of the wall between the last wall column and the existing brick of the south stair pergola. See Figure 4.1 for an illustration of the wall and gate replacement.

BS-3. Rebuild the rose garden fence.

The rose garden was enclosed with a fence constructed of metal wire panels mounted between brick piers. This fence supported the climbing roses planted in the perimeter beds, and with the shrubs planted along the outer perimeter of the garden, created a sense of seclusion and intimacy in the garden. The fence was installed in 1910 with the creation of the garden and altered in 1916 when the rose garden loggia was built. The fence remained otherwise unchanged throughout the historic period.

Today the fence is missing, as are most of the brick piers. The two brick piers associated with the retaining wall between the two terraces of the rose garden and one pier on the south side of the upper terrace remain. The loss of the fence has greatly reduced the sense of enclosure in this garden and eliminated the structural support for climbing roses along the perimeter beds. Reconstruction of this fence will help restore the historic character of the rose garden.

Rebuild the fence, using the existing piers, historic drawings, and historic photos as a guide. New piers should match existing piers in design, materials, and construction. The fence should be made of simple woven wire in a diamond

pattern (see Figure 1.31). Because this fence was rather low, at approximately four feet high, supplemental fencing may still be needed to exclude deer from the rose garden (see task VG-8). Deer fencing should be installed along the outer perimeter of the reconstructed fence as described in that task. Reinstating the garden surrounding vegetation may eventually eliminate the need for supplemental deer exclusion (see treatment task VG-6).

Although not part of the historic configuration, a gate may be installed in the fence at the north side where there is currently a gate in the deer fencing. This would allow more access to this garden without needing to walk down steps. The trade-off is that the dolphin bench, which historically occupied this location, would not be able to be restored to its historic location (see Figure 1.31). The gate should be of similar design as the wire fence to blend in visually.

BS-4. Repair and replace pergola wooden timber elements.

The original south and north pergolas, installed by Greenleaf in 1903 and by Cridland in 1922, respectively, were lost to decay and disrepair by the 1970s. The current pergolas were installed in the 1980s as part of the rehabilitation of the gardens. Since then, some of the wooden timbers of the pergolas have deteriorated from age, exposure to the elements, and deferred maintenance. Impacts include splitting, dry-rot, and insect damage (see Appendix C).

The wooden timber elements of all of the pergolas should be inspected regularly and repaired or replaced as needed. New timbers should match existing timbers in size, wood type, and character. Original drawings by Greenleaf and Cridland include detail specifications about the timber elements and may be consulted for guidance.

BS-5. Replace wire lattice in the upper annual terrace trellis fence.

Designed by Greenleaf and constructed in 1903, the trellis fence along the east side of the upper annual garden was part of the redesign of the lower garden terraces into the Italian garden. The fence consisted of brick piers spanned by diamond-shaped woven metal lattice panels that supported vines. The original metal lattice is badly rusted and broken, presenting sharp edges in many places.

Replace the wire lattice panels in the fence between the upper annual garden and the upper perennial garden. Panels should be constructed with a crimped woven diamond-shaped lattice that matches the existing fence in design and materials as closely as possible. Use an unpainted weathering steel that will take on a protective rust-colored surface. Repair all brickwork associated with the fence, including resetting and repointing existing bricks or replacing bricks as needed.

BS-6. Repair pool house roof.

The pool house, constructed by Greenleaf in 1903, is covered with a terra-cotta tile roof supported by wooden timbers and brick columns and walls. During site inspections in 2009, a leak in the roof of the pool house was observed. Water leaking into the pool house may cause damage to the historic masonry of the structure. To prevent further damage, repair the roof leak using appropriate methods. Continue to monitor the roofs of the pool house and other structures for leaks or other damage and repair as necessary.

BS-7. Reconstruct wire arches on east side of annual gardens.

In 1922 Robert Cridland redesigned the edge between the lower annual garden and the lower perennial garden. In place of the lattice wall and overhead arbors designed by Greenleaf, Cridland placed a double arborvitae hedge that flanked the walkway on the east edge of the lower annual garden. At three regular intervals between the center stair pergola and the south stair pergola, the hedge bowed out away from the walkway and arched wire trellises spanned the walkway. The arches were covered in honeysuckle vine, forming green tunnels along the walkway (see Figure 1.53). The arches were in place as late as the 1970s but have since been removed. Their removal, along with the loss of the arborvitae hedge, has significantly diminished the sense of enclosure of both the lower annual and lower perennial gardens and altered the character of the gardens as a whole.

To restore the historic sense of enclosure of the gardens, reinstate the wire arches over the walkway in the lower annual garden. Cridland's plan from 1922 and historic photos should be consulted as a guide for the construction of the arches. Plant the arches with honeysuckle. The wire arches should be reintroduced only in conjunction with the reestablishment of the arborvitae hedges (see treatment task VG-4).

BS-8. Reconstruct missing gate.

Iron gates spanned the main entrances to the gardens during the historic period, including the entrance on the palm house terrace and the entrance near the rose house at the southwest corner of the gardens. The entrance at the palm house terrace, considered to be the main visitor entrance to the garden, was an ornate wrought iron gate mounted to the brick wall. The gate near the rose house was of a more utilitarian design, with vertical iron bars and cross bracing. It is unknown whether there were other gates in the gardens, such as at the corner near the Tool House or near the Gardener's Cottage. The gate at the main entrance to the palm house terrace remains today but the gate near the Potting Shed is missing.

Reconstruct missing iron gate at the southwest corner of the rose house terrace near the Potting Shed. Use historic photos as a guide to reconstruct the gates (see Figure 1.79).

BS-9. Preserve field stone walls.

The fieldstone retaining walls that flank the central walkway in the upper perennial garden were designed by Robert Cridland in 1922. The walls not only provided a border for the long perennial beds and accommodated the grade change, they also provided a place for cascading rock plantings. Cridland left open pockets in the wall, in which he specified the planting of perennial varieties such as creeping phlox, sedum, and baby's breath. Today the stone walls remain and are in good condition.

Preserve the stone retaining walls in the upper perennial garden. Loose or missing stones should be repaired or replaced promptly to prevent further damage to the wall. Preserve the design of the walls, retaining the open pockets for perennial plantings (see task VG-14).

BS-10. Preserve drainage features, including side drains, French drains, and weep holes.

Greenleaf included an elaborate drainage system when he designed the Italian garden in 1903, which included at least nineteen catch basins with eight-inch drain pipes as well as three-inch tile pipes to drain the garden beds near the pool pergola. This sophisticated drainages system was necessary to properly drain the sunken walkways in the garden. Today, many of the drainage features are extant. While some of the features retain some degree of functionality, some are blocked or completely covered.

Preserve and maintain the drainage system, including catch basins and drain pipes. Uncover any buried catch basins and keep clear of gravel, soil, and debris. Clean catch basins regularly and clean and repair drain pipes as needed to maintain a functioning drainage system.

BS-11. Provide uniform placement of irrigation heads.

An irrigation system was installed in the gardens after the historic period to provide adequate water for garden plantings. While non-historic, the irrigation system is appropriate and needed to maintain the gardens. In many instances, however, the placement of the heads is irregular and too close to garden walkways. These present a tripping hazard and are a safety concern.

Maintain the irrigation system in proper working order to effectively deliver water to the garden plantings as needed. Relocate irrigation heads that are close to paths to reduce the tripping hazard, and ensure that all heads are of consistent placement and height.

BS-12. Restore rose garden fountain bowl and install replica of Orpheus fountain.

The fountain in the rose garden was part of the original 1910 plan by Thomas Meehan and Sons. Between 1910 and 1925, the center plinth was adorned with a frog fountain that spurted water from its mouth. In 1925, the frog was replaced with a statue of Orpheus with his lyre astride a fish mounted in a broad saucer fountain. The Orpheus fountain was a major contributor to the character of the rose garden.

Since the end of the historic period, the fountain has fallen into disrepair. Exposure to the elements and atmospheric pollution has severely eroded the statue, and the concrete pool basin is cracked and deteriorated and no longer holds water. In 2005, the statue was removed and placed into storage to prevent further damage. Today the deteriorated pool basin stands empty.

Use appropriate techniques to repair the cracks and missing concrete in the fountain basin so that it may hold water again. The Orpheus statue is too damaged to be repaired and replaced in the garden and should be protected in storage. In its place, construct a replica and install it on the fountain pedestal.

BS-13. Preserve and maintain electrical service and plumbing fixtures for fountains.

During the historic period, water features added an important character to the formal gardens. The presence of water, the splashing and gurgling sounds of the fountains, and the humidifying effect would have contributed to a soothing and pleasant atmosphere. In addition to the still water of the pool in the lower perennial garden, Vanderbilt had active fountains on the top panel terrace just below the palm houses and at the lowest point in the rose garden.

All of the fountains in the garden contribute to their historic character and should be maintained in working condition. Maintain the pumps, plumbing, and electrical utilities to ensure their continued working order. Fountains should be filled with water and operational during the growing season, and drained and protected during the winter.

CIRCULATION**CR-1. Preserve historic circulation path network and width.**

During the historic period, the circulation system of the gardens was composed of a network of gravel walkways, turf paths, and bluestone steps. The gravel paths made up the primary circulation, carrying visitors through and along the edges of the garden terraces. The walkways were between about four and six feet wide and surfaced with a light-colored gravel. Narrow turf paths separated the planting beds, allowing access within the beds in the annual, perennial, and rose gardens.

The circulation network of paths throughout the gardens is still intact from the Vanderbilt period, with little or no change to alignment or width. These walkways should be preserved in their current configuration. One exception is the path around the boy dolphin fountain, which is wider due to the loss of the circular grass panel that once surrounded the fountain. See also VG-17 regarding the restoration of this grass panel. The width of the turf paths should be preserved through the preservation of the planting bed outlines (see tasks VG-11, through VG-14).

CR-2. Stabilize walkway surfaces.

Greenleaf specified in his drawings for the Italian gardens that the paths be surfaced with 2" of Jones Point gravel ¼" size on a layer of loam binder on 6" of broken stone. He sourced the gravel to a vendor in Jones Point, NY. Although other paths in the gardens were not specified on any surviving plans, historic photos indicate that all of the paths were surfaced in a similar material.

The walkways are currently surfaced with light gray pea gravel, which conforms visually to the historic character of the gardens. However, the smooth stones of the pea gravel shift underfoot, creating an unstable walking surface. The loose stones also migrate excessively, spreading to turf areas, planting beds, steps, and fountain pools. Some of these issues may be mitigated by replacing the pea gravel with a crushed stone gravel of irregularly shaped stones. Crushed stone gravel tends to compact and bind more than pea gravel and would stay in place better. This would also provide a harder and more stable surface for wheelchair wheels and for visitors who are less steady on their feet, facilitating access to the gardens.

CR-3. Repair steps.

Many of the historic bluestone steps have shifted or come loose and present a safety hazard for garden visitors (see Appendix C). The steps should be repaired using existing materials. Repair or remove and reset the stone treads so that they are level and stable. Reset step side walls so that they are perpendicular and provide support for the steps.

CR-4. Add handrails to three sets of steps on the south side.

Many of the historic steps in the garden are steep and present a safety hazard for unsteady visitors. Handrails, while not historic, would help provide stability for some of the steps, increasing access to the gardens. Handrails should be installed on five of the steps in the upper terraces of the gardens (see Drawing 11). Install simple handrails mounted in concrete footings above and below the side walls on one side of each flight of steps. Do not affix the handrails directly to the bluestone steps or sidewalls and do not install handrails on both sides of the steps. The



Figure 4.2. Drawing showing the placement and design of the hedge to be replaced between the upper and lower perennial gardens as well as the juniper shrubs on the slope in front of the hedge (OCLP 2011).

handrails should be either unpainted metal or black painted, powder-coated, or vinyl-coated metal.

CR-5. Stabilize crumbling and cracked concrete near the tool house.

An area of concrete in proximity of the tool house is now cracked and crumbled. This should be stabilized, repaired and eventually replaced.

CR-6. Reset metal edges that are tripping hazards.

Planting beds in the gardens are currently edged with metal strips to contain turf grass and facilitate mowing. Some of these metal edges are raised above the ground surface, presenting a tripping hazard for garden visitors. Reset the metal edges to their proper height to mitigate this hazard.

CR-7. Preserve wheeled cart access to the formal gardens.

Currently, garden maintenance is facilitated by using wheeled carts and mowers in the gardens. The current access point is from the south into the lower annual garden, where the historic wall section is missing. From there, other terraces are accessed, notably the upper and lower perennial gardens via the corner near the center stair pergola. Reinstating historic structural and vegetation features to their 1938 configuration would block this access. For the missing wall section (Task BS-2), a gate may be installed to allow the partial reconstruction of the wall while

maintaining access. The historic configuration of the hedges and shrubs can be modified according to tasks VG-2 through VG-4 and Drawing 9.

CR-8. Retain parking and service area south of gardens.

The area to the south of the rose house terrace was historically the cutting and display garden. The roughly square garden was planted in rows and served as an outside nursery for cutting and bedding plants. Today this area is covered in gravel and grass and is used as service parking and as a staging area for garden maintenance. The storage shed, compost and soil piles, and temporary storage of plant materials is also in this area. As it is not recommended to reestablish the cutting garden, and since this area is mostly out of site from the gardens, the continued use of this area for parking and service staging is appropriate. The area should be kept as tidy as is reasonable for its use as a service area, and should not be used for the long-term storage of debris or other materials.

CR-9. Provide occasional service parking along the west side of the gardens.

In addition to the parking provide in the lot south of the gardens, additional parking is necessary for volunteers and visitors who have trouble negotiating steps or steep grades. To provide this parking, establish two informal parking spaces on the turf area to the west of the potting shed. The spaces should be along the side of and parallel to the drive. The parking spaces should be marked with signs as permit only and should not be marked in any other way (lines, rope, etc.).

Initially, the spaces should be established with no change to the turf grass surface. If the parking is occasional enough, the grass may survive without special structural alterations. Maintenance steps may be taken to maximize the success of the lawn, such as frequent aeration and over-seeding. If it becomes untenable to maintain the lawn under the parking spaces, structural grass pavers may be installed to provide a hardened surface while still maintaining the appearance of the lawn. These products, such as Grasspave by the company Invisible Structures, Inc., consist of a plastic honeycomb structure that holds soil and is topped with grass. Avoid concrete products, as these tend to show through the grass.

VEGETATION: TREES, SHRUBS, HEDGES, AND VINES

During the historic period, the formal gardens were as much defined by vegetation elements as structural ones. Such elements included hedges that separated spaces, shrubs that created mass, and vines that softened hard surfaces. With the exception of the vines that currently cover walls and pergolas, most of these structural vegetation elements have been lost, and the spatial relationships and overall character of the garden has changed as a result. Notable hedges that have been lost include the double hedge that separated the lower annual garden and the lower perennial garden and the hedge along the top of the retaining wall

between the upper and lower perennial gardens. Several evergreen shrubs in the lower perennial garden have also been lost, including juniper and arborvitae shrubs. The reestablishment of these elements will help restore some of the spatial organization and historic character of the gardens.

VG-1. Reinstate upper perennial garden shrubs.

Cridland's design for the upper perennial garden included borders planted with shrubs and small trees along the east and west edges of the terrace. The design for each border included a row of hibiscus shrubs and hydrangea in front of a taller row of columnar cherries and pyramidal arborvitae. These borders would have created showy borders for the terrace and emphasized its enclosed character. No historic photos have been located that clearly show these beds or give a sense of their character, but the fact that the rest of Cridland's design for the upper perennial garden was executed, it is likely that the trees and shrubs in these beds were installed as Cridland indicated.

The back row of each bed Cridland specified six pyramidal arborvitae eight to ten feet tall. Between each of these, he placed three 'Amanogawa' variety cherry trees, which have a form similar to Lombardy poplars, growing tall and narrow. While Cridland did not specify a size for these trees, they naturally grow to around twenty feet high and four to five feet wide. The trees were placed about six feet on center, which would have created a row of individual columnar plants rather than a continuous wall of vegetation.

These trees and shrubs were lost sometime after the historic period, and until recently they were absent from the upper perennial garden. In 2010, the back row of trees on each side was reinstated. These trees included the arborvitae and 'Amanogawa' cherries according to Cridland's plans. To recapture that enclosure and enhance the historic character of the garden, the front row of shrubs should be reinstated as well. Following the treatment plan in Drawing 8, plant a row of hydrangeas (*Hydrangea paniculata* or similar) punctuated every 24 feet with hibiscus (*Hibiscus syriacus* or similar). The hibiscus should be positioned mid-way between the cherries in the back row as depicted in Drawing 8.

VG-2. Reinstate hedge at southern end of upper perennial garden.

When Greenleaf designed the Italian garden on the two terraces that are today the upper and lower perennial garden terraces in 1903, he included a cedar hedge along the top of the slope that separated the upper and lower perennial garden terraces. The hedge divided the two sections of the garden with a dark green vertical mass over ten feet tall. At the center, flanking the center path, the hedge formed tall columns eighteen feet high (see Figure 1.26). Over the years, the hedge changed shape somewhat gradually and decreased in height. When Cridland redesigned the upper perennial garden terrace in 1934, he retained the hedge, but

by then it was only four to five feet high and dipped in the center near the path (see Figures 1.56 and 1.65).

The cedar hedge was a major organizing element, dividing the upper and lower perennial gardens into two distinct rooms, and its loss has dramatically altered the character of the perennial gardens. To regain the historic spatial organization, the hedge should be reinstated as it was in the 1930s. While junipers were likely chosen for the original hedge because of its height and because Greenleaf used junipers elsewhere in his design, maintaining a juniper hedge at the lower height would require significant effort. A substitute species such as arborvitae would be easier to maintain and would be compatible with the historic character of the gardens.

Reinstate the two halves of the hedge as shown in Drawing 8 using arborvitae shrubs. Maintain the hedge at a height of five to six feet with a transition to a height of four to five feet near the path (Figure 4.2). The western half of the hedge should extend only to a point even with the pergola wall to allow garden access (see Drawing 8). The hedges should be neatly pruned with flat tops and slightly battered sides, and should be protected from deer in the winter (see task VG-8).

VG-3. Reinstate juniper shrubs on slopes on north and west sides of the lower perennial garden.

In 1922, Cridland redesigned the west and north edges of the lower perennial garden terrace. In the plan, he placed juniper shrubs on the slopes below the hedges that formed the boundary between the terraces. These shrubs were low masses of solid foliage about two to four feet high (see Figure 1.65). These shrubs were an important part of the structural vegetation that helped enclose the garden spaces, adding a softness to the edges of the lower perennial garden. The loss of these shrubs diminishes this sense of enclosure and the feeling of being surrounded by green vegetation.

To reinstate these qualities, plant juniper shrubs along the slopes on the north and west sides of the lower perennial garden. Cridland specified a planting of three different varieties of juniper: *Juniperus chinensis* 'Pfizeriana', *Juniperus sabina*, and *Juniperus communis* 'Prostrate' or 'Tamariscifolia'. These varieties would have provided a slight variation in leaf texture and plant height, with the larger plants in the back near the hedges and lower cascading varieties in the front over the retaining walls. The indicated varieties may be used in the layout drawn by Cridland (Cridland Plan), but varieties with similar forms may be substituted.

VG-4. Reinstate double arborvitae hedge around the path on the lower annual terrace.

In 1922, Cridland replaced the trellis wall and arbors on the eastern edge of the lower annual terrace designed by Greenleaf in 1903 with a plan that included hedges, wire arch trellises, and new retaining walls. The boundary between the lower annual garden terrace and the lower perennial garden terrace was formed by a double arborvitae hedge that enclosed the east walk of the lower annual garden terrace. The double hedge lined the walk, flaring out in three places to go around the wire arch trellises. The hedge not only created a border between the two terraces, increasing the sense of enclosure in both, but also created a tunnel-like character to the walk itself (see Figure 1.53).

The hedge terminated on the north end at the center stair pergola, abutting directly against the pergola columns. The south-easternmost column also served as the terminus of the cedar hedge between the upper and lower perennial gardens, forming an effective corner to the garden walls. The narrow opening in the pergola toward the east, then, created a passageway between the lower annual garden and the upper perennial garden. Like the walkway surrounded by the hedges, this passageway passed between the cedar hedge on the right and the short section of garden wall on the left, creating an enclosed corridor that then emerged near the wellhead and southernmost cherry tree. The loss of the hedges has dramatically altered the character of the lower annual terrace and the lower perennial terrace, and changed the experience of walking through the garden.

In order to reestablish the spatial relationship of the garden terraces and enhance the historic character of the gardens, the arborvitae hedge and wire trellises should be reinstated (see task BS-7 for replacement of the wire trellises). Plant a hedge of arborvitae on either side of the lower annual terrace east walk (Drawing 9). The hedges should be approximately four feet high and two-and-a-half feet wide, and should flare out at each of the wire trellises. The easternmost of the two hedges should end approximately five feet from the central pergola column to accommodate mower access. The hedges should be neatly pruned with flat tops and slightly battered sides, and should be protected from deer in the winter (see task VG-8).

Garden Access

The loss of a number of vegetation features on the southern end of the formal gardens, including the double hedge on the lower annual terrace, the hedge between the upper and lower perennial terraces, the juniper shrubs around the lower perennial garden, and the shrub border on the upper perennial terrace, have had a significant cumulative impact on the sense of enclosure of the gardens. What were once individual garden rooms with distinct walls are now open to one another. Reinstating these features would restore the sense of enclosure of the terraces and would be an important effort to enhance the historic character of the

formal gardens. Reinstating these features, however, would also cut off what has become an important route to access the perennial gardens via wheeled garden equipment, such as riding mowers, wheelbarrows, and garden carts.

Currently, wheeled garden equipment is used throughout the formal gardens to cut grass and to deliver materials and tools to work areas. The main point of access to the gardens is from the parking area south of the formal gardens into the lower annual garden. From there, access to the upper and lower perennial gardens is via the northeast corner of the lower annual garden, across the walk, and around the wall at the center stair arbor. Because of garden walls that enclose the terraces, this is the only route that does not require going down stairs.

In order to restore the sense of enclosure of the gardens while preserving maintenance access to the perennial gardens, the historic configuration of the hedges and shrubs in the affected corner may be modified to allow passage of motorized carts and mowers. Small gaps in the hedges, combined with small-radius mowers will allow the hedges and shrubs to be reinstated while maintaining access (see Appendix F). Refer to Drawing 9 for the configuration of vegetation in this area.

VG-5. Preserve flowering cherries in historic locations.

In 1934, Robert Cridland created a new design for the upper perennial garden, which by that time had become overgrown with mature evergreen shrubs and trees. He placed a row of six flowering cherries on each turf panel, creating an allée through which the path descended toward the lower perennial garden. The redesign dramatically changed the character of the upper perennial garden from a narrow corridor of dense vegetation to an enclosed garden room bounded by walls, fences, slopes, and hedges. Documentation for the cherry tree plantings in the upper perennial garden includes Cridland's original drawings of the design, which show the number and location of the trees along with the other elements of the garden. The variety of the twelve cherry trees planted on the turf panels is not indicated except that they are "double pink." A number of historic photos taken during the 1930s demonstrate the character of the upper perennial garden around the end of the period of significance (see Figure 1.56 and 1.65). The cherry trees in these pictures are still relatively young and exhibit an upright vase form. The mature form of these trees is unknown.

The cherry trees were removed sometime after the end of the period of significance. In the 1970s, new cherry trees were planted in the upper perennial garden in a similar arrangement to the historic trees, but in different locations. The new trees were planted further out from the center path than the original trees and closer together. In 2009, these trees were replaced with new flowering cherry trees in their historic locations, reestablishing the spatial organization of the upper perennial garden. The replacement trees are *Prunus* 'Okame', a hybrid variety with

single pink flowers and a smaller, less spreading form than 'Kwanzan.' While the form and character of these trees are somewhat different than the mature form of 'Kwanzan', the smaller form more closely replicates the character of the trees in the 1930s when they were still young, and they will be easier to maintain and require less frequent replacements. These replacement trees should be maintained in their current location. Should any of the trees fail they should be replaced in-kind with the same variety and size tree.

VG-6: Reinstate garden surround shrubs.

The following treatment task is also included in the Cultural Landscape Report for Vanderbilt Mansion National Historic Site, Volume II, the site-wide treatment plan, as Task 2.4 and is included here as a cross-reference due to its proximity to the formal gardens.

There are two sources of detailed planting plans for the flowering and evergreen shrub plantings surrounding the rose garden. In 1910, Thomas Meehan and Sons designed the loggia garden, known today as the rose garden, as an eastern extension to the original formal garden terraces (see Figures 1.28 and 1.82). The plans included a diverse planting of shrubs along the outside of the enclosing fence. In 1916, the shrub plantings were altered and augmented by Robert Cridland (see Figure 1.78). Cridland's plan included a replanting of the north and east sides of the garden, while along the south side, the Meehan plantings were retained. These plans are complete with plant species and variety, and in the case of the Cridland plan, quantity and size of the plants. The existence and layout of these plantings is confirmed in the 1930s aerial photo of the garden (see Figure 1.81).

Today, only a few remnant shrubs remain from these plantings, and these have become overgrown and choked with vines and invasive plants. There are also a number of junipers around the rose garden pavilion, as Cridland called for in his plan, but it is unknown at this time if these are original plants or if they have been replaced since then. In either case, these are overgrown and in poor health.

To reinstate the full shrub planting around the rose garden, the existing shrubs should be removed and the area planted with new shrubs. The Cridland and Meehan plans should be used as a guide for plant selection and placement. The composite of the two plans, as it would have been planted after 1916, is shown in Drawing 7.

If the shrubs around the rose garden are not to be reinstated at this time, the alternative is to stabilize and rejuvenate the existing shrubs. This would entail removing the vines and invasive plants and pruning the shrubs to improve form and health. Shrubs should be protected, mulched, and kept free of vines.

VG-7: Preserve redbud and dogwood grove.

The following treatment task is also included in the Cultural Landscape Report for Vanderbilt Mansion National Historic Site, Volume II, the site-wide treatment plan, as Task 2.5 and is included here as a cross-reference due to its proximity to the formal gardens.

The redbud and dogwood grove is located prominently on the east-facing slope just south of the formal gardens. As a landscape feature, the grove bore an orchard-like character of evenly spaced trees with an open understory. During the spring, the blossoms on the trees would have created a striking effect.

Today, the trees in this grove continue to suffer health issues related to their advanced age and from competition from invasive species in the understory, which not only compete with the trees for resources but also detract from the historically open character of the grove. Continued efforts are needed to prevent the growth of vines and woody plants in the grove and encourage the growth of meadow grasses and forbs beneath the trees. This would involve seasonal mowing as well as some hand removals of troublesome plants. Seeding with an understory grass may help establish desired species and discourage unwanted plants.

The trees themselves should receive appropriate preservation efforts to ensure their health and longevity, including pruning where necessary. Replace in kind any dead and missing trees and those that cannot be sustained.

VG-8. Protect the garden area and individual plants from browsing deer.

Landscape damage from deer browsing has become an issue of increasing concern in recent decades as the deer population has swelled due to increasing forest cover (old field succession), decreased hunting, lack of predators, mild winters, and suburban development. Browsing deer in the park cause damage to vegetation, including arborvitae, rhododendron, hemlock, and herbaceous plantings. The park and the Frederick W. Vanderbilt Garden Association have implemented a number of methods to mitigate the deer damage, including installing a deer-exclusion fence around the rose garden. Deer damage may become more of an issue if historic shrubs and hedges are reinstated in the formal gardens.

Deer are persistent and adaptable, and no reasonable method of deer exclusion will be one hundred percent effective at preventing deer damage. To maximize success, deer control should utilize an integrated pest management approach, employing multiple means including exclusion, scare devices, and/or repellants. Plant selection may also reduce deer damage, favoring plants that show a tolerance to deer browsing and replacing heavily damaged species. Due to the complex factors involved in deer control, including maintenance costs and operational constraints, it is recommended that the park contract with a deer-control specialist to design a system specifically for the site. The following recommendations may

provide initial guidance for the design of a comprehensive deer control system for the formal gardens in the context of maintaining the landscape's historic character.

Deer Exclusion Fence

A site-wide deer fence would provide for the exclusion of deer from the entire park property, or alternatively from the historic core, thus protecting all sensitive vegetation together. A site-wide fence could be installed along and through wooded areas and away from visitor view, making it inconspicuous and more compatible with the landscape's historic character. However, a site-wide fence has drawbacks that make its implementation unfeasible. First, the length of fence, over three miles for the entire perimeter of the park, would be prohibitive, both for installation and for maintenance. Isolated breaches in the fence would allow access to the deer and defeat the system as a whole. Finally, conspicuous fencing in some places, notably around gates and roads, would be unavoidable.

The alternative to site-wide fencing is fencing smaller areas or individual features. This is the method currently being employed with the deer fence around the rose garden. Deer fencing should be installed along the outer perimeter of the gardens along low walls and to cover gaps. Use inconspicuous black coated wire or plastic mesh fencing mounted on black metal poles. Because of visual considerations and visitor access, it is not desirable to completely encircle the gardens in fencing, but to employ fencing in strategic locations to impede access and protect the most vulnerable areas of the garden. Deer fencing should be employed in conjunction with garden walls, fences, and topography to effectively exclude deer from portions of the gardens or at least reduce their presence. Walls within the gardens and steep steps may also help discourage deer from moving into some of the garden terraces.

Wrapping Shrubs and Hedges

Some vulnerable shrubs and hedges may be draped or wrapped with plastic netting to reduce deer damage. Several products are available that interfere with chewing and deter deer browsing. Netting should be used on shrubs and hedges such as the arborvitae shrubs in the lower perennial garden and the proposed double arborvitae hedge in the lower annual garden (Task VG-4), as well as any other woody shrubs that are susceptible to deer damage. Netting should be used primarily during the winter when deer damage is the most severe, and may be installed as part of the process of winterizing the gardens.

Deer Resistant Plants

Plant selection may help reduce the damage by deer. Some plants, such as arborvitae, are particularly favored by deer. Unfortunately, constraints on plant selection due to maintenance needs, plant availability, and historic character, may limit the options for plant substitution. In the case of arborvitae, some varieties are

available that have shown some success with resistance to deer, such as the variety Spring Grove. Other species that may offer resistance while still being suitable as a hedge include juniper and incense cedar (*Calocedrus decurrens*). Nominal deer resistance in combination with other methods of deer deterrence may be enough to keep damage at a manageable level.

In the case of herbaceous bedding plants, annuals and perennials may be selected for deer resistance either by reputation or through trial and error. Susceptible plants should not be replanted, and replacements selected based on the historical plant palettes provided in this document.

Other Methods

Other methods of deer control include chemical repellents, physical scare devices, and electric fencing. Chemical repellents, including commercial repellents and pepper sprays, may be effective in combination with other methods. The sprays are applied to the vulnerable foliage rendering them unpalatable to the deer. Physical scare devices are usually conspicuous (by design) and incompatible with the historic character and are typically not effective over the long term. Deer quickly become habituated to their presence and learn to ignore them. Electric fencing may be used with discretion, and would have to be deactivated during the day.

VG-9. Preserve and manage vines in areas as designated on historic plans.

The gardens during the historic period were lush and green, a character achieved in large part due to the vines and ivies that covered the majority of the vertical and overhead surfaces. This included the facades of the buildings, the garden walls and fences, the pergolas, and the overhead arbors. Many of the structures were designed specifically to support vines. Both Greenleaf and Cridland specified vines on many of their plans. Greenleaf, who specified few plants on his plans, included a list of twenty-one vines, ivies, and climbing roses to cover the trellises and arbors he designed (Table 4.1).

In addition to the vines specified on the planting plans by the gardens' designers, vines were likely planted and maintained by the gardeners. Alex Knauss, in his recollections in the 1960s, indicated that honeysuckle was planted on the slopes around the upper perennial garden and on the trellis fence between the upper annual garden and upper perennial garden, and that grapevine was planted on the pool and stair pergolas. Honeysuckle was also planted on the arched wire arbors over the walkway in the lower annual garden. Historic photos show vines and ivies on many structures, including the Gardener's Cottage and pool house, as well as the many arbors and trellises. The facades of the Gardener's Cottage appear to be covered in an evergreen broad-leafed ivy such as English ivy. The pool house appears to be covered in the same grapevine as the pool pergola.

The vines were maintained to either partially or completely cover the structures that supported them, but were not allowed to grow bushy or disorderly. The vines were kept trimmed neatly to the form of the structure, be it a wall, fence, or arched arbor. Some photos show structures bare of vines, suggesting that they were periodically cut back and then allowed to grow up again.

Today, the garden lacks many of the vines it featured during the historic period. Many of the brick walls, as well as the building facades are bare today. Vines, including honeysuckle, grapevine, and trumpet vine, are maintained on the stair arbors, pergolas, and trellis fences. Many of these, however, have become overgrown and obscure the structures beneath them. This is especially true on the stair pergolas and the north pergola, which are nearly completely obscured by large mounds of trumpet vine. In places, the mature vines are also causing damage to the brick structures.

To help enhance the lush, green character of the formal gardens, vines should be maintained on as many of the historically covered surfaces as is feasible. Existing vines should be pruned annually so as to reveal the form of the structures underneath. Vines should form a layer no more than a few inches thick covering the pergolas, arbors, and trellises. Periodically, the vines may be removed altogether and reestablished.

Table 4.1. Vines Specified on Greenleaf Planting Plan

Species	Variety or Cultivar	Common Name
<i>Euonymus fortunei</i>	Var. radicans	Winter Creeper
<i>Bignonia grandiflora</i> (syn. <i>Campsis grandiflora</i>)		Chinese Trumpet Vine
<i>Ampelopsis vietchii</i>		Boston Ivy
<i>Wisteria</i> sp.	Blue and White	Wisteria
<i>Hedera helix</i>		English Ivy
<i>Vitis</i> sp.		Wild Grape
<i>Hedera canariensis</i>		Algerian Ivy
<i>Parthenocissus quinquefolia</i>		Virginia Creeper
<i>Akebia quinata</i>		Akebia
<i>Rosa</i>	Dorothy P. Parkens	Dorothy P Parkens Climbing Rose
<i>Celastrus scandens</i>		Bittersweet
<i>Rosa multiflora</i>		Baby Rambler Rose
<i>Rosa</i>	Evergreen Gem	Evergreen Gem Climbing Rose
<i>Rosa</i>	Gardenia	Gardenia Climbing Rose
<i>Rosa</i>	Prairie Queen	Prairie Queen Climbing Rose
<i>Rosa</i>	Jersey Beauty	Jersey Beauty Climbing Rose
<i>Clematis jackmanii</i>		Jackman's Clematis
<i>Clematis paniculata</i> (syn. <i>C. ternifolia</i>)		Sweet Autumn Clematis
<i>Rosa</i>	Crimson Rambler	Crimson Rambler Climbing Rose
<i>Lonicera japonica</i>	Halliana	Hall's Honeysuckle
<i>Rosa</i>	Baltimore Belle	Baltimore Belle Climbing Rose

Historic vine species that prove difficult to control due to their vigorous growth, such as Hall's honeysuckle (*Lonicera japonica* 'Halliana') and oriental bittersweet (*Celastrus orbiculatus*), may be substituted with less aggressive species. Alternatives include trumpet honeysuckle (*Lonicera sempervirens*), trumpet creeper (*Campsis radicans*), Dutchman's pipe (*Aristolochia macrophylla*) and native wisteria (*Wisteria frutescens*).

Reestablish vines and ivies on the Gardener's Cottage and on the brick wall along the southern edge of the lower annual garden (Task BS-2). Although English ivy (*Hedera helix*) was likely used during the historic period, this species is considered particularly invasive and should not be reintroduced into the gardens. Suitable substitutes that are not quite as problematic as English ivy include Boston ivy (*Parthenocissus tricuspidata*) and Virginia creeper (*Parthenocissus quinquefolia*). Since these ivies may damage brickwork over time, they should be monitored closely and pruned or removed when necessary. Any damage to bricks or pointing should be repaired.

Vines on sloped areas along the west side of the upper perennial garden are frequently laden with weeds. These areas should be mulched annually in the spring with a mix of a weed barrier cloth and leaf mold, with the vines over the mulch.

VG-10. Restore plants in containers near the pool, north pergola, and loggia.

Bay plants (*Laurus nobilis*) were placed in pots near the pool and loggia during the historic period as illustrated in Figures 1.56, 1.68, and 1.73. Several records in the Vanderbilt purchasing ledgers relate to the purchase of bay trees in 1910, 1911, and 1923, as well as charges for loading the bay trees in 1938. All bay trees ordered are the same species (*Laurus nobilis*), though three shapes are ordered, standard, pyramid, and pillar. Three historic photos record the shape and location of three pairs of bays in pots: two by the pool, two at the north end of the garden by the north pergola, and two by the rose garden loggia (see Figures 1.27, 1.55, 1.67, and 1.68). The photographs show the bay plants pruned as pyramids with rounded tops.

The bay plants should be restored to enrich the tapestry of the garden. If bay plants cannot be preserved, a similar plant with rich green foliage could be substituted, such as cherry laurel. See small-scale features (Task SS-2) for details on containers.

VEGETATION: SEASONAL PLANTINGS

The seasonal planting of herbaceous annuals and ongoing care of perennials in the garden beds is critical to maintaining the historic character of the gardens. Of primary importance is that the garden beds be planted and cared for every year in a fashion that is compatible with historic conditions. This would include following

the historic arrangement of the beds, planting each bed in the appropriate category of plants (annuals, perennials, roses), and ensuring that the species and varieties chosen conform to the style, height, texture, and color that would have been used in the gardens during the Vanderbilt period. The gardens are currently being maintained in such a way, largely through the dedicated and donated efforts of the Frederick W. Vanderbilt Garden Association.

Beyond merely being faithful to an overall character, however, steps can be taken to bring the garden closer to its original condition through the careful choice of plant varieties based on historic documentation. The purchase ledgers that were kept for the Vanderbilt estate contain information about species and varieties that were purchased from the turn of the twentieth century through the 1930s. This information, together with historic photos and the recollections and drawings of Alex Knauss, a long-time Vanderbilt gardener, can help create a palette of plants that were used in the historic period. Using the historic plant palette and general guidelines for the arrangement of the gardens will result in a planting plan that is reasonably accurate to the historic conditions while providing flexibility needed to create and maintain a vibrant and engaging, but manageable, garden.

VG-11. Plant upper and lower annual gardens with a varying palette of flowering annuals in historically appropriate patterns.

The upper and lower annual gardens were used throughout the Vanderbilt period as displays for showy flowering annuals. The geometric beds were planted in solid colors of single varieties, with the gardens reflecting bilateral symmetry north to south and east to west. While the species, varieties, and colors varied from year to year, the overall pattern of single-color, single-species, symmetrical beds of flowering annuals was carried out at least from the early years of the twentieth century through the end of the Vanderbilts' residence. Although the annual beds were planted primarily in solid beds of single-color, single-species annuals, some variations on this included the use of borders or solid fields of color with a grid of contrasting individually spaced plants over them. These variations were mainly employed on the wing-shaped beds in the lower annual garden and only appear in a small number of photographs.

Today, the annual garden beds continue to be planted as they were during the historic period, in uniform beds of flowering annuals. According to information provided by the Frederick W. Vanderbilt Garden Association, annual species planted over the past ten years include ageratum, begonias, cannas, coleus, celosia, dusty miller, marigolds, petunias, salvia, and zinnias. All of these species, with the exception of the dusty miller, appear at least once in the estate purchase ledgers and were likely planted at some time in the annual beds during the historic period. Their use in the annual garden beds, as well as the established pattern of bed arrangement, is historically appropriate and should be continued.

In order to better represent the changing planting designs of the annual gardens, however, more variety should be introduced into the annual planting, both in species and in arrangement. Continue to plant the center beds with cannas with a border of pennisetum grass. The other beds should be planted with a core palette including begonias, petunias, heliotrope, pelargoniums, alyssum, and zinnias. These species appear in the majority of the historic photos and have the strongest correlation between the photos, the purchase ledgers, and historic accounts. This core palette should compose the bulk of the plantings in the annual gardens in any given year and should make repeat appearances from year to year in various combinations and arrangements. To this core, add other historically appropriate species to provide variety, including nasturtium, *Cineraria stellata*, lantana, marigold, pansy, primula, and salvia. Appendix D provides a list of annuals that appeared in the estate purchase ledgers.

Continue to plant annuals in solid uniform beds, with the following variations. The two round beds in the upper annual garden to the north and south of the center bed were typically planted with a contrasting border. Alex Knauss indicated zinnias in the center with a white petunia border, and historic photos support this or similar arrangements. Other beds that featured border plantings in some of the historic photos are the wing-shaped beds in the lower annual garden. Several photos from at least two separate years show these beds planted with what appears to be pelargoniums with a low border of alyssum. Other photos from early in the 1920s show the wing-shaped beds planted with a bed of low alyssum with individual plants of heliotrope or something similar planted above it. These variations on the solid uniform beds may be cycled into the planting plans for the annual gardens to add variety.

VG-12. Enlarge wing-shaped beds in lower annual garden.

No historic plans for the formal gardens survive that show the layout of the beds in the annual gardens as they were during the Vanderbilt period. Historic photos that date as far back as the early twentieth century, however, reveal the shape and arrangement of the beds that remained largely unchanged through the end of the period in 1938. In the decades following the transfer of the Vanderbilt estate to the National Park Service, the formal gardens suffered from inadequate care and resources and fell into disrepair. By the 1970s, the garden beds were gone and the terraces were covered in turf grass. With the rehabilitation of the gardens in the 1980s, the beds were reintroduced using the historic photos as guides. These newly-drawn beds largely conformed to the layout of the historic beds, but in the absence of precise plans the outline of the beds were estimated.

Comparison of existing conditions with historic photos show close agreement in the layout of the beds. The one discernable exception is the shape and size of the four crescent or wing-shaped beds in the lower annual garden. Historic photos depict beds that were larger, with larger central circular portions and wider wings.

These larger beds featured more bed area and thus larger blocks of color in the overall effect of the gardens. Redrawing the edges of these beds to increase their size will help enhance the historic character of the gardens. See Drawing 9 for a comparison of approximate outlines of the existing and historic beds.

VG-13. Preserve lower perennial garden beds, configuration, historic varieties, and combinations.

Perennials played a significant role in the formal gardens throughout their history. Greenleaf's plans for the Italian garden did not specify any perennials, but paintings done shortly after completion of the design show a border of low flowering perennials along the central walk in the upper perennial garden terrace. Not long after installation of Greenleaf's design, however, these were replaced with evergreen shrubs, which remained until 1934. In the lower perennial garden, however, the open panels of turf that Greenleaf had designed were replaced with geometric beds of mixed perennials. These beds would remain until the end of the historic period.

Historic photos show beds of mixed perennials in a wide variety of sizes, forms, and textures. In the photos, the perennials are layered in bands or small clumps, with two or three different kinds of perennials across the depth of any one bed. Lower growing plants tended to be placed along the edges of the beds with taller plants in the center, but in a varying height and foliage texture throughout the beds. This practice, also called ribbon planting, was common because it allowed for a layering of perennial species, thereby enhancing the depth and contrast within the garden beds. Prominent in many of the photos are large numbers of irises, especially in the beds near the pool, and delphiniums.

Cridland's 1916 plan provides the only formal plant list for the lower perennial garden from the historic period. As it is known that the perennial plantings evolved over the years and looked quite different in the late 1930s than they did earlier in the period, it is not desirable to reinstate Cridland's plan exactly. Rather, Cridland's perennial list provides a place to start for the selection of perennials for current plantings. In addition to this list, plants may be chosen from the estate purchase ledgers and may also be supplemented with non-documented varieties that are consistent in form and character with the historic perennials.

Selection of perennial varieties should follow a tiered selection process. If the plants are available and may be grown within the constraints of contemporary maintenance resources, plants of historically documented species and variety should be selected, chosen either from Cridland's 1916 plant list or from the estate purchase ledgers. Should these plants not be available or feasible to grow, substitute varieties or cultivars of historically documented species may be selected, provided the substitute plants have a similar character to the historic varieties. Finally, species that were not documented as being planted in the gardens

may be used if necessary to achieve the desired character of the gardens. A list of perennials used in the lower perennial garden historically and currently is presented in Appendix E.

In arranging the perennials within the beds, historic photos should be consulted as a guide for composition and character. Photos from later in the period (see Figures 1.65 and 1.66) are particularly useful. Plant individual types of plants in narrow bands or small clumps, no more than four or five feet long by two feet deep. Clumps may be as small as two feet by one foot in some cases. As groups of plantings begin to exceed this size, divide them and in-fill with another species to maintain a high degree of variety. Vary the height, color, texture, and form of the perennials, from front to back in the beds as well as along the length of the beds.

The beds should be kept full and lush throughout the growing season. Struggling or troublesome plants should be replaced with plants that provide more success. Adjacent perennials should be balanced for growth rate to prevent a vigorous plant from overtaking slow-growing neighbors. Holes in the plantings should be filled with appropriate perennials. Annuals may be used to fill holes if needed as a short-term solution to achieve full garden beds, but the goal is to maintain vibrant beds full of perennials.

VG-14. Preserve upper perennial garden beds, configuration, historic varieties, and combinations.

The upper perennial garden was characterized by dense evergreen trees and shrubs through much of the period. In 1934, Cridland designed a new garden for this terrace with open lawn panels, flowering trees and shrubs, and long perennial borders flanking the central walk. His design also included new stone walls along these borders that had pockets planted with low, creeping, and cascading plants. Cridland specified forty-two different varieties for the perennial borders and another seventeen for the rock walls. Along the tops of the rock walls were long borders of periwinkle (*Vinca minor*) and plumbago (*Ceratostigma plumbaginoides*).

For this new perennial planting, Cridland chose low-growing alpine varieties with small flowers, fine foliage, and either a creeping or mounding habit. Most of the plants were less than eighteen inches high, with a few as high as two to two and a half feet for variety. Even more so than in the lower perennial garden, the groupings of plants in the upper perennial garden were small and numerous.

Cridland's plan for the upper perennial garden was the last formal design drawn up for the formal gardens before the end of the period of significance. There is high confidence that the plan was implemented, if not exactly, at least in character. The plan is detailed in plant varieties, quantities, and location. The plan should thus serve as a strong guide in planting the upper perennial garden today.

Plant perennials in the long border beds along the central walkway of the upper perennial garden. Perennial varieties should be chosen, if possible, from the list provided by Cridland. Substitute species may be used provided they are low-growing with a tidy habit. Plants that tend to grow higher than about two feet or are bushy or un-kempt in character should be avoided. Perennials should be planted in small groups and divided regularly. Table 4.3 provides the list of perennials from Cridland's plan, as well as existing perennials and perennials specified by the National Park Service's 1941 Master Plan for comparison.

VG-14. Preserve lawn areas on the greenhouse terraces.

Small circular annual beds were located on the west side of the palm houses, near the gate. Visible in the historic aerial from the 1930s (see Figure 1.81), the beds were planted with annuals such as pelargonium. Planting beds also surrounded the palm houses and greenhouses (see Figure 1.23). These beds are no longer present and the area is covered with turf. These beds should not be restored as they would be out of context without the buildings, especially the beds that lined the foundations of the structures. An interpretive sign, such as the one outside of the gate on the west side of the garden can provide photographic interpretation of the lost structures.

VG-15. Preserve rose garden beds, configuration, historic varieties, and combinations.

Cridland arranged the roses in the rose garden by color and form, indicating a combination of tea, hybrid tea, standard, climbing, and polyantha bedding roses. The roses were arranged in blocks of color, with contrasting deep rich crimsons, light delicate pinks, strong yellows, and white blooms. The garden was largely symmetrical around its central axis in regard to color and arrangement, with the exception of alternating pink and yellow roses on the outer beds of the lower terrace. The roses were categorized in the beds according to form and rose classification. The center beds were filled with solid masses of single-color Polyantha roses, while the beds against the fences and walls contained climbing or rambler roses. The narrow beds in between contained blocks of tea or hybrid tea varieties.

The rose garden today is planted in a mixture of modern and older rose varieties planted symmetrically around the central walkway. The colors represented are primarily shades of pink, with some white, red, or variations thereof. The roses are predominantly hybrid teas, with climbing roses planted along the retaining walls at the top of each terrace. Although the overall character of the rose garden is similar to what it exhibited during the historic period, the rose varieties, their placement, and the color scheme that Cridland established have changed. Changes to the rose garden planting plan can bring the garden closer to its historic conditions and serve to educate visitors on historic rose varieties and forms.

Significant challenges hinder the complete restoration of the rose garden. These include the difficulty in obtaining historic rose varieties, the challenges of growing rose varieties that may not be suited to the Hyde Park climate, and the limited resources, personnel, and time available to cultivate high-maintenance varieties. Some of the roses listed in the historic plans and in the purchase ledgers would not survive the winter without protection or are susceptible to pests and diseases that make them difficult to grow. Vanderbilt had a staff of full-time gardeners and greenhouse facilities to care for the roses, as well as the money to replace roses that did not fare well, resources not available to the park or the volunteers that currently maintain the gardens.

The following treatment recommendations for the rose garden focus on establishing and maintaining a character consistent with historic conditions and favoring historic varieties, colors, and arrangement, while allowing for flexibility to meet current maintenance resources. Emphasis is placed on reestablishing the color scheme indicated by Cridland and organizing the garden according to rose type and form. Secondary priority is on selecting roses that were either documented as present in the garden or were available during the historic period.

Organization

When Cridland laid out the rose garden in around 1916, he did not indicate the rose varieties on the original plan. Rather, he specified the arrangement of roses by form and color. The center beds held baby ramblers, or polyanthas. Tea and hybrid tea roses were placed in the narrow middle beds, and climbers or ramblers placed along the walls, fences, and fence piers. The beds around the edge of the garden, against the fence, were labeled “assorted.” Cridland also indicated standard roses within the center beds, but photographs suggest that these were not planted. To enhance the historic character of the gardens, plant the rose garden according to its historic organization of color and form.

Center Beds: The center beds on each terrace should be planted with red and white polyantha roses in solid masses of color. The two upper terrace beds should be red, as should the two western beds of the lower terrace. The two beds closest to the loggia should be planted with white polyanthas. Maintain these roses so that they fill the beds, with individual plants indistinguishable.

Narrow Geometric Beds: The narrow beds that surround the center beds should be planted with hybrid tea roses, tea roses, or roses of similar character in color blocks described below. These beds can serve to establish the historic character of the rose garden and showcase historic and heirloom roses. To that end, efforts should be made to be as faithful to historic conditions as feasible, favoring cultivars that were documented in the gardens, heirloom cultivars, or roses that have a character compatible with the historic period.

Perimeter Beds: The beds that enclose the perimeter of the rose garden terraces along the fence and retaining walls were labeled “assorted” in Cridland’s plan. The drawing that includes rose cultivars does not specify anything in these beds, and there is very little evidence to suggest how Cridland’s direction of “assorted” was implemented in the garden. It is not known, for instance, whether roses were grouped by color or cultivar or whether they were interspersed in smaller numbers. From the historic photos, the roses in the perimeter beds appear to be tea and hybrid tea roses, resembling in form the roses in the narrow geometric beds. In the absence of historical information regarding the contents of these beds, they may be utilized to add flexibility and variety to the rose garden. The beds may be used to test historic varieties for suitability to the climate, for example, or to grow roses of particular interest to the gardens, such as the yellow-peach hybrid tea rose ‘Mrs. Frederick W. Vanderbilt.’

Color

Figure 1.71 and Drawing 10 show the colors and locations that Cridland specified, categorized in the plan as red, pink, white, and yellow. Cross-referencing this plan with Figure 1.76, which indicates specific rose cultivars, gives an idea of how these colors were manifest in the garden.

Red: The red roses ranged from scarlet (‘Gruss an Teplitz’) and crimson (‘Hadley’) to deep pink (‘General MacArthur’). The red hybrid tea roses were placed around the fountain and in the easternmost beds of the upper rose terrace. Red baby ramblers also filled the center beds on both the upper and lower terrace.

Pink: The pink roses were mostly very pale or lilac pink, with some exhibiting a medium pink hue. Although they didn’t occupy more area within the garden, pink roses were represented by the greatest number of cultivars, with seven different roses indicated on the plan.

White: The four white roses indicated on the plan range from the pure white ‘Kaiserin Augusta Victoria’ to creamy white roses tinged with pale yellow, such as ‘Mrs. Herbert Stevens’ and ‘Molly Sharmon-Crawford.’

Yellow: The yellow roses show a variety of hues, including very pale yellow, apricot, salmon, and a deep orange-yellow.

To enhance the historic character of the rose garden, reestablish the color scheme indicated by Cridland by planting roses by color according to Drawing 10. Choose colors as described above, avoiding colors and combinations that were not represented in the gardens, such as variegated roses.

Form

The roses specified by Cridland fell into three primary categories: polyantha roses, climbing or rambler roses, and tea and hybrid tea roses. These rose forms were used in specific configurations in the garden.

Polyantha Roses: Polyantha roses, referred to by Cridland as baby ramblers, were planted in the center beds of the lower rose terrace, and for part of the period also on the upper terrace. These were either white baby ramblers (Katharina Zeimet) or crimson baby ramblers, with each bed presenting a solid mass of color. The beds were between one and three feet high and densely planted.

Today, polyantha roses are readily available and are successful in the Hyde Park climate. Continue to plant the center beds with polyantha roses in red and white according to Drawing 10.

Climbing Roses and Ramblers: In his 1916 plan, Cridland indicated “Climbing roses” should be planted along the retaining walls and fence, and white climbing roses at each pier. Although he specified climbing roses, it is likely that he intended this as a generic term referring to roses with a climbing nature, rather than roses confined to the classification “climbers.” In his book, *Practical Landscape Gardening*, Cridland discusses climbing roses and lists a number of cultivars that fall into both the climber and rambler categories.

Today, both climbers and ramblers are commercially available and would be successful in the garden. Plant climbing or rambler roses in all perimeter beds of the rose garden along the retaining walls and where the fence used to be. For the perimeter beds, provide inconspicuous climbing support in the form of rebar until such a time when the fence can be reconstructed (see treatment task BS-3). Assorted colors may be planted along the fence and walls, with white roses at each pier.

Tea/Hybrid Tea: With the exception of the center beds, which were planted in baby ramblers, and the perimeter, planted in climbing roses, the majority of the roses in the rose garden were tea and hybrid tea roses. These occupied the narrow geometric beds around the baby rambler beds, as well as the perimeter beds in front of the climbing roses. These were the showcase roses of the garden and were represented by numerous varieties in many shades of pink, red, white, and yellow. The focus of these beds was on the individual roses and not on the beds as a whole. Many of the historic photos of the rose garden show these beds as more sparse than other beds, with much of the soil visible between the twiggy roses.

Maintaining heirloom tea and hybrid tea roses in the garden at Vanderbilt Mansion presents significant challenges. Tea and hybrid tea roses that were available during the historic period are substantially different from hybrid tea roses that were developed in the last half of the twentieth century. Teas and early hybrid teas were shrubbier, with thin stems and large blooms. These roses were also not as cold-hardy as modern hybrid tea roses, and many would not survive a Hyde Park winter without significant protection.

Nonetheless, in order to convey the historic character of the rose garden, it is important that these beds continue to be planted in heirloom hybrid teas or roses of similar character. The hardiest heirloom varieties should be sought out, with

emphasis on varieties documented in the plans and ledgers (varieties are discussed below). Rose varieties may be tested on a smaller scale in the perimeter beds, with successful roses being moved to the geometric beds and fitted into the color scheme outlined above. The hardiness of some of the roses may be extended by protecting the roses in place with mulching or burlap cover.

In cases where heirloom hybrid tea or tea roses can not be found to fill a certain color, roses of other types may be chosen, such as shrub roses that bear the characteristics of the heirloom varieties. This is preferable to planting modern roses with characteristics typically not found in roses during the historic period.

Rose Cultivars

Although Cridland did not indicate rose cultivars in his drawing for the rose garden, a second plan, written in a different hand than Cridland's, does indicate specific varieties that match Cridland's color scheme (see Figure 1.76). Comparison of this plan with purchase ledgers suggests that these roses were indeed planted in the garden, perhaps among others. These roses provide a starting point in selecting roses for planting in the garden today and give a clear sense of the form and character of the roses that grew during the Vanderbilts' time at Hyde Park.

The rose cultivars, indicated in Drawing 10, range in hardiness, with some suitable for growing in Hyde Park with minimal protection. Efforts should be made to obtain and grow these cultivars in the garden. Those that are successful should be planted in their historic arrangement according to the drawing. The cultivars that are marginally successful or that require additional effort in the form of protection or cultivation might be grown in smaller numbers in the perimeter beds. Even small numbers of historic rose cultivars can serve an interpretive purpose and help represent the garden's historic character.

Annuals

Cridland's 1916 plan for the loggia garden consisted entirely of roses in both the upper and lower terraces. Photos from the period, however, clearly show canna and other perennial and annual plants in some of the beds of the upper terrace. Alex Knauss recalled that all of the beds were originally planted with roses, but that in later years the upper level of the rose garden was changed to grow annuals as well, with roses around the edges, and around the side borders.² In the photos, canna is clearly visible in the center beds of the upper terrace along with annual bedding plants in the outer beds. Although the garden was likely in this configuration in 1938, the treatment date for the formal gardens, restoring the upper terrace to annual plantings may be considered an optional treatment approach. In keeping with the loggia garden's primary historic role as a rose garden, in deference to Cridland's original design and vision for the garden, and as an opportunity to interpret heirloom roses of the period, cultivation of the loggia garden in all roses is appropriate.

VG-16. Preserve aquatic plants in the pool.

Historic photographs capture a number of aquatic plants in the pool. The plants, however, were never as dense as to eliminate the reflective qualities of the water. Entries in the purchasing ledgers indicated that a number of species were used during the Vanderbilt period. Some of the species used are now considered non-native invasive aquatics and should not be used given the proximity of natural areas such as Crum Elbow Creek.

VG-17. Restore circle of turf around the boy dolphin fountain.

Historic photographs show that the fountain was once surrounded by a circular panel of turf and narrow walkway. This turf is now gone and the walkway is too wide. The small turf panel should be preserved to provide the historically appropriate setting for the fountain.

SMALL-SCALE FEATURES**SS-1. Preserve and display garden ornaments in their historic locations.**

During the historic period, the formal gardens were adorned with numerous decorative art objects, including sculptures, fountains, and antique pieces. These elements, many of which remain today, were in keeping with the design styles that characterized the formal gardens during the historic period. Their continued presence in their historic locations and contexts contribute to the historic character of the garden and should be preserved in situ whenever possible.

Care of all objects within the gardens should follow the best practices for the conservation of historic objects. Experts in the conservation of stone, metal, cast stone, terra-cotta, and other materials should be consulted on the appropriate measures to ensure the survival of these objects. Measures may range from cleaning and protection to complete replication and removal of the original object to storage.

The recommendations below focus on the historic placement, chronology, and context of each object and how the objects should be treated with respect to their role in the formal gardens. Any recommendations given for the treatment of the objects themselves, such as whether they should remain in the garden or be replaced with replicas, should be undertaken in consultation with a qualified conservator.

Semi-circular Terra-cotta Garden Seat

This elaborate, curved garden seat was likely located in the North Pergola during the historic period, although there are no historic photos showing the seat in this location. In the 1970s the seat was in the pergola, heavily weathered and damaged. The seat was subsequently removed to storage.

If a complete casting can be made from the existing pieces of the garden seat, it should be replicated and placed in the north pergola. If a reasonably accurate copy cannot be made, the seat should remain in storage and not replaced in the pergola.

Marble Garden Vase

The existing garden vase was historically located between the two wings of the rose house on the south side. Figure 1.79 shows the vase in this location. An aerial photo from the late 1930s (see Figure 1.80) appears to show another object, possibly a matching vase, between the wings on the north side of the terrace. Only one vase survives today and is currently in storage. The top is separated from the base and there is minor damage and loss.

The vase may be repaired and placed back in the garden in its original location. The loss of the rose house will make locating the vase more difficult, and careful assessment should be made using historic plans and images to ensure proper placement. The loss of the rose house, however, also diminishes the historic context of the vase. The vase, therefore, would neither add significantly to the historic character should it be replaced, nor detract from the historic character should it not be replaced. The replacement of the vase is therefore optional and may be undertaken at the park's discretion. The alternative option is place the vase indoors for display and interpretation, such as in a new museum space in the park's Coach House. The vase should not be placed in the garden in any other location but its historic location.

Should the vase be placed in the garden, appropriate protection and conservation measures should be taken to preserve the vase.

Dolphin Benches

Six cast stone dolphin benches were originally located in the rose garden upon its completion in 1910. Three were placed along the top retaining wall along the western edge, one each against the north and south fence on the lower terrace, and one at the eastern terminus of the garden (see Figure 1.28). When the rose house was added in 1916, the bench that had been placed there was moved, but it is not known whether it was moved somewhere else in the garden or removed entirely. There is no record of a dolphin bench elsewhere in the garden. In 1934, when Cridland redesigned the upper perennial garden, he removed the walkway and stairs along the east edge of the terrace. In place of the stairs, he added a recess in the retaining wall in the northeast corner of the lower perennial garden, and in it he specified a wooden seat. One historic photo shows a bench in this location, but not with enough detail to determine if it is indeed a wooden bench or if perhaps the last dolphin bench was placed here.

Today the original benches are in storage, and six replicas are in the garden. Four are currently located in the rose garden with three along the top retaining wall and one along the south fence, all in their historic locations. One bench is located in

the recess at the northeast corner of the lower perennial garden, and one is near the south stair pergola in the southwest corner of the lower perennial garden. There is no record indicating a bench in this last location during the historic period.

The four replica benches in the rose garden should be retained in their current location. If the fence around the rose garden is reconstructed in its historic configuration, the bench near the south stair pergola should be moved to the north fence of the rose garden opposite the bench on the south fence (see Task BS-3). If the fence is not reconstructed, or if the fence is reconstructed with a gate at this location to maximize access to the garden, all benches should be retained in their current location.

Sandstone Finials

A total of six sandstone finials decorated the palm house terrace during the historic period. These finials were of two similar designs. Four identical finials marked the central entrance walkway between the two palm houses, with two flanking the path to the west of the houses and two flanking the path to the east at the top of the steps leading down to the fountain terrace. Two finials of a slightly different design marked the eastern corners of the terrace so that they, along with the two at the top of the steps, formed a line along the eastern edge of the terrace. The finials were large, between four and five feet tall and twenty-four inches across at their widest point.

Today the finials remain on the palm house terrace, but are badly weathered and are in a number of pieces. It also appears that there is significant loss of material, and it is unclear how many complete finials could be assembled from the pieces and of which design. Assessment should be made to determine the status of the remaining pieces and whether complete models can be assembled. If complete models can be assembled using the existing pieces, cast copies may be made and placed in their historic locations. As with the vases on the rose house terrace, however, replication of the finials is not crucial for the historic character of the gardens, as the loss of the palm houses has diminished the historic context of the finials. The alternative option is to remove the finials to a location indoors for display and interpretation, such as a new museum space in the park's Coach House.

Marble Corinthian Capitals

Two Corinthian capitals were located in the formal gardens during the historic period. Photos from early in the period show the two capitals along the center line of the walkway in the lower perennial gardens near the reflecting pool. It doesn't appear that the capitals were there for very long, since the majority of the photos of the perennial gardens do not show the capitals. One of the capitals was moved to the central circular bed in the upper annual garden, where it remained for the rest of the historic period. The second capital appears in an aerial taken in the late

1930s on the south edge of the palm house terrace. It is likely that the capital was moved here at the same time the first capital was moved to the annual bed.

Both capitals remain today in their historic locations. In the upper annual garden, the capital is situated at the center of the middle bed, mounted on a bluestone slab and raised on stacked bricks, so that during the growing season about two-thirds of the capital is visible above the tall plantings. Comparison to historic photos indicates that this is similar to its historic configuration. The capital shows some weathering and damage. On the palm house terrace, the other capital is mounted on a bluestone slab directly on the ground. No historic photos show this capital to verify this configuration, but it is likely at least similar to historic conditions. The bluestone paver on which the capital rests is unlevel, and one side is covered with turf grass.

Both capitals should be retained in their current locations, or alternatively, replicated, with the replicas returned to the garden in current locations. The capital on the palm house terraces should be leveled and placed on a larger bluestone paver or on a square concrete paver, providing approximately six inches of base on all sides of the capital. This will help keep grass away from the capital and prevent damage from edging and other lawn maintenance. Appropriate protection and conservation measures should be taken to preserve the capitals.

Boy and Dolphin Fountain

The white marble fountain featuring a figure of a boy, or putto, with a dolphin in a scallop shell basin is located on the fountain terrace below the palm house terrace. It is not known when the fountain was acquired; the fountain does not appear in earlier photos of the gardens, such as the circa 1905 photo of the greenhouses (Figure 1.20), but appears in a photo taken a few years later after the construction of the rose house (see Figure 1.22).

The fountain should be retained in its current location, and appropriate protection and conservation measures should be taken to ensure the fountain's preservation.

Homer Terra-cotta Faux Wellhead

A late nineteenth-century Italian terra-cotta faux wellhead, located in the north pergola, features scenes depicting the death of Homer in bas relief. This wellhead does not appear in any historic photos before the 1970s, but since no photos show the interior of the north pergola, it is likely that the wellhead was located in the pergola during the historic period.

The wellhead should be retained in its current location.

Wellhead and Cistern in Upper Perennial Garden

Two decorative objects, a late-nineteenth-century terra-cotta wellhead with ornamental wrought-iron overthrow and an antique Roman marble cistern, are

located at the south end of the upper perennial garden. Although it is not known when these objects were placed in the garden, the overthrow of the wellhead is visible in a photo taken around 1922, and both objects are visible in photos from the 1930s. It is believed that the wellhead and cistern are in their historic locations.

The wellhead and cistern should be retained in their current locations. Appropriate conservation measures should be undertaken for both objects to ensure their preservation, including the repair, removal of rust, and repainting of the wrought-iron overthrow.

Antonio Galli Sculpture

The mid-nineteenth-century Italian white marble sculpture of an odalisque by Antonio Galli is located within the pool house at the south end of the lower perennial garden overlooking the reflecting pool. The sculpture was not installed in 1903 when the pool house was built, but it appears in photos from at least the 1910s. A 1911 entry in the purchase ledgers for a marble base for the “Italian Garden Statue” may have been for this sculpture. Often referred to affectionately as Barefoot Kate, the sculpture was featured prominently in the garden for much of the historic period.

Today, the sculpture remains in its historic location overlooking the pool. The sculpture shows signs of damage, including a broken fan, broken finger, and other chips and staining. The sculpture should be retained in its current location, and appropriate conservation measures should be employed to ensure its preservation.

Orpheus Fountain

The fountain, featuring a statue of Orpheus with a dolphin in a scallop shell fountain basin, adorned the rose garden fountain from 1925 until it was removed to storage in 2005. At that time the fountain was showing signs of extensive erosion and damage and was removed for its protection.

The Orpheus fountain should be replicated and placed in the rose garden fountain pool. This should be done in conjunction with the repair of the fountain pool basin (Task BS-12). The fountain should be maintained in working order and operated during the growing season.

SS-2. Restore plants in containers near the pool and loggia.

Historic photographs show bay plants in containers (see Figure 1.56, 1.67, and 1.73). From the photos, there appear to have been six plants in containers placed in pairs at the north pergola, the pool at the south end of the lower perennial garden, and at the rose house. Two additional potted bays were specified to be placed at the retaining wall between the upper and lower perennial gardens by Cridland in 1934, but these do not appear in any photos.

The plants were large, more than eight feet tall in some photos, and were planted in large containers approximately eighteen inches high by twenty-four inches wide. Although the historic photos do not show a great deal of detail, the containers appear to be nearly straight sided wooden barrel containers, with vertical staves and metal hoops. The containers are dark in color and may have been painted. The containers were replaced over the years as the trees grew and the barrels aged, but they all appear to be of similar style and dimensions.

The six bay shrubs in containers should be reinstated in the gardens at the north pergola, pool, and rose house (see task VG-10). Containers should be wooden barrel tubs with metal hoops as described above. Historic photos should be consulted for specifics on container style and plant location. Pot liners of plastic or other material may be used within the barrels to maximize the longevity of the containers, and the wooden barrels should be replaced periodically as they weather.

SS-3. Repaint or replace non-historic benches.

There are eleven non-historic wood and metal benches located throughout the gardens. The benches, previously painted green, have recently been painted black. The black paint, however, has already started to flake off, revealing the green paint underneath. Furthermore, the black paint may become hot in the summer sun. To alleviate these problems, the benches should be sanded or stripped of all loose paint, primed, and then repainted. Despite the heat problem, dark or drab colors are preferable to light colors to help reduce the visual presence of the benches. Brown or a medium gray may reduce the solar heating effect.

Alternatively, the benches may be replaced with a more compatible design that would also eliminate many of the maintenance issues with the current benches. As a replacement, choose light-colored concrete benches of a traditional style and simple decoration. The backless benches should be about six feet long with a concrete bench and concrete pedestal supports. These benches would prove durable and would not require regular painting and would be substantial yet moveable, should the park choose to reconfigure them within the gardens. Such benches would also be more compatible with the historic character without being confused with historic features. Figure 4.3 illustrates a possible conceptual design for a concrete bench, and Appendix G offers a sample source for procuring benches.



Figure 4.3. Conceptual drawing of a concrete bench (OCLP 2011).

ENDNOTES

- 1 Roosevelt-Vanderbilt National Historic Sites General Management Plan, National Park Service, 2010.
- 2 Alex Knauss, oral interview, transcript on file at Vanderbilt Mansion NHS Archives.



National Park Service
Olmsted Center for Landscape Preservation
www.nps.gov/oclp

SOURCES

1. Aerial Photograph: NY GIS, 2006
2. USGS Map, 1946

DRAWN BY:

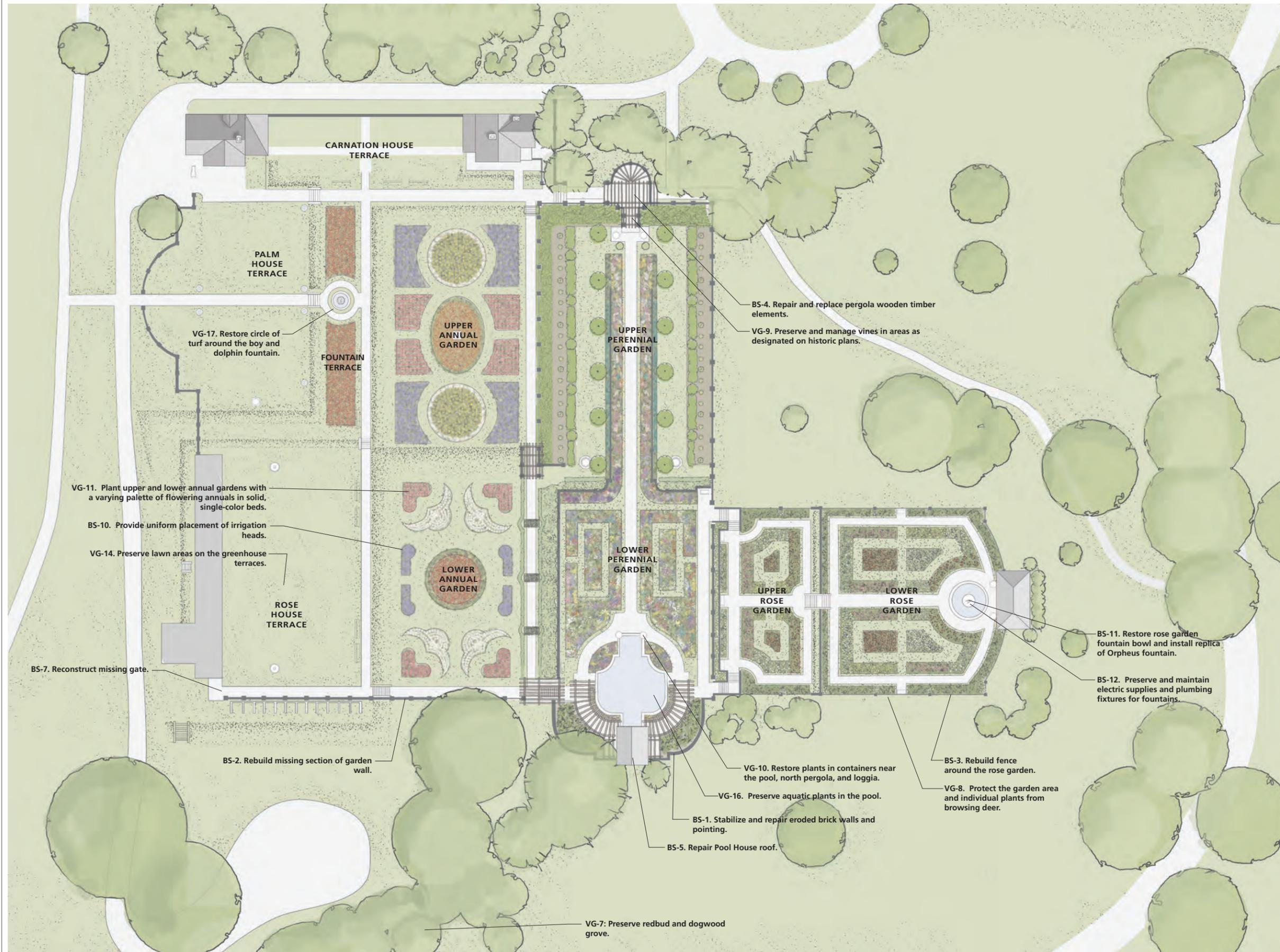
John Hammond, OCLP
Adobe Photoshop CS3, 2011

LEGEND

-  Trees
-  Shrubs
-  Lawn
-  Perennial Beds
-  Annual Beds
-  Rose Beds
-  Water Feature
-  Wooden Trellis

NOTES

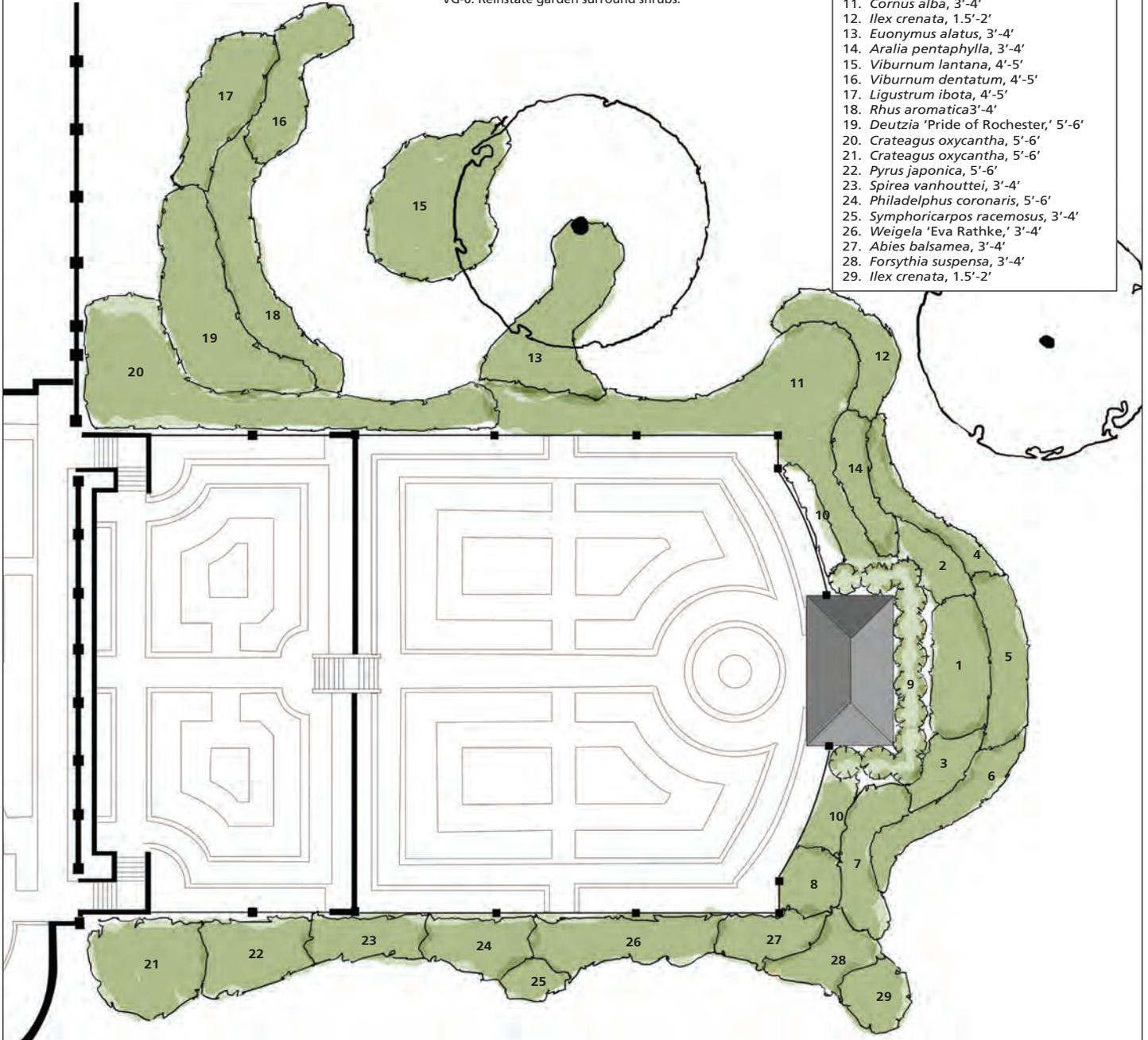
1. All vegetation shown in approximate scale and location.
2. Planting bed graphics are representational and do not indicate species or arrangement.
3. Feature and terrace names indicated are those in current use.



Planting Key

1. *Pinus mugho*, 2'-2.5'
2. *Juniperus communis*, 1.5'-2'
3. *Juniperus communis*, 3'-4'
4. *Symphoricarpos racemosus*, 3'-4'
5. *Ilex crenata*, 1.5'-2'
6. *Symphoricarpos racemosus*, 3'-4'
7. *Ilex crenata*, 1.5'-2'
8. *Philadelphus grandiflora*, 5'-6'
9. *Juniperus pfitzeriana*, 3'-4'
10. *Deutzia 'Pride of Rochester'*, 4'-5'
11. *Cornus alba*, 3'-4'
12. *Ilex crenata*, 1.5'-2'
13. *Euonymus alatus*, 3'-4'
14. *Aralia pentaphylla*, 3'-4'
15. *Viburnum lantana*, 4'-5'
16. *Viburnum dentatum*, 4'-5'
17. *Ligustrum ibota*, 4'-5'
18. *Rhus aromatica* 3'-4'
19. *Deutzia 'Pride of Rochester'*, 5'-6'
20. *Crateagus oxycantha*, 5'-6'
21. *Crateagus oxycantha*, 5'-6'
22. *Pyrus japonica*, 5'-6'
23. *Spirea vanhouttei*, 3'-4'
24. *Philadelphus coronaris*, 5'-6'
25. *Symphoricarpos racemosus*, 3'-4'
26. *Weigela 'Eva Rathke'*, 3'-4'
27. *Abies balsamea*, 3'-4'
28. *Forsythia suspensa*, 3'-4'
29. *Ilex crenata*, 1.5'-2'

VG-6: Reinstate garden surround shrubs.



Cultural Landscape Report

Vanderbilt Mansion
Formal Gardens



National Park Service
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NOTES

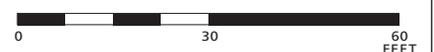
1. All features shown in approximate scale and location.
2. Recommendations are based on the 1910 plan by Thomas Meehan and Sons and the 1916 alterations to this plan by Robert Cridland.
3. Plant heights indicate approximate desired mature height.

SOURCES

1. Aerial Photograph: NY GIS, 2006
2. USGS Map, 1946
3. Aerial Photograph, 1943

DRAWN BY

John Hammond, OCLP
Adobe Photoshop CS3, 2008



Treatment Plan
Rose Garden Shrubs

Drawing 7

Cultural Landscape Report

Vanderbilt Mansion
Formal Gardens
Hyde Park, New York

Treatment Plan
Upper Perennial Garden



National Park Service
Olmsted Center for Landscape Preservation
www.nps.gov/oclp

SOURCES

1. Aerial Photograph: NY GIS, 2006
2. USGS Map, 1946

DRAWN BY:

John Hammond, OCLP
Adobe Photoshop CS3, 2011

LEGEND

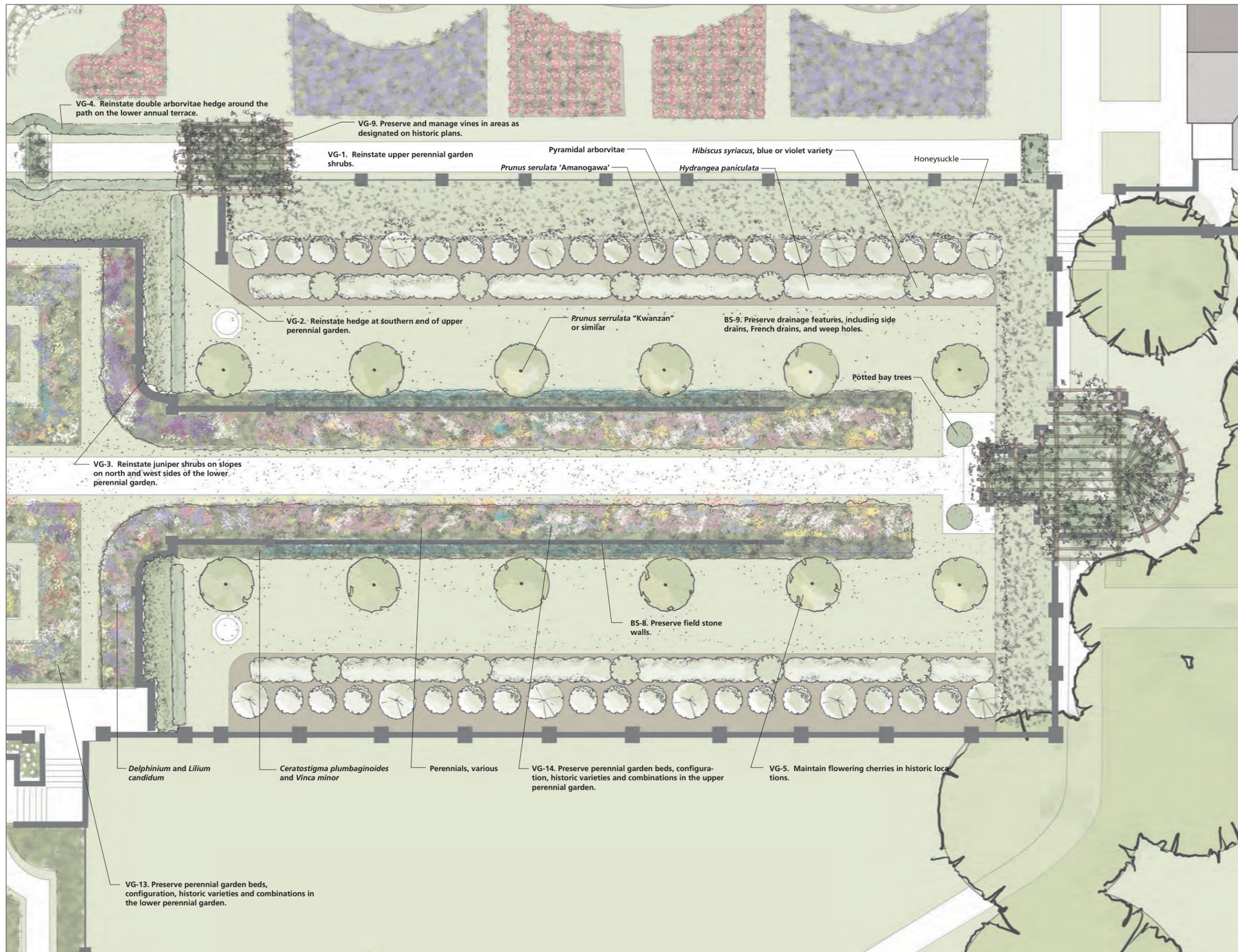
-  Trees
-  Lawn
-  Perennials
-  Annual Beds
-  Groundcover
-  Roses
-  Vine-covered Trellis
-  Shrubs

NOTES

1. All features shown in approximate scale and location.
2. Planting bed graphics are representational and do not indicate species or arrangement.
3. Feature and terrace names indicated are those in current use.



Drawing 8





National Park Service
Olmsted Center for Landscape Preservation
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SOURCES

1. Aerial Photograph: NY GIS, 2006
2. USGS Map, 1946

DRAWN BY:

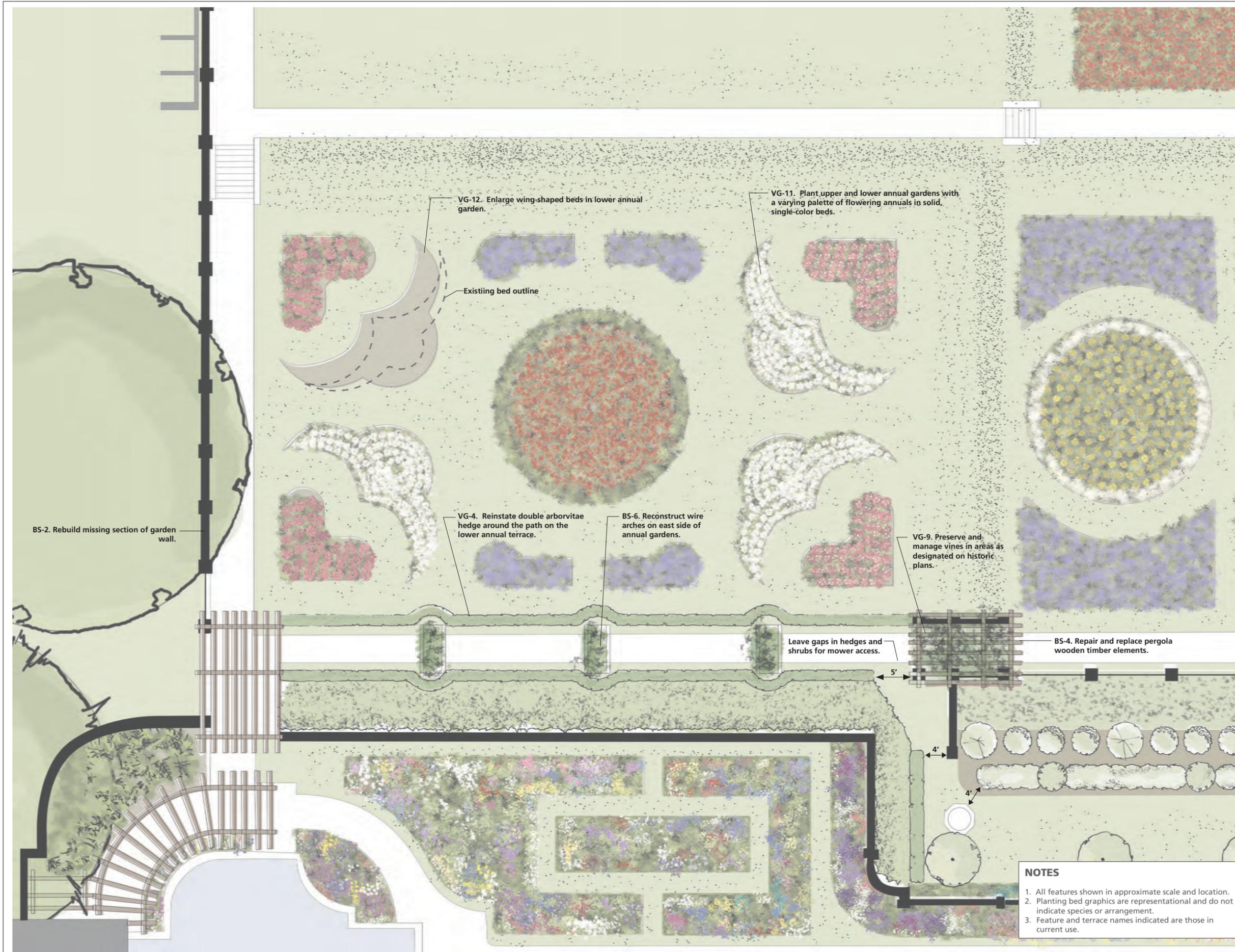
John Hammond, OCLP
Adobe Photoshop CS3, 2011

LEGEND

- Trees
- Lawn
- Perennials
- Annual Beds
- Groundcover
- Roses
- Vine-covered Trellis
- Ferns
- Shrubs
- Water



Drawing 9



NOTES

1. All features shown in approximate scale and location.
2. Planting bed graphics are representational and do not indicate species or arrangement.
3. Feature and terrace names indicated are those in current use.

Vanderbilt Mansion
Formal Gardens
Hyde Park, New York

Treatment Plan
Rose Garden



National Park Service
Olmsted Center for Landscape Preservation
www.nps.gov/oclp

SOURCES

1. Aerial Photograph: NY GIS, 2006
2. USGS Map, 1946

DRAWN BY

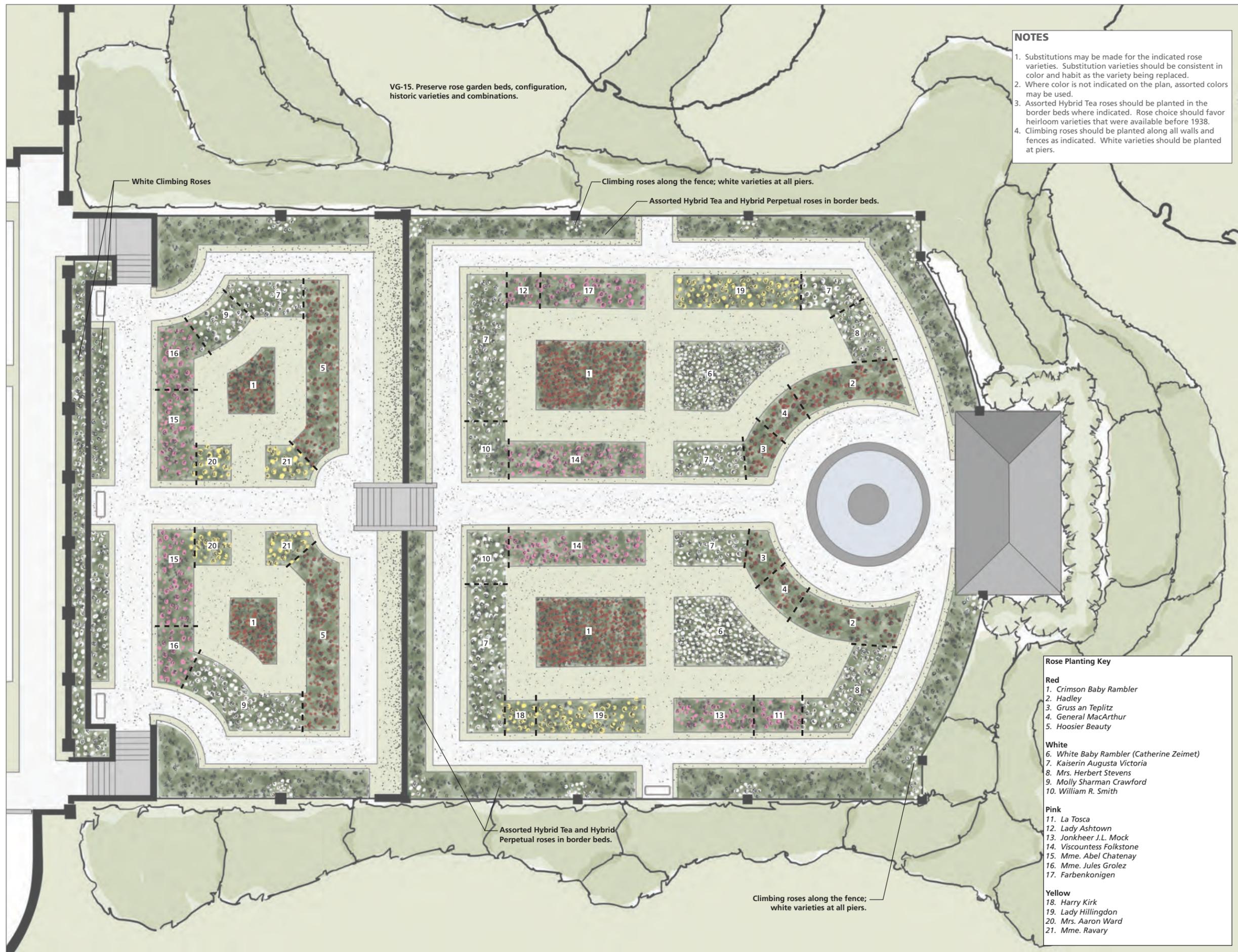
John Hammond, OCLP
Adobe Photoshop CS3, 2011

LEGEND

- Trees
- Shrubs
- Lawn
- Perennial Beds
- Annual Beds
- Rose Beds
- Water Feature
- Wooden Trellis

NOTES

1. Substitutions may be made for the indicated rose varieties. Substitution varieties should be consistent in color and habit as the variety being replaced.
2. Where color is not indicated on the plan, assorted colors may be used.
3. Assorted Hybrid Tea roses should be planted in the border beds where indicated. Rose choice should favor heirloom varieties that were available before 1938.
4. Climbing roses should be planted along all walls and fences as indicated. White varieties should be planted at piers.



Rose Planting Key

Red

1. *Crimson Baby Rambler*
2. *Hadley*
3. *Gruss an Teplitz*
4. *General MacArthur*
5. *Hoosier Beauty*

White

6. *White Baby Rambler (Catherine Zeimet)*
7. *Kaiserin Augusta Victoria*
8. *Mrs. Herbert Stevens*
9. *Molly Sharmar Crawford*
10. *William R. Smith*

Pink

11. *La Tosca*
12. *Lady Ashtown*
13. *Jonkheer J.L. Mock*
14. *Viscountess Folkstone*
15. *Mme. Abel Chatenay*
16. *Mme. Jules Grolez*
17. *Farbenkonigen*

Yellow

18. *Harry Kirk*
19. *Lady Hillingdon*
20. *Mrs. Aaron Ward*
21. *Mme. Ravary*



0 15 30 FEET



National Park Service
Olmsted Center for Landscape Preservation
www.nps.gov/oclp

SOURCES

1. Aerial Photograph: NY GIS, 2006
2. USGS Map, 1946

DRAWN BY:

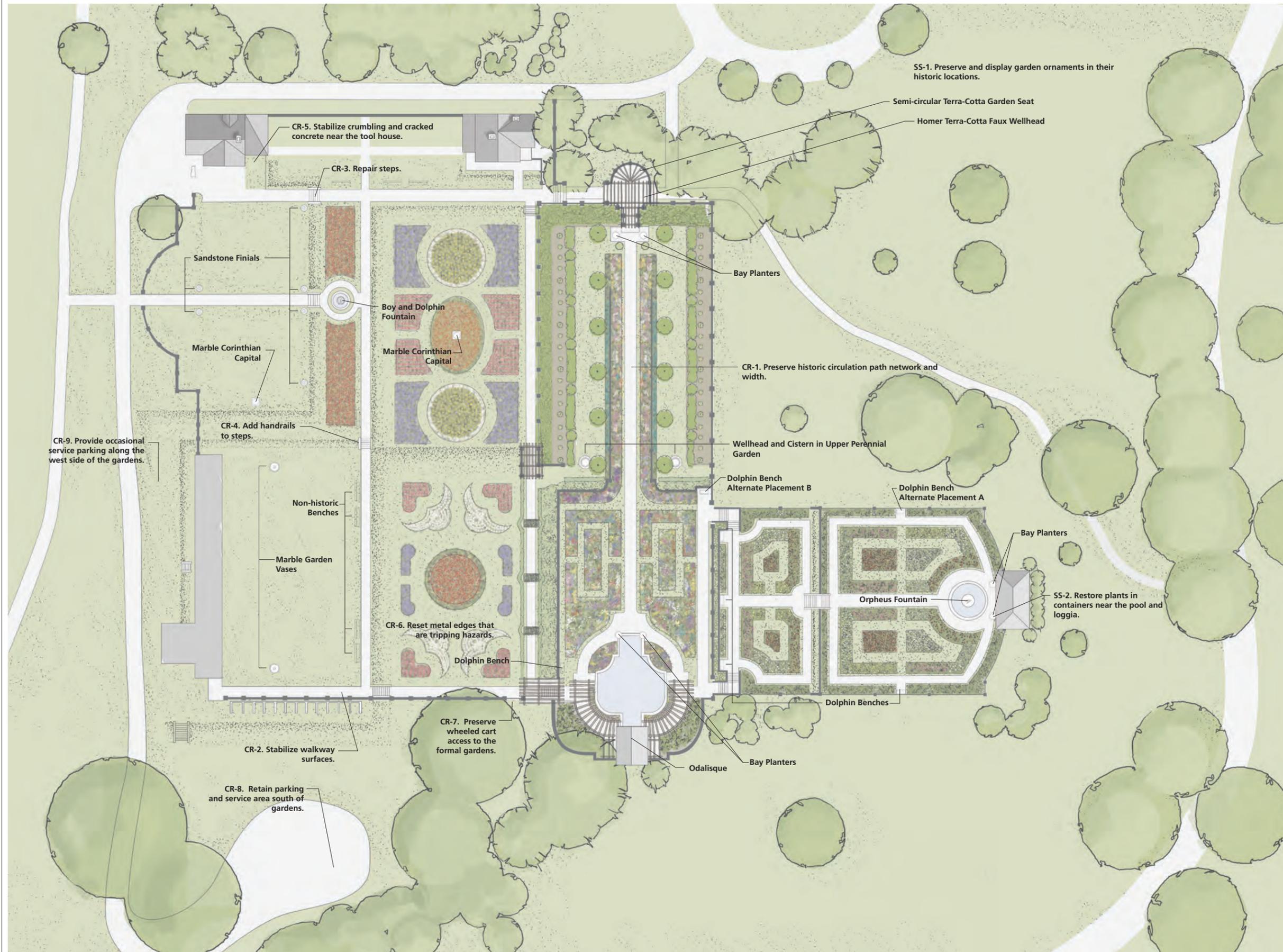
John Hammond, OCLP
Adobe Photoshop CS3, 2011

LEGEND

	Trees
	Shrubs
	Lawn
	Perennial Beds
	Annual Beds
	Rose Beds
	Water Feature
	Wooden Trellis

NOTES

1. All features shown in approximate scale and location.
2. Planting bed graphics are representational and do not indicate species or arrangement.
3. Feature and terrace names indicated are those in current use.



APPENDIX A: ESTATE PURCHASE LEDGERS

The following table lists all purchases for plants and other garden-related items found in the estate purchase ledgers from 1901 to 1939 in chronological order.

Year	Date	Order	Vendor	Reference Book, Page	Notes
1901	10-31	12 Chrysanthemums (\$1.20)	Sold to TH Howard	Bk 17, P. 30	
1901	10-31	12 Chrysanthemums (\$1.20)	Sold to E. Burnett	Bk 17, P. 30	
1901	10-31	24 Chrysanthemums (\$2.40)	Sold to WG Saltford	Bk 17, P. 30	
1901	10-31	2611 Roses (\$78.33)	Sold to WG Saltford	Bk 17, P. 30	At \$.03 each, these may be cut roses instead of rose plants
1901	10-31	48 Roses (\$1.44)	Sold to TH Howard	Bk 17, P. 30	
1901	10-31	9 Chrysanthemums (\$.90)	Sold to E. H. Wales	Bk 17, P. 30	
1901	11-11	100 Chrysanthemums (\$12.50)	Sold to VF Lichtenhan	Bk 17, P. 43	
1901	11-30	108 Chrysanthemums (\$10.80)	Sold to WG Saltford	Bk 17, P. 62	
1901	11-30	12 Chrysanthemums (\$3)	Sold to WG Saltford	Bk 17, P. 62	
1901	11-30	18 Chrysanthemums (\$1.80)	Sold to WG Saltford	Bk 17, P. 62	
1901	11-30	200 Chrysanthemums (\$20)	Sold to VF Lichtenhan	Bk 17, P. 62	
1901	11-30	2554 Roses (\$76.62)	Sold to WG Saltford	Bk 17, P. 62	At \$.03 each, these may be cut roses instead of rose plants
1901	11-30	29 Carnations (\$.29) <i>Dianthus sp.</i>	Sold to WG Saltford	Bk 17, P. 62	
1901	11-30	3 Chrysanthemums (\$2.25)	Sold to WG Saltford	Bk 17, P. 62	
1901	11-30	36 Chrysanthemums (\$3.60)	Sold to T.H. Howard	Bk 17, P. 62	
1901	11-30	54 Roses (\$1.62)	Sold to T.H. Howard	Bk 17, P. 62	
1901	11-30	7 Chrysanthemums (\$10.50)	Sold to WG Saltford	Bk 17, P. 62	
1901	11-30	74 Gardenias (\$11.10)	Sold to WG Saltford	Bk 17, P. 62	
1901	11-30	2 Chrysanthemums (\$3)	Sold to US Agor	Bk 17, P. 63	
1901	11-30	24 Roses (\$.75)	Sold to US Agor	Bk 17, P. 63	
1901	12-09	Roses	E. Burnett	Bk 12, p. 8	Bouquet
1901	12-09	Roses (\$.84)	E. Burnett	Bk 12, P. 8	
1901	12-14	200 Chrysanthemums (\$20)	(To) Lichtenhan	Bk 12, p. 8	
1901	12-31	Roses (\$2.88)	E Burnett	Bk 12, P. 10	
1901	12-31	119 Roses (\$3.57)	Sold to TH Howard	Bk 17, P. 85	
1901	12-31	1460 Roses (\$43.80)	Sold to WG Saltford	Bk 17, P. 85	
1901	12-31	169 Carnations (\$1.69) <i>Dianthus sp.</i>	Sold to WG Saltford	Bk 17, P. 85	
1901	12-31	24 Carnations (\$.24) <i>Dianthus sp.</i>	Sold to TH Howard	Bk 17, P. 85	
1901	12-31	329 Gardenias (\$49.35)	Sold to WG Saltford	Bk 17, P. 85	
1901	12-31	343 Roses (\$10.29)	Sold to Mr. Vanderbilt	Bk 17, P. 85	
1901	12-31	40 Carnations (\$.40) <i>Dianthus sp.</i>	Sold to Mr. Vanderbilt	Bk 17, P. 85	
1901	12-31	6 Gardenias (\$.90)	Sold to Mr. Vanderbilt	Bk 17, P. 85	
1902	01-31	1009 Roses (\$30.27)	Sold to WG Saltford	Bk 17, P. 100	
1902	01-31	282 Gardenias (\$42.30)	Sold to WG Saltford	Bk 17, P. 100	
1902	01-31	336 Carnations (\$3.36) <i>Dianthus sp.</i>	Sold to WG Saltford	Bk 17, P. 100	
1902	01-31	12 Gardenias (\$1.80)	Sold to Mr. Vanderbilt	Bk 17, P. 101	
1902	01-31	156 Roses (\$4.68))	Sold to Mr. Howard	Bk 17, P. 101	
1902	01-31	24 Carnations (\$.24) <i>Dianthus sp.</i>	Sold to Mr. Vanderbilt	Bk 17, P. 101	
1902	01-31	244 Roses (\$7.32)	Sold to Mr. Vanderbilt	Bk 17, P. 101	
1902	01-31	65 Carnations (\$.65) <i>Dianthus sp.</i>	Sold to Mr. Howard	Bk 17, P. 101	
1902	02-01	1 oz Marvel of Peru Mix	R & J Farquhar Co	Bk 17, P. 106	Marvel of Peru is a mix of six different colors of Mignonette
1902	02-20	2 pk Arnebia Carnuta (\$.50) Arabian Primrose	R & J Farquhar Co	Bk 17, P. 115	
1902	02-20	3 pk Heliotrope (\$.15)	R & J Farquhar Co	Bk 17, P. 115	
1902	02-26	100 Roses (\$3)	Sold to E.H. Wales	Bk 17, P. 115	

Year	Date	Order	Vendor	Reference Book, Page	Notes
1902	02-26	137 Gardenias (\$20.55)	Sold to WG Saltford	Bk 17, P. 115	
1902	02-26	372 Carnations (\$3.72) <i>Dianthus sp.</i>	Sold to WG Saltford	Bk 17, P. 115	
1902	02-26	872 Roses (\$26.16)	Sold to WG Saltford	Bk 17, P. 115	
1902	03-17	12 Carnations (\$.12) <i>Dianthus sp.</i>		Bk 12, P. 18	
1902	03-29	12 Carnation HT Briggs (\$.12) <i>Dianthus HT Briggs</i>	HT Briggs?	Bk 12, P. 18	
1902	03-31	1285 Roses (\$38.55)	Sold to W. G. Saltford	Bk 17, P. 130	
1902	03-31	188 Roses (\$5.64)	Sold to TH Howard	Bk 17, P. 130	
1902	03-31	24 Carnations (\$.24) <i>Dianthus sp.</i>	Sold to TH Howard	Bk 17, P. 130	
1902	03-31	4 lbs Sweet Peas <i>Lathyrus odoratus</i>	R V J Farquhar Co	Bk 17, P. 130	
1902	03-31	403 Carnations (\$4.03) <i>Dianthus sp.</i>	Sold to W. G. Saltford	Bk 17, P. 130	
1902	03-31	44 Gardenias (\$6.60)	Sold to W. G. Saltford	Bk 17, P. 130	
1902	04-01	300 Pachysandra terminalis (\$18)	W A Manda	Bk 17, P. 135	
1902	04-03	3 Trees (Maples) (\$50) <i>Acer sp.</i>	Mrs. J. S. Gilbert	Bk 17, P. 146	2 Trees have been moved. 3 to be moved within 12 months
1902	04-17	Shrubs (\$2)	E.L. Brardman	Bk 12, P. 23	
1902	04-19	25 Cornelian Cherry (\$2.50) <i>Cornus mas</i>	Thos Meehan & Sons	Bk 17, P. 147	
1902	04-19	25 Golden Bell (\$1.75) <i>Forsythia 'Golden Bell'</i>	Thos Meehan & Sons	Bk 17, P. 147	
1902	04-19	25 Hydrangea (\$2.25)	Thos Meehan & Sons	Bk 17, P. 147	
1902	04-19	25 Japanese Snowball (\$3.75) <i>Viburnum plicatum</i>	Thos Meehan & Sons	Bk 17, P. 147	
1902	04-19	25 Mist Bush (\$2.75) <i>Cotinus sp.</i>	Thos Meehan & Sons	Bk 17, P. 147	Referred to as "Cotinus, Mist Bush" in Meehan & Sons catalog
1902	04-19	25 Red Twigged Dogwood (\$2) <i>Cornus alba, stolonifera, or sericea</i>	Thos Meehan & Sons	Bk 17, P. 147	
1902	04-19	25 Rosa rosgosa white (\$2.75)	Thos Meehan & Sons	Bk 17, P. 147	
1902	04-19	25 Rosa rugosa red (\$2.75)	Thos Meehan & Sons	Bk 17, P. 147	
1902	04-19	25 Spiraea 'Anthony Waterer' (\$4.50) <i>Spiraea x bumalda 'Anthony Waterer'</i>	Thos Meehan & Sons	Bk 17, P. 147	Magenta flowers
1902	04-19	25 Spiraea reevesii (\$2.50)	Thos Meehan & Sons	Bk 17, P. 147	Double flowering spirea
1902	04-19	25 White flowered dogwood (\$5) <i>Cornus florida</i>	Thos Meehan & Sons	Bk 17, P. 147	
1902	04-19	50 Bush Honeysuckle (\$5) <i>Lonicera</i>	Thos Meehan & Sons	Bk 17, P. 147	
1902	04-19	50 Deutzia gracilis (\$5)	Thos Meehan & Sons	Bk 17, P. 147	
1902	04-19	50 Japanese Barberry (\$7.50) <i>Berberis thunbergii</i>	Thos Meehan & Sons	Bk 17, P. 147	
1902	04-19	50 Lilac Rothomagensis (\$4) <i>Syringa chinensis 'Red Rothomagensis'</i>	Thos Meehan & Sons	Bk 17, P. 147	
1902	05-01	84 Roses (\$2.52)		Bk 12, 24	
1902	05-01	38 Carnation (\$.38) <i>Dianthus sp.</i>	Mr. Esterbrook	Bk 12, p. 24	
1902	05-20	Forget-me-not Elisa Fourbert 1 1/2 oz	H Briggs	Bk 11, p. 20	
1902	05-20	Antirrhinum tall mixed 1 oz Snapdragon	H Briggs	Bk 11, p. 4	
1902	05-20	Arabis Alpina 1oz Rockcress	H Briggs	Bk 11, p. 4	
1902	05-20	Cyclamen Persicum mixed 2 pkts	H Briggs	Bk 11, p. 4	
1902	05-20	Eschscholzia mixed 1oz Californian poppy	H Briggs	Bk 11, p. 4	
1902	05-20	Foxglove mixed 1 oz <i>Digitalis</i>	H Briggs	Bk 11, p. 4	
1902	05-20	Hardy phlox Hybrids mixed	H Briggs	Bk 11, p. 4	
1902	05-20	Helenium bigelovii pk Sneezeweed	H Briggs	Bk 11, p. 4	Yellow herbaceous perennial
1902	05-20	Helianthus x multiflorus fl pk 2 pkts Sunflower	H Briggs	Bk 11, p. 4	
1902	05-20	Ipomoea grandiflora noctiflora 1 pkt Morning glory	H Briggs	Bk 11, p. 4	Climber

Year	Date	Order	Vendor	Reference Book,Page	Notes
1902	05-20	Ipomaea sinseata 1 pkt Morning glory	H Briggs	Bk 11, p. 4	Climber
1902	05-20	Ipomoea imperialis1 pkt Morning glory	H Briggs	Bk 11, p. 4	Climber
1902	05-20	Lathyrus latifolius 1 pkt red & 1 pkt Mixed Perennial Sweet Pea red	H Briggs	Bk 11, p. 4	Climber
1902	05-20	Mignonette common sweet 1 oz	H Briggs	Bk 11, p. 4	
1902	05-20	Mina Lobata 1 pkt Firecracker vine, Spanish Flag	H Briggs	Bk 11, p. 4	
1902	05-20	Nasturtium climbing mixed 1oz <i>Tropaeolum</i>	H Briggs	Bk 11, p. 4	
1902	05-20	Penstemon mixed 2 pkts	H Briggs	Bk 11, p. 4	
1902	05-20	Platycodon grandiflora mixed 2pkts	H Briggs	Bk 11, p. 4	herbaceous perennial
1902	05-20	Primula sinensis rosea and alba 1 pkt of each	H Briggs	Bk 11, p. 4	Possibly for display in Mansion may have been used as bedding display
1902	05-20	Sweet peas mixed 1 <i>Lathyrus odoratus</i>	H Briggs	Bk 11, p. 4	
1902	05-20	Sweet William mixed 2 pkts <i>Dianthus barbatus</i>	H Briggs	Bk 11, p. 4	
1902	05-20	Cyclamen Coum 2oz	H Briggs	Bk 11, p. 4	More likely to have been used outside in the ground, deep rose, pale pink7 white colors were available at this time
1902	08-02	500 Roman Hyacinths	Bobbin & Atkins)	Bk 11 p. 17	
1902	08-02	100 Daffodils, Sir Watkin	Bobbin & Atkins	Bk 11 p. 17	large daffodil, entirely yellow
1902	08-02	1000 Daffodils Poeticus	Bobbin & Atkins	Bk 11 p. 17	
1902	08-02	1000 Hyacinthus botryoides blue	Bobbin & Atkins	Bk 11 p. 17	
1902	08-02	1000 Scilla siberica Bluebell Siberian Siberian squill	Bobbin & Atkins	Bk 11 p. 17	
1902	08-02	1000 Triteleia uniflora Spring Star flower, Trumpet lily, Ipheion uniflorum	Bobbin & Atkins	Bk 11 p. 17	
1902	08-02	12 Ismene calathea Peruvian daffodil	Bobbin & Atkins	Bk 11 p. 17	
1902	08-02	200 Daffodils Major	Bobbin & Atkins	Bk 11 p. 17	
1902	08-02	2000 Lily of the Valley <i>Convallaria majalis</i>	Bobbin & Atkins	Bk 11 p. 17	
1902	08-02	24 Dielytia spectabilis <i>Dicentra spectabilis</i>	Bobbin & Atkins	Bk 11 p. 17	
1902	08-02	300 Paper White Narcissus	Bobbin & Atkins	Bk 11 p. 17	
1902	08-02	50 Hyacinths, Baroness Van Tuyll	Bobbin & Atkins	Bk 11 p. 17	Single light blue
1902	08-02	50 Hyacinths, General Pelissier	Bobbin & Atkins	Bk 11 p. 17	Exhibition variety, light blue
1902	08-02	500 Daffodils Incomparable	Bobbin & Atkins	Bk 11 p. 17	
1902	08-02	500 Daffodils Van Sion	Bobbin & Atkins	Bk 11 p. 17	Double narcissius
1902	08-02	500 Gladiolus 'The Bride'	Bobbin & Atkins	Bk 11 p. 17	
1902	08-02	100 Callas	Bobbin & Atkins	Bk 11, p. 17	Can be made to flower in winter by resting during the summer, ie dried and stored
1902	08-02	100 Montbretia crocosmiiflora <i>Crocsmia x crocosmiiflora</i>	Bobbin & Atkins	Bk 11, p. 17	
1902	08-02	100 Spiraea astilbe <i>Astilbe sp.</i>	Bobbin & Atkins	Bk 11, p. 17	
1902	08-02	1000 Freesias	Bobbin & Atkins	Bk 11, p. 17	
1902	08-02	12 Incarvillea Delavagii Garden Gloxinia	Bobbin & Atkins	Bk 11, p. 17	
1902	08-02	2000 Crocus, blue	Bobbin & Atkins	Bk 11, p. 17	
1902	08-02	2000 Crocus, yellow	Bobbin & Atkins	Bk 11, p. 17	
1902	08-02	2000 Snowdrops <i>Galianthus</i>	Bobbin & Atkins	Bk 11, p. 17	
1902	08-02	Lilium Harrisii 7 to 9 in 3 legged Bermuda lily	Clucas & Boddington	Bk 11, p. 17	
1902	08-16	1 oz Wallflower Blood Red <i>Cheiranthus sp.</i>	Farquhar	Bk 11, p. 20	
1902	08-16	1 oz Wallflower Primrose yellow <i>Cheiranthus sp.</i>	Farquhar	Bk 11, p. 20	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1902	08-16	Daisy 2 pkts double rose <i>Leucanthemum, Chrysanthemum</i>	Farquhar	Bk 11, p. 20	
1902	08-16	Daisy 2 pkts double white <i>Leucanthemum, Chrysanthemum</i>	Farquhar	Bk 11, p. 20	
1902	08-16	Special mixture pansies ¼ oz <i>Viola sp.</i>	Farquhar	Bk 11, p. 20	
1902	08-28	1 oz Broussonetia papyrifera Paper mulberry	Thorburn & Co.	Bk 11, p. 22-23	Deciduous tree growing to 50 ft tall, fruit is edible and very sweet
1902	08-28	1 oz Clethra alnifolia Summer sweet pepper bush	Thorburn & Co.	Bk 11, p. 22-3	
1902	08-28	1 oz Colutea arborescens Bladder Senna	Thorburn & Co.	Bk 11, p. 22-3	
1902	08-28	1 oz Hedera Helix English ivy	Thorburn & Co.	Bk 11, p. 22-3	
1902	08-28	1 oz Kalmia latifolia Mountain Laurel	Thorburn & Co.	Bk 11, p. 22-3	
1902	08-28	1 oz Rhus cotinus <i>Cotinus coggygria</i>	Thorburn & Co.	Bk 11, p. 22-3	
1902	08-28	1 oz Ribes sangeuinea	Thorburn & Co.	Bk 11, p. 22-3	
1902	08-28	1 oz Ulex Europaea Common Gorse	Thorburn & Co.	Bk 11, p. 22-3	
1902	08-28	1 oz Pyrus arbutifolia	Thorburn & Co.	Bk 11, p. 22-3	
1902	10-23	1,000 Yellow Crocuses	Bobbink & Atkins	Bk 11, p. 28	
1903	01-16	Adonis vernalis False hellebore; Spring Adonis	Farquhar	Bk 11, p. 35	Yellow flowered sprind flowering perennial
1903	01-16	Alstroemeria aurantiaca Lily Peruvian	Farquhar	Bk 11, p. 35	
1903	01-16	Anthericum liliago St Bernard's Lily	Farquhar	Bk 11, p. 35	white flowers, 2 to 3 feet high.
1903	01-16	Aquilegia chrysantha Golden columbine	Farquhar	Bk 11, p. 35	Yellow flowers
1903	01-16	Aretolis grandis African Daisy (<i>Arctotis stoechadifolia</i>)	Farquhar	Bk 11, p. 35	White flowers with blue center tipped with yellow
1903	01-16	Aristolochia siphon Dutchman's pipe (<i>Aristolochia macrophylla</i>)	Farquhar	Bk 11, p. 35	Visible in some of the historic garden images
1903	01-16	Asphodelus luteus Yellow Asphodel Flower of Hades	Farquhar	Bk 11, p. 35	2-4 feet high, yellow flowers in May & June
1903	01-16	Bocconia japonica Plume poppy (<i>Macleaya cordata</i>)	Farquhar	Bk 11, p. 35	
1903	01-16	Campanula mariesii Bellflower	Farquhar	Bk 11, p. 35	Short blue variety with single flowers
1903	01-16	Cyperus papyrus Papyrus sedge	Farquhar	Bk 11, p. 35	
1903	01-16	Delphinium hybrids	Farquhar	Bk 11, p. 35	
1903	01-16	Dictamus	Farquhar	Bk 11, p. 35	
1903	01-16	Echinops ritro Small globe thistle	Farquhar	Bk 11, p. 35	
1903	01-16	Eryngium amethystinum Amethyst sea holly	Farquhar	Bk 11, p. 35	
1903	01-16	Eucalyptus globules Blue gum	Farquhar	Bk 11, p. 35	
1903	01-16	Heliopsis False sunflower	Farquhar	Bk 11, p. 35	
1903	01-16	Hunnemannia fumariifolia Mexican Tulip Poppy	Farquhar	Bk 11, p. 35	
1903	01-16	Leptosyne maritime Sea dahlia	Farquhar	Bk 11, p. 35	Perennial herb
1903	01-16	Liatris spicata Blazing Star	Farquhar	Bk 11, p. 35	
1903	01-16	Aconitum Napellus Turk's-cap; garden monkshood	Farquhar	Bk 11, p. 35-	showy blue flowers produced on spikes
1903	01-16	Achillea Ptarmica 'The Pearl' Bride flower	Farquhar	Bk 11, p. 35-36	White flowered hardy perennial
1903	01-16	Calceolaria Lady's purse; slipper flower	Farquhar	Bk 11, p. 35-36	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1903	01-16	Calliopsis atrosanguinea Calliopsis crimson	Farquhar	Bk 11, p. 35-36	Crismon suitable for bedding
1903	01-16	Calliopsis grandiflora	Farquhar	Bk 11, p. 35-36	Cutflower brilliant golden flower
1903	01-16	Calliopsis lanceolata Lance-leaved Coreopsis	Farquhar	Bk 11, p. 35-36	
1903	01-16	Candytuft carmine <i>Iberis sempervirens</i>	Farquhar	Bk 11, p. 35-36	
1903	01-16	Centaurea montana Cornflower perennial; Batchelors buttons	Farquhar	Bk 11, p. 35-6	
1903	01-16	Dianthus	Farquhar	Bk 11, p. 35-6	
1903	01-16	Eschscholzia californica Californinan poppy	Farquhar	Bk 11, p. 35-6	
1903	01-16	Gloxinea	Farquhar	Bk 11, p. 35-6	
1903	01-16	Helianthus cucumerifolia Sunflower	Farquhar	Bk 11, p. 35-6	
1903	01-16	Helianthus cucumerifolia stella Sunflower	Farquhar	Bk 11, p. 35-6	
1903	01-16	Helianthus Maximiliana Sunflower	Farquhar	Bk 11, p. 35-6	
1903	01-16	Helichrysum Straw flower	Farquhar	Bk 11, p. 35-6	
1903	01-16	Lobelia cardinalis Cardinal flower	Farquhar	Bk 11, p. 35-6	
1903	01-16	Lobelia speciosa Lobelia	Farquhar	Bk 11, p. 35-6	
1903	01-16	Malope grandiflora rose Mallow wort	Farquhar	Bk 11, p. 35-6	
1903	01-16	Nigella Damascena Love-in-a-mist	Farquhar	Bk 11, p. 35-6	
1903	01-16	Poppy coccineum Poppy	Farquhar	Bk 11, p. 35-6	
1903	01-16	Poppy Glaucum Tulip Poppy	Farquhar	Bk 11, p. 35-6	Well adapted for edging as only gets 15 inches high
1903	01-16	Poppy Shirley <i>Papaver rhoeas</i>	Farquhar	Bk 11, p. 35-6	
1903	01-16	Ricinus Cambodgensis Castor oil plant	Farquhar	Bk 11, p. 35-6	Black stems, 5 feet high
1903	01-16	Ricinus Gilsoni mirabilis Castor oil plant	Farquhar	Bk 11, p. 35-6	Deep red foliage , 5 feet high
1903	01-16	Ricinus sanguineus Castor oil plant	Farquhar	Bk 11, p. 35-6	Red stalks and fruit, 8 feet high
1903	01-16	Ricinus zanzibariensis Castor oil plant	Farquhar	Bk 11, p. 35-6	Green leaved can grow to 20 feet
1903	01-16	Cosmos	Farquhar	Bk 11, p. 35-6	
1903	01-16	Malope grandiflora rose	Farquhar	Bk 11, p. 35-6	
1903	01-16	Petunia	Farquhar	Bk 11, p. 35-6	
1903	01-16	Primula stellata Primrose	Farquhar	Bk 11, p. 35-6	
1903	01-16	Statice Sea Lavender	Farquhar	Bk 11, p. 35-6	
1903	01-16	Lychnis viscaria splendens German Catchfly	Farquhar	Bk 11, p. 36	
1903	01-16	Morina elegans	Farquhar	Bk 11, p. 36	
1903	01-16	Nelumbium kermesinum Lotus	Farquhar	Bk 11, p. 36	Aquatic plant Light rose color
1903	01-16	Nelumbium luteum American Lotus; Chinkapin	Farquhar	Bk 11, p. 36	Sulpher yellow blooms
1903	01-16	Nelumbium speciosum	Farquhar	Bk 11, p. 36	Indigo flowers
1903	01-16	Nymphaea hybrid Waterlily	Farquhar	Bk 11, p. 36	
1903	01-16	Nymphaea stellata Waterlily	Farquhar	Bk 11, p. 36	
1903	01-16	Oenothera lamarckiana Evening primrose	Farquhar	Bk 11, p. 36	
1903	01-16	Paeony mixed Peony	Farquhar	Bk 11, p. 36	
1903	01-16	Phlox decussate Phlox perennial	Farquhar	Bk 11, p. 36	

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1903	01-16	Pyrethrum atrosanguineum Painted Daisy	Farquhar	Bk 11, p. 36	Single dark red flowers
1903	01-16	Rudbeckia newmanii Compact Black eye Susan	Farquhar	Bk 11, p. 36	
1903	01-16	Rudbeckia purpurea Purple cone flower	Farquhar	Bk 11, p. 36	
1903	01-16	Scabious scarlet	Farquhar	Bk 11, p. 36	
1903	01-16	Scabious white	Farquhar	Bk 11, p. 36	
1903	01-16	Solanum robustum Shrubby nightshade	Farquhar	Bk 11, p. 36	
1903	01-16	Stevia Lindleyana	Farquhar	Bk 11, p. 36	
1903	01-16	Toutomia uveria (<i>Kniphofia uvaria</i>) Red Hot Poker	Farquhar	Bk 11, p. 36	
1903	01-16	Trollius	Farquhar	Bk 11, p. 36	
1903	01-16	Andropogon argenteus (<i>Andropogon saccharoides</i>) Silver Beard Grass	Farquhar	Bk 11, p. 36-37	Ornamental 2-3 ft. tall, 2 ft. wide. Bright green leaves becoming orange in the fall
1903	01-16	Arundo donax variegata Variegated giant reed	Farquhar	Bk 11, p. 36-37	Ideal for massing or borders
1903	01-16	Briza maxima Rattle snake grass; Large quaking grass	Farquhar	Bk 11, p. 36-37	Grows to a height of 2 feet
1903	01-16	Eragrostis elegans Love Grass	Farquhar	Bk 11, p. 36-37	
1903	01-16	Erianthus Ravennae Hardy pampas Grass; plume grass	Farquhar	Bk 11, p. 36-37	
1903	01-16	Eulalia Zebrina Zebra Grass	Farquhar	Bk 11, p. 36-37	Ideal for dried flowers
1903	01-16	Miscanthus sinensis Grass	Farquhar	Bk 11, p. 36-37	
1903	01-16	Stock Brompton <i>Matthiola</i>	Farquhar	Bk 11, p. 36-37	
1903	01-16	Sweetpea Black Knight <i>Lathyrus odoratus Black Knight</i>	Farquhar	Bk 11, p. 36-37	
1903	01-16	Sweetpea Lady Grisel Hamilton <i>Lathyrus odoratus Lady Grisel Hamilton</i>	Farquhar	Bk 11, p. 36-37	
1903	01-16	Sweetpea Mrs. Eckford <i>Lathyrus odoratus Mrs. Eckford</i>	Farquhar	Bk 11, p. 36-37	
1903	01-16	Sweetpea Prima Donna <i>Lathyrus odoratus Prima Donna</i>	Farquhar	Bk 11, p. 36-37	
1903	01-16	Sweetpea Sadie Burpee <i>Lathyrus odoratus Sadie Burpee</i>	Farquhar	Bk 11, p. 36-37	
1903	01-16	Sweetpea Salopian <i>Lathyrus odoratus Salopian</i>	Farquhar	Bk 11, p. 36-37	
1903	01-16	Pennisetum Ruppelianum Purple fountain grass	Farquhar	Bk 11, p. 36-7	
1903	01-16	Stipa pennata Feather Grass	Farquhar	Bk 11, p. 36-7	
1903	01-16	Amaryllis (Hippeastum) vittata <i>Hippeastrum vittatum</i>	Farquhar	Bk 11, p. 37	
1903	01-16	Amaryllis villoata purpurea George lily; Scarborough lily	Farquhar	Bk 11, p. 37	
1903	01-16	Crinum kirkii Panama lily	Farquhar	Bk 11, p. 37	
1903	01-16	Lilium Candidum Madonna Lily	Farquhar	Bk 11, p. 37	
1903	01-16	Lilium speciosum album Japanese lily	Farquhar	Bk 11, p. 37	Ideal for cut flowers
1903	01-16	Lilium speciosum melpomene Lily	Farquhar	Bk 11, p. 37	Ideal for cut flowers
1903	01-16	Lilium speciosum rubrum Rubrum lily	Farquhar	Bk 11, p. 37	Ideal for cut flowers
1903	02-09	25 Carnations Adonis <i>Dianthus Adonis</i>	F. R. Pearson Co.	Bk 11, p. 38	
1903	02-09	25 Gardenia florida Fortunai	Neeber & Don	Bk 11, p. 38	
1903	02-09	3 Chrysanthemum C. J. Salter	F. R. Pearson Co.	Bk 11, p. 38	
1903	02-09	3 Chrysanthemum Durban Pride	F. R. Pearson Co.	Bk 11, p. 38	
1903	02-09	3 Chrysanthemum Lord Salisbury	F. R. Pearson Co.	Bk 11, p. 38	

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1903	02-09	3 Chrysanthemum Milicent Richardson	F. R. Pearson Co.	Bk 11, p. 38	
1903	02-09	3 Chrysanthemum Mrs. L. W. Pockett	F. R. Pearson Co.	Bk 11, p. 38	
1903	02-09	50 Carnations Enchantress <i>Dianthus Enchantress</i>	F. R. Pearson Co.	Bk 11, p. 38	
1903	02-09	50 Gardenia florida	Neeber & Don	Bk 11, p. 38	
1903	02-09	New Chrysanthemums: 3 Chrysanthemum W. R. Church	F. R. Pearson Co.	Bk 11, p. 38	
1903	02-09	New Chrysanthemums: 3 Mrs. J. C. Neville	F. R. Pearson Co.	Bk 11, p. 38	
1903	02-17	½ oz Poppy Mix (\$.20)	R & J Farquhar Co	Bk 15, p. 24	Perennial or annual unknown
1903	02-17	1 ½ lbs Sweet Peas in 6 varieties (\$1.50) <i>Lathyrus odoratus</i>	R & J Farquhar Co	Bk 15, p. 24	
1903	03-04	1 oz Tamarix gallica	Thorburn's Seeds	Bk 11, p. 40-1	
1903	03-04	1 oz. Viburnum Lantana Wayfaring Tree	Thorburn's Seeds	Bk 11, p. 40-1	
1903	03-04	1 pk 4591 Clematis Jackmanii Hybrids	Thorburn's Seeds	Bk 11, p. 40-1	
1903	03-04	1 pk 6180 Styrax Japonica Japanese snowbell	Thorburn's Seeds	Bk 11, p. 40-1	
1903	03-04	1 pk 6224 Tecoma Smithii Orange Bells	Thorburn's Seeds	Bk 11, p. 40-1	
1903	03-04	½ oz Andromeda Japonica Flame bush	Thorburn's Seeds	Bk 11, p. 40-1	
1903	03-04	½ oz Gaultheria shallon Salal, Shallon	Thorburn's Seeds	Bk 11, p. 40-1	
1903	03-04	1 oz Amelanchier Canadensis Canadian Serviceberry	Thorburn's Seeds	Bk 11, p. 40-1	
1903	03-04	1 oz Amorpha fruticosa Desert false Indigo bush	Thorburn's Seeds	Bk 11, p. 40-1	
1903	03-04	1 oz Andromeda ligustrina Bog rosemary;	Thorburn's Seeds	Bk 11, p. 40-1	Small shrub growing to 1-2 feet tall with slender stems flowers white or pink & flower late spring to early summer
1903	03-04	1 oz Berberis Aquifolium (<i>Mahonia aquifolium</i>) Oregon Grape	Thorburn's Seeds	Bk 11, p. 40-1	
1903	03-04	1 oz Cercis Siliquastrum The Judas Tree	Thorburn's Seeds	Bk 11, p. 40-1	
1903	03-04	1 oz Chionanthus Virginica Fringetree	Thorburn's Seeds	Bk 11, p. 40-1	
1903	03-04	1 oz Citrus trifoliata Poncirus trifoliata, syn. Citrus trifoliata	Thorburn's Seeds	Bk 11, p. 40-1	
1903	03-04	1 oz Exochorda grandiflora Pearl Bush	Thorburn's Seeds	Bk 11, p. 40-1	
1903	03-04	1 oz Gleditschia horida	Thorburn's Seeds	Bk 11, p. 40-1	
1903	03-04	1 oz Ilex crenata Japanese Holly	Thorburn's Seeds	Bk 11, p. 40-41	
1903	03-04	1 oz Ilex opaea American Holly	Thorburn's Seeds	Bk 11, p. 40-41	
1903	03-04	1 oz Myrica cerifera Wax myrtle, Bayberry,	Thorburn's Seeds	Bk 11, p. 40-41	
1903	03-04	1 oz Negundo aceroides <i>Acer negundo</i> , Box Elder	Thorburn's Seeds	Bk 11, p. 40-41	Fast-growing that grows up to 40 to 60 ft tall
1903	03-04	1 oz Nyssa multiflora Black Gum; Tupelo	Thorburn's Seeds	Bk 11, p. 40-41	
1903	03-04	1 oz Rhus cotinus (<i>Cotinus coggygia</i>) Smoke bush	Thorburn's Seeds	Bk 11, p. 40-41	
1903	03-04	1 oz Symphoricarpos vulgaris Snowberry	Thorburn's Seeds	Bk 11, p. 40-41	
1903	03-04	1 pk 4092 Agathaea coelaskis <i>Felicia amelloides</i> Blue Marguerite Kingfisher Daisy	Thorburn's Seeds	Bk 11, p. 40-41	Annual or tender tropicam perennial, Blue flowers
1903	03-04	1 pk 4233 Anemone Jap. Hon. Jubert Anemone 'Honorine Jobert'	Thorburn's Seeds	Bk 11, p. 40-41	White flowers with yellow stamens. Herbaceous perennial

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1903	03-04	1 pk 4272 Aristolochia Siphon Dutchman's pipe (<i>Aristolochia macrophylla</i>)	Thorburn's Seeds	Bk 11, p. 40-41	
1903	03-04	1 pk 4286 Asparagus verticillatus Fern (Vining Asparagus)	Thorburn's Seeds	Bk 11, p. 40-41	Climbing asparagus fern with glossy green foliage covered in fragrant white flowers in late spring, and is smothered with 1/2" bright red berries in late summer
1903	03-04	1 pk 4290 Asparagus Broussonetti	Thorburn's Seeds	Bk 11, p. 40-41	Shade loving
1903	03-04	1 pk 4324 Baptisia australis False indigo	Thorburn's Seeds	Bk 11, p. 40-41	Perennial Upright 3-4 feet, blue flowers
1903	03-04	1 pk 4590 Clematis Davididia Tube Clematis	Thorburn's Seeds	Bk 11, p. 40-41	Shrubby clematis light blue flowers
1903	03-04	1 pk 5270 Heliborus Helibore	Thorburn's Seeds	Bk 11, p. 40-41	
1903	03-04	1 pk 5364 Justicia multiflora Water willow	Thorburn's Seeds	Bk 11, p. 40-41	
1903	03-04	1 pk 5802 Phygelyus capensis Cape fuchsias	Thorburn's Seeds	Bk 11, p. 40-41	
1903	03-04	1 pk 6126 Spiraea ariaefolia (<i>Holodiscus discolor</i>) Cream bush; ocean-spray	Thorburn's Seeds	Bk 11, p. 40-41	
1903	03-04	1 pk 6128 Spiraea aruncus Goat's Beard (<i>Aruncus dioicus</i>)	Thorburn's Seeds	Bk 11, p. 40-41	A tall 4-6' high, clump-forming perennial with dark green foliage and plume-like spikes of tiny, cream colored flowers which rise well above the foliage in early to mid summer
1903	03-04	1 pk Spiraea Douglasii	Thorburn's Seeds	Bk 11, p. 40-41	
1903	03-04	2 oz Elaeagnus angustifolia Russian Olive	Thorburn's Seeds	Bk 11, p. 40-41	
1903	03-04	45 Rosa wichuraiana	Pierson	Bk 11, p. 41	
1903	03-04	50 Rosa wichuraiana Jersey Beauty	Pierson	Bk 11, p. 41	
1903	03-09	1 oz Amelanchier Canadensis (\$.20) Canadian Serviceberry	JM Thorburn Co	Bk 15, p. 33	Deciduous shrub or small tree growing to 20 to 25 ft tall Flowers in early spring, fruit is edible
1903	03-09	1 oz Amorpha fruticosa (\$.10) Desert false Indigo bush	JM Thorburn Co	Bk 15, p. 33	Grows from 10 to 15 ft tall. It is an invasive plant
1903	03-09	1 oz Berberis Aquifolium (\$.10) (<i>Mahonia aquifolium</i>) Oregon Grape	JM Thorburn Co	Bk 15, p. 33	
1903	03-09	1 oz Cercis Siliquastrum (\$.15) The Judas Tree	JM Thorburn Co	Bk 15, p. 33	
1903	03-09	1 oz Chionanthus Virginica (\$.20) Fringetree	JM Thorburn Co	Bk 15, p. 33	
1903	03-09	1 oz Citrus trifoliata (\$.20) Poncirus trifoliata, syn. Citrus trifoliata	JM Thorburn Co	Bk 15, p. 33	shrub or small tree
1903	03-09	1 oz Exochorda grandiflora (\$.40) Pearl Bush	JM Thorburn Co	Bk 15, p. 33	
1903	03-09	1 oz Gaultheria shallon (\$.15) Salal; Shallon	JM Thorburn Co	Bk 15, p. 33	
1903	03-09	1 oz Ilex opaca (\$.10) American Holly	JM Thorburn Co	Bk 15, p. 33	
1903	03-09	1 oz Myrica cerifera (\$.20) Wax myrtle; Bayberry	JM Thorburn Co	Bk 15, p. 33	
1903	03-09	1 oz Myssa Multiflora (\$.10) Sour Gum	JM Thorburn Co	Bk 15, p. 33	
1903	03-09	1 oz Rhus cotinus (\$.25) (<i>Cotinus coggygria</i>) Smoke bush	JM Thorburn Co	Bk 15, p. 33	
1903	03-09	1 oz Symphoricarpos Snowberry	JM Thorburn Co	Bk 15, p. 33	
1903	03-09	1 oz Viburnum lantana (\$.10) Wayfaring Tree	JM Thorburn Co	Bk 15, p. 33	

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1903	03-09	1 pk Spirea douglasii Rose spirea	JM Thorburn Co	Bk 15, p. 33	
1903	03-09	2 oz Elaeagnus augustifolia (\$.40) Russian Olive	JM Thorburn Co	Bk 15, p. 33	
1903	03-09	3 pk Flower Seed (\$.15)	JM Thorburn Co	Bk 15, p. 33	
1903	03-09	4 pk Flower Seed (\$.40)	JM Thorburn Co	Bk 15, p. 33	
1903	03-09	4 pk Flower Seed (\$1)	JM Thorburn Co	Bk 15, p. 33	
1903	03-10	18 Chrysanthemums Novelties as follows 3 Mrs. J. C. Melville	FR Pierson Co	Bk 15, p. 34	
1903	03-10	3 C. J. Salte	FR Pierson Co	Bk 15, p. 34	
1903	03-10	3 Lord Salisbury	FR Pierson Co	Bk 15, p. 34	
1903	03-10	3 Mrs. TW Pockett	FR Pierson Co	Bk 15, p. 34	
1903	03-10	3 William Richardson	FR Pierson Co	Bk 15, p. 34	
1903	03-10	3 WR Church	FR Pierson Co	Bk 15, p. 34	
1903	03-12	20 Delaware Grape Vines <i>Vitis sp.</i>	J Harris & Co.	Bk 11, p. 42	Ideal variety for jelly making
1903	03-12	20 Niagara Grape Vines <i>Vitis vinifera Niagara</i>	J Harris & Co.	Bk 11, p. 42	
1903	03-12	35 Cherry Currants <i>Ribes vulgariae Cherry</i>	J Harris & Co.	Bk 11, p. 42	
1903	03-12	35 Pearl Gooseberries <i>Ribes grossularia Pearl</i>	J Harris & Co.	Bk 11, p. 42	First appeared in 1885 in Ontario
1903	03-12	35 Red Cross Currants <i>Ribes Red Cross</i>	J Harris & Co.	Bk 11, p. 42	Bred 1894, hardier than many other varieties
1903	03-12	35 Red Jacket Gooseberries <i>Ribes grossularia Red Jacket</i>	J Harris & Co.	Bk 11, p. 42	First produced in 1876 in Ontario, small fruits packed with flavor
1903	03-12	35 Victoria Currants <i>Ribes rubrum Victoria</i>	J Harris & Co.	Bk 11, p. 42	Widely grown in North America at the turn of 20 century
1903	03-12	35 White Currants <i>Ribes rubrum White</i>	J Harris & Co.	Bk 11, p. 42	
1903	03-12	40 Concord Grape Vines <i>Vitis vinifera Concord</i>	J Harris & Co.	Bk 11, p. 42	
1903	03-16	12 Golden Privet (1 yr) (\$5) <i>Ligustrum</i>	W A Manda	Bk 15, p. 38	
1903	03-18	Plants and Bulbs: 2 doz. Gerbera Jamesoni Barberton daisy	H. Dreer	Bk 11, p. 42	
1903	03-18	Plants and Bulbs: 2 doz. Eucharis Amazonica Lily Amazon	H. Dreer	Bk 11, p. 42	
1903	03-18	Plants and Bulbs: 3 seeds of Victoria Trickeri Santa Cruz water lily	H. Dreer	Bk 11, p. 42	
1903	03-18	Plants and Bulbs:1 doz. Euphorbia Jacquiniflora Spurge	H. Dreer	Bk 11, p. 42	Red flowers appears in 19c and early 20c bks
1903	03-18	Seeds 2655 Pennisetum Ruppelianum Purple fountain grass	H. Dreer	Bk 11, p. 42	
1903	03-18	Seeds: 2648 Eulalia Varigata Japanese silver grass	H. Dreer	Bk 11, p. 42	
1903	03-18	Seeds: 2649 Eulalia Zebrina Zebra grass; Maiden Grass <i>Miscanthus sinensis Zebrina</i>	H. Dreer	Bk 11, p. 42	Green and Yellow Banded Foliage
1903	03-18	Seeds: 4051 Stokesia cyanea Cornflower aster; Stoke's aster	H. Dreer	Bk 11, p. 42	
1903	03-18	Seeds:1621 Buddleya Variabilis Butterfly bush; Summer lilac	H. Dreer	Bk 11, p. 42	
1903	03-18	Seeds:1721 Campanula Carpalia Alpine Bellflower (<i>Campanula caespitosa</i>)	H. Dreer	Bk 11, p. 42	
1903	03-18	Seeds:1724 Campanula Persicifolia grandiflora Bellflower	H. Dreer	Bk 11, p. 42	
1903	03-20	8 lbs (4 qts) Sweet Peas Farq' Col Hybrids (\$8) <i>Lathyrus odoratus Farquhar Col Hybrids</i>	RVJ Farquhar Co	Bk 15, p. 41	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1903	03-26	25 Carnations Adonis (\$4.50) <i>Dianthus Adonis</i>	FR Pierson	Bk 15, p. 41	
1903	03-26	3 Chrysanthemums (Derbans Pride) (\$1.50)	FR Pierson	Bk 15, p. 41	
1903	03-26	50 Carnations Enchantress <i>Dianthus Enchantress</i>	FR Pierson	Bk 15, p. 41	
1903	03-28	30 Gardenias Florida (\$.30)	Weeber & Don	Bk 15, p. 46	
1903	03-28	150 Iris Germanica (\$13.50) Bearded Iris	F A Pierson	Bk 15, p. 51	
1903	03-28	2 Lilac Chinese Weeping (\$2) <i>Syringa</i>	F A Pierson	Bk 15, p. 51	
1903	03-28	2 Lilac Giant Tree (\$3) <i>Syringa reticulata</i>	F A Pierson	Bk 15, p. 51	White bloom
1903	03-28	20 Acer Aurercum (\$3) <i>Acer negundo</i> 'Auratum' Ash leaved Maple	F A Pierson	Bk 15, p. 51	Unable to find this variety
1903	03-28	3 Lilac Chas X (\$1.50) <i>Syringa vulgaris Charles X</i>	F A Pierson	Bk 15, p. 51	Deep purplish red
1903	03-28	3 Lilac Marie Le Graye <i>Syringa vulgaris Marie Le Graye</i>	F A Pierson	Bk 15, p. 51	White
1903	03-28	45 Roses Hic	F A Pierson	Bk 15, p. 51	
1903	03-28	5 Roses Evergreen Gem	F A Pierson	Bk 15, p. 51	Light Yellow, double fragrant flower
1903	03-28	5 Roses Gardenia	F A Pierson	Bk 15, p. 51	
1903	03-28	5 Roses Mandas	F A Pierson	Bk 15, p. 51	
1903	03-28	5 Roses Pink Roamer	F A Pierson	Bk 15, p. 51	
1903	03-28	5 Roses South Orange Perfection Wichurana Rose	F A Pierson	Bk 15, p. 51	Blush changing to white flowers
1903	03-28	5 Roses Universal Favorite Wichurana Rose	F A Pierson	Bk 15, p. 51	Large double soft light pink
1903	03-28	50 Iris Sibirica (\$3) Siberian Iris	F A Pierson	Bk 15, p. 51	Late spring to early summer flowering
1903	03-28	50 Roses Jersey Beauty Wichurana Rambler	F A Pierson	Bk 15, p. 51	Single flowers of pale lemon-yellow large clusters produced in profusion on a vigorous plant with rich, glossy, green foliage.
1903	03-28	6 Lilac Louis Spaeth (\$4.50) <i>Syringa vulgaris 'Souvenir de Louis Spaeth'</i>	F A Pierson	Bk 15, p. 51	Long lasting intensely fragrant purple bloom
1903	04-05	100 Clematis paniculata (\$15) Sweet autumn clematis	T.N. Yates Co	Bk 15, p. 86	
1903	04-05	12 Pots Eng Ivy (\$3) <i>Hedera helix</i>	T.N. Yates Co	Bk 15, p. 86	
1903	04-05	4 Celastrus scandens (\$.80) American bittersweet	T.N. Yates Co	Bk 15, p. 86	
1903	04-07	12 Liliun Candidum (\$2) Madonna Lily	RV Farquhar Co.	Bk 15, p. 68	
1903	04-07	10 Crimson Rambler (\$1.50) Rose Crimson Rambler	Samuel C. Moon	Bk 15, p. 86	
1903	04-07	3 Crimson Ramblers (\$3) Rose Crimson Rambler	Samuel C. Moon	Bk 15, p. 86	
1903	04-07	5 Wistaria White (\$2.50) <i>Wisteria floribunda</i>	Samuel C. Moon	Bk 15, p. 86	
1903	04-07	5 Wisteria Blue (\$2.50) <i>Wisteria floribunda</i>	Samuel C. Moon	Bk 15, p. 86	
1903	04-10	1 Bignonia Grand (\$.10) <i>(Campsis radicans)</i> Common trumpet creeper	Hiram T. Jones	Bk 15, p. 86	
1903	04-10	1 Bignonia Radicans (\$.10) <i>(Campsis radicans)</i> Common trumpet creeper	Hiram T. Jones	Bk 15, p. 86	
1903	04-10	14 Wisteria Chinensis (\$2.80) <i>Wisteria sinensis</i>	Hiram T. Jones	Bk 15, p. 86	
1903	04-10	4 Scarlet Trumpet (\$.60) Honeysuckle <i>Lonicera sempervirens</i>	Hiram T. Jones	Bk 15, p. 86	
1903	04-10	8 Ampelopsis quinque(\$.60) Virginia Creeper <i>(Parthenocissus quinquefolia)</i>	Hiram T. Jones	Bk 15, p. 86	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1903	04-10	Begonia Grand (\$.75) <i>Begonia grandis</i>	Hiram T. Jones	Bk 15, p. 86	
1903	04-11	175 Honeysuckles Halleaus (\$13.13) <i>Lonicera japonica</i> 'Halliana' Hall's Honeysuckle	Hiram T. Jones	Bk 15, p. 86	
1903	04-13	100 Pinus Mugho 12-18 in Mugo Pine	Thomas Meehan & Sons	Bk 11, p. 45	
1903	04-13	150 Azalea amoeha (5 in pots) <i>Rhododendron x kurume</i> 'Amoena'	Thomas Meehan & Sons	Bk 11, p. 45	
1903	04-13	350 Juniperus (Douglas' golden)	Thomas Meehan & Sons	Bk 11, p. 45	
1903	04-13	50 Azalea amoeha <i>Rhododendron x kurume</i> 'Amoena'	Thomas Meehan & Sons	Bk 11, p. 49	
1903	04-13	20 Clematis Jackmanni (\$10)	Bobbink H. Atkins	Bk 15, p. 86	
1903	04-13	21 Ivy Canariensis (\$18.90) Algerian Ivy <i>Hedera helix canariensis</i>	Bobbink H. Atkins	Bk 15, p. 86	
1903	04-15	1 Mignonette machet <i>Reseda odorata</i>	Clucus & Boddington Co	B Bk 11, p. 45	
1903	04-15	12 Gladiolus Augusta (\$1.50)	Clucus & Boddington Co	B Bk 11, p. 45	
1903	04-15	1 pk Mignmette Allen's Defiances (\$1) <i>Reseda odorata</i>	Clucus & Boddington Co	Bk 11, p. 45	
1903	04-15	1 pk Shasta Daisy (\$.25) <i>Chrysanthemum maximum</i>	Clucus & Boddington Co	Bk 11, p. 45	
1903	04-15	100 Gladiolus Groff's Hybrids (\$3.50)	Clucus & Boddington Co	Bk 11, p. 45	
1903	04-15	12 Tritoma pfitzeri (\$2.50) (<i>Kniphofias pfitzeri</i>) Kniphofia Red hot poker	Clucus & Boddington Co	Bk 11, p. 45	Bright orange, late summer flowering
1903	04-15	Mignonette Allen's Defiant <i>Reseda odorata</i>	H Briggs	Bk 11,p. 45	
1903	04-15	Mignonette Macheta <i>Reseda odorata</i>	H Briggs	Bk 11,p. 45	
1903	04-15	Shasta Daisy <i>Chrysanthemum maximum</i>	H Briggs	Bk 11,p. 45	
1903	04-18	1 Mignonette machet (\$.15) <i>Reseda odorata</i>	Clucus & Boddington Co	Bk 15, p. 59	
1903	04-18	1 pk Mignmette Allen's Defiances (\$1) <i>Reseda odorata</i>	Clucus & Boddington Co	Bk 15, p. 59	
1903	04-18	1 pk Shasta Daisy (\$.25) <i>Chrysanthemum maximum</i>	Clucus & Boddington Co	Bk 15, p. 59	
1903	04-18	100 Gladiolus Groff's Hybrids (\$3.50)	Clucus & Boddington Co	Bk 15, p. 59	
1903	04-18	12 Gladiolus Augusta (\$1.50)	Clucus & Boddington Co	Bk 15, p. 59	
1903	04-18	12 Tritoma pfitzeri (\$2.50) (<i>Kniphofias pfitzeri</i>) Kniphofia Red hot poker	Clucus & Boddington Co	Bk 15, p. 59	Bright orange, late summer flowering
1903	04-22	150 Azalea amoena <i>Rhododendron x kurume</i> 'Amoena'	Thos Meehan & Sons	Bk 15, p. 62	
1903	04-22	350 Juniperus Douglasii <i>Juniperus horizontalis</i> 'Douglasii'	Thos Meehan & Sons	Bk 15, p. 62	
1903	04-23	1 Rose Crimson Rambler (\$.50) Rose Turner's Crimson Rambler	R & J Farquhar Co	Bk 15, p. 77	Large double red bloom
1903	04-23	1 Rose Farquhar Climber (\$1)	R & J Farquhar Co	Bk 15, p. 77	Introduced by Farquhar in 1903, cross between Rosa wichuraiana small double pale pink blooms with a hint of salmon borne in large clusters
1903	04-23	1 Rose Yellow Rambler (\$.50)	R & J Farquhar Co	Bk 15, p. 77	Deep golden yellow
1903	04-23	18 Ampelopsis Veitchii (\$4.50) <i>Parthenocissus tricuspidata</i> 'Veitchii' Boston Ivy	R & J Farquhar Co	Bk 15, p. 77	
1903	04-23	2 Rose Multiflora (\$.50)	R & J Farquhar Co	Bk 15, p. 77	Invasive
1903	04-29	10 Evergreen Gem Rose(\$3)	The Elizabeth Nursery	Bk 15, p. 87	
1903	04-29	4 Crimson Ramblers (\$1.20) Rose Crimson Rambler	The Elizabeth Nursery	Bk 15, p. 87	
1903	04-29	4 Dorothy Perkins Rose (\$2)	The Elizabeth Nursery	Bk 15, p. 87	Wichurana Colourful cascades of clear pink flowers
1903	04-29	4 Jersey Beauty (\$1.20)	The Elizabeth Nursery	Bk 15, p. 87	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1903	04-29	4 Multiflora Japanese Roses (\$1)	The Elizabeth Nursery	Bk 15, p. 87	
1903	04-29	6 Dawson Rose (\$1.50)	The Elizabeth Nursery	Bk 15, p. 87	Rose Pink multiflora rose
1903	04-29	6 Pink Pearl (\$1.50)	The Elizabeth Nursery	Bk 15, p. 87	
1903	04-29	8 Gardenia Rose (\$2.40)	The Elizabeth Nursery	Bk 15, p. 87	
1903	05-01	100 Pinus Montana (\$65) Pine	WA Manda	Bk 11, p. 47	
1903	05-01	250 Pinus Montana (\$70) Pine	WA Manda	Bk 11, p. 47	
1903	05-05	100 Pinus Mugho (\$30) Mugo Pine	Thos Meehan & Sons	Bk 15, p. 82	
1903	05-09	100 Pinus Montana (\$65) Pine	WA Manda	Bk 15, p. 77	
1903	05-09	250 Pinus Montana (\$70) Pine	WA Manda	Bk 15, p. 77	
1903	05-21	50 Azalea amoena 4" pots @.25 (\$12.50) <i>Rhododendron x kurume 'Amoena'</i>	Thos Meehan & Sons	Bk 15, p. 82	
1903	05-31	12 Euphorbia Jacquiniiflora (\$2.50) Spurge	Henry A Dreer	Bk 15, p. 44	
1903	05-31	24 Gerbera jamesoni (\$6)	Henry A Dreer	Bk 15, p. 44	
1903	05-31	3 Seeds Victoria Trickeri (\$.50) Santa Cruz water lily	Henry A Dreer	Bk 15, p. 44	
1903	05-31	6 pk Flower seeds (\$.55)	Henry A Dreer	Bk 15, p. 44	
1903	07-15	18 Cedar Trees 20 to 24 feet high @ \$20 (\$360)	Wadley Smythe	Bk 15, p. 125	
1903	07-15	21 Cedar Trees 16 to 20 ft high @ \$18 (\$378)	Wadley Smythe	Bk 15, p. 125	
1903	07-15	42 Cedar Trees 8 to 16 ft @ \$12 (\$504)	Wadley Smythe	Bk 15, p. 125	
1903	07-15	6 Amaryllis Follota Purpurea (\$2.50)	RVJ Farquhar Co	Bk 15, p. 127	
1903	07-21	2 oz Portulaca Scarlet (\$1.20) Purslane scarlet	R & J Farquhar Co	Bk 15, 130	
1903	07-21	2 oz Portulaca Scarlet (\$1.20) Purslane scarlet	R & J Farquhar Co	Bk p. 56	
1903	07-31	24 Eucharis Amazonia (\$12) Amazon Lily	Henry A Dreer	Bk 15, p. 138	Glasshouse
1903	08-01	100 Liliium Harrisii 7-9 in Bermuda lily	Clucus & Boddington	Bk 11, p. 58	
1903	08-01	100 Liliium Longifolium 7-9 in Lily	Clucus & Boddington	Bk 11, p. 58	
1903	08-01	100 White Italian Hyacinths <i>Muscari botryoides</i>	Clucus & Boddington	Bk 11, p. 58	Bloom two weeks later than Roman white hyacinths and blooms are large. Ideal for cut blooms
1903	08-01	200 Roman Hyacinths 12-15 cfm. Dark rose <i>Hyacinthus orientalis</i>	Clucus & Boddington	Bk 11, p. 58	
1903	08-01	200 Roman Hyacinths 12-15 in White <i>Hyacinthus orientalis</i>	Clucus & Boddington	Bk 11, p. 58	
1903	08-01	25 Gen. Pelissier (Dutch) Hyacinths General Pelissier	Clucus & Boddington	Bk 11, p. 58	Exhibition variety, light blue
1903	08-01	25 La Grandesse (Dutch) La Grandeese Spanish Bluebells	Clucus & Boddington	Bk 11, p. 58	
1903	08-01	300 Narcissus (Trumpet Major) Daffodil Trumpet Major	Clucus & Boddington	Bk 11, p. 58	
1903	08-01	300 Narcissus Double Von Sion Daffodil Von Sion	Clucus & Boddington	Bk 11, p. 58	Double
1903	08-01	50 Callas 4.5 to 5.5 in. around Egyptian Lily	Clucus & Boddington	Bk 11, p. 58	
1903	08-01	500 Cold storage Lily of the Valley <i>Convallaria majalis</i>	Clucus & Boddington	Bk 11, p. 58	
1903	08-01	500 Spanish Iris (Blanche superbe) <i>Iris xiphium</i>	Clucus & Boddington	Bk 11, p. 58	Pure white dwarf iris flowers mid spring to mid summer
1903	08-01	Pansy Seed 31 different order numbers Viola	Clovena Nurseries	Bk 11, p. 58	Sowing seeds at this time of the year is to generate plants for spring display

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1903	09-02	1 Baltimore Belle Rose (\$.10) <i>Rosa Belle de Baltimore</i>	The Elizabeth Nursery	Bk 15, p. 162	Vigorous climber Pinkish white to creamy white
1903	09-02	100 Evergreen Gem Roses (\$10)	The Elizabeth Nursery	Bk 15, p. 162	
1903	09-02	100 Gardenia Rose(\$10)	The Elizabeth Nursery	Bk 15, p. 162	
1903	09-02	100 Jersey Beauty (\$10)	The Elizabeth Nursery	Bk 15, p. 162	
1903	09-02	5 Begonia Grade (\$7.25)	The Elizabeth Nursery	Bk 15, p. 162	
1903	09-03	10 Akebia Quinata (\$1.50) Chocolate vine	H. T. Jones	Bk 15, p. 163	Aggressive species used as ground cover
1903	09-03	100 Euonymous Radicans (\$12.50) Winter creeper	H. T. Jones	Bk 15, p. 163	
1903	10-31	1 Crimson Rambler Rose Bushes (\$5) Rose Crimson Rambler	S. G. Harris	Bk 15, p. 178	
1903	11-14	Pack 12 Mignonette Eliasr <i>Reseda odorata Eliasr</i>	H Shear	Bk 11, p. 66	
1903	11-14	Pack 12 Salvia Splenda Sage	H Shear	Bk 11, p. 66	
1903	11-14	Packs 12 Cineraria mix	H Shear	Bk 11, p. 66	
1903	11-14	Packs 12 Sweet Alyssum <i>Lobularia maritima</i>	H Shear	Bk 11, p. 66	
1903	11-14	Packs 6 Ageratum white <i>Ageratum houstonianum white</i>	H Shear	Bk 11, p. 66	
1903	12-01	Nepenthes: 25 Dicksoniana Pitcher plant	H Shear	Bk 11, p. 68	
1903	12-01	Palms: 25 Cocos Belmarcana <i>Howea belmoreana</i> Curly Palm; Kentia Palm; Belmore Sentry Palm	H Shear	Bk 11, p. 68	
1903	12-01	Palms: 25 Cocos Forsteriana <i>Howea Forsteriana</i> Kentia Palm; Thatch Palm	H Shear	Bk 11, p. 68	
1903	12-01	Palms: 25 Cocos Latania	H Shear	Bk 11, p. 68	
1903	12-01	Palms: 50 Cocos weddelliana Wedding palm <i>Lytocaryum weddelliana</i>	H Shear	Bk 11, p. 68	
1903	12-03	Pine Trees	Jas. Keegan	Bk 15, p. 194	
1903	12-03	Cedar Trees	Jas. Keegan	Bk 15, p. 194S	
1904	00-00	Zinnia Alice?	R & J Farquhar Co	Bk 11, p. 71	
1904	00-00	Zinnia Casino	R & J Farquhar Co	Bk 11, p. 71	
1904	00-00	Zinnia Dazzler	R & J Farquhar Co	Bk 11, p. 71	
1904	00-00	Zinnia Wilson	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	10 Nasturtium Tall <i>Tropaeolum</i>	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	10 pk Nasturtiums, yellow <i>Tropaeolum</i>	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	10 pk Snapdragons White (462) <i>Antirrhinum White</i>	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	10 Portulaca Mix (\$5 per two oz) (6462)	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	2 oz Nicotiana Colassia Tobacco Plant	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	2 oz Petunia, double (6355)	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	2 oz Smilax	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	2 pk Petunia, mix (6462)	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	2oz Poppy Shirley (6195) <i>Papaver rhoeas</i>	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	3 pk Stevia	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	50 Dahlia, Double Mix	R & J Farquhar Co	Bk 11, p. 71	Tubeoses Bulbs Pearl see Bk 15, p. 213
1904	01-04	50 Gerberas Double	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	500 Gladioli	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	Carmen?	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	Coleus Golden Bedder	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	Stocks ten week <i>Mattholia</i>	R & J Farquhar Co	Bk 11, p. 71	
1904	01-04	Sweetpeas Eckfords mix <i>Lathyrus odoratus Eckfords mix</i>	R & J Farquhar Co	Bk 11, p. 71	

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1904	01-04	Zinna verbena	R & J Farquhar Co	Bk 11, p. 71	
1904	01-13	¼ oz Petunia Double (\$15)	R & J Farquhar Co	Bk 15, p. 213	
1904	01-13	1 lb Sweet Peas (\$.15) <i>Lathyrus odoratus</i>	R & J Farquhar Co	Bk 15, p. 213	
1904	01-13	1 oz Nicotiana Affinis (\$.50) Tobacco Plant	R & J Farquhar Co	Bk 15, p. 213	
1904	01-13	1 oz Petunia (\$.75)	R & J Farquhar Co	Bk 15, p. 213	
1904	01-13	1 oz Poppy Shirley Mix (\$.40) <i>Papaver rhoeas</i>	R & J Farquhar Co	Bk 15, p. 213	
1904	01-13	1 oz Portulaca (\$5)	R & J Farquhar Co	Bk 15, p. 213	
1904	01-13	1 oz Smilax (\$.75)	R & J Farquhar Co	Bk 15, p. 213	
1904	01-13	10 Nasturtium Tall (\$5) <i>Tropaeolum</i>	R & J Farquhar Co	Bk 15, p. 213	
1904	01-13	50 Tubeoses Bulbs Pearl (\$1)	R & J Farquhar Co	Bk 15, p. 213	
1904	01-13	500 Gladioi Bulbs Mix (\$6))	R & J Farquhar Co	Bk 15, p. 213	
1904	02-04	Caladium Fancy dormant tubers 1 doz	H Shear	Bk 11, p. 74	
1904	02-04	Candytuft 4 <i>Iberis</i>	H Shear	Bk 11, p. 74	
1904	02-04	Salvia Splendid (<i>Salvia splendens</i>) Sage	H Shear	Bk 11, p. 74	
1904	02-04	Verbena auricular mix 4 pkts	H Shear	Bk 11, p. 74	
1904	02-06	Ricinus gibsonii <i>Ricinus communis gibsonii</i> Castor Oil plant	J.& Thorburn Co	Bk 11, p. 75	
1904	02-09	10 Col Anthirrhinum(\$5) Snapdragon	R & J Farquhar Co	Bk 15, p. 224	Antirrhinum were grown in one of the sections of the Rose House Terrace presumably as cut flowers for display
1904	02-09	35 Pk Flower seeds (\$3.50)	R & J Farquhar Co	Bk 15, p. 224	
1904	02-09	5 Col Asters Giant Cornet (\$2.50) <i>Callistephus chinensis Cornet</i>	R & J Farquhar Co	Bk 15, p. 224	
1904	02-09	5 Col Asters Victoria (\$6.25) <i>Callistephus chinensis Victoria</i>	R & J Farquhar Co	Bk 15, p. 224	
1904	02-09	50 Dahlias (Double Mix) (\$8)	R & J Farquhar Co	Bk 15, p. 224	
1904	02-09	8 pk flower seeds (\$.40)	R & J Farquhar Co	Bk 15, p. 224	
1904	02-11	2 oz Ricinus gibsonii (\$.50) Castor Oil plant	J.M. Thorburn Co	Bk 15, p. 240	
1904	02-11	6 pk Verbena (\$.60)	J.M. Thorburn Co	Bk 15, p. 240	
1904	03-17	20 Concord Grape Vine <i>Vitis vinifera Concord</i>	GC Stone	Bk 11 p. 78	
1904	03-18	4 oz Ricinus gibsonii Castor Oil plant	D Welsh	Bk 11, p. 79	
1904	04-02	1 doz Caladium Esculentum (\$2.50) Elephant's ears	J.M. Thorburn Co	Bk 15, p. 255	
1904	04-02	4 oz Ricinus gibsonii (\$.40) Castor Oil plant	J.M. Thorburn Co	Bk 15, p. 255	
1904	04-15	12 Arbor Vitae Globe <i>Thuja occidentalis, 'Globe'</i>	R Pierson	Bk 11, p. 82	
1904	04-15	12 Arbor Vitae Hoveys Golden <i>Thuja orientalis Aurea</i>	R Pierson	Bk 11, p. 82	
1904	04-15	12 Retinesphora filifera <i>Chamaecyparis pisifera</i>	R Pierson	Bk 11, p. 82	
1904	04-15	12 Retinesphora plumosa a mea. <i>Chamaecyparis pisifera 'Plumosa'</i>	R Pierson	Bk 11, p. 82	
1904	04-15	6 Cornus Dogwood	R Pierson	Bk 11, p. 82	
1904	04-15	6 Kalmia	R Pierson	Bk 11, p. 82	
1904	04-15	1 doz Caladium Icy Leaved (\$2) Elephant's ears	R & J Farquhar Co	Bk 15, p. 259	Can be used in conjunction with castor oil plant or canna for a spectacular border. May also have been used near water or rockwork. Is visible in one of the historic images of the glass house
1904	04-15	1 lbs Sweet Peas Mix (\$1) <i>Lathyrus odoratus</i>	R & J Farquhar Co	Bk 15, p. 259	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1904	04-18	100 Ivy leaved Geraniums <i>Pelargonium peltatum</i>	R & J Farquhar	Bk 11, p. 83	
1904	04-18	500 Golden Bedder in 3 in pots	R & J Farquhar	Bk 11, p. 83	
1904	04-19	6 Austrian Pine <i>Pinus nigra</i>	Thom Meehan	Bk 11, p. 83	
1904	04-19	6 Balsam Fir <i>Abies balsamea</i>	Thom Meehan	Bk 11, p. 83	
1904	04-19	6 Douglas Spruce <i>Pseudotsuga</i>	Thom Meehan	Bk 11, p. 83	Bk 15, p. 266
1904	04-19	6 Dwarf Pine	Thom Meehan	Bk 11, p. 83	
1904	04-19	6 Nordman Fir <i>Abies nordmanniana</i>	Thom Meehan	Bk 11, p. 83	
1904	04-19	6 Norway Spruce <i>Picea abies</i>	Thom Meehan	Bk 11, p. 83	
1904	04-19	7 Blue Spruce <i>Picea pungens</i>	Thom Meehan	Bk 11, p. 83	
1904	04-19	7 Pinus Cembra Swiss Stone Pine	Thom Meehan	Bk 11, p. 83	
1904	05-02	2 Col' Blue Spruce (Blue Kosters) (\$8) <i>Picea pungens</i>	Thos Meehan & Sons	Bk 15, p. 266	
1904	05-02	2 Pinus Cembra (\$2.50) Swiss Stone Pine	Thos Meehan & Sons	Bk 15, p. 266	
1904	05-02	6 Austrian Pine (\$7.50) <i>Pinus nigra</i>	Thos Meehan & Sons	Bk 15, p. 266	
1904	05-02	6 Balsam Fir (\$2.10) <i>Abies balsamea</i>	Thos Meehan & Sons	Bk 15, p. 266	
1904	05-02	6 Douglas Spruce (\$6) <i>Pseudotsuga</i>	Thos Meehan & Sons	Bk 15, p. 266	
1904	05-02	6 Dwarf Pine (\$3.60))	Thos Meehan & Sons	Bk 15, p. 266	
1904	05-02	6 Nordmans Fir (\$12) <i>Abies nordmanniana</i>	Thos Meehan & Sons	Bk 15, p. 266	Large evergreen coniferous tree growing to 60 m tall
1904	05-02	6 Norway Spruce (\$2.10) <i>Picea abies</i>	Thos Meehan & Sons	Bk 15, p. 266	
1904	05-06	6 Kalmia (Mountain Laurel) (\$6)	W. Terpinig	Bk 15, p. 265	
1904	06-22	Pansy Emperor William <i>Viola</i>	R & J Farquhar Co	Bk 11, p. 87	Bk 14, p. 8
1904	06-22	Pansy Victoria <i>Viola</i>	R & J Farquhar Co	Bk 11, p. 87	
1904	06-22	Pansy White <i>Viola</i>	R & J Farquhar Co	Bk 11, p. 87	
1904	08-11	1 oz Pansy Emp William (\$3) <i>Viola</i>	R V J Farquhar Co	Bk 14, p. 8	
1904	08-11	1 oz Pansy Victoria (\$2) <i>Viola</i>	R V J Farquhar Co	Bk 14, p. 8	
1904	08-11	1 oz Pansy White (\$1.25) <i>Viola</i>	R V J Farquhar Co	Bk 14, p. 8	
1904	08-20	Ferns: 1 doz Merolepia?	?	Bk 11, p. 90	
1904	08-20	Ferns: 1 doz Adiantum macr	?	Bk 11, p. 90	
1904	08-20	Ferns: 1 doz Adiantum Moorii	?	Bk 11, p. 90	
1904	08-20	Ferns: 1 doz Pteris	?	Bk 11, p. 90	
1904	08-20	Ferns: 1 doz Pteris craltca	?	Bk 11, p. 90	
1904	09-21	50 Ferns (for table spans) (\$3)	FR Pierson Co	Bk 14, p. 20	Pan Ferns
1904	09-21	50 Ferns (for table spans) (\$3)	FR Pierson Co	Bk 14, p. 20	Pan Ferns
1904	12-27	Portulaca Double 2oz	?	Bk 11, p. 97	
1904	12-27	Sweet peas Mrs Shankey 2oz <i>Lathyrus odoratus Mrs Shankey</i>	?	Bk 11, p. 97	
1909	12-17	50 Rooted Dorothy Gordon Carnation(\$5) <i>Dianthus Dorothy Gordon</i>	Jos Heacock Co	Bk 7, P. 302-303	
1909	12-17	50 Rooted Mrs. C. W. Ward Carnation(\$6) <i>Dianthus Mrs. C. W. Ward</i>	Cottage Garden Co	Bk 7, P. 302-303	
1910	01-01	6 Chestnut Trees (\$9) <i>Aesculus or Castanea</i>	Glenwood Nurseries	Bk 7, P. 306	
1910	01-04	12 Chrysanthemum Bessie Evans (\$2)	Charles H. Totty	Bk 7, P. 306	
1910	01-04	12 Chrysanthemum Brighthurst (\$.75)	Charles H. Totty	Bk 7, P. 306	
1910	01-04	12 Chrysanthemum Leslie Morrison (\$2)	Charles H. Totty	Bk 7, P. 306	

Year	Date	Order	Vendor	Reference Book, Page	Notes
1910	01-04	12 Chrysanthemum R. Fulton (\$5)	Charles H. Totty	Bk 7, P. 306	
1910	01-04	12 Chrysanthemum W Mease (\$5)	Charles H. Totty	Bk 7, P. 306	
1910	01-04	12 Chrysanthemum WA Etherington (\$\$.75)	Charles H. Totty	Bk 7, P. 306	
1910	01-04	3 Chrysanthemum Anunda (\$5)	Charles H. Totty	Bk 7, P. 306	
1910	01-04	3 Chrysanthemum Mrs. David (\$5)	Charles H. Totty	Bk 7, P. 306	
1910	01-04	6 Chrysanthemum J Lock (\$4.50)	Charles H. Totty	Bk 7, P. 306	
1910	01-04	6 Chrysanthemum Mrs. Stevens (\$2.50)	Charles H. Totty	Bk 7, P. 306	
1910	01-17	1 Cineraria Matchless Stell Mix (\$1)	A T Boddington	Bk 7, P. 306	
1910	01-17	¼ oz Verbenia White (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-17	1 pk Cyclamen Bd. Gig. Crimson (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-17	1 pk Cyclamen Bd. Gig. Pink (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-17	1 pk Cyclamen Bd. Gig. Snowball (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-17	1 pk Primula lilacina (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-17	1/16 oz Aster Ostrich Plume Lavender (\$.25) <i>Callistephus chinensis</i>	A T Boddington	Bk 7, P. 308	
1910	01-17	1/16 oz Aster Ostrich Vick's Pink (\$.25) <i>Callistephus chinensis Ostrich Vick's Pink</i>	A T Boddington	Bk 7, P. 308	
1910	01-17	1/8 oz Salvia Zurich (\$.75)	A T Boddington	Bk 7, P. 308	
1910	01-17	2 pk Gypsophila elegans rosea (\$.20)	A T Boddington	Bk 7, P. 308	
1910	01-17	pk Antirrhinum Queen Victoria (\$.25) Snapdragons	A T Boddington	Bk 7, P. 308	
1910	01-17	18 Gloxinia Bulbs Cyclops	A T Boddington	Bk 7, P. 310	
1910	01-17	18 Gloxinia Bulbs Duchess of Yor	A T Boddington	Bk 7, P. 310	
1910	01-17	18 Gloxinia Bulbs Goliath	A T Boddington	Bk 7, P. 310	
1910	01-17	18 Gloxinia Bulbs Her Majesty	A T Boddington	Bk 7, P. 310	
1910	01-17	18 Gloxinia Bulbs Reading Scarlet	A T Boddington	Bk 7, P. 310	
1910	01-17	18 Gloxinia Bulbs Spotted Hybrid	A T Boddington	Bk 7, P. 310	
1910	01-24	1 Cineraria Matchless Dwarf Mix (\$1)	A T Boddington	Bk 7, P. 306	
1910	01-24	1 Cineraria Matchless Giant Mix (\$1)	A T Boddington	Bk 7, P. 306	
1910	01-24	1 Cineraria Matchless Tall Mix (\$1)	A T Boddington	Bk 7, P. 306	
1910	01-24	2 oz Alyssum Carpet of Snow (\$1) <i>Lobularia maritima 'Carpet of Snow'</i>	A T Boddington	Bk 7, P. 306	Annual or Tender perennials 4-6 inches produces fragrant spreading masses of white flowers.
1910	01-24	2 oz Alyssum Maratima (\$1) <i>Lobularia maritima 'Carpet of Snow'</i>	A T Boddington	Bk 7, P. 306	
1910	01-24	¼ oz Verbenia Morn. Blue (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-24	¼ oz Verbenia Pink (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-24	¼ oz Verbenia Scarlet (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-24	½ oz Kochia trichophylla (\$2)	A T Boddington	Bk 7, P. 308	
1910	01-24	1 oz Marigold French Legion of Honor (\$.40)	A T Boddington	Bk 7, P. 308	
1910	01-24	1 pk Antirrhinum Lilacinum (\$.25) Snapdragons	A T Boddington	Bk 7, P. 308	
1910	01-24	1 pk Calceolaria Hybrid perfection (\$1)	A T Boddington	Bk 7, P. 308	
1910	01-24	1 pk Cyclamen Bd. Gig. Blue (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-24	1 pk Cyclamen Bd. Gig. Cherry (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-24	1 pk Cyclamen Bd. Gig. Lilac (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-24	1 pk Cyclamen Bd. Gig. Red (\$0)	A T Boddington	Bk 7, P. 308	
1910	01-24	1 pk Cyclamen Bd. Gig. Rose (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-24	1 pk Cyclamen Bd. Gig. Syringa (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-24	1 pk Primula alba (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-24	1 pk Primula rosea (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-24	1/16 oz Aster Ostrich Plume Dark Blue (\$.25) <i>Callistephus chinensis</i>	A T Boddington	Bk 7, P. 308	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1910	01-24	1/16 oz Aster Ostrich Plume Light Blue (\$\$.25) <i>Callistephus chinensis</i>	A T Boddington	Bk 7, P. 308	
1910	01-24	1/16 oz Aster Ostrich Plume White (\$\$.25) <i>Callistephus chinensis Ostrich Plume White</i>	A T Boddington	Bk 7, P. 308	
1910	01-24	1/16 oz Aster Ostrich Vick's Crimson (\$\$.25) <i>Callistephus chinensis Ostrich Vick's Crimson</i>	A T Boddington	Bk 7, P. 308	
1910	01-24	1/16 oz Cosmos Lady Lenox (\$.20)	A T Boddington	Bk 7, P. 308	
1910	01-24	1/8 oz Salvia Clara Bedman (\$.40)	A T Boddington	Bk 7, P. 308	
1910	01-24	1oz Lobbs Nasturtium mix <i>Tropaeolum</i>	A T Boddington	Bk 7, P. 308	
1910	01-24	2 Mrs. _____ (\$6.50)	A T Boddington	Bk 7, P. 308	
1910	01-24	2 pk Begonia atropurpurea (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-24	2 pk Begonia rosea (\$.50)	A T Boddington	Bk 7, P. 308	
1910	01-24	2 pk Gypsophila elegans alba (\$.20)	A T Boddington	Bk 7, P. 308	
1910	01-24	2 pk Pennisetum Longistylus (\$.10)	A T Boddington	Bk 7, P. 308	
1910	01-24	2 pk Pennisetum Ruppelii (\$.20) Fountain Grass, Crimson	A T Boddington	Bk 7, P. 308	
1910	01-24	2 pk Schizanthus (\$1.50)	A T Boddington	Bk 7, P. 308	
1910	01-24	pk Antirrhinum (\$.25) Snapdragons	A T Boddington	Bk 7, P. 308	
1910	01-24	pk Antirrhinum Carmine (\$.25) Snapdragons	A T Boddington	Bk 7, P. 308	
1910	01-24	pk Antirrhinum Ceresia (\$.25) Snapdragons	A T Boddington	Bk 7, P. 308	
1910	01-24	pk Antirrhinum Luteum (\$.25) Snapdragons	A T Boddington	Bk 7, P. 308	
1910	01-24	pk Antirrhinum Salmon (\$.25) Snapdragons	A T Boddington	Bk 7, P. 308	
1910	03-09	¼ lb. Nasturtiums Golden King Dwarf (\$.60) <i>Tropaeolum majus</i>	A T Boddington	Bk 7, P. 318	
1910	03-09	¼ lb. Nasturtiums King of Tom Thumb (\$.060) <i>Tropaeolum majus</i>	A T Boddington	Bk 7, P. 318	
1910	03-09	1 pk Primula Kewensis (\$.75)	A T Boddington	Bk 7, P. 318	
1910	03-22	300 Am. Beauty Rose Plants (\$24)	Charles H. Totty	Bk 7, P. 320	
1910	03-30	Centaurea imperialis deep lavender Cornflower; Batchelor Buttons		Bk 7, p. 322	Royal Sweet Sultan
1910	03-31	100 Associated Dish ferns (\$6)	Henry A Dreer	Bk 7, P. 322	
1910	03-31	12 Ageratum Princess Pauline (\$1) <i>Ageratum houstonianum 'Princess Pauline'</i>	Henry A Dreer	Bk 7, P. 322	4" in height, light lavender color, used as border or bedding plant under taller plants. Mentioned often in gardening literature of 1900-1920
1910	03-31	12 Ageratum Stella Gurney (\$1) <i>Ageratum houstonianum 'Stella Gurney'</i>	Henry A Dreer	Bk 7, P. 322	Mentioned often in gardening literature of 1900-1920
1910	03-31	12 Myosotis alpestris robusta grandiflorus (\$1) Forget-me-nots	Henry A Dreer	Bk 7, P. 322	
1910	03-31	12 Myosotis palustris semperflorus (\$1) Forget me not	Henry A Dreer	Bk 7, P. 322	Sky blue flowers
1910	03-31	50 Centaurea Imperialis deep lavender Royal Sweet Sultan Cornflower; Bachelor Buttons	Henry A Dreer	Bk 7, P. 322	Vendor could not supply
1910	03-31	50 Centaurea Imperialis delicate lilac Royal Sweet Sultan Cornflower; Bachelor Buttons	Henry A Dreer	Bk 7, P. 322	Vendor could not supply
1910	03-31	6 Campanula carpalua (\$.75) Alpine Bellflower	Henry A Dreer	Bk 7, P. 322	

Year	Date	Order	Vendor	Reference Book, Page	Notes
1910	04-11	Extension to Italian Garden Draft (\$1147.50), (\$2686.82), (\$1237.68), (\$800)	Thos Meehan & Sons	Bk 16, p. 32	This is a significant entry in monetary terms
1910	04-11	Unknown (\$30.44)	Vaughan's Seed Store	Bk 6, p. 413	
1910	04-11	Unknown (\$4)	Vaughan's Seed Store	Bk 6, p. 413	
1910	04-13	3 Clematis Jackmani (\$2.75)	R & J Farquhar Co	Bk 7, p. 328	
1910	04-13	35 Halls Honeysuckle (\$5.40) <i>Lonicera japonica 'Halliana'</i>	R & J Farquhar Co	Bk 7, p. 328	
1910	04-18	2 Bay Trees <i>Laurus nobilis</i> Sweet bay trees	Julius Roehis Co	Bk 7, p. 328	Not supplied
1910	04-21	2 Bay Trees <i>Laurus nobilis</i> Sweet bay trees	Henry A Dreer	Bk 7, p. 328	
1910	05-05	100 Antirrhinum Dwarf White (\$7.50) Snapdragon Dwarf White	A T Boddington	Bk 7, p. 336	
1910	05-05	2 doz Cactus Dahlias Flora (\$5)	A T Boddington	Bk 7, p. 336	
1910	05-05	2 doz Cactus Dahlias Krimhilde (\$3)	A T Boddington	Bk 7, p. 336	
1910	05-05	2 doz Cactus Dahlias Prince of Yellow (\$3)	A T Boddington	Bk 7, p. 336	
1910	05-05	2 doz Cactus Dahlias Standard Bearer (\$3)	A T Boddington	Bk 7, p. 336	
1910	05-05	200 Antirrhinum Mix (\$15) Snapdragon Mix	A T Boddington	Bk 7, p. 336	
1910	05-05	3 doz Cactus Dahlias Countess of Lonsdale (\$4.50)	A T Boddington	Bk 7, p. 336	
1910	05-24	150 White Killarney Roses (\$30)	Charles H. Totty	Bk 7, p. 338	
1910	05-24	250 Pink Killarney Roses (\$45)	Charles H. Totty	Bk 7, p. 338	
1910	05-26	200 Geraniums (\$7) <i>Pelargonium</i>	A. Vincent Sons Co	Bk 7, p. 338	
1910	05-26	50 Geraniums dwarf variegated (\$1.75) <i>Pelargonium</i>	A. Vincent Sons Co	Bk 7, p. 338	
1910	05-27	600 Violet Plants (\$9) <i>Viola</i>	Stanton Rockefeller	Bk 7, p. 338	600 ordered
1910	06-00	Plan No. 2011 Italian garden (\$75)	Thomas Meehan & Sons	Bk 16, p. 3	
1910	06-02	50 Hydrangea in 2 ½ inch pots (\$1.50)	Mrs J H Claus	Bk 16, p. 1	
1910	06-16	½ Doz Jackmanni Red (\$6)	J G Johnson	Bk 16, p. 2	Possibly <i>Potentilla fruticosa</i> 'Jackmanni' yellow flower, <i>Clematis jackmanni</i> , purple, which is ordered in 1915, bk 16, p. 183
1910	06-16	1 Doz Roses Gruss an Teplitz (\$8) Fountain Grass, Crimson <i>Rosa Grüss an Teplitz</i>	J G Johnson	Bk 16, p. 2	aka Grüss an Teplitz, Virginia R. Coxe, 1897 introduced, very fragrant, crimson flowers
1910	06-16	2 ½ Doz <i>Euonymus radicans</i> var. (\$15)	J G Johnson	Bk 16, p. 2	
1910	06-28	100 <i>Gladiolus Lemoinei</i>	John Lewis Childs	Bk 16, p. 3	Could not supply Lemoinei 1878 introduction Enthusiasts have ventured to say that some of the richest colorings in the plant kingdom are found in the lemoinei.
1910	06-28	200 <i>Gladiolus America</i>	John Lewis Childs	Bk 16, p. 3	Could not supply
1910	06-28	200 <i>Gladiolus</i> Mix Childsi	John Lewis Childs	Bk 16, p. 3	Could not supply Childsi introduced 1882, flowers of the best varieties are of great size and substance, often measuring 7 to 9 in. across, while the range of colour is marvellous, with shades of grey, purple, scarlet, salmon, crimson, rose, white, pink, yellow, &c., often beautifully mottled and blotched in the throat.

Year	Date	Order	Vendor	Reference Book,Page	Notes
1910	06-29	250 Cold storage Lilly of the Valley (250 Cold storage Lilly of the Valley 250 Cold storage Lilly of the Valley 250 Cold storage Lilly of the Valley (\$20) <i>Convallaria majalis</i>	Heeber & Don	Bk 16, p. 3	Likely that these were for cut flower or pot plant production for the house
1910	07-07	10 Azaleas Breuhard Andreas White	H Zijp & Co	Bk 16, p. 5	Not listed by Azalea Society of America
1910	07-07	10 Azaleas Niobe white	H Zijp & Co	Bk 16, p. 5	Listed on Azalea Society of America
1910	07-07	100 Asparagus Plumosus Seeds (\$1) Asparagus Fern (<i>Asparagus setaceus</i>)	A T Boddington	Bk 16, p. 5	Asparagus Plumosus is most likely Asparagus setaceus (Common Asparagus Fern, Lace Fern). Ideal in house or in glasshouse border possible use in borders or in Mansion as a house plant.
1910	07-07	100 Asparagus Sprengeri Seeds (\$.50) Asparagus fern	A T Boddington	Bk 16, p. 5	Asparagus Sprengeri aka asparagus fern
1910	07-07	2 pkts B's Pot Myosotis (\$1) Forget-me-nots	A T Boddington	Bk 16, p. 5	Can be grown in greenhouse and made to flower mid-winter and continue for many weeks.
1910	07-07	5 Azalea Empereur du Bresil	H Zijp & Co	Bk 16, p. 5	Listed on Azalea Society of America
1910	07-07	5 Azalea Memoire de Louis Van Houtte	H Zijp & Co	Bk 16, p. 5	Listed on Azalea Society of America
1910	07-07	5 Azalea Sacountala	H Zijp & Co	Bk 16, p. 5	Listed on Azalea Society of America
1910	07-07	5 Azalea Schryveriana May be <i>Azalea Schryderii</i>	H Zijp & Co	Bk 16, p. 5	Not listed on Azalea Society of America however it may be Schryderii
1910	07-07	5 Azaleas Ernst Thiers	H Zijp & Co	Bk 16, p. 5	Listed on Azalea Society of America
1910	07-07	5 Azaleas Vervaeneana	H Zijp & Co	Bk 16, p. 5	Listed on Azalea Society of America
1910	07-07	7 Pkt Giant Sweet Sultan 7 var. <i>Centaurea imperialis</i>	A T Boddington	Bk 16, p. 5	Giant Sweet Sultans are <i>Centaurea imperialis</i>
1910	07-30	12 Camellias (\$30)	Bobunk & Atkins	Bk 16, p. 6	
1910	08-02	Unknown (\$49)	Vaughan's Seed Store	Bk 6, p. 413	
1910	08-18	Unknown (\$25)	Vaughan's Seed Store	Bk 6, p. 413	
1910	09-08	Unknown (\$48.50)	Vaughan's Seed Store	Bk 6, p. 413	
1910	09-08	Unknown (\$51.20)	Vaughan's Seed Store	Bk 6, p. 413	
1910	10-12	Unknown (\$14.30)	Vaughan's Seed Store	Bk 6, p. 413	
1910	10-15	100 seed Dracanea indivisa <i>Cordylone indivisa</i>	A T Boddington	Bk 16, p. 14	
1910	10-27	1 pkt Celosia seeds (\$1) Cockscomb	Julius Roehrs	Bk 16, p. 15	Julius Roehrs is still trading.
1910	10-27	50 Violet plants (\$1.50) <i>Viola</i>	John G Bahret	Bk 16, p. 15	
1910	11-12	Unknown (\$2)	Haggerty Floral Co.	Bk 6, p. 443	
1910	11-14	Unknown (\$35.45)	Vaughan's Seed Store	Bk 6, p. 413	
1910	12-08	Unknown (\$14.50)	Vaughan's Seed Store	Bk 6, p. 413	
1910	12-11	Unknown (\$22)	Vaughan's Seed Store	Bk 6, p. 413	
1910	12-21	10 Chrys. Chrysolora (\$6) Chrysanthemum Chrysolora	Percy Ellings Agt to Elmar D Smith	Bk 16, p. 21	Could find reference to Chrys. Chrysolora on web. Usually single-stemmed pot plant
1910	12-21	10 Chrys. Morristown (\$6) Chrysanthemum Morristown	Percy Ellings Agt to Elmar D Smith	Bk 16, p. 21	Morristown Exhibition Bloom
1910	12-21	10 Chrys. Roman Gold (\$4) Chrysanthemum Roman Gold	Percy Ellings Agt to Elmar D Smith	Bk 16, p. 21	
1910	12-21	10 Chrys. Smith's Advance (\$4) Chrysanthemum Smith's Advance	Percy Ellings Agt to Elmar D Smith	Bk 16, p. 21	
1910	12-21	10 Chrys. Tarrytown (\$6) Chrysanthemum Tarrytown	Percy Ellings Agt to Elmar D Smith	Bk 16, p. 21	
1910	12-21	10 Chrysanthemum Pokupsi (\$6)	Percy Ellings Agt to Elmar D Smith	Bk 16, p. 21	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1911	01-16	500 Mannetti rose stock	A J Boddington	Bk 1, p. 7	'Manettii' Commonly used as a rootstock in the 19th century, especially in the U.S.A. A dense, medium shrub with pale pink flowers
1911	03-17	300 Gladioli American Bulbs (\$15)	A T Boddington	Bk 16, P. 28	Grand pink and ideal for cut flowers. May have been bought as cut flower for Mansion Arthur T Boddington was on the executive committee of the American Gladiolus Society 1910
1911	04-19	100 Small Pan Ferns Asst. var. (\$6)	Henry A Dreen	Bk 16, p. 32	Interior display plants for greenhouse, exhibition or mansion
1911	04-20	2 Pyramid Bay Trees (\$40) <i>Laurus nobilis</i>	Bobbink & Atkins	Bk 16, p. 32	
1911	04-20	2 Standard Bay Trees (\$75) <i>Laurus nobilis</i>	Julius Roehrs	Bk 16, p. 32	These bay trees are possibly the trees that stand outside the mansion house in photograph
1911	04-20	4 Pillar bay Trees (\$125) <i>Laurus nobilis</i>	Bobbink & Atkins	Bk 16, p. 32	
1911	04-21	25 American Beauty Rose Bushes (\$12.50)	Chas Totty		Rosa American Beauty developed in France in 1875 aka Madame Ferdinand Jamin, Hybrid perpetual Double, spring flowering, dark pink, fragrant Totty mail order contained delphiniums, chrysanthemums and roses amongst others. Totty involved in setting up 1 st Madison Flower Show.
1911	05-03	28 Evergreen Trees (\$58)	Sunnyfield Nursery Co	Bk 16, p. 34	
1911	05-04	30 Ampelopsis Veitcii (\$3.60) <i>Parthenocissus tricuspidata</i>	R & J Farquhar & Co.	Bk 16, p. 34	
1911	05-11	50 hybrid Rhododendrons assorted colors (\$124.25)	Thos. Meehan & Sons	Bk 16, p. 35	assorted colors written on side of page
1911	05-17	2 Pyramid bay Trees (\$35) <i>Laurus nobilis</i>	The ? Moon & Co.	Bk 16, p. 35	
1911	05-20	6 Gardenia Rose plants (\$9.75)	H A Manda	Bk 16, p. 35	Climbing, rambler, apple scented, soft creamy yellow flower
1911	05-27	12 Begonia Lonsdale (\$3)	Robert Craig & Co	Bk 13, p. 36	
1911	05-27	12 Begonia Lorraine (\$3)	Robert Craig & Co	Bk 13, p. 36	Lorraine is a pink begonia
1911	05-27	12 Begonia Norwood (\$4)	Robert Craig & Co	Bk 13, p. 36	
1911	06-06	12 Begonia Gloria of Cincinati (\$6)	Knight & Struck	Bk 16, p. 23	Glory of Cincinnati Winter flowering with masses of rose pink flowers. Very expensive plants.
1911	06-06	12 Cattleya Labiata Imp. (\$30.25)	Knight & Struck	Bk 16, p. 23	Very expensive plants. These are possibly the cattleya that appear in the Alex. Knauss photographs. The rediscovery of <i>C. labiata</i> (1889) was heralded by The Orchid Review as "the event of the year,". Will flower Sep-November
1911	06-22	200 Double Violet Plants (\$3) <i>Viola</i>	Stanton & Rockerfellow	Bk 16, P. 39	
1911	06-24	1 doz. Limnocharis Humbolt (\$1.50)	Henry A Dreer	Bk 16, p. 39	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1911	06-24	250 Lily of the Valley Cold Storage (\$6) 250 Lily of the Valley Cold Storage (\$6) 250 Lily of the Valley Cold Storage (\$6) 250 Lily of the Valley Cold Storage (\$6) <i>Convallaria majalis</i>	Heeber & Don	Bk 16, p. 39	
1911	06-24	1 doz. Eichhornia crassipes major (\$1.50) Water hyacinth	Henry A Dreer	Bk 16, p. 39 Aquatic plants	
1911	08-01	Furnishing and placing Marble base	Martin H Collins	Bk 16, p. 46	
1911	08-10	¼ lb Sweet Peas Wallacea <i>Lathyrus odoratus Wallacea</i>	A T Boddington	Bk 16, p. 45	1911 publication on sweet pea trials
1911	09-01	3 Lilac President Gre (\$1.50) <i>Syringa vulgaris 'Président Grévy'</i>	Brown Bros. Co.	Bk 16, p. 4	
1911	09-01	3 Lilac Prince of Wales (\$1.50) <i>Syringa vulgaris 'Prince of Wales'</i>	Brown Bros. Co.	Bk 16, p. 48	
1911	09-01	6 Lilac Marie (\$3) <i>Syringa vulgaris</i>	Brown Bros. Co.	Bk 16, p. 48	
1911	09-09	1/8 oz. Sweet Peas 'Anita Wehrmann' (\$1) <i>Lathyrus odoratus</i>	A.J. Boddington Co.	Bk 1, p. 1	
1911	09-13	2 pkts. Schizanthus grandiflora (\$1.50) Butterfly flower	A.J. Boddington Co.	Bk 1, p. 1	Schizanthus grandiflora described as very pretty half hardy annuals. Silver gilt floral medal, RHS 1908 Used as exhibition plant and described as weedy like appearance and better to grow in self supporting groups.
1911	09-15	¼ oz. Sweet Peas 'Anita Wehrmann' (\$.40)	Vaughan's Seed Store	Bk 1, p. 1	
1911	09-15	1/8 oz. 'Early Heather Bell' (\$.75) <i>Lathyrus odoratus Early Heather Bell'</i>	Vaughan's Seed Store	Bk 1, p. 1	
1911	09-15	1/8 oz. Rose Queen (\$.30) <i>Lathyrus odoratus 'Rose Queen'</i>	Vaughan's Seed Store	Bk 1, p. 1	
1911	09-29	½ doz. Crimson Rambler Rose bushes (\$10.50)	R & J Farquhar & Co.	Bk 16, p. 46	
1911	10-05	1 doz. Spirea Queen Alexandra (\$2.25) <i>Astilbe x rosea 'Queen Alexandra'</i>	A T Boddington	Bk 16, p. 51	Deep pink flowers
1911	10-05	100 7" Standing Flower Pots	?	Bk 16, p. 51	Most likely used for displays
1911	10-05	2 doz. Spirea Gladstone Astilbe (\$4) <i>Astilbe 'W E Gladstone'</i>	A T Boddington	Bk 16, p. 51	Astilbe 'W E Gladstone' which is white
1911	10-10	100 Narcissus (\$1.25) Daffodils	W.E. Marshall & Co.	Bk 1, p. 3	
1911	10-10	500 Crocus (\$6.00)	W.E. Marshall & Co.	Bk 1, p. 3	
1912	01-08	12 Chrys. C. Matherson (\$7.50) <i>Chrysanthemum C. Matherson</i>	Scott Bros.	Bk 16, p. 58	C Mathersom (Christy Mathewson)
1912	01-08	12 Chrys. Countess of Granard (\$5) <i>Chrysanthemum Countess of Granard</i>	Scott Bros.	Bk 16, p. 58	
1912	01-08	12 Chrys. Mary Farnsworth (\$2.50) <i>Chrysanthemum Mary Farnsworth</i>	Scott Bros.	Bk 16, p. 58	Most likely used for flower shows and as cut flowers for mansion. Chrysanthemums appear frequently in historic photographs. Price varies greatly. These varieties would appear to be no longer available.
1912	01-08	12 Chrys. White Queen (\$2.50) <i>Chrysanthemum White Queen</i>	Scott Bros.	Bk 16, p. 58	
1912	01-08	12 Chrys. Wm Turner (\$5) <i>Chrysanthemum Wm Turner</i>	Scott Bros.	Bk 16, p. 58	William Turner named after RHS judge in Chrysanthemums and sweet pea
1912	01-22	50 Double Fuchsia (\$2)	Wood Brothers	Bk 16, p. 58	Bedding scheme or display, or mansion or flower show
1912	01-22	50 Single Fuchsia (\$2)	Wood Brothers	Bk 16, p. 58	Bedding scheme or display, or mansion or flower show
1912	02-08	Seeds (\$20), Bulbs (\$24)	A J Boddington	Bk 16, p. 60	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1912	02-15	12 <i>Oncidium varicosum</i> Rogersii (Rogersii) (\$36) Dancing Doll Orchid flowers	Julius Roehrs & Co.	Bk 16, p. 60	Flowers Fall through to Spring
1912	02-24	½ pkt Cineraria (\$.60)	A T Boddington	Bk 16, p. 60	Cineraria maritime most likely, does appear as edging plant to define beds in photographic archive. Could also be more tender cinerarias which would have been grown as pot plants in the glass house
1912	02-24	1/8g <i>Salvia</i> Bedman (\$.40) <i>Salvia splendens</i> 'Bonfire' ('Clara Bedman')	A T BoddingtonFF	Bk 16, p. 60	Scarlet-spiked plants grow to a very even 26-inch height. Bedman after Bedman Brothers Seed company established with help from James Thorburn (also supplier for Hyde park)
1912	02-27	12 each Nash & Stells Late Pink <i>Chrysanthemum</i> (\$4)	Chas H Totty	Bk 16, p. 61	
1912	02-27	6 Chrys Mason <i>Chrysanthemum</i> Mason	Chas H Totty	Bk 16, p. 61	
1912	02-27	6 Chrys Merstham Gem <i>Chrysanthemum</i> Merstham Gem	Chas H Totty	Bk 16, p. 61	
1912	02-27	6 Chrys Merstham Rose <i>Chrysanthemum</i> Merstham Rose	Chas H Totty	Bk 16, p. 61	
1912	02-27	6 Chrys Mrs Nash <i>Chrysanthemum</i> Mrs Nash	Chas H Totty	Bk 16, p. 61	
1912	02-27	6 Chrys Ms Godfrey <i>Chrysanthemum</i> Mrs Godfrey	Chas H Totty	Bk 16, p. 61	
1912	02-27	6 Chrys Narcissus <i>Chrysanthemum</i> Narcissus	Chas H Totty	Bk 16, p. 61	
1912	02-27	6 Chrys Pink Felicity <i>Chrysanthemum</i>	Chas H Totty	Bk 16, p. 61	
1912	02-27	6 Chrys Rowbottom <i>Chrysanthemum</i> Narcissus	Chas H Totty	Bk 16, p. 61	
1912	02-27	6 Chrys Thorn <i>Chrysanthemum</i> Thorn	Chas H Totty	Bk 16, p. 61	
1912	02-27	6 Chrys W. Buckingham <i>Chrysanthemum</i> W. Buckingham	Chas H Totty	Bk 16, p. 61	
1912	02-27	6 Chrys, Mary Cope <i>Chrysanthemum</i> Mary Cope	Chas H Totty	Bk 16, p. 61	
1912	02-27	6 <i>Hydrangea</i> Madam Mouillier <i>Hydrangea macrophylla</i> 'Madame Emile Mouillere'	Chas H Totty	Bk 16, p. 61	<i>Hydrangea macrophylla</i> "Madame Emile Mouillere" is a white mophead,
1912	03-18	100 Rose Rosesunburst "own root stock" (\$40)	Chas H Totty	Bk 16, p. 64	Unable to find this variety
1912	03-22	4 English Walnut Trees 2 1/2 ft (\$10) <i>Juglans Regia</i>	E C Pomeroy	Bk 16, p. 64	
1912	03-25	50 small Pan Ferns Assorted varieties	Henry A Dreer	Bk 16, p. 64	Presumably for display in the Mansion or Glasshouses
1912	04-01	Furnishing & Planting as per contract (\$382.25) Replanting garden extension (\$71.65)	Thos. Meehan & Sons	Bk 16, p. 66	
1912	04-10	2 <i>Juniperus</i> Sinensis <i>(Juniperus chinensis)</i>	Sunnyfield Nursery	Bk 16, p. 66	
1912	04-10	2 <i>Retinispora</i> Squar. Veitchei <i>Chamaecyparis pisifera</i> 'suarrosa veitchii'	Sunnyfield Nursery	Bk 16, p. 66	
1912	04-10	2 <i>Thuja occidentalis</i> 'Ellwangeriana" Eastern arborvitae	Sunnyfield Nursery	Bk 16, p. 66	
1912	04-10	30 Poplars Lombardy (\$21) <i>Populus nigra</i>	Sunnyfield Nursery	Bk 16, p. 66	
1912	04-10	6 Evergreens (\$8)	Sunnyfield Nursery	Bk 16, p. 66	
1912	04-17	Mugh's Pinus (\$43.75) <i>Pinus mugo</i> var. <i>mughus</i>	Sunnyfield Nursery	Bk 16, p. 67	
1912	04-19	40-18' Pinus Mughus 66 Boxing 1.50 (\$67.50) <i>Pinus mugo</i> var. <i>mughus</i>	Thos. Meehan & Sons	Bk 16, p. 67	
1912	04-25	12 <i>Dahlia</i> Amos Perry	Harry A Dreer	Bk 16, P. 67	Amos Perry crimson

Year	Date	Order	Vendor	Reference Book, Page	Notes
1912	04-25	12 Dahlia Floradora	Harry A Dreer	Bk 16, P. 67	Floradora is wine crimson
1912	04-25	12 Dahlia Gorgeous	Harry A Dreer	Bk 16, P. 67	
1912	04-25	12 Dahlia Master Carl	Harry A Dreer	Bk 16, P. 67	
1912	04-25	12 Dahlia Mrs C Turner	Harry A Dreer	Bk 16, P. 67	
1912	04-25	36 Dahlia Countess Lonsdale	Harry A Dreer	Bk 16, P. 67	Countess of Lonsdale is salmon tinted
1912	05-04	12 Begonia Glory De Lorraine (\$3)	Knight & Struck Co.	Bk 16, p. 70	
1912	05-04	12 Begonia Glory of Cincinnati (\$4)	Knight & Struck Co.	Bk 16, p. 70	
1912	05-04	12 Begonia Lonsdale (\$4)	Knight & Struck Co.	Bk 16, p. 70	
1912	05-04	12 Dahlia Amos Perry (\$1.44)	Knight & Struck Co.	Bk 16, p. 70	
1912	05-04	12 Dahlia Floradora (\$1.44)	Knight & Struck Co.	Bk 16, p. 70	
1912	05-04	12 Dahlia Master Carl (\$1.92)	Knight & Struck Co.	Bk 16, p. 70	
1912	05-04	12 Dahlia Mrs Turner (\$0.96)	Knight & Struck Co.	Bk 16, p. 70	
1912	05-04	36 Dahlia Countess of Lonsdale (\$4.32)	Knight & Struck Co.	Bk 16, p. 70	
1912	06-10	Unknown (\$35.45)	Vaughan's Seed Store	Bk 6, p. 413	
1912	06-15	2 Cybotium Scheidi (\$5) Mexican Tree fern	Julius Roehrs	Bk 16, p. 75	
1912	06-15	2 Dracaena Lord Wolseley(\$3)	Julius Roehrs	Bk 16, p. 75	
1912	06-15	2 Phoenix Roebelenii (\$4) Syn. Pygmy Date Palm	Julius Roehrs	Bk 16, p. 75	
1912	06-15	4 Kentia Belmoreana (\$8) (<i>Howea belmoreana</i>)	Julius Roehrs	Bk 16, p. 75	Howea belmoreana Syn. Kentia belmorean
1912	06-15	4 Kentia Forsteriana (\$8) <i>Howea fosteriana</i>	Julius Roehrs	Bk 16, p. 75	syn. Kentia Palm
1912	06-15	4 Kentia Forsteriana made-up (\$6)	Julius Roehrs	Bk 16, p. 75	
1912	06-15	6 Phoenix Roebelenii (small) (\$5) Syn. Pygmy Date Palm	Julius Roehrs	Bk 16, p. 75	
1912	06-27	1 Juniper 4 ft <i>Juniperus</i>	Sunnyfield Nursery	Bk 16, p. 75	
1912	06-27	1 Mughus Pine 2 ½ ft <i>Pinus mugo var. mughus</i>	Sunnyfield Nursery	Bk 16, p. 75	
1912	06-27	1 Retinispora plumose 3ft <i>Chamaecyparis pisifera 'Plumosa'</i>	Sunnyfield Nursery	Bk 16, p. 75	
1912	06-27	2 Hemlock 4 ft <i>Tsuga</i>	Sunnyfield Nursery	Bk 16, p. 75	
1912	07-06	¼ lb Sweet Pea Wallacea (\$2) <i>Lathyrus odoratus Wallacea</i>	A T Boddington	Bk 16, p. 77	
1912	07-06	½ lb of Sweet Pea Mrs Alex Wallace <i>Lathyrus odoratus Mrs Alex Wallace</i>	A T Boddington	Bk 16, p. 77	Mrs Alex Wallace Pinkish lavender color. The sweet pea could be used as cut flowers or as part of a display
1912	08-28	1 doz Spirea H. Witte (\$1.50)	A T Boddington	Bk 16, p. 80	
1912	08-28	1 doz Spirea Peach Bloom (\$1.75) <i>Astilbe 'Peach Blossom'</i>	A T Boddington	Bk 16, p. 80	Peach Blossom
1912	08-28	1 pkts Muschere (Muscaria moschatum) Bod. Giant Eng. Exhibition (\$1)	A T Boddington	Bk 16, p. 80	Muscari moschatum syn. Grape Hyacinth fragrant bloom produced Feb & March
1912	08-28	2 pkts Pansies Bod. Challenge (\$1) <i>Viola Bod. Challenge</i>	A T Boddington	Bk 16, p. 80	Challenge series are Medium sized winter hardy perennial, masses of medium sized blooms on compact plants. In a full range of colors.
1912	08-28	3 doz Spirea Gladstone (\$4.50) <i>Astilbe 'W E Gladstone'</i>	A T Boddington	Bk 16, p. 80	<i>Astilbe 'W E Gladstone'</i> which is white
1912	09-10	Unknown (\$35.45)	Vaughan's Seed Store	Bk 6, p. 413	
1912	09-24	250 Lily of the Valley (\$5) 250 Lily of the Valley (\$5) 250 Lily of the Valley (\$5) 250 Lily of the Valley (\$5) <i>Convallaria magalis</i>	Julius Roehrs	Bk 16, p. 84	
1912	09-24	Assorted pan ferns (\$3)	H A Dreer	Bk 16, p. 84	
1912	11-07	Unknown (\$1.90)	Saltford Flower Shop	Bk 6, p. 424	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1912	11-20	100 Mrs Chas Russell Roses (own roots) (\$30)	Waban Rose Conservatories	Bk 16, p. 90	This HT rose is listed American Rose Annual 1913 it is a double rose and ideal for cut flowers
1912	11-30	100 Milady Roses (own roots) (\$30)	A N Pierson Co	Bk 16, p. 90	Rose Milady HT red in color and listed American Rose Annual 1913. A.N. Pierson Inc was a rose breeder who operated out of Cromwell Connecticut between 1890-1991. Mentioned frequently in the American Rose society reports from 1910 onwards
1912	J06-27	800 Marie Louise Violet Plants (\$12) <i>Viola Marie Louise</i>	S. Rockefeller	Bk 16, p. 74	Rich mauve colored, double, very fragrant
1913	01-09	12 Begonia Glory De Lorraine (\$3.50)	Knight & Struck Co.	Bk 16, p. 70	Same varieties as ordered the previous May 4
1913	01-09	12 Begonia Lonsdale (\$4)	Knight & Struck Co.	Bk 16, p. 70	Same varieties as ordered the previous May 4
1913	01-09	24 Begonia Glory of Cincinnati (\$8.20)	Knight & Struck Co.	Bk 16, p. 70	Same varieties as ordered the previous May
1913	01-10	500 Gladiolus America (\$22.50)	Heeber & Don	Bk 16, p. 95	America is a pink flower ideal for cutting
1913	01-10	500 Gladiolus Graffi Hybrids (\$17.50)	Heeber & Don	Bk 16, p. 95	
1913	01-10	Unknown (\$.60)	Saltford Flower Shop	Bk 6, p. 424	
1913	01-13	Flower seeds (\$34.45) Flower seeds (\$4.60)	A J Boddingtons		
1913	01-24	100 Pink Carnations Northport (\$20) <i>Dianthus Northport</i>	Chas. Totty	Bk 16, p. 96	
1913	01-24	12 Chrys. Harry E Converse (\$2.50) <i>Chrysanthemum Harry E Converse</i>	Chas. Totty	Bk 16, p. 96	Harry E converse bronze exhibition flower
1913	01-24	12 Chrys. Mrs Gilbert Drabble (\$5) <i>Chrysanthemum Mrs Gilbert Drabble</i>	Chas. Totty	Bk 16, p. 96	
1913	01-24	6 Chrys. Caddie (\$1.50) <i>Chrysanthemum Caddie</i>	Chas. Totty	Bk 16, p. 96	
1913	01-24	6 Chrys. Josephine (\$1.50) <i>Chrysanthemum Josephine</i>	Chas. Totty	Bk 16, p. 96	
1913	01-24	6 Chrys. Mrs Harry Turner <i>Chrysanthemum Mrs Harry Turner</i>	Chas. Totty	Bk 16, p. 96	Mrs Harry Turner exhibition bloom
1913	01-24	6 Chrys. Oriole (\$1.50) <i>Chrysanthemum Oriole</i>	Chas. Totty	Bk 16, p. 96	
1913	03-01	3 Pine ? Trees (\$62) <i>Pinus</i>	Jas Keogan	Bk 16, p. 104	This is a lot of money for 3 trees
1913	03-10	Unknown (\$43.35)	Vaughan's Seed Store	Bk 6, p. 413	
1913	03-18	1 pkt Scabious Fire King (\$0.10) <i>Scabiosa atropurpurea 'Fire King'</i>	A T Boddington	Bk 16, p. 102	hardy Annual fragrant 24-36"
1913	03-18	500 White Pine 6 yrs Transplants (\$42.50) <i>Pinus strobus</i>	American Forestry Co	Bk 16, p. 102	Could not supply large evergreen coniferous tree growing to 40-50 m
1913	03-31	50 Bank's Pine 3'-4' Twice Transplanted (\$3.75) <i>Pinus</i>	American Forestry Company	Bk 16, p. 103	
1913	04-10	Unknown (\$30)	Waban Rose Conservatories	Bk 6, p. 311	
1913	04-14	Morning Glory seed (Ipomoea violacea) (\$0.50)	Du Bois Bros.	Bk 16, p. 106	
1913	04-22	4 Pks Flowering seed Primula primrose	A T Boddington	Bk 16, p. 107	
1913	04-29	Prof Service Stock & Planting (\$1470) Less Planting Plan # 2469 (\$72.50) Total (\$1397.50)	Robert B Cridland	Bk 16, p. 107	
1913	05-01	Greenhouse Contract (\$350)	E S Foster	Bk 16, p. 111	
1913	06-06	800 Marie Louise Violet Plants (\$12)	S. Rockefeller	Bk 16, p. 112	Double violet, mauve color, very fragrant. This same order was placed in 1912
1913	07-17	10 Azaleas Breuhard Andreas white (\$2.50)	H Zijp & Co	Bk 16, p. 115	This is the same order as one that was placed on 1910-7-7 with the same company

Year	Date	Order	Vendor	Reference Book,Page	Notes
1913	07-17	10 Azaleas Noibe (\$2.50)	H Zipp & Co	Bk 16, p. 115	
1913	07-17	5 Azaleas Empereur de Brisel (\$1.25)	H Zipp & Co	Bk 16, p. 115	
1913	07-17	5 Azaleas Ernest Thiers (\$1.25)	H Zipp & Co	Bk 16, p. 115	
1913	07-17	5 Azaleas Memoire de Louis Van Houtte (\$1.25)	H Zipp & Co	Bk 16, p. 115	
1913	07-17	5 Azaleas Sacorentala (\$1.25)	H Zipp & Co	Bk 16, p. 115	
1913	07-17	5 Azaleas Schryveriana (\$1.25)	H Zipp & Co	Bk 16, p. 115	
1913	07-17	5 Azaleas Vervaeneana (\$4.75)	H Zipp & Co	Bk 16, p. 115	
1913	08-07	4 oz Sweet Peas Le Marquis (\$1.50) <i>Lathyrus odoratus Le Marquis</i>	A T Boddington	Bk 16, p. 117	Le Marquis is a dark blue
1913	08-07	4 oz Sweet Peas Mrs Alex Wallace (\$1.75) <i>Lathyrus odoratus Mrs Alex Wallace</i>	A T Boddington	Bk 16, p. 117	Mrs A Wallace is described as Lavender or mauve This is one of the varieties that Boddingtons entered into the Sweet Pea trials at Cornell University in 1911
1913	08-07	4 oz Sweet Peas Wallacea (\$0.75) <i>Lathyrus odoratus Wallacea</i>	A T Boddington	Bk 16, p. 117	
1913	09-09	24 Chrys. Frutescens Mrs Sanders 4' pots (\$3) <i>Chrysanthemum Frutescens Mrs Sanders</i>	Henry A Dreer	Bk 16, p. 120	
1913	11-01	5 Days Survey & Maps NYC& HRRR (\$125) Computing areas 10 2 Maps 5 & 8 (\$23)	B H Brevoort	Bk 16, p. 128	
1913	11-20	12 Parrot's feathers (\$1) <i>Myriophyllum proserpinacoides</i>	Henry A Dreer	Bk 16, p. 126	Myriophyllum aquaticum now considered invasive plant
1913	11-23	1 doz Spirea H. Witte (\$1.50)	A T Boddington	Bk 16, p. 126	Same as order placed 1912-8-28
1913	11-23	1 doz Spirea Peach Bloom (\$1.75) <i>Astilbe 'Peach Blossom'</i>	A T Boddington	Bk 16, p. 126	Same as order placed 1912-8-28
1913	11-23	3 doz Spirea Gladstone (\$3.) <i>Astilbe 'W E Gladstone'</i>	A T Boddington	Bk 16, p. 126	Same as order placed 1912-8-28
1913	12-06	250 Manette Stock for Rose Grafting	Jackson & Perkins Co	Bk 16, p. 129	Could not supply is written in the margin Rosa gallica 'Manette'
1913	12-10	250 Manette Stock for Rose Grafting (\$3.75)	Henry a Dreer	Bk 16, p. 129	Could not supply is written in the margin Rosa gallica 'Manette'
1913	12-16	2 sets each of 21 "New French Hydrangeas" 6 pots (\$17.50) <i>Hydrangea macrophylla</i>	H A Dreer	Bk 16, p. 129	
1914	01-01	Pinus (\$5.10) Pine	Jas Keogan	Bk 16, p. 134	
1914	01-08	Unknown (\$36.25)	Vaughan's Seed Store	Bk 6, p. 413	
1914	01-14	100 Gorgeous Carnation rooting Cut	Chas H Totty	Bk 16, p. 132	
1914	01-14	3 Chrys Jas Frazer <i>Chrysanthemum James Frazer</i>	Chas H Totty	Bk 16, p. 132	
1914	01-16	36 Gloxinias (\$9) <i>Sinningia speciosa</i>	A T Boddington	Bk 16, p. 132	
1914	01-16	Flower seeds 36 Callas Elliottiana, (\$10.80) <i>Zantedeschia elliottiana</i>	A T Boddington	Bk 16, p. 132	
1914	01-22	2 pkts Aster Heatherhome's Sea Shell (\$1) <i>Callistephus chinensis</i>	Knight & Stuck Co.	Bk 16, p. 132	
1914	01-22	2 pkts Cosmos Midsummer Giant (\$1)	Knight & Stuck Co.	Bk 16, p. 132	
1914	01-22	2 pkts Heliotrope Pearly Blue (\$0.50)	Knight & Stuck Co.	Bk 16, p. 132	
1914	01-22	48 Begonia Cinn (\$16) <i>Begonia 'Gloria of Cincinnati'</i>	Knight & Stuck Co.	Bk 16, p. 132	
1914	01-22	6 Bougainvillea Sanderiana (\$9.35) <i>Bougainvillea glabra 'Sanderiana Variegata'</i>	Knight & Stuck Co.	Bk 16, p. 132	Purple flowers
1914	02-02	Myriophyllum proserpinacoides (\$1) Parrot's Feathers	Vaughan's Seeds	Bk 16, p. 135	Syn. Parrot's feathers, aquatic
1914	02-07	Unknown (\$36.45)	Vaughan's Seed Store	Bk 6, p. 413	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1914	02-10	12 Roses Edith Part	Samuel McGreedy & Sons	Bk 16, p. 130	Edith Part Red & yellow moderate & Bushy
1914	02-10	12 Roses F W Vanderbilt	Samuel McGreedy & Sons	Bk 16, p. 130	These may have been introduced to trial at Hyde Park as no \$ is indicated. F W Vanderbilt HT Coppery rose moderately bushy
1914	02-10	12 Roses Lady Mary Ward	Samuel McGreedy & Sons	Bk 16, p. 130	
1914	02-10	12 Roses Mrs Chas E Pearson	Samuel McGreedy & Sons	Bk 16, p. 130	
1914	02-10	12 Roses Old Gold	Samuel McGreedy & Sons	Bk 16, p. 130	
1914	03-26	50 Rose Hadley Tea (\$7.50)	A M Pierson	Bk 16, p. 138	Red Rose, American Rose Society Gold Medal Winner 1914
1914	03-26	50 Rose Hadley Tea Grafted (\$20)	A M Pierson	Bk 16, p. 138	Red Rose, American Rose Society Gold Medal Winner 1914
1914	03-27	50 Assorted Pan Ferns (\$3)	Henry A Dreer	Bk 16, p. 138	
1914	04-11	100 (8c) White Pines 2' to 3' <i>Pinus strobus</i>	American Forestry Co	Bk 16, p. 141	An order was placed March 18 1913 for 500 white pine that could not be supplies.
1914	04-11	200 (20c) White Pines 2 ½' to 3' <i>Pinus strobus</i>	American Forestry Co	Bk 16, p. 141	An order was placed March 18 1913 for 500 white pine that could not be supplies.
1914	04-15	75 Rhododendron Maximum (\$56.25)	Rort B Cridland	Bk 16, p. 141	
1914	04-17	100 Manette rose root Stock (\$2.50)	Henry A Dreer	Bk 16, p. 142	Manette stock was used for budding roses
1914	04-21	200 Common White Willow Rooted Stock 3'-4' (\$50) <i>Salix alba</i>	Brown Brothers	Bk 16, p. 142	
1914	04-23	25 Hardy English Ivy <i>Hedra helix</i>	Henry A Dreer	Bk 16, p. 143	
1914	05-06	12 Hemlock Trees 3-4 ft (\$8) <i>Tsuga Canadensis</i>	R B Cridland	Bk 16, p. 145	
1914	05-06	50 Asparagus Hatcheri (\$5) Fern lace veil	Henry A Dreer	Bk 16, p. 145	Asparagus harcherii is believed to be a chance hybrid of A. plumosa appears in contemporary gardening magazines
1914	05-06	50 Asparagus Sprengeri 2 ½' or 3' pot (\$4) Asparagus Fern	Henry A Dreer	Bk 16, p. 145	
1914	05-07	Unknown (\$2)	Saltford Flower Shop	Bk 6, p. 424	
1914	05-14	20 Honeysuckle Hallean (\$5) <i>Lonicera japonica 'Halliana'</i>	Thomas Meehan & Son	Bk 16, p. 146	Hall's Honeysuckle, pale yellow in color, repeat flowering late spring to mid summer, fragrant
1914	05-14	24 Honeysuckle Halleane 5 Pots (\$6) <i>Lonicera japonica 'Halliana'</i>	Thomas Meehan & Son	Bk 16, p. 146	Hall's Honeysuckle, pale yellow in color, repeat flowering late spring to mid summer, fragrant
1914	06-12	50 Caladium Esculentum 5" pots (\$9) Elephant ears	A M Pierson	Bk 16, p. 149	Syn; Colocasia antiquorum, Caladium esculentum
1914	06-12	800 Marie Louise Violet Plants (\$12)	S Rockefeller	Bk 16, p. 149	Same as order in June 1912 & 1913
1914	06-12	Unknown (\$11.50)	Vaughan's Seed Store	Bk 6, p. 413	
1914	06-16	Visits (\$25), Plans (\$142.50) Expenses (\$10) (\$177.50)	Rob B Cridland	Bk 16, p. 149	
1914	07-10	Unknown (\$1.40)	Vaughan's Seed Store	Bk 6, p. 413	
1914	08-24	1 pkt Myositis Bod. Pot (\$0.50) Forget-me-not	A T Boddington	Bk 16, p. 157	
1914	08-24	2 pkts Myositis Oblongata perfecta (\$0.30) Forget-me-not	A T Boddington	Bk 16, p. 157	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1914	08-24	3 pkts Sweet Pea Lavender Orchid (\$1.25) <i>Lathyrus odoratus Lavender Orchid</i>	A T Boddington	Bk 16, p. 157	
1914	08-24	3 pkts Sweet Pea Orchid Beauty (\$1.25) <i>Lathyrus odoratus Orchid Beauty</i>	A T Boddington	Bk 16, p. 157	
1914	09-12	Unknown (\$17.94)	Vaughan's Seed Store	Bk 6, p. 413	
1914	09-19	250 Lily of the Valley (\$8) 250 Lily of the Valley (\$8) 250 Lily of the Valley (\$8) 250 Lily of the Valley (\$8) <i>Convallaria majalis</i>	Knight & Struck	Bk 16, p. 161	1000 ordered in 1910, 1911, 1912 & 1914
1914	09-25	Collection of Dahlias (\$25)	N Harold Cotton	Bk 16, p. 162	
1914	10-08	Unknown (\$1.20)	Vaughan's Seed Store	Bk 6, p. 413	
1914	10-08	Unknown (\$70)	Vaughan's Seed Store	Bk 6, p. 413	
1914	10-09	50 Assorted pan ferns (\$3)	Henry A Dreer	Bk 16, p. 164	
1914	10-09	Unknown (\$2)	Vaughan's Seed Store	Bk 6, p. 413	
1914	11-07	Unknown (\$14.50)	Vaughan's Seed Store	Bk 6, p. 413	
1914	11-17	12 Spirea H Witte (\$1)	A T Boddington	Bk 16, p. 167	Same as order placed 1912-8-28 & 1913-11-23
1914	11-17	12 Spirea Peach Bloom (\$1.50) <i>Astilbe 'Peach Blossom'</i>	A T Boddington	Bk 16, p. 167	Same as order placed 1912-8-28 & 1913-11-23
1914	11-17	36 Spirea Gladstone (\$3) <i>Astilbe 'W E Gladstone'</i>	A T Boddington	Bk 16, p. 167	Same as order placed 1912-8-28 & 1913-11-23
1914	12-04	Unknown (\$1)	Saltford Flower Shop	Bk 6, p. 424	
1915	01-05	500 Manette Stock for Rose Grafting (\$7.50)	H A Dreer	Bk 16, p. 173	100 had been ordered the previous April
1915	01-16	12 Chrysanthemum Mendon (\$5)	Scott Bros.	Bk 16, p. 173	
1915	01-16	6 Chrysanthemum Bob Putting (\$3.75)	Scott Bros.	Bk 16, p. 173	
1915	01-16	6 Chrysanthemum E Roope (\$3.75)	Scott Bros.	Bk 16, p. 173	
1915	01-16	6 Chrysanthemum Ellan (Gratis)	Scott Bros.	Bk 16, p. 173	
1915	01-16	6 Chrysanthemum L M Bennett (\$3.75)	Scott Bros.	Bk 16, p. 173	
1915	01-16	6 Chrysanthemum Mrs Jones (Gratis)	Scott Bros.	Bk 16, p. 173	
1915	01-16	6 Chrysanthemum Mrs Walkin (\$3.75)	Scott Bros.	Bk 16, p. 173	
1915	01-16	6 Chrysanthemum Nesissa (\$2.50)	Scott Bros.	Bk 16, p. 173	
1915	01-16	6 Chrysanthemum Odessa (\$2.50)	Scott Bros.	Bk 16, p. 173	
1915	02-02	100 Sweet Pea Yarrowa (\$5) <i>Lathyrus odoratus</i>	Knight & Struck	Bk 16, p. 176	
1915	02-02	3 Lilac Christmas (\$6)	Knight & Struck	Bk 16, p. 176	
1915	02-02	3 Lilac Rhods Pink Peach (\$7.50) <i>Syringa Rhods Pink Peach</i>	Knight & Struck	Bk 16, p. 176	
1915	02-02	48 Begonia Cinnati (\$16)	Knight & Struck	Bk 16, p. 176	
1915	02-02	6 Chorozema Cordatum Splendens (\$6)	Knight & Struck	Bk 16, p. 176	
1915	02-02	Sweet Peas (\$5) <i>Lathyrus odoratus</i>	R & J Farquhar & Co.	Bk 16, p. 176	
1915	02-15	Tree moving from Dec 14- feb 5 th Labor (\$621.80) Tree Mover Truck (\$415)	Isaac Hicks & Son	Bk 16, p. 176	
1915	02-18	Flower Seeds (\$40.95)	A T Boddington	Bk 16, p. 176	
1915	03-12	2 doz Lonicera Hallean (\$4.80) <i>Lonicera japonica 'Halliana'</i> Hall's Honeysuckle	The Morris Nursery	Bk 16, p. 179	Same Lonicera also ordered from Thomas Meehan 1914 May14
1915	03-12	3 doz Hydrangea Paniculata Grandiflora (\$9.00)	The Morris Nursery	Bk 16, p. 179	
1915	03-16	12 Cattleya Mossiae Imp. (\$40)	Julius Roehrs	Bk 16, p. 179	Expensive item different Cattleya than ordered in 1911 bk 16, p. 23
1915	04-12	Unknown, (\$13.80)	The Morris Nurseries	Bk 6, p. 303	
1915	04-22	6 Ampelopsis Veitcii (\$1.50) <i>Parthenocissus tricuspidata</i>	A & J Farquahar	Bk 16, p. 183	Ampelopsis Veitcii Parthenocissus tricuspidata was ordered in May 1911 from the same supplier, Bk 16, p. 34
1915	04-22	6 Clematis Jackmanii (\$4)	A & J Farquahar	Bk 16, p. 183	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1915	04-22	6 Clematis Panaculata (\$2.50))	A & J Farquahar	Bk 16, p. 183	Clematis paniculata, C. maximonowicziana, C. terniflora White, August September flowering, fragrant.
1915	04-23	2 pkts Kochia trichophylla (\$0.20)	A J Boddington	Bk 16, p. 184	Glasshouse or annual check photographs
1915	04-28	1 lb Tom Thumb Nasturtium (\$1.75) <i>Tropaeolum</i>	A T Boddington	Bk 16, p. 184	
1915	05-15	50 Asst Pan Ferns (\$3)	H A Dreer	Bk 16, p. 187	
1915	05-31	200 Mad. Butterfly Roses (\$ 61.00)	Totty's	Bk 1, p. 253	Mme. Butterfly is a HT with blooms in several shades of pale pink to blush with lemon centre.
1915	06-01	Wall at Italian Garden (\$330) Steps at Italian Garden (\$59) Brick Wall at Italian Garden (\$15.20)	H Myers	Bk 16, p. 192	
1915	06-09	26 Water Lillies Asst (\$25) <i>Nymphaea</i>	Henry A Dreer	Bk 16, p. 190	Photos of John Moore in pond with waterlilies
1915	06-18	1 Box 12 x 16 D J Glass	E V Grant	Bk 16, p. 190	
1915	06-23	500 Freesia Mam Purity Fishers (\$20)	Burrnett Bros.	Bk 16, p. 191	possibly grown in the greenhouses as cut flowers for the house
1915	07-01	4 Each of Jap. Iris (Iris laevigata) 5, 6, 7, 9, 10, 12, 13, 16, 15, 20, 21, 22, 26, 27, 33, 34, 36, 40, 41, 43, 44, 50, 29, 3?, (Total \$35)	Brown Brothers	Bk 16, p. 193	
1915	07-01	Marie Louise Violet Plants (\$12)	Rockerfellow	Bk 16, p. 193	Same order as Same as order in June 1912, 1913 & 1914
1915	07-16	6 Kenita Belmoreana 4" pots (\$3) Howea belmoreana Syn. Kentia belmoreana	Henry A Dreer	Bk 16, p. 193	Previous order was placed for these plants with Julius Roehrs in June 1912 Bk 16, p. 75
1915	07-16	6 Phoenix Roebelenii 4" pots (\$4.50) Pygmy Date Palm	Henry A Dreer	Bk 16, p. 193	Previous order was placed for these plants with Julius Roehrs in June 1912 Bk 16, p. 75
1915	08-03	½ oz Sweet Pea Fair Orchid (could not supply) <i>Lathyrus odoratus</i>	A T Boddington	Bk 16, p. 196	
1915	08-03	½ oz Sweet Pea Orchid Beauty (\$2.50) <i>Lathyrus odoratus</i>	A T Boddington	Bk 16, p. 196	
1915	08-03	1 oz Sweet Pea Lav. Nora (could not supply) <i>Lathyrus odoratus</i>	A T Boddington	Bk 16, p. 196	
1915	08-03	1/8 Mignonette Bod. Majesty (\$1.50) <i>Reseda odorata</i>	A T Boddington	Bk 16, p. 196	
1915	09-17	12 Lemon Verbena Pot Grown (\$1) <i>Aloysia triphylla</i>		Bk 16, p. 200 Lippia citriodora,	Aloysia triphylla may have been used as part of floral display check photographs
1915	09-21	¼ oz Sweet Pea Anita Wehrman (\$2) <i>Lathyrus odoratus</i>	Vaughan Seed Store	Bk 16, p. 200	
1915	11-20	Uruguayan Grass <i>Cortaderia selloana</i>	Saltford Flower Shop	Bk 16, p. 206	May be drier or cut flower rather than plant itself considering supplier
1915	11-26	20 Pines White) 15' (\$360) 30 Pines White 12' (\$390)	Hicks Nurseries	Bk 16, p. 206	300 white pines were ordered in April 1914 bk 16, p. 141
1915	12-21	200 Carnation Good Cheer 2" pots <i>Dianthus Good Cheer</i>	A N Pierson	Bk 16, p. 208	Carnations also ordered 1/14/1914 different variety Bk 16, p. 132
1915	12-21	12 H Witte Spirea	Arthur T Boddington	Bk 16, p. 210	Same as order placed 1912-8-28, 1913-11-23, 1914-11-17
1915	12-21	12 Peach Bloom Spirea <i>Astilbe 'Peach Blossom'</i>	Arthur T Boddington	Bk 16, p. 210	Same as order placed 1912-8-28, 1913-11-23, 1914-11-17

Year	Date	Order	Vendor	Reference Book,Page	Notes
1915	12-21	36 Gladstone Spirea <i>Astilbe 'W E Gladstone'</i>	Arthur T Boddington	Bk 16, p. 210	Same as order placed 1912-8-28, 1913-11-23, 1914-11-17
1916	01-04	12 H Witle Spirea	Arthur T Boddington	Bk 16, p. 212	
1916	01-04	12 Peach Bloom Spirea <i>Astilbe x rosea 'Peach Blossom'</i>	Arthur T Boddington	Bk 16, p. 212	Possibly double entry from previous order see Bk 16, p. 210 but quantity for Spirea Gladstone has increased from 36 to 50. The location and costing for this batch is also split and therefore may be an inaccurate entry.
1916	01-04	50 Gladstone Spirea <i>Astilbe x arendsii 'W E Gladstone'</i>	Arthur T Boddington	Bk 16, p. 212	
1916	01-07	12 Orchids (\$36)	Knight & Struck	Bk 16, p. 212	
1916	01-07	2 doz Begonia Cincinnati (\$7)	Knight & Struck	Bk 16, p. 212	The last few items are similar to an order placed with the same company 1915-2-16 bk 16, p. 176
1916	01-07	2 oz 5060 400 (\$2.50) 4 pks 5135 60 (\$1) ½ oz 5195 100 (\$2.50) 2oz 5270 400 (\$2) 2oz 5310 400 (\$1) 1/2oz 5580 100 (\$1.25) 4 pkts 5227 40 (\$1) 2 oz 5321 400 (\$1) 1oz 5315 200 (\$2)	Knight & Struck	Bk 16, p. 212	
1916	01-07	6 Lilac Chas X (\$15) <i>Syringa Chas X</i>	Knight & Struck	Bk 16, p. 212	
1916	01-07	6 Lilac Rtn. Pink Peal (\$18) <i>Syringa Rtn. Pink Peal</i>	Knight & Struck	Bk 16, p. 212	
1916	03-08	200 Good Cheer 2 ¼" (\$24)	A N Pierson	Bk 16, p. 218	Previous orders of carnations include Bk 16, p. 96 & p. 132 all ordered in January of each year
1916	03-16	50 Ophelia rose gft (grafted?)2 ¼' (\$8.75)	A N Pierson	Bk 16, p. 218	Ophelia syn. Swertia of gentian family. Rose Ophelia developed Richmond AN Pierson has also supplies roses so may indeed be the Rose Ophelia Double, scented, pale pink HT rose
1916	04-01	50 Ophelia rose O.R. (own rootstock?) (\$5)	A N Pierson	Bk 16, p. 218	Rose Ophelia double, scented, pale pink HT rose
1916	04-01	100 Sunburst Greenhouse Roses in 2 ½ Pots (\$15)	A N Pierson	Bk 16, p. 219	These roses were previously ordered in 1912 from Chas. Totty see Bk 16, p. 64
1916	04-01	Gladiolus (\$5.00)	Richard Dienu Co.	Bk 8, P. 9	
1916	04-18	200 S A Nutt Geraniums (Pelargonium) in 3" pots (\$16) <i>Pelargonium S A Nutt</i>	A N Pierson	Rich vermilion colour	Blood red, upper petals bright Vermillion, lower more crimson, almost magenta. Tall growing
1916	04-21	Expenses to New York Flower Show (\$7.50)	H J Allen	Bk 16, p. 219	
1916	04-21	100 White Spruce 3ft high <i>Picea glauca</i>	Hicks Nurseries	Bk 16, p. 220	
1916	05-01	½ Bay Tree Greenhouse (\$2.75) <i>Laurus noblis</i>	E S Foster	Bk 16, p. 224	
1916	05-01	200 White Pine Trees @ 2.5 (\$50) <i>Pinus strobus</i>	George Foreman	Bk 16, p. 224	
1916	05-02	50 Veitch's Fir 3 ft high @ 2.50 each (\$125.00) <i>Abies vetchii</i>	Hicks Nurseries	Bk 16, p. 222	Coniferous evergreen tree growing at a fast rate to 25-30 m tall This entry is crossed out Duplicate written

Year	Date	Order	Vendor	Reference Book,Page	Notes
1916	05-09	25 Anthurium Mandaramum (\$3.75) Flamingo Flower; Pigtail Plant	U A Manda	Bk 16, p. 223	
1916	05-09	3 Polypodium @ \$3 (\$9) Fern	U A Manda	Bk 16, p. 223	
1916	05-10	12 Forget-Me-Not Plants (\$1.50) <i>Myosotis</i>	Sinda (???)	Bk 8, p. 9	
1916	05-12	500 White Pines FF?TT? 1 ½ -2 ft (\$50) <i>Pinus strobus</i>	American Forestry Company	Bk 16, p. 222	
1916	05-19	50 Veitch's Fir (\$125) <i>Abies veitchii</i>	Issac Hicks	Bk 16, p. 223	(<i>Chamaecyparis pisifera</i> 'suarrosa veitchii')?Bk 16, p. 66
1916	06-01	36 Rhododendrons @ 2.50 (\$90)	Robt B Cridland	Bk 16, p. 224	
1916	06-01	2 trips to New York with Flowers	H J Allen	Bk 16, p. 228	Possibly to provide flowers for Vanderbilt Home in City or for Flower Show or special event
1916	06-01	900 Roses @ .40 (\$360)	Robt B Cridland	Bk 16, p. 228	Unknown variety
1916	06-01	Garden House (\$2932.60) Pier Caps (\$354.20) Paving (\$93.50) Stock (\$1250) 900 Roses @ .40 (\$360)	Robt B Cridland	Bk 16, p. 228	
1916	06-08	12 Cattleya Labiata Semi Est (\$36)	Knight & Struck Company	Bk 16, p. 226	These were previously ordered in 1911 from same company see Bk 16, p. 23
1916	06-13	800 Marie Louise Violet Plants (\$12)	S Rockefeller	Bk 16, p. 226	Same order as Same as order in June 1912, 1913, 1914 & 1915 Bk 16, p. 193
1916	06-21	24 Begonia Glorie de Cincinnati (\$7)	Knight & Struck Co	Bk 16, p. 228	similar to an order placed with the same company 1915-2-16 bk 16, p. 176 & 1916-1-7 Bk 16, p. 212
1916	06-21	24 Begonia Mrs J A Peterson (\$10)	Knight & Struck Co	Bk 16, p. 228	similar to an order placed with the same company 1915-2-16 bk 16, p. 176 & 1916-1-7 Bk 16, p. 212
1916	07-14	12 Kenita Single 4" Pots @ \$1 <i>Howea belmoreana</i> Syn. <i>Kentia</i> <i>belmoreana</i>	Julius Roehrs	Bk 16, p. 229	Previous order was placed for these plants with Julius Roehrs in June 1912 Bk 16, p. 75 & July 1915 Bk 16, p. 193
1916	07-14	12 Phoenix Roebelenii 4" pots @ \$1 (Total \$24) Pygmy Date Palm	Julius Roehrs	Bk 16, p. 229	Previous order was placed for these plants with Julius Roehrs in June 1912 Bk 16, p. 75 & July 1915 Bk 16, p. 193
1916	07-21	1/8 oz Sweet Pea E Burke <i>Lathyrus odoratus</i>	A T Boddington	Bk 16, p. 229	
1916	07-21	1/8 oz Sweet Pea Orange Orchid <i>Lathyrus odoratus</i>	A T Boddington	Bk 16, p. 229	
1916	07-21	1/8 oz Sweet Pea Rose Queen <i>Lathyrus odoratus</i>	A T Boddington	Bk 16, p. 229	
1916	07-21	1/8 oz Sweet Pea Yarrowa <i>Lathyrus odoratus</i>	A T Boddington	Bk 16, p. 229	
1916	07-21	1/8 oz Sweet Peas Anita Wehrman <i>Lathyrus odoratus</i>	A T Boddington	Bk 16, p. 229	
1916	07-21	3 pkts Sweet Pea Salmomid <i>Lathyrus odoratus</i>	A T Boddington	Bk 16, p. 229	
1916	07-31	Painting and Bronzing Upper Rose House and two Palm Houses as per contract (\$325)	E S Foster	Bk 16, p. 230	
1916	J01- 07	2 doz Begonia Mrs J A Peterson (\$10)	Knight & Struck	Bk 16, p. 212	
1917	03-09	2 Black Walnut (\$3.00) <i>Juglans nigra</i>	J.T. Jones	Bk 1, p. 10	
1917	03-09	2 English Walnut (\$4.00) <i>Juglans regia</i>	J.T. Jones	Bk 1, p. 10	
1917	03-09	2 Pecan trees (\$4.00) <i>Carya illinoensis</i>	J.T. Jones	Bk 1, p. 10	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1917	03-26	400 Heliotrope 2 ¼" pots (\$20.00)	A.N. Pierson	Bk 1, p. 11	Heliotrope described in 1900 The Standard Cyclopedia of Horticulture as being extensively used as a bedding plant and by florists for cut flowers, they can be grown from seed and strike regularly from tender cuttings.
1917	03-30	10 Campbells Early grape vine (\$2.00) <i>Vitis vinifera</i> 'Campbells Early'	Ellwanger & Barry	Bk 1, p. 12	
1917	03-30	10 Dutchess (\$2.00) <i>Vitis vinifera</i> 'Dutchess'	Ellwanger & Barry	Bk 1, p. 12	
1917	03-30	10 Salem (\$2.00) <i>Vitis vinifera</i> 'Salem'	Ellwanger & Barry	Bk 1, p. 12	
1917	03-30	10 Wilder (\$1.50) <i>Vitis vinifera</i> 'Wilder'	Ellwanger & Barry	Bk 1, p. 12	
1917	03-30	20 'Niagara' (\$3.00) <i>Vitis vinifera</i> 'Niagara'	Ellwanger & Barry	Bk 1, p. 12	
1917	04-21	9 water lily plants (\$17.25) <i>Nymphaea</i>	William Tricker	Bk 1, p. 14	
1917	04-24	4 pk Cardinal Climber (\$0.50) <i>Ipomoea sloteri</i>	H A Dreer	Bk 1, p. 14	
1917	04-28	12 Rose Pink Ophelia Roses (\$6)	Pennock N Yuhaut Co.	Bk 1, p. 14	
1917	04-30	400 Heliotrope 2 ¼" pots (\$20.00)	A.N. Pierson	Bk 1, p. 15	
1917	05-04	Supplies	A T Boddington	Bk 1, p. 17	
1917	05-11	Expenses to New York	H J Allen	Bk 1, p. 16	HJ Allen is the head gardener in photograph. Unknown if these expenses relate to flower show or delivery of flowers.
1917	05-25	Nursery Stock	Robert Cridland	Bk 1, p. 17	
1917	05-26	100 Am. Beauties Rose (\$18.00)	A.N. Pierson	Bk 1, p. 17	American Beauty'syn. 'Madame Ferdinand Jamin'. The cup-shaped flowers, deep pink and scented. Ideal as cut flower
1917	05-31	200 Baron Hulot Gladiolus	Cedar Hill Nursery	Bk 1, p. 17	Indigo blue in color flowers late summer early autumn
1917	05-31	Plants	H A Dreer	Bk 1, p. 17	
1917	05-31	Plants	A N Pierson	Bk 1, p. 17	
1917	06-01	149 pines (\$37.25) <i>Pinus</i>	George Foreman	Bk 1, p. 18	
1917	06-01	25 cedars (\$6.25) <i>Thuja</i>	George Foreman	Bk 1, p. 18	
1917	06-10	100 Primula obconia grandiflora (\$5.00) primrose	Henry Schmidt	Bk 1, p. 21	Flowers pink or white. 1905 Journal refers to this plant and says that it is commonly grown in hot houses in pots during winter. The leaves of this plant are edged with tiny spines which are extremely poisonous and can result in a painful rash
1917	06-11	12 Rosa Vicountess Folkstone Rose	A.N. Pierson Inc.	Bk 1, p. 18	Vicountess Folkstone is a creamy pink HT
1917	06-11	44 Mme Jules Grolez Rose (\$22.00)	A.N. Pierson Inc.	Bk 1, p. 18	'Mme Jules Grolez' is a cherry red HT
1917	06-11	45 Lady Hillingdon Rose (\$20.25)	A.N. Pierson Inc.	Bk 1, p. 18	'Lady Hillingdon' is yellow
1917	06-11	6 La Tosca Rose	A.N. Pierson Inc.	Bk 1, p. 18	Rosa La Tosca is a silvery pale pink, mid fragrant, HT
1917	06-11	7 Mme Ravary Rose (\$3.50)	A.N. Pierson Inc.	Bk 1, p. 18	'Mme Ravary', is yellow
1917	07-20	24 Begonia 'Cincinatti' (\$6.00)	Knight & Struck	Bk 1, p. 20	
1917	07-20	24 Begonia 'Mrs. J.A. Peterson' (\$9.00)	Knight & Struck	Bk 1, p. 20	Described as being suitable for Christmas hanging baskets for indoor use. Flowers deep pink or red foliage a rich deep bronze. Bred by J.A. Peterson' pre 1916

Year	Date	Order	Vendor	Reference Book,Page	Notes
1917	07-20	800 Violet (\$12.00) <i>Viola spp.</i>	Stanton Rockefeller	Bk 1, p. 22	Stanton Rockefeller for best 100 violets Ploughkeepie NY Flower Show 1897. Not known if these were grown outdoors or in an unheaded glasshouse.
1917	07-21	Seeds: 1 pkt #3041, 1 pkt #3042, 1oz #4281, 1oz #4284	A T Boddington	Bk 1, p. 22	
1917	08-10	12 Judas Tree (\$15.00) 6 Blue ? (\$4.50) <i>Cercis siliquastrum</i>	Brown Brothers Co.	Bk 1, p. 24	
1917	08-13	¼ oz. Sweet peas Anita Markam (\$2.25) <i>Lathyrus odoratus 'Anita Markam'</i>	A.J. Boddington	Bk 1, p. 24	
1917	08-13	¼ oz. Sweet peas Mrs. J.M. Baker (\$1.50) <i>Lathyrus odoratus 'Mrs. J.M. Baker'</i>	A.J. Boddington	Bk 1, p. 24	
1917	08-13	¼ oz. Sweet peas Orchid Beauty (\$0.75) <i>Lathyrus odoratus Orchid Beauty'</i>	A.J. Boddington	Bk 1, p. 24	
1917	08-13	¼ oz. Sweet peas Salmonia (\$12.00) <i>Lathyrus odoratus 'Salmonia'</i>	A.J. Boddington	Bk 1, p. 24	
1917	08-13	½ oz. Sweet peas Rose Queen (\$2.00) <i>Lathyrus odoratus Rose Queen</i>	A.J. Boddington	Bk 1, p. 24	
1917	08-21	250 Colored Freesias (\$12.61)	Knight & Struck	Bk 1, p. 24	Possibly for cut flower production in pots or in one of the greenhouses. Regarded as winter flowering in the greenhouse but can be forced to flower Aug & September
1917	08-21	½ oz. Sweet peas Blue Flaked (\$1.50) <i>Lathyrus odoratus 'Blue Flaked'</i>	A.J. Boddington	Bk 1, p. 25	
1917	09-04	3 pkts. Calendula 'Prince of Orange' pot marigold	Greber and Don	Bk 1, p. 26	Bloom all winter in greenhouse, rich orange in color
1917	09-07	2 oz. Larkspur <i>Consolida ajacis</i>	A.J. Boddington	Bk 1, p. 26	Suggested would be ideal for a blue border, can also be white or pink
1917	11-24	50 Tulips (\$2.08)	Knight & Struck	Bk 1, p. 30	
1917	11-24	Plants	Knight & Struck	Bk 1, p. 30	
1917	11-31	50 Hoosier Beauty Graft Rose	A N Pierson	Bk 1, p. 12	This is a crimson rose with moderate spread, HT
1917	11-31	50 Hoosier Beauty OS Rose	A N Pierson	Bk 1, p. 12	This is a crimson rose with moderate spread, HT
1917	11-31	Flower Show	H Tupering C. Halpin J D Graff	Bk 16, p. 12	
1917	12-01	12 rhododendron (\$37.50)	Knight & Struck	Bk 1, p. 31	
1917	12-01	200 Gladiola hybrids (\$4.20)	John Shupers & co.	Bk 1, p. 31	
1918	02-26	Supplies	A T Boddington	Bk 1, p. 36	
1918	03-02	100 Cannas Mrs. Alfred Conard(\$12.00)	A.J. Boddington	Bk 1, p. 36	4 ft.; salmon-pink; large-size blooms; bright green foliage
1918	03-25	Plants	Knight & Struck	Bk 1, p. 36	
1918	03-31	650 Carnation plants (\$64.00) <i>Dianthus spp.</i>	Charles H. Totty	Bk 1, p. 37	
1918	04-01	4 Trips to New York with flowers	H J Allen	Bk 1, p. 39	
1918	04-04	1 case of Orchids	Joseph Manda	Bk 1, p. 54	Was unable to supply
1918	04-04	12 Cattleya Labiata	Joseph Manda	Bk 1, p. 54	Was unable to supply
1918	04-04	6 Gunnera scabra <i>Gunnera tinctoria</i>	Julius Roehrs	Bk 1, p. 64	
1918	04-30	50 ferns in 2 ¼" pots	H.A. Dreer	Bk 1, p. 39	
1918	04-30	50 ferns in 3" pots	H.A. Dreer	Bk 1, p. 39	
1918	05-16	18 Viscountess Folkstone Rose	H.A. Dreer	Bk 1, p. 40	Vicountess Folkstone is a creamy pink HT
1918	05-04	100 Berberis thunbergii (\$15.00) Japanese Barberry	Robert B. Cridland	Bk 1, p. 42	
1918	05-04	12 Retinispora spp. (\$72.00)	Robert B. Cridland	Bk 1, p. 42	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1918	05-04	2 Thuja vesuviana ? (\$12.00)	Robert B. Cridland	Bk 1, p. 42	
1918	05-04	40 Taxus brevifolia (\$60.00) Yew	Robert B. Cridland	Bk 1, p. 42	
1918	05-04	6 Juniperus chinensis 'Pfitzeriana' (\$36.00) Juniper	Robert B. Cridland	Bk 1, p. 42	
1918	05-16	13 Hoosier Beauty Rose	H.A. Dreer	Bk 1, p. 40	Hoosier Beauty is crimson
1918	05-16	13 Molly Sharman Crawford Rose	H.A. Dreer	Bk 1, p. 40	Molly Sharman Crawford is white
1918	05-16	15 General MacArthur Rose	H.A. Dreer	Bk 1, p. 40	General Mac Arthur is crimson
1918	05-16	25 Augusta Victoria Rose	H.A. Dreer	Bk 1, p. 40	Augusta Victoria, is a Primrose HT
1918	05-16	35 Lady Hillingdon Rose	H.A. Dreer	Bk 1, p. 40	Lady Hillingdon is apricot yellow
1918	05-16	6 Harry Kirk Rose	H.A. Dreer	Bk 1, p. 40	Harry Kirk is Primrose
1918	05-16	6 Jonkheer J.L. Mock Rose	H.A. Dreer	Bk 1, p. 40	Jonkheer J.L. Mock is deep rose, fragrant
1918	05-16	6 La Tosca Rose	H.A. Dreer	Bk 1, p. 40	Rosa La Tosca is a silvery pale pink HT
1918	05-16	6 Mme Ravary Rose	H.A. Dreer	Bk 1, p. 40	Mme Ravary is HT light yellow double
1918	05-16	Gruss an Tepliz Rose	H.A. Dreer	Bk 1, p. 40	Gruss an Tepliz is red
1918	05-17	1 doz. Honesuckle extra (\$ 4.00) <i>Lonicera spp</i>	Poughkeepsie Nursery Co.	Bk 1, p. 41	
1918	05-28	1 Hemlock (\$ 5.00) <i>Tsuga spp.</i>	George Foreman	Bk 1, p. 41	
1918	05-28	150 pines (\$37.50) <i>Pinus spp.</i>	George Foreman	Bk 1, p. 41	
1918	05-28	3 pines (\$15.00) <i>Pinus spp.</i>	George Foreman	Bk 1, p. 41	
1918	06-04	6 Retinispora obtusa 'nana' (\$43.20)	Robert B. Cridland	Bk 1, p. 42	
1918	07-17	100 America Gladioli (\$2.50)	A.J. Boddington Co.	Bk 1, p. 43	America is shell pink
1918	07-17	100 Mrs. Francis King Gladioli (\$3.50)	A.J. Boddington Co.	Bk 1, p. 43	Mrs Francis King is Red
1918	09-10	50 assorted ferns in 2 ½" pots (\$ 3.00)	Charles H. Totty Co.	Bk 1, p. 50	
1918	Sep 10	50 assorted ferns in 3" pots (\$ 4.00)	Charles H. Totty Co.	Bk 1, p. 50	
1919	01-03	1 set Anemome Japanese Windflower			
1919	01-03	100 Columbia Rose (\$ 30.00)	Charles H. Totty Co.	Bk 1, p. 57	Columbia is pink
1919	01-03	100 Hoosier Beauty Rose	Charles H. Totty Co.	Bk 1, p. 57	
1919	01-03	100 Mrs. Henry Winnette Rose	Charles H. Totty Co.	Bk 1, p. 57	Mrs. Henry Winnette is red
1919	01-03	100 Ophelia supreme Rose	Charles H. Totty Co.	Bk 1, p. 57	
1919	01-03	100 Pocahontas Carnation <i>Dianthus Pocahontas</i>	Charles H. Totty Co.	Bk 1, p. 57	Pocahontas is crimson
1919	01-03	100 Premier Rose Rose 2 ½" pots	Charles H. Totty Co.	Bk 1, p. 57	Premier rose is a deep rose colour
1919	01-03	100 Princess Dagmar <i>Dianthus Princess Dagmar</i>	Charles H. Totty Co.	Bk 1, p. 57	Princss Dagmar is crimson
1919	01-03	200 Laddie Carnation <i>Dianthus Laddie</i>	Charles H. Totty Co.	Bk 1, p. 57	Laddie is pink.
1919	01-03	300 Ophelia Rose (\$ 60.00)	Charles H. Totty Co.	Bk 1, p. 57	
1919	01-03	6 Fuji Chrysanthemum	Charles H. Totty Co.	Bk 1, p. 57	
1919	01-03	6 Sam Caswell Chrysanthemum Total: (\$ 1.25)	Charles H. Totty Co.	Bk 1, p. 57	
1919	01-03	6 Tachinlana Chrysanthemum	Charles H. Totty Co.	Bk 1, p. 57	
1919	01-13	100 Yellow Prince Carnations own root in 2 ½" pots (\$ 10.00) <i>Dianthus Yellow Prince</i>	Charles H. Totty Co.	Bk 1, p. 58	
1919	04-16	1 Juniper Pfizeriana (\$ 7.00) <i>Juniperus media 'Pfitzeriana</i>	R.B. Cridland	Bk 1, p. 64	
1919	05-31	140 Pines – 4 ft. (\$ 35.00) <i>Pinus spp.</i>	George Foreman	Bk 1, p. 68	
1919	05-31	16, pines – 10 ft. (\$ 8.00) <i>Pinus spp.</i>	George Foreman	Bk 1, p. 68	
1919	07-01	Repairs at Greenhouses	Hitchings & Co.	Bk 1 p. 72	

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1919	07-01	800 Marie Louise Violet Plants (\$ 16.00)	Stanton Rockefeller	Bk 1, p. 72	Fragrant double parma violet flowers in fall, winter and spring
1919	07-11	100 Primula obconica Grandiflora (\$ 6.63) primrose	Henry Schmidt	Bk 1, p. 73	Most likely for use as potted plant
1919	07-12	Begonia	A N Pierson	Bk 1, p. 73	
1919	07-12	Marguerites <i>Argyranthemum</i>	A N Pierson	Bk 1, p. 73	Variety of colours, Perennial but treated as annual
1919	07-16	100 Cyclamen Plants (\$ 45.00)	Conrad C. Gindra	Bk 1, p. 75	
1919	07-24	15 semi-established Cattleya Mossiae orchids (\$ 75.00)	G.E. Baldwin & co.	Bk 1, p. 73	
1919	07-24	15 semi-established Cattleya Trianae orchids (\$ 75.00)	G.E. Baldwin & co.	Bk 1, p. 73	Central petal is yellow, blue and red
1919	07-25	100 Iris Tingitana	John Schespers Inc	Bk 1, p. 73	Syn. Iris fontanesii Flowers spring the a deep blue to pale blue
1919	07-25	Begonia	LJ Reuter Co.	Bk 1, p. 74	
1919	07-25	Marguerites <i>Argyranthemum</i>	LJ Reuter Co.	Bk 1, p. 74	
1919	08-22	50 Doris Carnations (\$ 7.50) <i>Dianthus Doris</i>	Charles H. Totty Co.	Bk 1, p. 76	
1920	01-15	2 lbs Sweet Pea Hunt's Superb ? <i>Lathyrus odoratus</i>	William M Hunt & Co.	Bk 1, page120	
1920	01-22	100 Carnation Pocahontas (\$ 12.00) <i>Dianthus</i>	Charles H. Totty Co.	Bk 1, p. 91	
1920	01-22	100 Carnation Ruth Baur (\$ 25.00) <i>Dianthus</i>	Charles H. Totty Co.	Bk 1, p. 91	
1920	01-22	12 Heliotrope Elizabeth Dennison (\$2.50)	Charles H. Totty Co.	Bk 1, p. 91	Heliotrope Elizabeth Dennison is blue and strongly scented
1920	01-22	12 Rose Frank W. Dunlop (\$ 7.50)	Charles H. Totty Co.	Bk 1, p. 91	Rose Frank W. Dunlop is a HT
1920	01-22	12 Rose Madam Butterfly (\$ 7.50)	Charles H. Totty Co.	Bk 1, p. 91	Madam Butterfly is pink shaded with apricot & gold
1920	01-22	12 Rose Madam Colette Martinette (\$3.00)	Charles H. Totty Co.	Bk 1, p. 91	Madam Colette Martinette is yellow
1920	01-22	200 Carnation Laddie (\$ 50.00) <i>Dianthus</i>	Charles H. Totty Co.	Bk 1, p. 91	
1920	01-22	½ oz Vinca Alba Periwinkle	A T Boddington	Bk 16, p. 91	An 1907 article in the garden describes Vinca alba as being used in a bedding scheme.
1920	01-22	½ oz Vinca Rosea Periwinkle	A T Boddington	Bk 16, p. 91	
1920	04-30	Lilacs Jean Mace (\$ 12.00) <i>Syringa vulgaris Jean Mace</i>	Cedar Hill Nursery	Bk 1, p. 97	
1920	04-30	Lilacs Macrostachys (\$ 6.00) <i>Syringa vulgaris macrostachya</i>	Cedar Hill Nursery	Bk 1, p. 97	Profusion of soft pink
1920	04-30	Lilacs Madame Buchner? (\$ 8.00) <i>Syringa vulgaris Madame Buchner?</i>	Cedar Hill Nursery	Bk 1, p. 97	Heavy bloomer with fragrant double lilac colored flowers
1920	04-30	Lilacs Midway (\$ 8.00) <i>Syringa</i>	Cedar Hill Nursery	Bk 1, p. 97	
1920	04-30	Lilacs Miss Ellen Willmott (\$ 10.00) <i>Syringa vulgaris 'Miss Ellen Willmott'</i>	Cedar Hill Nursery	Bk 1, p. 97	Pure white lilac double flowered
1920	04-30	Lilacs Mont Blanc (\$ 20.00) <i>Syringa vulgaris 'Mont Blanc'</i>	Cedar Hill Nursery	Bk 1, p. 97	White flowers late spring early summer
1920	05-24	½ lb Nasturtium Dwarf Gold Glow/Gleam (\$ 0.30) <i>Tropaeolum majus</i>	A.T. Boddington Co.	Bk 1, p. 99	
1920	05-29	1 Dutchman Pipe (\$ 1.50) <i>Aristolochia macrophylla</i>	Poughkeepsie Nursery Co.	Bk 1, p. 100	Deciduous woody vine, quick growing, large heart shaped leaves
1920	05-29	6 Clematis paniculata (\$ 6.00) Sweet autumn clematis	Poughkeepsie Nursery Co.	Bk 1, p. 100	August flowering white fragrant flowers
1920	06-16	800 violet plants (\$ 16.00)	Stanton Rockefeller	Bk 1, p. 102	Possibly parma violets as previous orders

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1920	06-30	50 Dracaena indivisa (\$8.00) <i>Cordylone indivisa</i>	Roman J. Irwin	Bk 1, p. 103	It was not uncommon at this time to use these plants as centre pieces in carpet bedding schemes
1920	06-30	Assorted ferns (\$ 10.50)	Joseph Manda Co.	Bk 1, p. 103	
1920	06-30	Collection of Dahilias (\$25.00)	N. Harold Cottan & son	Bk 1, p. 103	
1920	06-30	14 Cypress (\$ 23.58) <i>Cupressus spp.</i>	C.N. Arnold	Bk 1, p. 104	
1920	07-15	72 Primula obconica (\$ 4.75)	Henry Schmidt	Bk 1, p. 104	
1920	08-12	1oz Sweet Pea Mrs. Chas. ? <i>Lathyrus odoratus</i>	William Hunt & Co.	Bk 1, p. 107	
1920	08-12	3 pkt. Sweet Peas Ridgefield Beauty (\$2.00) <i>Lathyrus odoratus</i>	William Hunt & Co.	Bk 1, p. 107	
1920	08-30	Order Flower seeds (green houses)	W M Hunt & Co	Bk 1, p. 76	
1920	09-03	100 seeds Dracaena indivisa (\$0.50) <i>Cordylone indivisa</i>	A.J. Boddington	Bk 1, p. 109	<i>Cordylone indivisa</i> , <i>Terminalis indivisa</i> probably used in bedding scheme
1920	09-30	Tulips Clara Butt (\$2.75)	A.J. Boddington	Bk 1, p. 110	Clara Butt is pink/rose
1920	09-30	Tulips Darwin Margaret (\$2.75)	A.J. Boddington	Bk 1, p. 110	Margaret is deep blush
1920	09-30	Tulips Darwin Pride of Haarlem (\$2.75)	A.J. Boddington	Bk 1, p. 110	Pride of Haarlem is cerise
1920	09-30	Tulips Darwin Rev Ewbank (\$2.75)	A.J. Boddington	Bk 1, p. 110	Rev. Ewbank is mauve
1920	09-30	Tulips Darwin two varieties (\$4.50)	A.J. Boddington	Bk 1, p. 110	
1920	12-28	100 Carnations Maine Sunshine (\$ 25.50) <i>Dianthus</i>	Joseph Mauda co.	Bk 1, p. 116	Yellow carnation
1921	01-18	4 pkts. Begonia Erfardii (\$ 1.00)	A.J. Boddington co.	Bk 1, p. 120	
1921	01-31	Begonia seeds (\$18.35)	John Schupers Inc.	Bk 1, p. 120	
1921	02-08	10 Grapes Worden <i>Vitis vinifera 'Worden'</i>	Harrison's Nurseries	Bk 1, p. 121	
1921	02-08	6 Palms Belmoreana (\$ 14.40) <i>Kentia Belmoreana</i>	Joseph Mauda co.	Bk 1, p. 121	
1921	02-08	6 Palms Forseriana (\$ 8.00) <i>Kentia Forsteriana</i>	Joseph Mauda co.	Bk 1, p. 121	
1921	02-15	1 pkt. Antirrhinum Giant Buff	H.P. Winta	Bk 1, p. 122	
1921	02-15	1 pkt. Antirrhinum Cloth of Gold Snapdragon	H.P. Winta	Bk 1, p. 122	
1921	02-15	1 pkt. Antirrhinum Golden chamois Snapdragon	H.P. Winta	Bk 1, p. 122	
1921	02-15	1 pkt. Antirrhinum Orange King. Snapdragon	H.P. Winta	Bk 1, p. 122	
1921	02-15	1 pkt. Aster Surf caerulea <i>Callistephus chinensis Surf caerulea</i>	H.P. Winta	Bk 1, p. 122	
1921	02-15	1 pkt. Clerodendron Fallas Bleeding heart	H.P. Winta	Bk 1, p. 122	
1921	02-15	1 pkt. Giant mixed cyclamens	H.P. Winta	Bk 1, p. 122	
1921	02-15	1 pkt. Glavosa superba	H.P. Winta	Bk 1, p. 122	
1921	02-15	1 pkt. Pot myosotis Forget me not	H.P. Winta	Bk 1, p. 122	
1921	02-15	1 pkt. Primulus stellata Mixed Primrose	H.P. Winta	Bk 1, p. 122	
1921	02-15	1 pkt. Schizanthus Relictsus Poor Man's Orchid	H.P. Winta	Bk 1, p. 122	
1921	02-15	1 pkt. Schizanthus Wisetonensis Poor Man's Orchid	H.P. Winta	Bk 1, p. 122	
1921	02-15	1 pkt. Tall Mixed Star ?	H.P. Winta	Bk 1, p. 122	
1921	02-25	200 Lantanas 2 ¼" pots, white and red (\$16.00)	Roman J. Trivia	Bk 1, p. 123	
1921	02-28	100 Columbia Supreme Roses (\$45.00)	Charles H. Totty Co.	Bk 1, p. 123	
1921	02-28	100 Golden Ophelia Rose (\$ 45.00)	Charles H. Totty Co.	Bk 1, p. 123	
1921	03-12	Chrysanthemum 6 Delight	Charles H. Totty	Bk 1, p. 124	
1921	03-12	Chrysanthemums 12 William H. Waif	Charles H. Totty	Bk 1, p. 124	
1921	03-12	Chrysanthemums 12 President John Everett	Charles H. Totty	Bk 1, p. 124	
1921	03-12	Chrysanthemums 6 Mrs. J Leslie Davis	Charles H. Totty	Bk 1, p. 124	
1921	03-12	Chrysanthemums:12 Niagara	Charles H. Totty	Bk 1, p. 124	

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1921	03-12	Mignon Dahlias: 3 Agnes	Charles H. Totty	Bk 1, p. 124	These are bedding dahlias at around 18 inches high and are in Totty advert in the garden Agnes is purple
1921	03-12	Mignon Dahlias: 3 Albion	Charles H. Totty	Bk 1, p. 124	Albion is white
1921	03-12	Mignon Dahlias: 3 Countess of Pembroke	Charles H. Totty Co.	Bk 1, p. 124	Countess of Pembroke, pale lilac
1921	03-12	Mignon Dahlias: 3 Daffodil	Charles H. Totty	Bk 1, p. 124	Daffodil is yellow
1921	03-12	Mignon Dahlias: 3 Daphne	Charles H. Totty	Bk 1, p. 124	Daphne is deep maroon
1921	03-12	Mignon Dahlias: 3 Dazzler	Charles H. Totty	Bk 1, p. 124	Dazzler is orange/scarlet
1921	03-12	Mignon Dahlias: 3 Etna	Charles H. Totty	Bk 1, p. 124	Etna is crimson
1921	03-12	Mignon Dahlias: 3 Jubilee	Charles H. Totty	Bk 1, p. 124	Jubilee is Pink
1921	03-12	Mignon Dahlias: 3 Nivena	Charles H. Totty	Bk 1, p. 124	Nivena is white
1921	03-12	Mignon Dahlias: 3 Olive	Charles H. Totty	Bk 1, p. 124	Olive is orange
1921	04-06	½ oz. Buddleja Eva Dudley (\$6.00) Butterfly Bush	R & J Farquhar & Co.	Bk 1, p. 127	light lilac pink flowers
1921	04-06	1 pkt. Coleus	R & J Farquhar & Co.	Bk 1, p. 127	
1921	04-09	25 3-4 ft. Hemlocks (\$70.00) <i>Tsuga Canadensis</i>	United Forestry Co.	Bk 1, p. 127	
1921	04-09	50 1 ½-2 ½ ft. Austrian pines (\$25.00) <i>Pinus nigra</i>	United Forestry Co.	Bk 1, p. 127	
1921	04-09	50 2 ½-4 ft. Austrian pines (\$37.50) <i>Pinus nigra</i>	United Forestry Co.	Bk 1, p. 127	
1921	04-09	50 2-3 ft. White Pines (\$15.00) <i>Pinus strobus</i>	United Forestry Co.	Bk 1, p. 127	
1921	04-09	50 3-4 ft. Douglas Spruce or Fir (\$30.00) Primrose	United Forestry Co.	Bk 1, p. 127	
1921	04-09	50 3-4 ft. Lodge Pole Pines (\$25.00) <i>Pinus contorta</i>	United Forestry Co.	Bk 1, p. 127	
1921	04-09	50 3-4 ft. Red or Norway Pines (\$35.00) <i>Pinus resinosa</i>	United Forestry Co.	Bk 1, p. 127	
1921	04-09	50 3-4 ft. Scotch Pines (\$25.00) <i>Pinus sylvestris</i>	United Forestry Co.	Bk 1, p. 127	
1921	04-09	50 3-4ft. White Pines (\$25.00) <i>Pinus strobus</i>	United Forestry Co.	Bk 1, p. 127	
1921	04-30	¼ oz. Salvia, Zurich (\$ 2.50) <i>Salvia splendens 'Pride of Zurich'</i>	William M. Hunt	Bk 1, p. 129	Zurich is a dwarf salvia described as ideal for bedding
1921	04-30	½ oz. Verbena Pink, (\$ 1.80)	William M. Hunt	Bk 1, p. 129	
1921	04-30	½ oz. Zinnia Tall double mixture (\$ 0.75)	William M. Hunt	Bk 1, p. 129	
1921	04-30	1 oz. Alyssum, Carpet of snow (\$ 1.50) <i>Lobularia</i>	William M. Hunt	Bk 1, p. 129	
1921	04-30	1 oz. Gypsophila elegans (\$ 1.00) Babys breath	William M. Hunt	Bk 1, p. 129	
1921	04-30	100 Montbretia mixed (\$ 5.00) <i>Crocsmia masoniorum</i>	William M. Hunt	Bk 1, p. 129	
1921	04-30	2 pkts. Petunia Violet Queen (\$ 2.00)	William M. Hunt	Bk 1, p. 129	
1921	05-18	1 oz. Alyssum, Carpet of snow \$0.80)	A.J. Boddington co.	Bk 1, p. 131	
1921	05-18	1 pkt. Hibiscus caerulea (\$0.25)	A.J. Boddington co.	Bk 1, p. 131	
1921	05-18	2 Aster Rose King (\$0.20) <i>Callistephus chinensis Rose King</i>	A.J. Boddington co.	Bk 1, p. 131	
1921	05-18	2 Astermum Giant Crego Lavender (\$0.25) <i>Callistephus chinensis Giant Crego Lavender</i>	A.J. Boddington co.	Bk 1, p. 131	

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1921	05-18	2 Asternum White (\$0.50) <i>Callistephus chinensis White</i>	A.J. Boddington co.	Bk 1, p. 131	
1921	05-18	2 Asternum Rose Pink (\$0.50) <i>Callistephus chinensis RosePink</i>	A.J. Boddington co.	Bk 1, p. 131	
1921	05-18	2 oz. Cornflower blue (\$0.80) <i>Centaurea</i>	A.J. Boddington co.	Bk 1, p. 131	
1921	05-18	2 pkt. Aster Carlson Lavender (\$0.20) <i>Callistephus chinensis Carlson Lavender</i>	A.J. Boddington co.	Bk 1, p. 131	
1921	07-15	2 large pkts Lavender Asters (\$1.00) <i>Callistephus chinensis Lavender</i>	William M. Hunt & Co.	Bk 1, p. 135	
1921	07-15	2 large pkts Rose King Asters (\$1.00) <i>Callistephus chinensis Rose King</i>	William M. Hunt & Co.	Bk 1, p. 135	
1921	07-15	2 large pkts Violet Asters (\$1.00)	William M. Hunt & Co.	Bk 1, p. 135	
1921	07-16	¼ oz. Enchantress Sweet Peas (\$.025) <i>Lathyrus odoratus</i>	Burpee & co.	Bk 1, p. 137	
1921	07-16	¼ oz. Flamingo Sweet Peas (\$0.50) <i>Lathyrus odoratus</i>	Burpee & co.	Bk 1, p. 137	
1921	07-16	¼ oz. Illumination Sweet Peas (\$0.48) <i>Lathyrus odoratus</i>	Burpee & co.	Bk 1, p. 137	
1921	07-16	¼ oz. Lavender King Sweet Peas (\$0.28) <i>Lathyrus odoratus</i>	Burpee & co.	Bk 1, p. 137	
1921	07-16	¼ oz. Mrs. Heir Sweet Peas (\$2.50) <i>Lathyrus odoratus</i>	Burpee & co.	Bk 1, p. 137	
1921	07-16	¼ oz. Mrs. Warren G. Harding Sweet Peas (\$3.00) <i>Lathyrus odoratus</i>	Burpee & co.	Bk 1, p. 137	
1921	07-16	¼ oz. Rose Queen Sweet Peas (\$0.25) <i>Lathyrus odoratus</i>	Burpee & co.	Bk 1, p. 137	
1921	07-30	700 Tulips Darwin	A T Boddington	Bk 1, p. 137	
1921	07-30	25 Primula malacoides Rohiere (\$1.75) Fairy primrose	C.W. Leggit	Bk 1, p. 138	
1921	07-30	25 Primula malacoides conspicua (\$2.25) Fairy primrose	C.W. Leggit	Bk 1, p. 138	
1921	08-26	Dahilas (\$25.00)	N. Harold Cottain & Son	Bk 1, p. 140	
1921	08-30	700 Violet plants (\$24.50)	Frank Jacoby	Bk 1, p. 141	
1921	09-13	1 pkt. Cyclamen Crimson King (\$0.75)	William M. Hunt & Co.	Bk 1, p. 142	
1921	09-13	1 pkt. Cyclamen Lilac Queen (\$0.75)	William M. Hunt & Co.	Bk 1, p. 142	
1921	09-13	1 pkt. Cyclamen Purpurea (\$0.75)	William M. Hunt & Co.	Bk 1, p. 142	
1921	09-13	1 pkt. Cyclamen Rosy Morn. (\$0.75)	William M. Hunt & Co.	Bk 1, p. 142	
1921	09-13	1 pkt. Cyclamen White & Claret (\$0.75))	William M. Hunt & Co.	Bk 1, p. 142	
1921	09-13	1 pkt. Cyclamen White Giant (\$0.75)	William M. Hunt & Co.	Bk 1, p. 142	
1921	09-13	2 pkt. Cyclamen hybrids (\$1.50)	William M. Hunt & Co.	Bk 1, p. 142	
1921	09-13	2 pkt. Cyclamen Mrs. Buckston (\$2.00)	William M. Hunt & Co.	Bk 1, p. 142	
1921	09-13	2 pkt. Cyclamen Salmon King (\$2.00)	William M. Hunt & Co.	Bk 1, p. 142	
1921	09-23	Tulip bulbs:100 Baron de la Tonnaye (\$4.50)	Chas. Schwake & Co. Inc.	Bk 1, p. 143	Darwin Hybrids
1921	09-23	Tulip bulbs:100 Clara Butt (\$4.5 0)	Chas. Schwake & Co. Inc.	Bk 1, p. 143	Darwin Hybrids
1921	09-23	Tulip bulbs:100 Madam Krelage (\$6.00)	Chas. Schwake & Co. Inc.	Bk 1, p. 143	Darwin Hybrids Madam Krelage is purpleish rose, blush pink
1921	09-23	Tulip bulbs:100 Mr Farncombe Sanders (\$6.00)	Chas. Schwake & Co. Inc.	Bk 1, p. 143	Mr Farncombe Sanders is scarlet
1921	09-23	Tulip bulbs:100 Mrs. Potty Palmer (\$7.00)	Chas. Schwake & Co. Inc.	Bk 1, p. 143	Darwin Hybrids Mrs Potter Palmer is glowing purple
1921	09-23	Tulip bulbs:100 Pride of Haarlem (\$6.00)	Chas. Schwake & Co. Inc.	Bk 1, p. 143	Darwin Hybrids
1921	09-23	Tulip bulbs:100 Rev. Ewbank (\$6.00)	Chas. Schwake & Co. Inc.	Bk 1, p. 143	Darwin Hybrids
1922	01-20	¼ oz. Aster Lavender King (\$1.20) <i>Callistephus chinensis Lavender King</i>	Burnett Bros.	Bk 1, p. 151	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1922	01-20	¼ oz. Aster Peach Blossom (\$1.20) <i>Callistephus chinensis Peach Blossom</i>	Burnett Bros.	Bk 1, p. 151	
1922	01-20	¼ oz. Aster Rose (\$1.20) <i>Callistephus chinensis Rose</i>	Burnett Bros.	Bk 1, p. 151	
1922	01-20	¼ oz. Verbena Helen Willmott (\$2.00)	Burnett Bros.	Bk 1, p. 151	
1922	01-20	2 pkts. Blue Lace Flower (\$1.00) <i>Trachymene caeruleum</i>	Burnett Bros.	Bk 1, p. 151	
1922	01-31	25 Salmon Pink Bonfire Salvia	Roman J. Irwin	Bk 1, p. 152	
1922	02-08	150 Lantana	The Stars and Harrison Co.	Bk 1, p. 153	
1922	02-27	100 Maine Sunshine Carnations (\$27.00) <i>Dianthus</i>	Charles H. Totty Co.	Bk 1, p. 154	
1922	02-28	¼ oz. Salpiglossis (\$0.75) Painted tongue	William M. Hunt	Bk 1, p. 155	
1922	02-28	1 oz. Mignotte Machet (\$2.00) <i>Mignonette Reseda odorata 'Machet'</i>	William M. Hunt	Bk 1, p. 155	
1922	02-28	1 oz. Zinnia Tall Double mixed (\$1.50)	William M. Hunt	Bk 1, p. 155	
1922	02-28	1/8 oz. Aster Carlson's Lavender (\$0.75) <i>Callistephus chinensis Carlson's Lavender</i>	William M. Hunt	Bk 1, p. 155	
1922	02-28	1/8 oz. Aster Rose (\$0.75)	William M. Hunt	Bk 1, p. 155	
1922	02-28	1/8 oz. Aster Vick's White (\$0.75)	William M. Hunt	Bk 1, p. 155	
1922	02-28	2 oz. Alyssum Carpet of Snow (\$3.00) <i>Lobularia maritima 'Carpet of snow'</i>	William M. Hunt	Bk 1, p. 155	
1922	03-16	250 Carnations Belle Washburn (\$30.30) <i>Dianthus</i>	Stark Bros. Nurseries	Bk 1, p. 156	Red carnation
1922	03-22	150 Gladiolus Maiden's Blush	Chas. Schwake & Co. Inc.	Bk 1, p. 157	
1922	03-22	150 Gladiolus Orange Brilliant	Chas. Schwake & Co. Inc.	Bk 1, p. 157	
1922	04-14	100 assorted ferns 2 ¼" pots (\$ 12.00)	Joseph Mauda	Bk 1, p. 158	
1922	04-14	2 Dracaena 5" pots (\$ 12.50)	Joseph Mauda	Bk 1, p. 158	
1922	04-14	2 Dracaena 5" pots (\$ 8.00)	Joseph Mauda	Bk 1, p. 158	
1922	04-14	25 Asparagus Elongatus 3" pots Asparagus fern	Joseph Mauda	Bk 1, p. 158	Introduced from Africa by Mauda. Spreading plant stems can be cut and the plant branches out and produces again, Sprays are laden with miniature jewel like flowers. Mixed with roses or carnations creates a wonderful effect
1922	04-14	50 Asparagus Sprengeri 3" pots Asparagus fern	Joseph Mauda	Bk 1, p. 158	
1922	04-14	6 Kentia Belmoreana 4" pots (\$ 8.25)	Joseph Mauda	Bk 1, p. 158	
1922	04-14	6 Kentia Forsteriana 4" pots (\$ 7.50)	Joseph Mauda	Bk 1, p. 158	
1922	04-22	6 Nephrolepis Elegantissima (\$ 5.00) Boston fern	A.N. Pierson Co.	Bk 1, p. 159	Boston fern possibly for use in the mansion
1922	04-30	100 Caveolar Fir (\$ 40.00) <i>Abies</i>	United Forestry Co.	Bk 1, p. 159	
1922	04-30	100 Douglas Spruce (\$ 25.00) <i>Pseudotsuga menziesii</i>	United Forestry Co.	Bk 1, p. 159	
1922	04-30	100 Red Pine (\$ 60.00) <i>Pinus resinosa</i>	United Forestry Co.	Bk 1, p. 159	
1922	04-30	50 Colorado Spruce (\$ 40.00) <i>Picea pungens</i>	United Forestry Co.	Bk 1, p. 159	
1922	05-08	Sweet Pea Seeds: ½ oz. Bluebird (\$ 0.45) <i>Lathyrus odoratus</i>	Chas. Schwake & Co. Inc.	Bk 1, p. 162	
1922	05-08	Sweet Pea Seeds: ½ oz. Glitters (\$ 1.30) <i>Lathyrus odoratus</i>	Chas. Schwake & Co. Inc.	Bk 1, p. 162	
1922	05-08	Sweet Pea Seeds: ½ oz. Illumination (\$ 0.65) <i>Lathyrus odoratus</i>	Chas. Schwake & Co. Inc.	Bk 1, p. 162	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1922	05-08	Sweet Pea Seeds: ½ oz. Rose Queen (\$ 0.80) <i>Lathyrus odoratus</i>	Chas. Schwake & Co. Inc.	Bk 1, p. 162	
1922	05-08	Sweet Pea Seeds: 6 pkts. Mrs. Kean (\$ 1.00) <i>Lathyrus odoratus</i>	Chas. Schwake & Co. Inc.	Bk 1, p. 162	
1922	05-08	Sweet Pea Seeds: 6 pkts. Mrs. Warren G. Harding (\$ 1.00) <i>Lathyrus odoratus</i>	Chas. Schwake & Co. Inc.	Bk 1, p. 162	
1922	05-17	Clematis Jackmanii (Can't Supply?)	A.N. Pierson Inc.	Bk 1, p. 162	
1922	05-31	1 pkt. Cyclamen S's Giant Mixed (\$ 2.75)	Chas. Schwake & Co. Inc.	Bk 1, p. 164	
1922	05-31	1 pkt. Schizanthus large flowered hybrids (\$ 0.61) Poor man's orchid	Chas. Schwake & Co. Inc.	Bk 1, p. 164	
1922	05-31	1 pkt. Schizanthus Wisetomensis (\$ 2.65) Poor man's orchid	Chas. Schwake & Co. Inc.	Bk 1, p. 164	
1922	05-31	1 pkt. Cineraria Feltham Beauty (\$1.22)	Chas. Schwake & Co. Inc.	Bk 1, p. 164	Ideal as cut flower or pot plant for conservatory
1922	05-31	1 pkt. Myosotis Sutton's Perfection (\$0.61) Forget-me-knot	Chas. Schwake & Co. Inc.	Bk 1, p. 164	
1922	06-03	½ oz. Centureas cayanus seed	Roman J. Irwin	Bk 1, p. 165	
1922	06-03	50 Dracaena indivisa <i>Cordyline indivisa</i>	Roman J. Irwin	Bk 1, p. 165	
1922	06-31	90 Rose Frau Karl Druschki (\$ 54.00)	Henry A. Dreer	Bk 1, p. 166	White
1922	06-31	150 Rose Madame Butterfly (\$ 37.00)	Charles H. Totty Co.	Bk 1, p. 167	
1922	06-31	35 Dahlia bulbs (\$ 10.90)	N. Harold Cottain & son	Bk 1, p. 167	
1922	06-31	50 Rose Columbia (\$ 12.50)	Charles H. Totty Co.	Bk 1, p. 167	
1922	06-31	6 Sov. _____ Rose (\$ 13.50)	Charles H. Totty Co.	Bk 1, p. 167	
1922	06-31	75 Rose Crusader (\$ 45.00)	Charles H. Totty Co.	Bk 1, p. 167	Crusader is red
1922	07-31	100 Gladiolus Mrs. Watt (\$ 3.50)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	Exhibition variety
1922	07-31	25 Gladiolus C _____ (\$ 0.88)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	
1922	07-31	25 Gladiolus Evelyn Kirkland (\$4.00)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	Pink
1922	07-31	25 Gladiolus Flora (\$ 1.00)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	
1922	07-31	25 Gladiolus Gretchen Zang (\$ 4.00)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	White
1922	07-31	25 Gladiolus Le Marshall Fuch (\$ 1.00)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	lavender pink
1922	07-31	25 Gladiolus Maiden's Blush bulblets (\$ 5.00)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	
1922	07-31	25 Gladiolus N _____ (\$ 4.50)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	
1922	07-31	25 Gladiolus Orange Brilliant (\$ 4.48)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	
1922	07-31	25 Gladiolus Will _____ (\$ 2.50)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	
1922	07-31	50 Gladiolus Herada (\$ 4.50)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	deep mauve
1922	07-31	50 Gladiolus Immaculata (\$ 4.00)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	pure white
1922	07-31	50 Gladiolus Mary Fennell (\$ 2.00)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	deep lilac
1922	07-31	50 Gladiolus Peace (\$ 2.00)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	white
1922	07-31	50 Gladiolus Primula Alice Tiplady (\$ 3.75)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	orange
1922	07-31	50 Gladiolus Prince of Wales (\$ 2.00) (\$ 1.00)	Chas. Schwake & Co. Inc.	Bk 1, p. 168	salmon rose
1922	08-02	50 Primula malacoides (\$ 6.00) Greenhouse Primrose	Roman J. Irwin	Bk 1, p. 171	
1922	09-30	1 ____ pansy (\$ 1.20)	William M. Hunt	Bk 1, p. 175	
1922	09-30	2 pkts. Schizanthus (\$1.50) Poor man's orchid	William M. Hunt	Bk 1, p. 175	
1922	10-10	12 Acanthus mollis latifolius (\$ 20.00) Bear's Breeches	Henry A. Dreer	Bk 1, p. 176	Broad summer-active dark green figured foliage , spikes of white and purple flowers Jun-Aug, 60cm
1922	10-31	50 Primula malacoides rohersii (\$ 3.25) Primrose		Bk 1, p. 178	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1922	11-27	13 spruce <i>Picea</i>	C.N. Arnold	Bk 1, p. 179	
1922	11-27	28 spruce <i>Picea</i>	C.N. Arnold	Bk 1, p. 179	
1922	11-27	8 fir <i>Abies</i>	C.N. Arnold	Bk 1, p. 179	
1922	11-27	9 spruce <i>Picea</i>	C.N. Arnold	Bk 1, p. 179	
1923	01-23	100 America roses 2 ½" pots (\$ 45.50)	Charles H. Totty Co.	Bk 1, p. 184	
1923	01-31	Amaryllis seeds	Richard Diener Co.	Bk 1, p. 185	
1923	01-31	Dahlia	Richard Diener Co.	Bk 1, p. 185	
1923	01-31	Flower seeds: Petunia	Richard Diener Co.	Bk 1, p. 185	
1923	01-31	Freesia	Richard Diener Co.	Bk 1, p. 185	
1923	03-04	500 Douglas Fir T 18-24 <i>Pseudotsuga menziesii</i>	American Forestry Co.	Bk 1, p. 187	
1923	03-04	500 Red Pine 3'- 4' <i>Pinus resinosa</i>	American Forestry Co.	Bk 1, p. 187	
1923	03-31	¼ oz. Aster Lavender (\$ 0.75) <i>Callistephus chinensis Lavender</i>	William M. Hunt Co.	Bk 1, p. 189	
1923	03-31	¼ oz. Aster Vick's Rose (\$ 0.75) <i>Callistephus chinensis Vick's Rose</i>	William M. Hunt Co.	Bk 1, p. 189	
1923	03-31	¼ oz. Aster White (\$ 0.75) <i>Callistephus chinensis Aster White</i>	William M. Hunt Co.	Bk 1, p. 189	
1923	03-31	¼ oz. Astermum lavender (\$ 1.00)	William M. Hunt Co.	Bk 1, p. 189	
1923	03-31	¼ oz. Astermum Pink (\$ 1.00)	William M. Hunt Co.	Bk 1, p. 189	
1923	03-31	¼ oz. Astermum White (\$ 1.00)	William M. Hunt Co.	Bk 1, p. 189	
1923	03-31	½ oz. Zinnia dk. Pink (\$ 1.00)	William M. Hunt Co.	Bk 1, p. 189	
1923	03-31	1 oz. Alyssum (\$ 1.00) <i>Lobularia maritima</i>	William M. Hunt Co.	Bk 1, p. 189	
1923	03-31	1 oz. Nastrutium Lobb's Mixture (\$0.50) <i>Tropaeolum majus</i>	William M. Hunt Co.	Bk 1, p. 189	Nastrutium Lobb's mixture contains Queen Victoria, Lucifer, Spitfire and Lily Shridt
1923	03-31	1 pkt. Cineraria Stellata (\$ 0.50)	William M. Hunt Co.	Bk 1, p. 189	Ideal as cut flower or pot plant for conservatory
1923	03-31	1 pkt. Schizanthus hybrid	William M. Hunt Co.	Bk 1, p. 189	
1923	03-31	1/8 oz. Pansy Ice King (\$ 0.50)	William M. Hunt Co.	Bk 1, p. 189	
1923	03-31	1/8 oz. Pansy March Beauty (\$ 0.50)	William M. Hunt Co.	Bk 1, p. 189	
1923	03-31	1/8 oz. Pansy Winter Queen (\$ 0.50)	William M. Hunt Co.	Bk 1, p. 189	
1923	03-31	1/8 oz. Pansy Winter Snow (\$ 0.50)	William M. Hunt Co.	Bk 1, p. 189	
1923	03-31	2 pkt. Cosmos New Double Early (\$ 0.50)	William M. Hunt Co.	Bk 1, p. 189	
1923	04-20	200 Honeysuckle halliana (\$ 50.00) <i>Lonicera japonica 'Halliana'</i> <i>Hall's Honeysuckle</i>	Henry A. Dreer	Bk 1, p. 190	Hall's Honeysuckle, pale yellow in color, repeat flowering late spring to mid summer, fragrant
1923	04-20	4 Clematis Jackmanii (\$ 3.00)	Henry A. Dreer	Bk 1, p. 190	
1923	04-28	10 Juniper	Poughskeepie Nursery Co.	Bk 1, p. 194	
1923	04-30	100 Cannas Mrs Alfred F Conrad (\$ 16.00)	William M. Hunt Co.	Bk 1, p. 191	
1923	04-30	300 Fir <i>Abies</i>	Little Tree Farm	Bk 1, p. 191	
1923	04-30	500 Red Pines <i>Pinus resinosa</i>	Little Tree Farm	Bk 1, p. 191	
1923	04-30	5000 Trees	Conservation comm.	Bk 1, p. 191	
1923	04-30	12 Phoenix Roebelinii Pygmy Date Palm	Joseph Manta	Bk 16, p. 191	
1923	05-01	12 Rose Ameila Gude Roses 2 ½" (\$ 10.00)	Charles H. Totty Co.	Bk 1, p. 193	
1923	05-01	50 Dracaena indivisa 2 ¼ " <i>Cordyline indivisa</i>	Roman J Irwin	Bk 1, p. 193	
1923	05-01	75 Rose Mrs. Aaron Ward Roses 2 ½" (\$18.75)	Charles H. Totty Co.	Bk 1, p. 193	Indian double yellow HT
1923	05-19	6 Chrysanthemum Adelaide	Chas. H. Totty	Bk 1, p. 193	

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1923	05-19	6 Chrysanthemum Anna L Moran	Chas. H. Totty	Bk 1, p. 193	
1923	05-19	6 Chrysanthemum Autumn Beauty	Chas. H. Totty	Bk 1, p. 193	
1923	05-19	6 Chrysanthemum Billancourt	Chas. H. Totty	Bk 1, p. 193	
1923	05-19	6 Chrysanthemum Crawfordia	Chas. H. Totty	Bk 1, p. 193	
1923	05-19	6 Chrysanthemum Hints of Gold	Chas. H. Totty	Bk 1, p. 193	
1923	05-19	6 Chrysanthemum Mrs Chester Robinson	Chas. H. Totty	Bk 1, p. 193	
1923	05-19	6 Chrysanthemum Mrs Hamish Craig	Chas. H. Totty	Bk 1, p. 193	
1923	05-19	6 Chrysanthemum Mrs Harrison	Chas. H. Totty	Bk 1, p. 193	
1923	08-07	25 Primula malacoides King Alfred Fairy Primrose	Roman J. Irwin	Bk 1, p. 201	
1923	08-07	25 Primula malacoides Ruben Fairy Primrose	Roman J. Irwin	Bk 1, p. 201	
1923	08-07	25 Primula malacoides Townsendi Fairy Primrose	Roman J. Irwin	Bk 1, p. 201	Suggested as a house plant, baby primrose with soft pink flowers
1923	08-07	25 Primula obconica German Primrose	Roman J. Irwin	Bk 1, p. 201	
1923	08-07	50 Primula obconica mixed German Primrose	Roman J. Irwin	Bk 1, p. 201	
1923	08-31	Collection of Dahlias (\$ 100.00)	N. Harold Cotta & Son	Bk 1, p. 202	
1923	09-01	2 Dracaenias	Julus Roehrs	Bk 4, p. 44	
1923	09-01	2 Dracaenias (\$500.)	Julus Roehrs	Bk 4, p. 44	
1923	09-01	4 Palms	Julus Roehrs	Bk 4, p. 44	
1923	09-01	4 Palms	Julus Roehrs	Bk 4, p. 44	
1923	09-01	5 Bay trees	Julus Roehrs	Bk 4, p. 44	
1923	09-30	100 bulbs Clara Butt	A. Frylink & Sons	Bk 1, p. 205	
1923	09-30	100 bulbs Golden Bronze	A. Frylink & Sons	Bk 1, p. 205	
1923	09-30	100 bulbs King Alfred	A. Frylink & Sons	Bk 1, p. 205	
1923	09-30	100 bulbs La Tulipe Noire	A. Frylink & Sons	Bk 1, p. 205	
1923	09-30	100 bulbs La Tulipe Noire	A. Frylink & Sons	Bk 1, p. 205	
1923	09-30	100 bulbs Moonlight	A. Frylink & Sons	Bk 1, p. 205	
1923	09-30	100 bulbs Mr Farmcombe Sanders	A. Frylink & Sons	Bk 1, p. 205	
1923	09-30	100 bulbs Pride of Haarlem	A. Frylink & Sons	Bk 1, p. 205	
1923	09-30	100 bulbs Sir Issac Lawrence	A. Frylink & Sons	Bk 1, p. 205	
1923	09-30	100 tulip bulbs	A. Frylink & Sons	Bk 1, p. 205	
1923	11-19	100 Cyclamen seedings (\$8.00)	Roman J. Irwin	Bk 1, p. 210	
1923	11-30	12 English Walnut trees (\$30.00) <i>Juglans regia</i>	E.C. Pomeroy	Bk 1, p. 211	
1923	12-31	6 America Rose (\$12.10)	Bobbnik & Atkins	Bk 1, p. 213	
1923	12-31	6 Anita Crot Rose (\$9.75)	Bobbnik & Atkins	Bk 1, p. 213	
1923	12-31	6 Independence Day Rose (\$15.19)	Bobbnik & Atkins	Bk 1, p. 213	
1923	Sep 1	5 Bay trees <i>Lauris noblis</i>	Julus Roehrs	Bk 4, p. 44	
1924	01-24	100 Rose Sensation (\$40.00)	Charles H. Totty Co.	Bk 1, p. 217	
1924	01-24	150 Carnation Dagmar Princess (\$18.00) <i>Dianthus</i>	Charles H. Totty Co.	Bk 1, p. 217	Deep crimson
1924	01-24	2 doz. Heliotrope Royal Fragrance (\$25.00)	Charles H. Totty Co.	Bk 1, p. 217	Became standard variety for mass effect, purple in colour deep green leaves, intense fragrance
1924	01-24	350 Rose Mme Butterfly (\$10.00)	Charles H. Totty Co.	Bk 1, p. 217	HT pale pink to blush with lemon centre
1924	01-24	Winsome Carnations (\$ 40.00) <i>Dianthus</i>	Charles H. Totty Co.	Bk 1, p. 217	Fine bi-coloured pink
1924	01-31	100 Carnation Donald Dark Crimson (\$30.28) <i>Dianthus</i>	Chas. Schwake & Co. Inc.	Bk 1, p. 215	Dark Crimson
1924	02-00	100 seeds Dahlia Salbach (\$ 3.00)	Richard Diener	Bk 1, p. 216	Pink
1924	02-00	2 pkts. Primula malacoides (\$1.00) Fairy Primrose	Richard Diener	Bk 1, p. 216	Half hardy or cold greenhouse plant with mauve or lilac flowers
1924	02-00	2 pkts. Statice blue (\$.050)	Richard Diener	Bk 1, p. 216	
1924	02-00	500 seeds hybrid Freesias (\$5.00)	Richard Diener	Bk 1, p. 216	

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1924	02-00	6 pkts. Petunias (\$ 3.00)	Richard Diener	Bk 1, p. 216	
1924	0-28	50 Carnation Davis (\$ 14.25) <i>Dianthus</i>	Charles H. Totty Co.	Bk 1, p. 218	
1924	03-26	100 Mammoth White Verbena <i>Verbena urticifolia</i>	Roman J. Irwin	Bk 1, p. 218	
1924	03-26	2 Nasturtium <i>Tropaeolum majus</i>	Martin Shaw	Bk 1, p. 218	
1924	03-28	100 Carnation Maine Sunshine (\$ 11.25) <i>Dianthus</i>	Charles H. Totty Co.	Bk 1, p. 218	
1924	03-28	50 Ferns assorted (\$ 6.00)	Charles H. Totty Co.	Bk 1, p. 218	
1924	03-30	¼ oz. Salpiglossis mixed (\$ 1.00) Painted Tongue	William M. Hunt Co.	Bk 1, p. 220	
1924	03-30	2 pk. Salpiglossis hybrid (\$ 1.50) Painted Tongue	William M. Hunt Co.	Bk 1, p. 220	
1924	04-08	¼ oz. Aster Lavender (\$ 0.75) <i>Callistephus chinensis . Aster Lavender</i>	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	¼ oz. Pansy Col. Green (\$1.00)	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	¼ oz. Pansy Ice King (\$1.25)	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	¼ oz. Pansy March Beauty (\$1.25)	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	¼ oz. Pansy Winter Snow (\$1.00)	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	1 oz. Alyssum (\$1.00) <i>Lobularia maritima</i>	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	1 pkt. Primula Lilac (\$ 0.75)	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	1 pkt. Primula Rose (\$ 0.75) Primrose	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	1 pkt. Primula White (\$ 0.75) Primrose	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	1/8 oz Aster Ago 5 varieties (\$ 2.50) <i>Callistephus chinensis Ago</i>	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	1/8 oz. Aster G. Blue (\$ 0.50) <i>Callistephus chinensis G. Blue</i>	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	1/8 oz. Aster Oct. Pl Lar (\$ 0.50) <i>Callistephus chinensis Oct. Pl Lar</i>	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	1/8 oz. Aster Pink (\$ 0.50) <i>Callistephus chinensis Pink</i>	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	1/8 oz. Aster White (\$ 0.50) <i>Callistephus chinensis White</i>	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	2 pkt. Aster tall mixed (\$ 2.00) <i>Callistephus chinensis</i>	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	3 pkt. Cosmos 3 vars. (\$ 0.45)	William M. Hunt Co.	Bk 1, p. 219	
1924	04-08	8 pkt. Cyclamen 8 vars. (\$ 6.00)	William M. Hunt Co.	Bk 1, p. 219	
1924	04-26	100 Verbena Mammoth white <i>Verbena urticifolia</i>	Roman J. Irwin	Bk 1, p. 221	
1924	04-26	50 Dracaena indivisa (\$ 4.00) <i>Cordyline indivisa</i>	Roman J. Irwin	Bk 1, p. 221	
1924	04-30	1 oz Nemophila Menziesii insignis Baby blue eyes	Burnett Brothers	Bk 1, p. 222	
1924	04-30	100 Colorado Blue Spruce (\$ 50.00) <i>Picea pungens</i>	United Forestry Co.	Bk 1, p. 222	
1924	04-30	100 Concolor Fir (\$55.00) <i>Abies concolor</i>	United Forestry Co.	Bk 1, p. 222	Medium to large evergreen coniferous tree growing to 50 to 80 ft tall
1924	04-30	100 Douglas Fir (\$ 25.00) <i>Pseudotsuga menziesii</i>	United Forestry Co.	Bk 1, p. 222	
1924	04-30	100 White Spruce (\$25.00) <i>Picea glauca</i>	United Forestry Co.	Bk 1, p. 222	
1924	04-30	107 Douglas Fir (\$30.00) <i>Pseudotsuga menziesii</i>	United Forestry Co.	Bk 1, p. 222	
1924	04-30	12 Balsam Fir (\$ 9.00) <i>Abies balsamea</i>	United Forestry Co.	Bk 1, p. 222	Medium-size evergreen tree typically 30 to 50 ft tall
1924	04-30	12 Red Oak (\$ 6.00) <i>Quercus borealis or Quercus rubra</i>	United Forestry Co.	Bk 1, p. 222	
1924	04-30	12 Tulip (\$ 4.20) <i>Liriodendron tulipifera</i>	United Forestry Co.	Bk 1, p. 222	
1924	04-30	1oz Zinnia Best Pink	Burnett Brothers	Bk 1, p. 222	
1924	04-30	2 Blue Spruce (\$ 4.00) <i>Picea pungens</i>	United Forestry Co.	Bk 1, p. 222	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1924	04-30	200 Colorado Blue Spruce (\$ 85.00) <i>Picea pungens</i>	United Forestry Co.	Bk 1, p. 222	
1924	04-30	235 White Spruce (\$ 50.00) <i>Picea glauca</i>	United Forestry Co.	Bk 1, p. 222	
1924	04-30	50 White Pine (\$ 25.00) <i>Pinus strobus</i>	United Forestry Co.	Bk 1, p. 222	
1924	04-30	500 Red Pine (\$10.00) <i>Pinus resinosa</i>	United Forestry Co.	Bk 1, p. 222	
1924	04-30	500 Scotch Pine (\$7.58) <i>Pinus sylvestris</i>	United Forestry Co.	Bk 1, p. 222	
1924	04-30	70 European Larch (\$ 20.00) <i>Larix decidua</i>	United Forestry Co.	Bk 1, p. 222	
1924	04-30	200 Red Pine <i>Pinus resinosa</i>	Little Tree Farm	Bk 1, p. 223	
1924	04-30	200 Red Pine half price <i>Pinus resinosa</i>	Little Tree Farm	Bk 1, p. 223	
1924	05-08	10 Norway Maples (\$ 17.00) <i>Acer platanoides</i>	Little Tree Farm	Bk 1, p. 225	deciduous tree growing to 50 to 80 ft tall
1924	07-20	Taxus Cuspidate capitata (\$ 35.00) Japanese Yew	Andona Nurseries	Bk 1, p. 230	
1924	07-30	16 Honeysuckle <i>Lonicera</i>	A.L. Miller	Bk 1, p. 231	
1924	07-30	50 Primula Primrose	Henry Schmidt	Bk 1, p. 231	
1924	07-30	75 Primula Primrose	Roman J. Irwin	Bk 1, p. 231	
1924	09-25	100 Narcissus (\$ 9.50)	A. Frylink & Son	Bk 1, p. 235	
1924	09-25	2 Thuja compacta (\$ 14.75) American Arborvitae	Poughskeepie Nursery Co.	Bk 1, p. 235	
1924	09-25	2900 Tulip bulb	A. Frylink & Son	Bk 1, p. 235	
1924	11-22	Dahlia Jersey's Beauty	John Schupers Inc.	Bk 1, p. 240	
1924	11-30	100 Darwin bulbs (\$ 7.00)	Saltford Flower Shop	Bk 1, p. 239	
1924	11-30	1 st Greenhouse payment (\$ 3,945.00) 2 nd Greenhouse payment (\$ 2,945.00) Paragraph explains dimensions, a few details about greenhouse agreement	Hutchings & Co.	Bk 1, p. 240	
1924	12-31	Final Greenhouse payment (\$ 2,945.00)	Hutchings & Co.	Bk 1, p. 242	
1925	03-04	200 Maine Sunshine Carnations (\$ 50.00) <i>Dianthus</i>	Totty's	Bk 1, p. 246	
1925	04-08	10 Amphelopsis tricuspidata (\$ 4.58) <i>Parthenocissus tricuspidata</i>	El. City Nursery Co.	Bk 1, p. 248	
1925	04-08	10 Judas Tree (\$ 12.00) <i>Cercis siliquastrum</i>	El. City Nursery Co.	Bk 1, p. 248	
1925	04-08	10 Red Dogwood (\$ 15.00) <i>Cornus florida rubra</i>	El. City Nursery Co.	Bk 1, p. 248	
1925	04-08	10 White Dogwood (\$ 6.50) <i>Cornus florida</i>	El. City Nursery Co.	Bk 1, p. 248	
1925	04-08	50 Assorted ferns (\$ 5.00)	Syracus Pattery Co.	Bk 1, p. 248	
1925	04-21	1 Blue Spruce <i>Picea pungens</i>	Poughskeepie Nursery Co.	Bk 1, p. 250	
1925	04-21	1 Retinospora <i>Chamaecyparis</i>	Poughskeepie Nursery Co.	Bk 1, p. 250	
1925	04-21	1 Siberian Arborvitae <i>Thuja occidentalis</i> . 'Wareana'	Poughskeepie Nursery Co.	Bk 1, p. 250	
1925	04-21	5 Irish Juniper <i>Juniperus communis</i>	Poughskeepie Nursery Co.	Bk 1, p. 250	
1925	04-21	7 Thuja Compacta <i>Thuja occidentalis</i> 'Pyramidalis Compacta' Arborvitae	Poughskeepie Nursery Co.	Bk 1, p. 250	
1925	04-23	¼ oz. Helichrysum mixed (\$0.50)	Stumpp & Walter Co.	Bk 1, p. 247	
1925	04-23	¼ oz. Zinnia Double (\$ 2.00)	Stumpp & Walter Co.	Bk 1, p. 247	
1925	04-23	1/8 oz. Petunia Julius Dreffe (\$20.00)	Stumpp & Walter Co.	Bk 1, p. 247	
1925	05-31	50 Asparagus Fern (\$ 3.75)	Roman J. Irwin	Bk 1, p. 252	Feathery, needle-like, stems giving an open, loose appearance in growth
1925	05-31	50 Dracaena (\$ 4.00)	Roman J. Irwin	Bk 1, p. 252	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1925	05-31	10 <i>Amphelopsis tricuspidata</i> (\$ 4.58) <i>Parthenocissus tricuspidata</i>	El. City Nursery Co.	Bk 1, p. 253	
1925	06-30	24 <i>Caladium</i> (\$8.09)	Henry A. Dreer	Bk 1, p. 256	
1925	06-30	6 <i>Pycnostachys</i> (\$ 2.59)	Totty's	Bk 1, p. 256	Tropical plant
1925	07-31	10 pkts. <i>Cyclamen</i> (\$ 6.00)	Stumpp & Walter Co.	Bk 1, p. 257	
1925	07-31	12 <i>Kentia Belmoreana</i> (\$ 15.00)	Joseph Mauda co.	Bk 1, p. 257	
1925	07-31	60 <i>Primulas</i> (\$ 4.26) Primrose	Henry Schmidt	Bk 1, p. 257	
1925	07-31	Sweet Peas (\$ 5.00) <i>Lathyrus odoratus</i>	Burpee Co.	Bk 1, p. 257	
1926	01-31	½ oz <i>Vinca Rosea</i> Periwinkle pink	Stumpp & Walter	Bk 1, p. 266	
1926	01-31	4 Pkts <i>Begonia semperflorens</i>	Stumpp & Walter	Bk 1, p. 266	Suitable for bedding in the summer months or as a greenhouse plant for the autumn and winter
1926	03-23	100 Briarcliff (\$60.00)	Totty's	Bk 1, p. 269	Possible rose, carnation or other
1926	03-23	100 Cannas (\$ 5.00)	Vaughan's	Bk 1, p. 269	
1926	03-23	100 Senator (\$60.00)	Totty's	Bk 1, p. 269	Possible rose, carnation or other
1926	03-23	25 Mrs. F.R. Pierson (\$15.00)	Totty's	Bk 1, p. 269	Possible rose, carnation or other
1926	04-13	150 Cannas (\$6.00)	Vaughan's	Bk 1, p. 270	
1926	04-13	20 <i>Euonymus radicans</i> (\$ 6.62) Common winter creeper	El. City Nursery	Bk 1, p. 270	
1926	04-13	50 assorted ferns (\$ 6.50)	Joseph Manda	Bk 1, p. 270	
1926	05-01	100 baby Evergreens (\$ 15.00)	Baby Blue Spruce	Bk 1, p. 271	
1926	05-01	100 Mrs. Coolidge & Pailsey (\$ 46.50)	Totty's	Bk 1, p. 271	
1926	05-01	11 Balsam Fir (\$ 24.75) <i>Abies</i>	United Forestry co.	Bk 1, p. 271	
1926	05-01	2 Weeping Willows (\$4.00) <i>Salix x sepulcralis</i>	El. City Nursery	Bk 1, p. 271	
1926	05-01	30 <i>Hydrangea</i> (\$ 15.00)	El. City Nursery	Bk 1, p. 271	
1926	05-01	450 Briarcliff (\$ 270.00)	Totty's	Bk 1, p. 271	
1926	05-01	500 Red Pine (\$ 44.50) <i>Pinus resinosa</i>	United Forestry co.	Bk 1, p. 271	
1926	06-31	10 <i>Taxus</i> (\$157.50) Yew	Eastern Nurseries	Bk 1, p. 273	
1926	06-31	12 Junipers	Frangham Nurseries	Bk 1, p. 273	
1926	06-31	14 <i>Pieris</i> (\$42.00)	Eastern Nurseries	Bk 1, p. 273	
1926	06-31	23 <i>Leucothoe</i>	Frangham Nurseries	Bk 1, p. 273	
1926	06-31	35 <i>Rhododendron</i> (\$50.40)	Eastern Nurseries	Bk 1, p. 273	
1926	06-31	7 <i>Berberis</i> (\$90.00) Barberry	Eastern Nurseries	Bk 1, p. 273	
1926	06-31	7 <i>Rhododendron</i>	Frangham Nurseries	Bk 1, p. 273	
1926	06-31	8 Junipers (\$12.80)	Eastern Nurseries	Bk 1, p. 273	
1926	06-31	9 <i>Leucothoe</i> (\$13.50)	Eastern Nurseries	Bk 1, p. 273	
1926	08-31	17 Firs (\$12.36) <i>Abies</i>	C.N. Arnold	Bk 1, p. 277	
1926	08-31	32 Firs (\$2.41) <i>Abies</i>	C.N. Arnold	Bk 1, p. 277	
1926	08-31	34 firs (\$22.53) <i>Abies</i>	C.N. Arnold	Bk 1, p. 277	
1926	08-31	Spruces (\$3.33) <i>Picea</i>	C.N. Arnold	Bk 1, p. 277	
1926	09-01	125 <i>Primulas</i> (\$15.00)	Roman J. Irwin	Bk 1, p. 276	
1926	09-01	50 <i>Lillium formosum</i> (\$40.00) Madonna Lily	Stumpp & Walter Co.	Bk 1, p. 276	
1926	09-31	100 <i>Lapeirousia</i> bulbs (\$ 5.00)	Hetz & Turett's Co.	Bk 1, p. 278	
1926	11-06	100 Tulips (\$ 4.00)	Saltford Flower Shop	Bk 1, p. 281	
1926	12-31	100 <i>Cyclamens</i> (\$ 12.00)	Roman J. Irwin	Bk 1, p. 282	
1926	12-31	200 <i>Gladioli</i> (\$ 18.00)	Hetz & Turett's Co.	Bk 1, p. 282	
1926	Sep 31	150 <i>Iris tingitana</i> (\$ 18.00)	Hetz & Turett's Co.	Bk 1, p. 278	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1927	01-31	¼ oz. Vinca Roses (\$0.50) <i>Vinca rosea</i>	Stumpp & Walter Co.	Bk 1, p. 284	
1927	01-31	¼ oz. Vinca alba (\$0.50) <i>Vinca alba</i>	Stumpp & Walter Co.	Bk 1, p. 284	
1927	01-31	1/32 oz. Begonia erfordii (\$ 4.00)	Stumpp & Walter Co.	Bk 1, p. 284	
1927	04-31	1000 Red Pine (\$189.00) <i>Pinus resinosa</i>	Clifford H. Easton	Bk 1, p. 288	
1927	04-31	200 Cannas Victory (\$44.00)	John L	Bk 1, p. 288	
1927	04-31	300 Gladiolas (\$21.00)	John L	Bk 1, p. 288	
1927	04-31	100 Gerbera jamesonii (\$ 2.50)	William H. Hunt	Bk 1, p. 289	
1927	05-31	15 Azaleas Hindiflora	Stumpps & Walter	Bk 1, p. 290	
1927	05-31	Azaleas 6 Bacchus	Totty's	Bk 1, p. 290	
1927	05-31	Azaleas 6 Chas. Jolly	Totty's	Bk 1, p. 290	
1927	05-31	Azaleas 6 Henri Vincent	Totty's	Bk 1, p. 290	
1927	05-31	Azaleas 6 Normandie Early	Totty's	Bk 1, p. 290	
1927	05-31	Azaleas 6 Yellow Frost	Totty's	Bk 1, p. 290	
1927	05-31	Azaleas 6 Yellow Normandie	Totty's	Bk 1, p. 290	
1927	05-31	Azaleas: 6 Firelight	Totty's	Bk 1, p. 290	
1927	05-31	10 White Dogwood (\$15.00) <i>Cornus florida</i>	El. City Nursery	Bk 1, p. 291	
1927	05-31	24 Hydrangea (\$10.80)	El. City Nursery	Bk 1, p. 291	
1927	06-31	50 Dracera indivisa (\$5.50)	Roman J. Irwin	Bk 1, p. 292	
1927	07-31	25 Gerbera jamesonii hybrids mixed (\$37.50)	A. Frylink & Son	Bk 1, p. 293	
1927	07-31	36 Begonia melior (\$18.00)	Roman J. Irwin	Bk 1, p. 293	Christmas Begonia
1927	07-31	36 Mixed Primula obconica (\$3.60)	Roman J. Irwin	Bk 1, p. 293	
1927	08-01	Lilium formosum (\$ 35.00) Madonna Lily	Stumpp & Walter	Bk 1, p. 295	
1927	08-01	Mr. Walker Samuel's Wrexham Delphinium seeds (\$ 10.07)	John Schupers Inc.	Bk 1, p. 295	Sky Blue in color
1927	09-30	12 Primula (\$3.00)	Roman J. Irwin	Bk 1, p. 296	
1927	09-30	12 Primula American Legion (\$1.50)	Roman J. Irwin	Bk 1, p. 296	
1927	09-30	12 Primula Double Lavender (\$ 2.50)	Roman J. Irwin	Bk 1, p. 296	
1927	09-30	12 Primula Robio (\$1.50)	Roman J. Irwin	Bk 1, p. 296	
1927	09-30	12 Primula Townsendii (\$1.50)	Roman J. Irwin	Bk 1, p. 296	
1927	09-30	50 table fern (\$5.00)	Roman J. Irwin	Bk 1, p. 296	
1927	10-31	1000 Darwin (\$89.50)	A. Frylink & Son	Bk 1, p. 298	
1927	10-31	500 Tulip cottage (\$20.00)	A. Frylink & Son	Bk 1, p. 298	
1927	11-30	10 Anchusa Myosotidiflora (\$ 5.64) Looking Glass	W.E. Marshall & Co.	Bk 1, p. 300	
1927	11-30	100 Tulips (\$ 4.00)	Saltford Flower shop	Bk 1, p. 300	
1927	12-31	36 Calceolaria 2 ¼" (\$ 22.50) Lady's purse; slipper flower	Roman J. Irwin	Bk 1, p. 301	
1928	01-31	20 Spruce <i>Picea</i>	C.N. Arnold	Bk 1, p. 302	
1928	01-31	24 Spruce <i>Picea</i>	C.N. Arnold	Bk 1, p. 302	
1928	01-31	6 Fir <i>Abies</i>	C.N. Arnold	Bk 1, p. 302	
1928	04-01	100 Templar Roses	Totty's	Bk 1, p. 307	
1928	04-01	12 M. Rogers Rose	Totty's	Bk 1, p. 307	
1928	04-01	12 Miss Rita Mitchell Rose	Totty's	Bk 1, p. 307	
1928	04-01	12 Sov. Roses	Totty's	Bk 1, p. 307	
1928	04-01r	12 Rose Orange	Totty's	Bk 1, p. 307	
1928	05-31	1 Fir (\$ 2.45) <i>Abies</i>	C.N. Arnold Lumber Co.	Bk 1, p. 308	
1928	05-31	1,000 Norway Spruce (\$58.00) <i>Picea abies</i>	The Living Tree Guild	Bk 1, p. 308	
1928	05-31	50 Asparagus sprengeri Asparagus fern	Roman J Irwine	Bk 16, p. 308	
1928	06-30	200 Rose Killarney Rose 3" (\$102.00)	Totty's	Bk 1, p. 310	Double white rose
1928	07-31	36 Begonia Ufelior (15.00)	Roman J. Irwin	Bk 1, p. 311	
1928	07-31	50 Dracaena indivisa (\$10.00) <i>Cordyline indivisa</i>	Roman J. Irwin	Bk 1, p. 311	
1928	07-31	50 Primula Lelander (\$7.50)	Roman J. Irwin	Bk 1, p. 311	

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1928	07-31	50 Primula obc (\$4.00)	Roman J. Irwin	Bk 1, p. 311	
1928	07-31	Lilium Harissii (\$ 50.20) <i>Lilium longiflorum Harrisii</i> Bermuda lily	M.W. Hunt	Bk 1, p. 311	
1928	11-19	24 Calceolaria Pink Beauty Lady's purse; slipper flower	Roman J. Irwin	Bk 1, p. 314	
1928	11-19	24 Calceolaria Stewartii Lady's purse; slipper flower	Roman J. Irwin	Bk 1, p. 314	Crimson color, shrubby kind
1929	04-19	100 Barberry Bushes <i>Berberis sp.</i>	JW Cronk	Bk 9, p. 6	
1929	04-30	Siberian Elms (\$22.00) <i>Ulmus pumila</i>	Living Tree Guild	Bk 1, p. 320	
1929	08-31	48 Carnations (\$9.80) <i>Dianthus</i>	Roman J. Irwin	Bk 1, p. 323	
1929	11-31	36 Calceolaria (\$18.15) Lady's purse; slipper flower	Roman J. Irwin	Bk 1, p. 325	
1929	12-28	Begonia erfordi	W.E. Marshall	Bk 1, p. 326	
1929	12-28	Begonia Marshall crimson	W.E. Marshall	Bk 1, p. 326	
1929	12-28	Begonia Marshall Crimson	W.E. Marshall	Bk 1, p. 326	
1929	12-28	Vinca rosea Periwinkle pink	W.E. Marshall	Bk 1, p. 326	
1930	02-28	¼ oz. Verbena	Andrew P. Kennedy	Bk 1, p. 328	
1930	02-28	1 pkt. Dianthus	Andrew P. Kennedy	Bk 1, p. 328	
1930	02-28	12 Gladioli Orchid	Andrew P. Kennedy	Bk 1, p. 328	
1930	03-07	10 Periwinkle (\$ 2.00) <i>Vinca</i>	El. City Nursery Co.	Bk 1, p. 335	
1930	05-31	100 Assorted Ferns (\$8.00)	J.L. Anderson	Bk 1, p. 332	
1930	05-31	Assorted Ferns (\$6.00)	Roman J. Irwin	Bk 1, p. 332	
1930	07-21	25 Melior Begonias (\$11.25) Christmas Begonia	Roman J. Irwin	Bk 1, p. 334	
1930	07-21	6 ½ oz. Sweet Peas (\$5.50) <i>Lathyrus odoratus</i>	W.E. Marshall	Bk 1, p. 334	
1930	08-31	200 Freesia (\$ 15.64)	W.E. Marshall	Bk 1, p. 335	
1930	08-31	Stimaglim Sweet Pea culture (\$ 0.30)	Stumpp & Walter Co.	Bk 1, p. 335	
1930	09-30	50 Primula (\$ 11.35)	Roman J. Irwin	Bk 1, p. 336	
1930	21-07	100 Freesia (\$7.50)	W.E. Marshall	Bk 1, p. 334	
1931	02-28	36 Carnation Zarro <i>Dianthus</i>	Totty's	Bk 1, p. 340	
1931	02-28	Carnation Coral Glow <i>Dianthus</i>	Totty's	Bk 1, p. 340	
1931	02-28	Carnation Lady Henley <i>Dianthus</i>	Totty's	Bk 1, p. 340	
1931	03-31	200 Gladiolus (\$ 12.00)	W.E. Marshall	Bk 1, p. 341	
1931	04-01	75 Johnanna Hoogevorst Roses (\$30.00)	Totty's?	Bk 1, p. 342	
1931	05-31	50 Dracanea (\$5.10)	Roman J. Irwin	Bk 1, p. 343	
1932	04-01	50 Gladioli (\$18.00)	W.E. Marshall	Bk 1, p. 354	
1933	08-01	50 Lilium Harrisii Easter lily	William W. Hunt	Bk 3, p. 145	Easly blooms for Easter sale
1933	08-01	50 Lilium Harrisii Easter lily	William W. Hunt	Bk 3, p. 145	
1933	11-10	25 Lilium Regale Regal Lily	William W. Hunt	Bk 3, p. 145	Summer blooming
1933	11-10	Lily Regale Regal Lily	William W. Hunt	Bk 3, p. 145	
1934	03-16	1 pkt Dracaena ind. <i>Cordyline indivisa</i>	William W. Hunt	Bk 3, p. 145	
1934	03-16	100 Gladiolus Golden dream	William W. Hunt	Bk 3, p. 145	
1934	03-16	100 Gladiolus War	William W. Hunt	Bk 3, p. 145	
1934	03-16	Alyssum, Carpet of Snow <i>Lobularia maritima Carpet of Snow</i>	William W. Hunt	Bk 3, p. 145	
1934	03-16	Alyssum, Carpet of Snow <i>Lobularia maritima Carpet of Snow</i>	William W. Hunt	Bk 3, p. 145	
1934	03-16	Aster, Cal, 2 varieties <i>Callistephus chinensis</i>	William W. Hunt	Bk 3, p. 145	China asters grown primarily for cut flower production rather than garden decoration

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1934	03-16	Aster, Cal, 2 varieties <i>Callistephus chinensis</i>	William W. Hunt	Bk 3, p. 145	Aster Cal, could also be <i>Lessingia filaginifolia</i> (Hook. & Arn.) M.A. Lane var. <i>filaginifolia</i>
1934	03-16	Aster, L B. oz, 3 varieties <i>Callistephus chinensis</i>	William W. Hunt	Bk 3, p. 145	
1934	03-16	Aster, L oz, 3 varieties <i>Callistephus chinensis</i>	William W. Hunt	Bk 3, p. 145	
1934	03-16	Dracenea Ind <i>Cordyline indivisa</i>	William W. Hunt	Bk 3, p. 145	
1934	03-16	Marigold, Little Brownie <i>Tagetes Little Brownie</i>	William W. Hunt	Bk 3, p. 145	
1934	03-16	Petunia, Balcony, 3 varieties	William W. Hunt	Bk 3, p. 145	
1934	03-16	Petunia, Balcony, 3 varieties	William W. Hunt	Bk 3, p. 145	
1934	03-16	Petunia, Bar Harbor Beauty	William W. Hunt	Bk 3, p. 145	
1934	03-16	Petunia, Bar Harbor Beauty	William W. Hunt	Bk 3, p. 145	
1934	03-16	Primula, Dacokii's (or Darokeii) Pink	William W. Hunt	Bk 3, p. 145	
1934	03-16	Primula, Dacokii's Pink	William W. Hunt	Bk 3, p. 145 Could be Darokeii	
1934	03-16	Verbena, Mau. Pink	William W. Hunt	Bk 3, p. 145	
1934	03-16	Verbena, Mau. Pink	William W. Hunt	Bk 3, p. 145	
1934	03-16	Verbena, Miss Willicott	William W. Hunt	Bk 3, p. 145	
1934	03-16	Verbena, Miss Willicott	William W. Hunt	Bk 3, p. 145 Could be Willmicott	
1934	03-16	Zinnia, D. J. mixed	William W. Hunt	Bk 3, p. 145	
1934	03-16	Zinnia, D. J. mixed	William W. Hunt	Bk 3, p. 145	
1934	04-17	Expenses at flower show (\$12)	H.J. Allen	Bk 3, P. 7	
1934	04-6	Gardenias	Belmont Gardens, Belmont, MA	Bk 3, P. 38	
1934	06-00	25 Begonias Melia Christmas Begonia	Roman J. Irwin	Bk 3, p. 159	Christmas Begonia
1934	06-00	Sweet Peas <i>Lathyrus odoratus</i>	Roman J. Irwin	Bk 3, p. 159	
1934	06-00	Sweet Peas <i>Lathyrus odoratus</i>	Roman J. Irwin	Bk 3, p. 159	
1934	07-00	Begonias Melia Christmas Begonia	Roman J. Irwin	Bk 3, p. 159	
1934	07-28	Azalea	Anne C. Rogers Estate	Bk 3, p. 301	
1934	07-28	Orchids	Anne C. Rogers Estate	Bk 3, p. 301	
1934	08-26	One half the contract price for Garden work Total \$1656.	Robert B. Cridland	Bk 3, P. 55	
1934	08-28	Fern	Anne C. Rogers Estate	Bk 3, p. 301	
1934	09-22	Balance on the contract price for garden work \$828.	Robert B. Cridland	Bk 3, P. 55	
1934	12-15	Potting trees two men labor @1.25 (\$15.)	Woodland Tree Service	Bk 3, p. 403	
1935	02-25	25 Belmont Gardenia 2 ¼" plants (\$50 each)	Belmont Garden	Bk 5, p. 33	
1935	03-01	Flower seeds	William M. Hunt & Company	Bk 5, p. 183	
1935	03-26	50 <i>Asparagus plumosus nanus</i> 2 ¼" size (\$4.) <i>Asparagus</i> Fern	J. F. Anderson	Bk 5, p. 11	A greenhouse variety, bearing fern-like foliage
1935	03-26	50 <i>Asparagus sprengeri</i> <i>oprengeri</i> 2 ¼" size (\$4.) <i>Asparagus</i> Fern	J. F. Anderson	Bk 5, p. 11	
1935	04-13	100 assorted ferns in 2 ¼" pots	J. F. Anderson	Bk 5, p. 11	
1935	04-22	100 assorted <i>Delphinium</i> plants (\$20.00)	Turner Brothers Nursery	Bk 5, p. 379	
1935	04-24	Plant material and planting in upper garden (\$555.)	Robert B. Cridland	Bk 5, p. 73	
1935	04-30	1 pkt <i>Cosmos</i> Orange Flare	W.E. Marshall & Co., Inc.	Bk 5, P. 250	
1935	04-30	1 pkt Marigold Royal Scot	W.E. Marshall & Co., Inc.	Bk 5, P. 250	
1935	04-30	100 <i>Gladioli</i> Gold Measure	W.E. Marshall & Co., Inc.	Bk 5, P. 250	

Year	Date	Order	Vendor	Reference Book, Page	Notes
1935	04-30	100 Gladioli Scarlet Wonder	W.E. Marshall & Co., Inc.	Bk 5, p. 250	
1935	04-30	100 Gladioli Virginia	W.E. Marshall & Co., Inc.	Bk 5, p. 250	
1935	04-30	24 Chrysanthemum, 6 vars.	W.E. Marshall & Co., Inc.	Bk 5, p. 250	
1935	04-30	3 ¼ oz Portulaca, 3 vars.	W.E. Marshall & Co., Inc.	Bk 5, p. 250	
1935	04-30	3 1/8 oz Aster Gt. Comet, 3 vars. <i>Callistephus chinensis Giant. Comet</i>	W.E. Marshall & Co., Inc.	Bk 5, p. 250	
1935	05-07	4 Rosa moschata Clytemnestra	Bobbink and Atkins	Bk 5, p. 49	"ordered by Mr. Cridland for flower gardens"
1935	06-21	1 pkt Alice Sunshine Snapdragon Seed <i>Antirrhinum</i>	Roman J. Irwin, Inc	Bk 5, p. 207	
1935	06-21	1 pkt Terry's Surprise Snapdragon Seed <i>Antirrhinum</i>	Roman J. Irwin, Inc	Bk 5, p. 207	
1935	06-21	1 pkt Velvet Beauty Snapdragon Seed <i>Antirrhinum</i>	Roman J. Irwin, Inc	Bk 5, p. 207	
1935	06-21	12 Lady Mac Begonia in 2 ¼" pots	Roman J. Irwin, Inc	Bk 5, p. 207	Christmas flowering
1935	06-21	12 Melior Begonia in 2 ¼" pots Christmas Begonia	Roman J. Irwin, Inc	Bk 5, p. 207	Christmas Begonia
1935	07-05	1 pkt Snapdragon seed Sunset <i>Antirrhinum</i>	Roman J. Irwin, Inc	Bk 5, p. 207	
1935	08-08	1 oz. Sweet Pea Ely. Attraction <i>Lathyrus odoratus</i>	William M. Hunt & Company	Bk 5, p. 183	
1935	08-08	1 oz. Sweet Pea Ely. Fortyniner <i>Lathyrus odoratus</i>	William M. Hunt & Company	Bk 5, p. 183	
1935	08-08	1 oz. Sweet Pea Ely. Greeting <i>Lathyrus odoratus</i>	William M. Hunt & Company	Bk 5, p. 183	
1935	08-08	1 oz. Sweet Pea Ely. St. Rose <i>Lathyrus odoratus</i>	William M. Hunt & Company	Bk 5, p. 183	
1935	08-08	1 oz. Sweet Pea Ely. Vulcan <i>Lathyrus odoratus</i>	William M. Hunt & Company	Bk 5, p. 183	
1935	08-08	1 oz. Sweet Pea Ely.[early?] Memory <i>Lathyrus odoratus</i>	William M. Hunt & Company	Bk 5, p. 183	
1935	08-08	1 pkt Dracena Indivisa <i>Cordlyine Indivisa</i>	William M. Hunt & Company	Bk 5, p. 183	
1935	08-08	1 pkt Pansy Green Gts. (Giants)	William M. Hunt & Company	Bk 5, p. 183	
1935	08-08	1 pkt Primula Mal. Superba	William M. Hunt & Company	Bk 5, p. 183	
1935	09-27	25 Liliium Erabu xxx (sp?)	William M. Hunt & Company	Bk 5, p. 183	
1935	09-27	25 Liliium, Harrisii	William M. Hunt & Company	Bk 5, p. 183	
1935	10-15	20 Lantanas Delicatissima 2 ¼" pots	E.F. Weaver, Greenhouses	Bk 5, p. 411	
1935	10-15	20 Lantanas Lavender Queen 2 ¼" pots	E.F. Weaver, Greenhouses	Bk 5, p. 411	
1935	10-15	20 Lantanas Sensation 2 ¼" pots	E.F. Weaver, Greenhouses	Bk 5, p. 411	
1935	10-15	20 Lantanas Violet Thing 2 ¼" pots	E.F. Weaver, Greenhouses	Bk 5, p. 411	
1935	10-15	20 Lantanas Weeping 2 ¼" pots	E.F. Weaver, Greenhouses	Bk 5, p. 411	
1936	01-24	100 Robert Allwood Carnations rooted cutting <i>Dianthus</i>	Roman J. Irwin, Inc	Bk 5, p. 207	
1936	01-24	50 Guy Allwood Carnations rooted cuttings <i>Dianthus</i>	Roman J. Irwin, Inc	Bk 5, p. 207	
1936	01-31	200 Virginia Carnations, 2 ¼" pots <i>Dianthus</i>	Totty's,	Bk 5, p. 373	
1936	01-31	300 Salmon Spectrum Carnations, 2 ¼" pots <i>Dianthus</i>	Totty's,	Bk 5, p. 373	
1936	01-31	Giant Laddie Carnations, 2 ¼" pots <i>Dianthus</i>	Totty's,	Bk 5, p. 373	
1936	03-17	1 oz. Marigold Little Brownie <i>Tagetes Little Brownie</i>	William M. Hunt & Company	Bk 5, p. 183	
1936	03-17	1 pkt Petunia Balcony Blue	William M. Hunt & Company	Bk 5, p. 183	
1936	03-17	1 pkt Petunia Balcony Pink	William M. Hunt & Company	Bk 5, p. 183	
1936	03-17	1 pkt Petunia Balcony White	William M. Hunt & Company	Bk 5, p. 183	
1936	03-17	1.8 oz. Aster Pink King <i>Callistephus chinensis</i>	William M. Hunt & Company	Bk 5, p. 183	
1936	03-17	1/8 oz. Aster Lavender King <i>Callistephus chinensis</i>	William M. Hunt & Company	Bk 5, p. 183	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1936	03-17	1/8 oz. Aster Violet King <i>Callistephus chinensis</i>	William M. Hunt & Company	Bk 5, p. 183	
1936	03-17	1/8 oz. Petunia Bar Harbor Bty	William M. Hunt & Company	Bk 5, p. 183	
1936	03-17	2 oz. Alyssum Carpet of Snow <i>Lobularia matitima Carpet of Snow</i>	William M. Hunt & Company	Bk 5, p. 183	
1936	03-17	200 Gladiolus War	William M. Hunt & Company	Bk 5, p. 183	
1936	03-17	¼ oz. Verbena Mam. Pink	William M. Hunt & Company	Bk 5, p. 184	
1936	03-17	¼ oz. Verbena Miss Willmott	William M. Hunt & Company	Bk 5, p. 184	
1936	03-17	1 pkt Viola Blue Butterfly	William M. Hunt & Company	Bk 5, p. 184	
1936	03-17	1/8 oz Zinnia Lill. Golden Gem	William M. Hunt & Company	Bk 5, p. 184	
1936	03-17	1/8 oz. Zinnia Lill. Scarlet	William M. Hunt & Company	Bk 5, p. 184	
1936	04-03	100 Picardy Gladiolus	Champlain View Gardens	Bk 5, p. 74	
1936	04-10	¼ oz Tagetes Marigold	W.E. Marshall & Co., Inc.	Bk 5, P. 250	
1936	04-10	¼ oz Verbena Mayflower	W.E. Marshall & Co., Inc.	Bk 5, P. 250	
1936	04-10	1 pkt Petunia New All Double	W.E. Marshall & Co., Inc.	Bk 5, P. 250	
1936	04-10	100 Gladioli Alice Tiplady	W.E. Marshall & Co., Inc.	Bk 5, P. 250	
1936	04-10	100 Gladioli Souvenior	W.E. Marshall & Co., Inc.	Bk 5, P. 250	
1936	04-10	2 ¼ oz Zinnia, 2 vars.	W.E. Marshall & Co., Inc.	Bk 5, P. 250	
1936	04-10	2 1/8 oz Aster, 2 vars. <i>Callistephus chinensis</i>	W.E. Marshall & Co., Inc.	Bk 5, P. 250	
1936	04-10	2 pkt Zinnia Fantasy	W.E. Marshall & Co., Inc.	Bk 5, P. 250	
1936	04-10	3" Vinca Claret-Colored Periwinkle pink	W.E. Marshall & Co., Inc.	Bk 5, P. 250	
1936	04-11	18 roses Mme Norbert Levavaseur (\$.40 each)	Robert B. Cridland	Bk 5, p. 73	ordered from the Storrs & Harrison Co., Plainville, OH
1936	04-11	18 roses Mme. A Barbier (\$.50 each)	Robert B. Cridland	Bk 5, p. 73	ordered from the Storrs & Harrison Co., Plainville, OH
1936	04-11	36 roses Fran Karl Druschki (\$.40 each)	Robert B. Cridland	Bk 5, p. 73	Ordered from the Storrs & Harrison Co., Plainville, OH
1936	04-11	6 Mrs. John Lang rose (\$.45 each)	Robert B. Cridland	Bk 5, p. 73	ordered from the Storrs & Harrison Co., Plainville, OH
1936	04-11	6 Roses Gen. Jacqueminot (\$.45 each)	Robert B. Cridland	Bk 5, p. 73	ordered from the Storrs & Harrison Co., Plainville, OH
1936	04-11	6 roses George Arends (\$.45 each)	Robert B. Cridland	Bk 5, p. 73	ordered from the Storrs & Harrison Co., Plainville, OH
1936	04-11	6 roses Ulrich Brunner (\$.40 each)	Robert B. Cridland	Bk 5, p. 73	ordered from the Storrs & Harrison Co., Plainville, OH
1936	04-24	600 roses (\$.26 each)	Robert B. Cridland	Bk 5, p. 73	Ordered from the Storrs & Harrison Co., Plainville, OH
1936	04-27	4 Japanese Cherry trees, Amanogawa, 8-9 ft. (\$6. each)	Robert B. Cridland	Bk 5, p. 73	Ordered from the Garden Nurseries, Narberth, PA
1936	04-29	100 Mountain Laurel, 1-2 ft. (\$77.75) <i>Kalmia latifolia</i>	Clifford H Easton	Bk 5, p. 121	
1936	05-05	1 Thuja douglasi pyramidalis Arborvitae <i>Thuja occidentalis douglasi</i>	Poughkeepsie Nursery Company, Inc.	Bk 5, P. 301	
1936	05-06	6 roses Baroness Rothschild	Robert B. Cridland	Bk 5, p. 73	Ordered from Bobbink & Atkins, Rutherford, NJ
1936	05-06	6 roses Paul Neyron	Robert B. Cridland	Bk 5, p. 73	Ordered from Bobbink & Atkins, Rutherford, NJ
1936	05-06	6 roses Anna Diesbach (\$.65 each)	Robert B. Cridland	Bk 5, p. 73S	Ordered from Bobbink & Atkins, Rutherford, NJ
1936	06-06	1 pkt Snapdragon Coates Yellow Perfection <i>Antirrhinum</i>	Roman J. Irwin, Inc	Bk 5, p. 207	
1936	06-06	1 pkt Snapdragon Sunset <i>Antirrhinum</i>	Roman J. Irwin, Inc	Bk 5, p. 207	
1936	06-06	1 pkt Snapdragon Terry's Surprise Improved <i>Antirrhinum</i>	Roman J. Irwin, Inc	Bk 5, p. 207	
1936	06-06	1 pkt Snapdragon Velvet Beauty <i>Antirrhinum</i>	Roman J. Irwin, Inc	Bk 5, p. 207	

Year	Date	Order	Vendor	Reference Book, Page	Notes
1936	06-06	12 Lady Mac Begonia in 2 1/4 " pots	Roman J. Irwin, Inc	Bk 5, p. 207	Christmas flowering
1936	06-06	12 Melior Begonia in 2 1/4 " pots	Roman J. Irwin, Inc	Bk 5, p. 207	Described as being suitable for Christmas hanging baskets for indoor use.
1936	08-06	1/2 oz. Sweet Pea Blue <i>Lathyrus odoratus</i>	William M. Hunt & Company	Bk 5, p. 184	
1936	08-06	1/2 oz. Sweet Pea Lavender <i>Lathyrus odoratus</i>	William M. Hunt & Company	Bk 5, p. 184	
1936	08-06	1/2 oz. Sweet Pea Orange <i>Lathyrus odoratus</i>	William M. Hunt & Company	Bk 5, p. 184	
1936	08-06	1/2 oz. Sweet Pea Rose <i>Lathyrus odoratus</i>	William M. Hunt & Company	Bk 5, p. 184	
1936	08-06	1/2 oz. Sweet Pea Scarlet <i>Lathyrus odoratus</i>	William M. Hunt & Company	Bk 5, p. 184	
1936	08-06	1/2 oz. Sweet Pea Zvolanek's Pink <i>Lathyrus odoratus</i>	William M. Hunt & Company	Bk 5, p. 184	
1936	08-06	1 pkt Primula Mal. Superba	William M. Hunt & Company	Bk 5, p. 184	
1936	08-06	1/8 oz. Pansy Hunt's Superb	William M. Hunt & Company	Bk 5, p. 184	
1936	08-06	25 Liliun Erabu	William M. Hunt & Company	Bk 5, p. 184	
1936	08-28	25 Liliun Harrisii	William M. Hunt & Company	Bk 5, p. 184	
1936	09-14	50 assorted ferns in 2 1/4" pots	J. F. Anderson	Bk 5, p. 11	
1937	01-09	1/2 oz. Vinca rosea Periwinkle pink	William M. Hunt & Company	Bk 5, p. 184	
1937	01-09	1 collection Petunia Balcony 3 var.	William M. Hunt & Company	Bk 5, p. 184	
1937	01-09	1 pkt Marigold C. of Gold <i>Tagetes C. of Gold</i>	William M. Hunt & Company	Bk 5, p. 184	
1937	01-09	1 pkt Marigold Sunset Gts. (Giants?) <i>Tagetes Sunset</i>	William M. Hunt & Company	Bk 5, p. 184	
1937	01-09	1/8 oz. Aster W.R. Imp. Crego O. Rose <i>Callistephus chinensis 'Queen of the Market' flesh Pink</i>	William M. Hunt & Company	Bk 5, p. 184	
1937	01-09	1/8 oz. Aster W.R. Imp. Crego Shell Pink <i>Callistephus chinensis W.R. Imp. Crego Shell Pink</i>	William M. Hunt & Company	Bk 5, p. 184	
1937	01-09	1/8 oz. Aster W.R. Temple's Azure Blue <i>Callistephus chinensis W.R. Temple's Azure Blue</i>	William M. Hunt & Company	Bk 5, p. 184	
1937	01-09	1/8 oz. Aster W.R. Temple's Deep Rose <i>Callistephus chinensis W.R. Temple's Deep Rose</i>	William M. Hunt & Company	Bk 5, p. 184	
1937	01-09	1/8 oz. Aster W.R. Temple's White (or Lemple's) <i>Callistephus chinensis W.R. Temple's White</i>	William M. Hunt & Company	Bk 5, p. 184	
1937	01-09	1/8 oz. Petunia Bar Harbor Bty.	William M. Hunt & Company	Bk 5, p. 184	
1937	01-09	1/8 oz. Zinnia Lil. Golden Gem	William M. Hunt & Company	Bk 5, p. 184	
1937	01-09	1/8 oz. Zinnia Lil. Scarlet Gem	William M. Hunt & Company	Bk 5, p. 184	
1937	01-09	3 pkts Petunia Dainty Lady	William M. Hunt & Company	Bk 5, p. 184	
1937	02-08	100 Betty Nuthall Gladiolus	Champlain View Gardens	Bk 5, p. 74	
1937	02-08	100 Bill Lowden (or Sowdon) Gladiolus	Champlain View Gardens	Bk 5, p. 74	
1937	02-08	100 Com Koehl Gladiolus	Champlain View Gardens	Bk 5, p. 74	
1937	02-08	100 Orange Queen Gladiolus	Champlain View Gardens	Bk 5, p. 74	
1937	02-08	300 Picardy Gladiolus	Champlain View Gardens	Bk 5, p. 74	
1937	03-23	1/4 oz No 2386 Dracaena Indivisa <i>Cordyline Indivisa</i>	Henry A. Dreer	Bk 5, p. 120	
1937	03-23	1 oz seeds Golden Gem Lilliput or Baby Zinnia	Henry A. Dreer	Bk 5, p. 120	
1937	03-23	1 pkt No 1880 Centaurea Jubilee Gem Cornflower; Batchelor's buttons	Henry A. Dreer	Bk 5, p. 120	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1937	03-23	1 pkt No 3273 Orange Gleam Nasturtium <i>Tropaeolum Orange Gleam</i>	Henry A. Dreer	Bk 5, p. 120	
1937	03-23	1 pkt No 3277 Scarlet Gleam Nasturtium <i>Tropaeolum Scarlet Gleam</i>	Henry A. Dreer	Bk 5, p. 120	
1937	03-23	1 pkt No 3285 Golden Gleam Nasturtium <i>Tropaeolum Golden Gleam</i>	Henry A. Dreer	Bk 5, p. 120	
1937	03-23	6 Eva Le Gallienne Chrysanthemums	Totty's	Bk 5, p. 373	
1937	03-23	6 Golden Majestic Chrysanthemums	Totty's	Bk 5, p. 373	
1937	03-23	6 Grace Sturgis Chrysanthemums	Totty's	Bk 5, p. 373	
1937	03-23	6 Majestic Chrysanthemums	Totty's	Bk 5, p. 373	
1937	03-23	6 Mrs. Benjamin A. Melching Chrysanthemums	Totty's	Bk 5, p. 373	
1937	03-23	6 Nagirroc Chrysanthemums	Totty's	Bk 5, p. 373	
1937	03-23	6 Purple Queen Chrysanthemums	Totty's	Bk 5, p. 373	
1937	03-23	6 Red Majestic Chrysanthemums	Totty's	Bk 5, p. 373	
1937	04-19	100 assorted ferns in 2 ¼" pots	J. F. Anderson	Bk 5, p. 11	
1937	05-07	50 Asparagus plumosus nanus 2 ¼" size (\$4.) Asparagus Fern	J. F. Anderson	Bk 5, p. 11	
1937	05-07	50 Asparagus sprengeri oprengeri 2 ¼" size (\$4.) Asparagus Fern	J. F. Anderson	Bk 5, p. 11	
1937	05-07	30 Fran Karl Druschki Rose (\$.60 each)	Bobbink and Atkins	Bk 5, p. 49	
1937	05-07	6 Anna de Diesbach Rose (\$.65 each)	Bobbink and Atkins	Bk 5, p. 49	
1937	05-07	6 General Jacqueminot Rose (\$.65 each)	Bobbink and Atkins	Bk 5, p. 49	
1937	05-07	6 Ulrich Brunner Rose (\$.65 each)	Bobbink and Atkins	Bk 5, p. 49	
1937	05-17	1 doz. Polyantha or Baby Rambler Roses Mrs. W. H. Cutbrush (or Cuthish)	Turner Brothers Nursery	Bk 5, p. 379	
1937	06-09	½ oz Blue Bonnet Spencer Sweet Peas <i>Lathyrus odoratus</i>	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	½ oz Exposition Pink Spencer Sweet Peas <i>Lathyrus odoratus</i>	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	½ oz Red Bird Spencer Sweet Peas <i>Lathyrus odoratus</i>	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	½ oz Zbolonek's Blue Sensation Sweet Peas <i>Lathyrus odoratus</i>	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	½ oz Zbolonek's Orange Sweet Peas <i>Lathyrus odoratus</i>	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	1 pkt Alyssum, Saxatile, Silver Queen <i>Aurinia saxatile 'Silver Queen'</i>	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	1 pkt Antirrhinum, Terry's Surprised Improved for Greenhouse Snapdragon	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	1 pkt Aquilegia, Scarlet Shades Columbine	Stumpp & Walter Co	Bk 5, P. 341, 353	Red flowers
1937	06-09	1 pkt Bellis Daisy, Giant Flowering Pink <i>Bellis perennis</i>	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	1 pkt Blue Delphinium, Wrexham Blue	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	1 pkt Campanula, Telham Beauty <i>Campanula persicifolia 'Telham Beauty'</i>	Stumpp & Walter Co	Bk 5, P. 341, 353	4 feet tall and offers rich blue blossoms
1937	06-09	1 pkt Crimson Aster Queen of the Market <i>Callistephus chinensis 'Queen of the Market' Pink</i>	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	1 pkt Doronicum, Pardalianches Great false leopardbane	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	1 pkt Flesh Pink Aster Queen of the Market <i>Callistephus chinensis 'Queen of the Market' flesh Pink</i>	Stumpp & Walter Co	Bk 5, P. 341, 353	

Year	Date	Order	Vendor	Reference Book, Page	Notes
1937	06-09	1 pkt Gallardia, Grandiflora, compacted	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	1 pkt Geum, Double Orange Queen	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	1 pkt Hardy Primula, Pulverulenta	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	1 pkt Myosotis, Royal Blue Forget-me-knot	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	1 pkt Pyrethrum, New Double Hybrids	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	1 pkt Scarlet Aster Queen of the Market <i>Callistephus chinensis 'Queen of the Market' Scarlet</i>	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	1 pkt Snapdragon, Coate's Yellow Perfection <i>Antirrhinum</i>	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	1 pkt Snapdragon, Velvet Beauty <i>Antirrhinum</i>	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	1 pkt Sweet William, Newport Pink <i>Dianthus barbatus Newport Pink</i>	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	25 Liliium Formosum	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	25 Liliium Harrisii 2 nd size for Easter forcing Easter Lily	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	06-09	Spencer Sweet Peas ½ oz Majestic Rose <i>Lathyrus odoratus</i>	Stumpp & Walter Co	Bk 5, P. 341, 353	
1937	07-01	250 carnation plants 125 Woburn <i>Dianthus</i>	John G. Bahret & Son	Bk 5, p. 50	
1937	07-01	250 carnation plants 125 Spectrum Supreme <i>Dianthus</i>	John G. Bahret & Son	Bk 5, p. 50	
1937	08-16	25 Liliium Harrisii, 2 nd size Easter Lily	Stumpp & Walter Co	Bk 5, P. 353	
1937	08-18	100 Pteris Ferns (Dish) in (50 in 3" pots, 50 in 2 ¼" pots)	J. F. Anderson	Bk 5, p. 11	
1937	08-18	1 oz pkt Summer Flowering Sweet Peas, Pinkie <i>Lathyrus odoratus</i>	Stumpp & Walter Co	Bk 5, P. 353	
1937	08-18	1 oz pkt Summer Flowering Sweet Peas, Royal Purple <i>Lathyrus odoratus</i>	Stumpp & Walter Co	Bk 5, P. 353	
1938	01-08	¼ oz Annual Chrysanthemum, Golden Crown	Stumpp & Walter Co	Bk 5, p. 353-4	
1938	01-08	¼ oz Giant Imperial Larkspur, Blue Spire <i>Delphinium consolida 'Blue Spire'</i>	Stumpp & Walter Co	Bk 5, p. 353-4	
1938	01-08	¼ oz Giant Imperial Larkspur, Dazzler <i>Delphinium consolida Imperial 'Dazzler'</i>	Stumpp & Walter Co	Bk 5, p. 353-4	
1938	01-08	¼ oz Verbena Crimson Glow	Stumpp & Walter Co	Bk 5, p. 353-4	
1938	01-08	1 pkt Annual Carnation, Maroon King <i>Dianthus 'Maroon King'</i>	Stumpp & Walter Co	Bk 5, p. 353-4	
1938	01-08	1 pkt Browallia Speciosa Major Bush violet	Stumpp & Walter Co	Bk 5, p. 353-4	Greenhouse
1938	01-08	1/8 oz Salvia Farinacea	Stumpp & Walter Co	Bk 5, p. 353-4	
1938	01-08	1/8 oz Verbena Venosa	Stumpp & Walter Co	Bk 5, p. 353-4	
1938	01-08	2 pkts Salvia Welwyn Pink	Stumpp & Walter Co	Bk 5, p. 353-4	
1938	01-26	Flower seeds, copy of order in letter file (\$26.05)	Stumpp & Walter Co	Bk 5, p. 354	
1938	04-05	50 Pteris Ferns (Dish) in (2 ¼" pots)	J. F. Anderson, NJ	Bk 5, p. 11	
1938	04-27	100 Better Times Roses 4" pots, grafted (\$60)	Andrew R. Kennedy, Inc	Bk 5, p. 231	
1938	04-28	150 Commander Koehl Gladiolus	Champlain View Gardens	Bk 5, p. 74	
1938	04-28	150 Picardy Gladiolus	Champlain View Gardens	Bk 5, p. 74	
1938	05-14	100 Charles Dickens Gladiolus	Champlain View Gardens	Bk 5, p. 74	
1938	05-14	100 Golden Cup Gladiolus	Champlain View Gardens	Bk 5, p. 74	

Year	Date	Order	Vendor	Reference Book,Page	Notes
1938	05-14	100 Minuet Gladiolus	Champlain View Gardens	Bk 5, p. 74	
1938	05-14	100 Miss Bloomington Gladiolus	Champlain View Gardens	Bk 5, p. 74	
1938	05-14	100 Mrs. T. E. Langford Gladiolus	Champlain View Gardens	Bk 5, p. 74	
1938	05-14	50 Aida Gladiolus	Champlain View Gardens	Bk 5, p. 74	
1938	06-08	Flower seeds, copy of order in letter file, 13 pkts (\$5.05)	Sutton & Sons	Bk 5, p. 357	
1938	06-10	12 Lady Mac Begonia in 2 1/4 " pots	Roman J. Irwin, Inc	Bk 5, p. 207	Christmas flowering
1938	06-17	1 oz Red Bird Winter Flowering Sweet Peas <i>Lathyrus odoratus 'Red Bird'</i>	Stumpp & Walter Co	Bk 5, p. 354	
1938	06-17	3oz Blue Sensation Winter Flowering Sweet Peas <i>Lathyrus odoratus 'Blue Sensation'</i>	Stumpp & Walter Co	Bk 5, p. 354	
1938	11-12	Labor loading Bay Trees, 42 hours at 50 cents per hour, \$21 total	Lewis & Valentine	Bk 2, p. 3	
1939	06-14	2 Aerial maps a neg no. 8520-127, 4x5" cropped section of contact print, one for Mr. Murphy, one for office (Real Estate agents)	Dutchess County Planning Board	Bk 5, p. 111	

**APPENDIX B: "REVISED KEY TO PLAN NO. 2011" BY THOMAS MEEHAN AND SONS,
APRIL 4, 1911**

The following table includes the perennials specified by Thomas Meehan and Sons in their 1910 plan for the loggia garden. Synonyms and common names have been added by Rieley and Associates, 1988.

* indicates the key number included more than one plant species or plant size.

Key No.	Qty	Name	Notes
1	160	Assorted roses	
2	11	Digitalis purpurea, foxgloves	
3	30	Phlox Wm. Robinson	
4	7	Paeonia edulis superba (P. lactiflora), peony	
5	15	Heuchera sanguinea, coral bells	
6	20	Iris 'Silver King', white Iris	
7	13	Aguilegia vulgaris alba, white columbine	
8	7	Paeonia 'Jupiter'	
9	30	Phlox Lothair	
10	11	Digitalis purpurea alba, white foxglove	
11	13	Aguilegia caerulea, blue columbine	
12	20	Iris Queen of May	
13	15	Heuchera sanguinea, coral bells	
14	15	Iris 'Silver King', white Iris	
15	15	Stokesia cyanea, Stoke's aster	
16	13	Spiraea filipendula (Filipendula hexapetala), dropwort	
17	11	Paeonia 'festiva maxima' (P. lactiflora cv.), peony	
18	25	Phlox Queen	
19	7	Hemerocallis flava, daylily	
20	30	Platycodon mariesii (P. grandiflorum cv. mariesii), blue balloon-flower	
21	20	Inula 'Brittanica', inula cv.	
22	25	Lychnis haageana, Haage's campion	
23	35	Coreopsis grandiflora, Bigflower coreopsis	
24	20	Aguilegia flabellata, dwarf columbine	
25	45	Dianthus plumarius, grass pinks	
26	25	Phlox Slocum	
27	30	Geum coccineum, geum	
28	33	Lychnis viscaria splendens, German catch-fly	
29	17	Baptisia australis, false indigo	
30	17	Dicentra spectabilis, bleeding-heart	
31	25	Phlox 'Independence', white summer phlox	
32	25	Phlox divaricata	
33 1/2	15	Stokesia cyanea, Stoke's aster	
34	20	Paeonia Rhoda	
35	25	Anemone rubra, uncertain species, possibly b. nemorosa	
35 1/2	15	Anemone sylvestris, spring anemone	
36	35	Gypsophila repens, creeping baby's breath	
36 1/2	17	Campanula medium, bellflower	
37	20	Physostegia virginica alba, obedient plant	
38	45	Dianthus plumarius, grass pinks	
39	25	Phlox Aurora Borealis	
40	30	Platycodon mariesii alba, (P. grandiflorum mariesii alba), white balloon-flower	
41	35	Coreopsis lanceolata, lanceleaved coreopsis	
42	35	Spiraea filipendula (Filipendula hexapetala), dropwort	
43	13	Aguilegia flabellate nana, dwarf columbine	
44	17	Phlox Queen	
45	15	Veronica teucrium (V. latifolia), speedwell	
46	15	Paeonia edulis superba (P. lactiflora), peony	
47	35	Papaver nudicaule, Iceland poppy	
48	20	Baptisia australis, false indigo	
49	30	Lychnis flos-jovis, flower-of-jove	

Key No.	Qty	Name	Notes
50	50	Iris Queen of May	
50 1/2	70	Iris pallida Dalmatica	
51	13	Boltonia asteroides, white boltonia	
51*	3	Mallow Marvel pink, probably Malva alcea cv.	2 yr.
51 1/2	3	Mallow Marvel red, probably Malva alcea cv.	2 yr.
51 1/2*	13	Aster novae-angliae, New England aster	
52	30	Geum heldrichi	
53	20	Achillea "The Pearl"	
54	20	Paeonia cv. 'Andre Lauris', deep pink named hybrid peony	
55	25	Aster alpinus, alpine aster	
56	25	Dicentra spectabilis, bleeding-heart	
57	25	Phlox 'Independence', white summer phlox	
58	30	Campanula grandis, (C. persicifolia), peach-leaf bellflower	
59	15	Anemone rubra, uncertain species, possibly b. nemorosa	
60	20	Inula 'Brittanica', inula cv.	
61	35	Lychnis flos-jovis, flower-of-jove	
62	50	Iris coelestine	
62 1/2	70	Iris prismatica, slender blue flag	
63	15	Aster novae-angliae, New England aster	
63*	3	Mallow Marvel pink, probably Malva alcea cv.	2 yr.
63 1/2	15	Aster 'White Queen', hybrid aster	
63 1/2*	15	Mallow Marvel red, probably Malva alcea cv.	2 yr.
64	17	Iris Ulysses	
65	11	Iris kaempferi, Japanese Iris	
65*	11	Chrysanthemum 'St. Illoria', pink chrysanthemum	
65 1/2	10	Chrysanthemum 'Soeur Melaine', white chrysanthemum	
65 1/2*	10	Iris kaempferi, Japanese Iris	
66	20	Iris 'Silver King', white Iris	
67	20	Spiraea filipendula (Filipendula hexapetala), dropwort	
68	15	Delphinium hybridum (D. elatum), delphinium	
69	9	Gaillardia compacta (probably G. pulchella)	
69 1/2	10	Gaillardia compacta (probably G. pulchella)	
70	11	Chrysanthemum Mrs Snyder	
70 1/2	12	Chrysanthemum Julia Lagravere	
71	17	Stokesia cyanea, Stoke's aster	
72	5	Paeonia Compte de Paris	
73	15	Penstemon barbatus, beardtongue	
74	15	Campanula grandis, (C. persicifolia), peach-leaf bellflower	
74 1/2	13	Platycodon grandiflora	
75	9	Anemone 'Queen Charlotte', fall anemone cv.	
76	13	Lychnis haageana, Haage's campion	
77	11	Campanula media, bellflower	
77 1/2	9	Funkia lancifolia, hosta	
78	10	Papaver orientale, oriental poppy	
78*	10	Aster 'White Queen', hybrid aster	
79	13	Aguilegia flabellate nana, dwarf columbine	
80	11	Anemone 'Queen Charlotte', fall anemone cv.	
81	15	Funkia lancifolia, hosta	
82	9	Phlox lothair	
83	13	Delphinium chinensis (D. grandiflorum), larkspur	
84	15	Phlox Queen	
85	11	Hemerocallis flava, daylily	
86	15	Phlox Champs Elysees	
87	17	Oenothera Youngii (O. tetragona)	
88	15	Iris pumila	
89	20	Heuchera sanguinea, coral bells	
90	15	Coreopsis lanceolata, lanceleaved coreopsis	
91	15	Spiraea filipendula (Filipendula hexapetala), dropwort	
92	15	Iris Nero	
93	15	Aster formosissimus, white aster	
94	15	Platycodon mariesii alba, (P. grandiflorum mariesii alba), white balloon-flower	
94 1/2	11	Funkia lancifolia, hosta	
95	11	Campanula persicifolia alba, white peach-leaf bellflower	
96	17	Statice Gmelinii (Limonium Gmelinii), sea-lavender	

Key No.	Qty	Name	Notes
97	15	Paeonia cv. Duchess of New Orleans	
98	17	Chrysanthemum A. Neilson	
98 ½	11	Chrysanthemum 'Soeur Melaine', white chrysanthemum	
99	13	Delphinium hybridum (D. elatum), delphinium	
100	15	Anemone sylvestris, spring anemone	
101	17	Campanula latifolia macrantha, great bellflower	
102	13	Hemerocallis Dumortieri, hybrid daylily	
103	7	Anemone 'Queen Charlotte', fall anemone cv.	
104	17	Aguilegia caerulea, blue columbine	
105	13	Oenothera speciosa, evening primrose (day-flowering)	
106	10	Papaver orientale, oriental poppy	
106*	10	Aster Robt. Parker	
107	13	Campanula media alba, white Canterbury bells	
108	9	Aster japonica rosea	
109	13	Phlox Slocum	
110	11	Funkia lancifolia, hosta	
111	11	Iris Jewell	
112	15	Pentstemon digitalis	
113	13	Phlox 'Independence', white summer phlox	
114	15	Gaillardia compacta (probably G. pulchella)	
115	10	Iris Penelope	
116	15	Phlox Lord Raleigh	
117	15	Coreopsis grandiflora, Bigflower coreopsis	
118	13	Geum coccineum, geum	
119	20	Iris Ulysses	
120	11	Iris kaempferi, Japanese Iris	
120*	11	Chrysanthemum 'Soeur Melaine', white chrysanthemum	
120 ½	10	Iris kaempferi, Japanese Iris	
120 ½*	10	Chrysanthemum 'St. Illoria', pink chrysanthemum	
121	20	Iris 'Silver King', white Iris	
122	15	Iris Yolande	
123	5	Aster tataricus, hardy aster	
123*	15	Aster St. Brigid	
124	40	Paeonia sinensis assorted	
125	9	Viburnum dentatum	2-3 ft.
126	9	Spiraea prunifolia	3-4 ft.
127	13	Symphoricarpos vulgaris	2 ½-3 ft
128	9	Viburnum tomentosum	4-5 ft.
129	7	Hydrangea quercifolia	12-18 in.
130	11	Berberis thunbergii	18-24 in.
131	2	Picea orientalis	4-5 ft.
131*	2	Picea orientalis	3-4 ft.
131*	1	Picea orientalis	5-6 ft.
132	5	Lonicera morrowi	3-4 ft.
133	5	Stephanandra flexuosa	2 ½-3 ft.
134	7	Hydrangea grandiflora	2 ½-3 ft.
135	10	Deutzia gracilis	18-24 in.
136	7	Spiraea arguta	2-3 ft.
137	15	Ligustrum regelianum	2 ½-3 ft.
138	2	Thuja pyramidalis	6-7 ft.
138*	3	Thuja pyramidalis	8-9 ft.
138*	3	Thuja pyramidalis	5-6 ft.
138*	3	Thuja pyramidalis	4-5 ft.
139	15	Spiraea thunbergii	2 ½-3 ft.
140	7	Picea balsamea	5-6 ft.
141	11	Forsythia suspensa	4 ft.
142	17	Berberis thunbergii	18-24 in.
143	11	Weigela Eva Rathke	3-4 ft.
144	15	Symphoricarpos racemosus	2 ½-3 ft.
145	11	Philadelphus coronarius	4-5 ft.
146	15	Spiraea Van houttei	3-4 ft.
147	13	Pyrus japonica	3-4 ft.
148	25	Rhododendron maximum	3-5 ft.
150	2	Taxus baccata	4 ft.
151	25	Ampelopsis veitchii	5 in. pots
151*	25	Hedera helix	5 in. pots
152	50	Lonicera halleana	5 in. pots
152*	25	Lonicera brachypoda	5 in. pots

Key No.	Qty	Name	Notes
152*	25	Lonicera sinensis	5 in. pots
153	2	Thuya Geo. Peabody	5 ft. uniform

APPENDIX C: EXISTING CONDITIONS FIELD NOTES

The following table contains field notes and observations of site surveys conducted in the formal gardens in 2008.

Feature Location and Description	Loose mortar or spalling	Cap cracked or shifted	Step, walk or wall leaning or heaving	Bricks severely eroded or gone	Step, walk or wall cracked or fractured	Wood rotting, gone or damage by vegetation	Damage by vegetation	Missing features	Overall: Good (G), Fair (F), Poor (P)	Comments on Condition
Greenhouse wall along north boundary of garden, Carnation House Terrace Ranges from 3 ½ to 5 ft. height	X	X	X						F	Concrete surface is cracking and mortar is loose. Virginia creeper vine is both damaging wall and holding it together—it could be cut back to reduce moisture. The south side is bowing inward. The concrete cap should be repaired to slow further damage. Long-term the wall should be replaced.
Concrete pad on north side of Tool House with three manholes and parking barriers			X						G	Some slight heaving, but overall in good condition.
Entry steps at southwest corner of Tool House	X								G	Three bluestone steps to upper level of Tool House have some spalling, but overall in good condition.
Three bluestone pavers at base of steps at southeast corner of Tool House			X						F	One of the three pieces is small and sunk. This smaller piece should be replaced with one of equal size and color as other two—or all three replaced with equal size and color.
Concrete sidewalk at southeast corner of Tool House					X				P	The concrete pad is cracked and crumbled and needs replacement.
Concrete ramp on south side into Tool House									G	Ramp in good condition but door needs replacement.
Wooden deck on east side of Tool House						X			P	Deck that serves as entrance walk into Tool House is rotten and the railings are loose. The wood structure needs replacement. When replaced, footings should all be brick piers as they are at the north end of the deck.
Tool House							X		F	Virginia creeper vines on the northeast corner of the building are causing the cement surface to crack.
Gardeners Cottage							X		G	West wall appears to have a fresh mortar surface. Virginia creeper is growing on the northwest corner of the building.
Concrete walk between Tool House and Gardeners Cottage, formerly inside the Carnation Green House					X				F	Walk in fair condition with some cracking and lifting—but not a primary circulation path used by visitors. Oddly, one bluestone paver near center of walk
Bluestone steps from fountain terrace to former Carnation House entrance and walk	X				X					Large step is spalling, coping stones in fair condition—two on each side and one is cracked
Remnant stone pad beyond southwest corner of Gardener's Cottage					X				F	A remnant concrete pad, possibly a footing for a porch, is partially exposed and in fair condition.

Feature Location and Description	Loose mortar or spalling	Cap cracked or shifted	Step, walk or wall leaning or heaving	Bricks severely eroded or gone	Step, walk or wall cracked or fractured	Wood rotting, gone or damage by vegetation	Damage by vegetation	Missing features	Overall: Good (G), Fair (F), Poor (P)	Comments on Condition
Entry steps at southeast corner of Gardener's Cottage: 2 bluestone steps, landing with two large bluestone pavers of 3x5 1/2ft., and one bluestone step into cottage									G	
Four bluestone steps with two coping stones approx. 5 1/2 ft. from southeast corner of Gardener's Cottage								X	G	Steps in good condition and even. Gap above steps of about 5 1/2 ft. is odd, perhaps paver (s) is missing.
Bluestone paver on north side of Gardener's Cottage, near fuel intake									G	Single paver below fuel intake in good condition.
Wall section at southeast corner of Gardener's Cottage with four pillars	X	X			X				F	Wall section needs repointing, some of the red clay tile caps are damaged. A big crack in the wall will cause further damage if not sealed. One pillar is capped with Virginia creeper.
Wall section beyond east side of Gardener's Cottage with five pillar and ranging from 3 1/2 to 5 1/2 ft. height	X	X							F	Some of the earthenware tile caps repaired with concrete, North end of wall has 1-2 in. crack.
Palm House terrace boundary wall, west side of formal gardens. Brick wall approx. 4 ft. with red earthenware coping.	X	X						X	F	Cracks in caps need to be repaired to protect the wall from water and ice damage, particularly at the wall-pillar junctions. Brick wall is in fair condition with some repointing needed. Red clay finials missing from caps on north end of wall, some remain at south end. The wall is in better condition than other walls in the garden, perhaps because there are no adjacent trees or vines.
Bluestone step outside of (west of) Palm House terrace boundary wall									G	Single step is set at grade and is in good condition.
Steps between Palm House terrace and Fountain Terrace- 6 steps with 2 coping stones, steps are approx. 7 1/2 ft. long, coping stones are approx. 16 in. wide			X						P	Steep steps are very uneven, pitching both forwards and backwards. All six steps need to be reset. The 4 th step up as a crack at the north end which was mended. The coping stones are in good condition. Tilting steps are a priority for repair.
Steps between Fountain Terrace and Rose House Terrace 6 steps with 2 coping stones	X	X							F	The 5 th step is pulling out and the 6 th step is tilting inward both needs to be reset. Corners are cracked off some of the steps and there is some spalling on the west coping stone. The pea gravel from pathway is transferring onto steps & is a potential hazard. The grass terrace adjacent to the east coping stone is eroded and needs to be filled.
Rose House Terrace boundary wall south side of formal gardens. Low brick wall approx. 3 1/2 ft with red earthenware tile coping	X								F	Brick wall is in fair condition with some repointing needed. All red clay finials missing from caps. Caps are in good condition. South side of the wall is in poorer condition possibly due to adjacent cold frames

Feature Location and Description	Loose mortar or spalling	Cap cracked or shifted	Step, walk or wall leaning or heaving	Bricks severely eroded or gone	Step, walk or wall cracked or fractured	Wood rotting, gone or damage by vegetation	Damage by vegetation	Missing features	Overall: Good (G), Fair (F), Poor (P)	Comments on Condition
Cold Frames on south side of the Rose House Terrace boundary wall. Concrete structure with some remaining timber framing	X	X							P	Cold frames are in poor condition. The wooden frames, midsections and covers are missing. The concrete frame is cracking. The frames are being used to store plants.
Potting House on west side of the Rose House Terrace. Brick construction approx 113ft x 13ft with a metal roof	X								G	Some bricks are falling, and some repointing necessary but overall structure is good due to the solid roof on the building.
Extension at South east corner of the Potting House 20ft x 17ft									G	Three windows are boarded, a trash can is located near the wall and a utility pipe
Remainder of concrete pad on east side of the Potting House				X					P	Concrete pad is crumbling & uneven. There are three loose bluestone pavers lying on the concrete surface near the door that enters the Potting House on the east side. A moveable metal and wood bench is located here
Fieldstone foundation on south west corner of building										Exposed mortared fieldstone foundation
Steps on west side of Potting House leading to the building. This comprises of 5 steps that are approx. 5ft wide x 1 ft and 3" high and two coping of similar dimension. The top step is flush with the grass									G	These steps descend the grassy terrace on the west side of the Potting House and connect with a doorway that accesses the building. The steps comprise of 4 steps and 2 pavers of bluestone set on brick. They are of a different design to step in the formal garden, possibly a more economical design reflecting their utilitarian function to access work area behind glasshouses. These are in good condition.
Short path 2 ft by 5 ½ ft connects with a door on west side of the –Potting House Comprising of a series of blue stone pavers.										The steps terminate on a platform of three pavers, the south paver has broken edge and is irregular in fashion and may be a replacement rather than original.
Arched Stair Arbor at the north east end of Upper Annual Garden. This is an ornate metal structure that connects the Carnation House Terrace with the Upper Annual Garden										This sturdy construction is in good repair. Vines, honeysuckle and wisteria scramble over the structure. Wirework treillage is somewhat damaged, some of the cross wires have been cut to facilitate vine growth. To prevent structural damage to the construction plants must be pruned and trained in such a fashion as to ensure that they do not pass through the lattice, cause undue stress on the overall structure or grow between the wirework and adjacent brick piers.
Steps under the arbor the north east end of Upper Annual Garden, comprising of 5 steps and two coping stones		X		X					F	The top step is out of kilter with the rest of the flight and the nosing of bottom step is out of kilter and needs to be reset. The coping stone on the east side is misaligned.

Feature Location and Description	Loose mortar or spalling	Cap cracked or shifted	Step, walk or wall leaning or heaving	Bricks severely eroded or gone	Step, walk or wall cracked or fractured	Wood rotting, gone or damage by vegetation	Damage by vegetation	Missing features	Overall: Good (G), Fair (F), Poor (P)	Comments on Condition
Brick piers and trellis demarking east side of the Upper Annual Garden & Upper Annual Garden. 9 brick columns, supporting metal frames unto which festooned metal treillage panels are attached	X	X		X			X		F	Some of the brickwork in the column is eroding in particular on the 2 nd , 8 th & 9 th piers. The capitals are in good condition, the mortar is in fair condition. The 2 nd capital is clad with a vine, honeysuckle. Capital on 6 th pier appears to be loose. Metal frames are in good condition, some of the joints connecting the frame to the brickwork are loose and mortar has crumbled. Attachments for the frames and lattice panels are in good condition. Honeysuckle is trained along the lattice panels. Along the ground black landscaping fabric is visible. Two spigots are visible along this boundary line, it is not known if they are functional. Water spray may be responsible for some of the brick erosion to adjacent pillars
Stair Pergola connecting the Upper Annual Garden with the Lower Annual Garden. This is a brick, timber and wire construction	X						X		F	Brick columns are sound however the upper five courses of bricks on the north east & north west column require repointing. Vine ties are apparent on some of the pillars. Some of the vines are putting pressure on the brickwork and causing it to twist and crack, this should be monitored. Brick wing walls are in good condition but the south west lower pier is pulling away from the wall and is leaning. The wire lattice and associated attachments are sound. Some of the timber beams are rotting. The larger timbers are sound, The 3 rd truss is rotting and many of the smaller cross members are rotting or gone. The 6 trumpet vines are thriving but are a little too vigorous and out of proportion with the pergola and should be pruned to reduce overall mass. These were planted 25 years ago by the FWVGA
Steps under the Stair Pergola connecting the Upper Annual Garden with the Lower Annual Garden, 11 steps					X				G	Where the path connects with the steps there is a change in level which is a potential trip hazard. This could be reduces by creating a concrete and pea gravel sill. The 11 steps are in good condition. The third step from the top is cracked
Short wall extending east from the lower south east corner of the stair pergola	X	X	X		X				F	This low brick wall 3 ½ feet extends into the Upper Perennial Garden. The wall capping has shifted by a couple of inches causing the underlying brick courses to bulge and mortar to degrade. The adjoining pier on the east end is pulling away from the wall. Some vegetation is colonizing the loose joints. The north face of the wall supports the south end of a long embankment in the Upper Perennial Garden. The mortar joints are loose.
Steps connecting Rose House Terrace with the Lower Annual Garden								X		This steep stairway is in good condition. The footings for a brick wall are visible. This lost feature would have provided support when traversing the stairway. The pitch of the steps may be responsible for the lack of use and consequently the good state of repair
Boundary wall south side of Lower Annual Garden								X		This section of wall is missing and there is to delineate the outer limits of the walled garden

Feature Location and Description	Loose mortar or spalling	Cap cracked or shifted	Step, walk or wall leaning or heaving	Bricks severely eroded or gone	Step, walk or wall cracked or fractured	Wood rotting, gone or damage by vegetation	Damage by vegetation	Missing features	Overall: Good (G), Fair (F), Poor (P)	Comments on Condition
Pergola at the south east corner of the Lower Annual Garden connecting to the Pool House Pergola. This is a timber and brick and stone structure	X	X					X		P	The brick piers on the west side of the structures have loose mortar especially near the top. Some of the timber beams are nearing the end of their life and must be replaced. Evidence of carpenter bee activity, some rot and decay, one beam is tilting. The north east wooden column is rotten and needs immediate replacement as it is affecting the overall integrity of the structure. This post can not support the additional weight of a vine. Timber cross members are structurally sound and were replaced in 2007. The rest of the timber structure could last for another 3 years without the additional weight and moisture content associated with the vines or possibly 5 years without the climbers. The trumpet vine was cleared from the post in 2008. The brick base that supports the south east wooden pillar has some loss of pointing. A vine is pushing the wall capping out of place resulting in a degradation of the brick mortar joints.
Steps under the Pergola at the south east corner of the Lower Annual Garden connecting to the Pool House Pergola	X					X	X		P	These steps are in good repair. The top step has settled a little and needs to be reset. North wing walls is cracked, the south coping stone is cracked.
L Shaped Perimeter wall north of the Upper Perennial Garden	X								F	North east pier is no longer tied to the adjoining wall. The wall is capping with molded stone. Some of the brick work mortar is loose and there is minor cracking in the wall. The west side of the wall is in better condition than the east side. There is more mortar loose on the east side. This may in part be due to the overhanging tree canopy.
Steps at perimeter wall north of the Upper Perennial Garden. Steps are 16" wide x 9' long x 6" high					X				G	These four bluestone steps are in good condition, only the 1 st step is chipped
Perimeter wall north of the Upper Perennial Garden south side of path, western section	X	X					X		F	Low brick wall approx. 3½' is surmounted by clay tile capping, the horizontality of which is interrupted by 3 brick columns surmounted with a stone capital and large ball finial; the columns are connected by large carved cedar beams. Overall effect is to view the perennial garden through a series of picture windows. Timber beams are cracked but solid and retain integrity. There is evidence of carpenter bee activity. Vine growing in joint between cedar beam and the first pier to be removed to prevent additional structural damage. Vine pruned back hard earlier in 2008. Evidence of graffiti on the tile capping. Some of the joints between capping tiles have been repaired

Feature Location and Description	Loose mortar or spalling	Cap cracked or shifted	Step, walk or wall leaning or heaving	Bricks severely eroded or gone	Step, walk or wall cracked or fractured	Wood rotting, gone or damage by vegetation	Damage by vegetation	Missing features	Overall: Good (G), Fair (F), Poor (P)	Comments on Condition
Perimeter wall north east corner of the Upper Perennial Garden	X	X			X		X		P	Low brick wall capped with red capping tiles extends east from the North Pergola. Three low brick piers crowned with hipped tiles surmounted with ball finials. This wall is in poor condition cracking is apparent at the base of these walls, only one damaged ball finial remains at the base of these side walls. There is no separation between the bottom walls and piers. White pines overhang the wall and there is some colonization of vegetative material in the wall
North Pergola in the Upper Perennial Garden	x	x	x		x	x	x	x	F	This ornate structure of brick, stone and timber overlooks the Upper Perennial Garden. The piers supporting the woodwork are in fair condition however some of the pointing in the upper brick courses is failing. There is some damage to the capping, chipping and loss of corners. A low semi-circular seating wall is set on a sloping height ranging in height on the outside from 4' -2½ '. The wall capping is chipped and loose, the pointing has failed resulting in the degradation of mortar on the top few levels of brick coursing. Efflorescence of the brickwork on the north east side visible. The red earthenware tile floor is in good condition, a few half tiles are missing. A bluestone flag at the west entrance has shifted and is cracked and is currently set at a different level to the tiles and adjacent pea gravel connecting path and poses as a potential trip hazard. The tilting of the bluestone flag may also be affecting the water runoff to the adjacent drain. The timber radials are rotting where notched; this may be contributed to by the additional moisture, weight and poor air circulation associated with the vine clambering over the structure. Remedial pruning would improve this situation and prolong the life of the timber. The timber cross members are also rotting. The path edge is poorly defined

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Stairway associated with North Pergola in the Upper Perennial Garden	X	X	X	X	X	X	X		F	Set of 14 steps comprised of 1' deep bluestone steps, the tread depth is increased by a row of red earthenware tiles. Overall the steps are in fair condition with minimal spalling, little damage to the tiles & the top step has slightly settled. The west wing wall is cracked near the base. Concrete foundation for the east wing wall are visible on the east face, pointing is somewhat displaced. The pillars supporting the timber beams are under stress resulting from the vines embracing and twisting the column in such a fashion that the overhead load bearing beam no longer sits squarely on the cap. The brickwork is showing signs of stress throughout the pillar length and the mortar is degrading at the base. The overall integrity of the structure is being compromised by the contorting effect of the vine. Remedial pruning is required and in future if vines are to remain they must be trained and kept under control to minimize structural damage. Some minor repointing work is needed to the brickwork. Large timber beams at the lower end of the arch are sound, except at the south east end above the cement column. There is evidence of carpenter bee activity. The wooden cross members are poor and rotting some of the outer ends have broken off. Vine growth on top of the structure at this point is dense. Two Doric cement columns set on low brick sidewalls terminate the structure. The pointing on the sidewalls is failing. The east column is fractured 2' from the base; this may be due to the pressure exerted by the vine growth.
Low perimeter wall at north east side of Upper Perennial Garden	X		X				X		G	This low brick wall incorporating a series of pillars, flush with the tile wall capping. approx. 4' high demarking the north east limit of the formal garden affords views into the wider landscape. The brickwork is in good condition, pointing is sound and the capping in intact and has been repaired in the past. There is a wobble on the wall at the south end. This may be due in part to soil movement associated with previous planting along this wall.
Dry stone wall flanking centre path in the Upper Perennial Garden										Low retaining dry stone wall increasing from ½' at north end to 3' at south end. Gaps in the wall are used as planting pockets, a weep hole pipe emerges at the south end.
Dry stone wall flanking centre path in the Upper Perennial Garden, westside									F	Low retaining dry stone wall increasing from ½' at north end to 3' at south end. Gaps in the wall are used as planting pockets.

Feature Location and Description	Loose mortar or spalling	Cap cracked or shifted	Step, walk or wall leaning or heaving	Bricks severely eroded or gone	Step, walk or wall cracked or fractured	Wood rotting, gone or damage by vegetation	Damage by vegetation	Missing features	Overall: Good (G), Fair (F), Poor (P)	Comments on Condition
Retaining brick wall east side of upper and Lower Perennial Garden	X	X							F	The drystone wall terminates at a brick pier capped with stone. The capping has shifted and is misaligned. The attached brick wall is 13 courses high and set on an exposed concrete foundation is capped with stone. The pointing between the caps has failed in sections. The wall turns east and runs towards the Upper Rose garden. Where the wall straightens a different color brick has been use, this wall is capped by a brick rowlock course. A square recess inset into the high bank beyond the retaining wall terminates the run as it tapers off parallel with the perimeter wall
Retaining brick wall west side of upper and Lower Perennial Garden	X	X	X						F	The dry stone wall terminates at a brick pier capped with stone. The pointing on the pier is degrading. The attached brick wall is 14 courses high and is capped with stone. The corner of one of the piers is damaged. The pointing under the caps is loose in sections. The wall turns west and is terminated in a brick pier. Here the construction of the wall changes and mirrors the construction on the opposite side of the path, The 14 course brick retaining wall is capped by a brick rowlock course and runs towards the Lower Annual Garden and the turns south terminating at the stair pergola. The pointing is degraded in particular under the coping and the resulting water ingress is causing cracks and fracturing, these fissures are being colonized by vegetation. Weep holes are only apparent at the North end. The south end of the wall is pushing out.
Pool Pergola Side walls at the base of the Stair Pergola at the south west corner of the Lower Perennial garden	X	X	X	X					P	The stone cape is pitching and the mortar joints are loose and the wall is splayed and tilting south
Pool Pavilion Pergola outer wall	X	X		X					F	This approx 9' brick apsidal wall is capped with stone. The south west side of the structure had just been repaired however some loose pointing is apparent in the upper brick courses. The mortar joints at the cope stone for a large pillar at the south side have degraded and the water ingress has caused erosion of other mortar joints and the substantial brick movement is causing the pillar to lean forward at the top. Bricks adjacent to the window and along the south east section are deteriorating and cracks are apparent near the base of the wall. North west sections of the brickwork are coated with algae bloom. The outer wall of the pool house is in good condition.

Feature Location and Description	Loose mortar or spalling	Cap cracked or shifted	Step, walk or wall leaning or heaving	Bricks severely eroded or gone	Step, walk or wall cracked or fractured	Wood rotting, gone or damage by vegetation	Damage by vegetation	Missing features	Overall: Good (G), Fair (F), Poor (P)	Comments on Condition
Pool Pavilion	X			X			X		P	Wooden joists and trusses support a tile roof. The vine is growing under some of the roof tiles and if unchecked will create structural problems. A number of holes are visible in the roof tiles suggesting water ingress. The red earthenware tiles on the floor are in good condition and only a few are cracked. There is some graffiti carved into the soft bricks and a hook in the centre of the wall. Brick embossed with WAU (William A. Underhill Brickyard, Croton Point, NY). Stone seats integrated into brick construction beneath the two arched windows
Pool House Pergola	X	X				X	X		F	The brick columns supporting the timber beams are in good condition some of the mortar joints are degrading. The vines planted beside the pillars are pruned back. Some of the cross beams are beginning to rot and there is evidence of carpet bees. On the east side some of the cross members have been replaced
Wall at the east side of the Lower Perennial Garden overlooking the Upper Perennial Garden	X	X	X		X				P	This wall consists of a low brick wall approx. 3' capped with red earthenware tiles, with high brick pillars extending approx. 9' capped with molded caps. Ornate ironwork scrolls bridge each column. This creates a series of picture windows through which the Rose Gardens and wider landscape can be viewed. Roses and vines ascend the pillars and ironwork. There is extensive brick erosion in particular on the pillars where the mortar joints have failed. The pointing in the brick courses just beneath the coping is poor. A number of the columns are cracked and leaning east, some of the caps are chipped. Several of the joints where the ironwork is secured to the pillars are loose. The metalwork is in good condition and is supporting roses (new dawn) and honeysuckle. The mortar just below the tile capping on the low wall is failing. A series of vine ties occur on the west side of the low wall. In all probability to facilitate the training of the plants in the adjoining 2' deep bed to ornament the wall.
Sidewalls for L staircase descending to the Upper Rose Garden (South Flight)	X	X							P	Darker colored brick are used to form these sidewalls. Stone coping is used to cap and distinguish these walls. Some of the caps have been repaired. There is some cracking and shifting of the walling due to failure of mortar joints. The south wall connected to the Pool Pergola is very loose for the first 7 courses of bricks beneath the coping; algae bloom and vegetation are visible in the south east corner.
Stair treads of L staircase descending to the Upper Rose Garden (South Flight)					X				G	These 2 sets of five bluestone threads are in good condition with only a small amount of spalling. The midway single stone platform spanning 6' x 6' is in excellent condition.

Feature Location and Description	Loose mortar or spalling	Cap cracked or shifted	Step, walk or wall leaning or heaving	Bricks severely eroded or gone	Step, walk or wall cracked or fractured	Wood rotting, gone or damage by vegetation	Damage by vegetation	Missing features	Overall: Good (G), Fair (F), Poor (P)	Comments on Condition
Retaining wall at the west end of the Upper Rose Garden									G	This low approx. 3½' brick retaining wall capped with a brick rowlock course has been recently rebuilt, behind which is a concealed rough fieldstone wall. There are no weep holes, to facilitate drainage in the new wall. The mortar joints appear to be thicker than exhibited elsewhere in the garden.
Sidewalls for L staircase descending to the Upper Rose Garden (South Flight)										Darker colored brick are used to form these sidewalls. Stone coping is used to cap and distinguish these walls. Some of the mortar joints associated with the caps have failed resulting in some cracking and shifting of the copes and walling. There are plant ties visible on the walls. There is some damage to the corner bricks at the south east section.
Stair treads of L staircase descending to the Upper Rose Garden (South Flight)					X				F	These 2 sets of five bluestone threads are in fair condition with some cracking and spalling. The midway single stone platform spanning 6' x 6' is in good condition.
Perimeter fence forming north boundary of the Upper Rose Garden								X		This black chain link fence defines the north boundary of the Upper Rose Garden. There is a gate located near the east end. The current screen is in place of a series of high brick pillars capped with molded stone caps supporting a surrounding fence that was previously located on this site. The loss of this feature and the associated shrubbery planting has a dramatic impact on the sense of enclosure of the formal garden and the Rose Terraces. The spatial relationship within the garden and connectivity with the wider landscape is dramatically different from the historic period. The loss of a solid surface and associate plantings will also have an effect on the microclimate of these terraces
Perimeter fence forming south boundary of the Upper Rose Garden								X	F	This black chain link fence defines the south boundary of the Upper Rose Garden.
Staircase leading from the Upper Rose to the Lower Rose Garden	X	X			X				F	This set of five bluestone risers lead to a landing that carries on down for another 5 steps. The steps are overall in fair condition with some spalling. However the 2 step from the bottom is loose and should be reset. The brick side walls and stone coping are in poor condition. There is a loss of pointing and fracturing on the south side wall. The north side wall is leaning north and has a number of loose bricks and mortar
Low retaining wall on south west of the Lower Rose Garden									G	This low, approx. 3½' brick wall with brick rowlock coping is in good condition. There are no major cracks or leaning. Some loss of mortar is visible in the 4 courses below the coping. Some vegetation is colonizing the joints. There are no weep holes to assist drainage. A series of rose ties are attached to the walls.

Feature Location and Description	Loose mortar or spalling	Cap cracked or shifted	Step, walk or wall leaning or heaving	Bricks severely eroded or gone	Step, walk or wall cracked or fractured	Wood rotting, gone or damage by vegetation	Damage by vegetation	Missing features	Overall: Good (G), Fair (F), Poor (P)	Comments on Condition
Low retaining wall on north west of the Lower Rose Garden										This low, approx. 3½' brick wall with brick rowlock coping is in fair condition. The wall is leaning east and there is some loss of mortar in the upper 4 tiers and a fracture at the north end of the wall. Some vegetation is colonizing the joints. There are no weep holes to assist drainage. A series of rose ties are attached to the walls
Perimeter fence forming north boundary of the Lower Rose Garden								X	F	This black chain link fence defines the north boundary of the Lower Rose Garden. There is a gate located near the east end. The upright posts are irregularly aligned. The current screen is in place of a series of high brick pillars capped with molded stone caps supporting a surrounding ironwork fence that was previously located on this site. The loss of this feature has a dramatic impact on the sense of enclosure of the formal garden and the Rose Terraces. The spatial relationship within the garden and connectivity with the wider landscape is dramatically different from the historic period. The loss of a solid surface and associate plantings will also have an effect on the microclimate of these terraces
Perimeter fence forming south boundary of the Lower Rose Garden								X	F	This black chain link fence defines the south boundary of the Lower Rose Garden. The upright posts are irregularly aligned
Rose Garden Loggia									G	The front façade is an arcaded loggia supported by two columns overlook the Orpheus Fountain basin and to the Rose Garden beyond. Three arched picture open to the east. Two large arched openings with low metal ballustrade at the base open to the North and South
Compost area located in the former cutting garden south of the Rose House Terrace									F	This is the storage area for compost and topsoil, currently topsoil made by NPS in house and then supplied to FWVGA
Garden shed located in the former cutting garden located south of Rose House terrace									F	Marty's shed, a timber structure was erected c. 2000 and is used to store lawn maintenance equipment. The shed is dedicated to one of the volunteers
High mortared fieldstone wall running north to south along the west perimeter of the former cutting garden										
Fieldstone steps at north end of the fieldstone wall									G	These 9 steps are in good condition and access is improved with the addition of a handrail by FWVGA

APPENDIX D: ANNUALS IN ESTATE PURCHASE LEDGERS

The following table lists the annuals that appear in the estate purchase ledgers arranged alphabetically by name.

Species	Date	Reference Book, Page	Notes
Ageratum Princess Pauline	1910	Bk. 7, P. 322	4" in height, light lavender color, used as border or bedding plant under taller plants
Ageratum Stella Gurney	1910	Bk. 7, P. 322	Both A. Stella Gurney and Princess Pauline are mentioned often in gardening literature of 1900-1920
Ageratum white	1903	Bk. 11, P. 66	
Alyssum	1923	Bk. 1, P. 189	
Alyssum	1924	Bk. 1, P. 219	
Alyssum Carpet of snow	1910	Bk. 7, P. 306	
Alyssum Carpet of Snow	1936	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Alyssum Carpet of Snow	1922	Bk. 1, P. 155	
Alyssum maratima	1910	Bk. 7, P. 306	
Alyssum, Carpet of Snow	1934	Bk. 3, P. 145	William W. Hunt
Alyssum, Carpet of snow	1921	Bk. 1, P. 124	
Alyssum, Carpet of snow	1921	Bk. 1, P. 131	
Alyssum, Saxatile, Silver Queen	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Andropogon argenteus	1903	Bk. 11, P. 36-37	
Antirrhinum Giant Buff	1921	Bk. 1, P. 122	
Antirrhinum Cloth of Gold	1921	Bk. 1, P. 122	
Antirrhinum Golden chamois	1921	Bk. 1, P. 122	
Antirrhinum Orange King	1921	Bk. 1, P. 122	
Aquilegia, Scarlet Shades	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Arabian Primrose, Arnedia Cornuta	1902	Bk 17, P. 115	
Arundo donax variegata	1903	Bk 11, P. 36-37	
Asparagus Fern	1925	Bk. 1, P. 252	50 ordered
Asparagus sprengeri	1928	Bk. 16, P. 308	50 Ordered
Aster Rose King	1921	Bk. 1, P. 131	
Aster Carlson Lavender	1921	Bk. 1, P. 131	
Aster Carlson's lavender	1922	Bk. 1, P. 155	
Aster Giant Cornet	1904	Bk. 15, P. 224	
Aster Gt. Comet, 3 vars.	1935	Bk. 5, P. 250	W.E. Marshall & Co., Inc., 150 West 23 rd St., New York, NY
Aster Heatherhome's Sea Shell	1914	Bk. 16 P. 132	
Aster Lavender	1923	Bk. 1, P. 189	
Aster lavender	1924	Bk. 1, P. 219	
Aster Lavender King	1936	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Aster Lavender King	1922	Bk. 1, P. 151	
Aster Oct. Pl Lar	1924	Bk. 1, P. 219	
Aster Ostrich Plume Dark Blue	1908	Bk. 7, P. 308	
Aster Ostrich Plume Lavender	1908	Bk. 7, P. 308	
Aster Ostrich Plume Light Blue	1908	Bk. 7, P. 308	

Species	Date	Reference Book, Page	Notes
Aster Ostrich Plume White	1908	Bk. 7, P. 308	
Aster Ostrich Vick's Crimson	1908	Bk. 7, P. 308	
Aster Ostrich Vick's Pink	1908	Bk. 7, P. 308	
Aster Ostrich Vick's White	1908	Bk. 7, P. 308	
Aster Peach Blossom	1922	Bk. 1, P. 151	
Aster Pink	1924	Bk. 1, P. 219	
Aster Pink King	1936	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Aster Rose	1922	Bk. 1, P. 151	
Aster Rose	1922	Bk. 1, P. 155	
Aster Surf caerulea	1921	Bk. 1, P. 122	
Aster Vick's Rose	1923	Bk. 1, P. 189	
Aster Vick's White	1922	Bk. 1, P. 155	
Aster Victoria	1904	Bk. 15, P. 224	
Aster Violet King	1936	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Aster W.R. Imp. Crego O. Rose	1937	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Aster W.R. Imp. Crego Shell Pink	1937	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Aster W.R. Temple's Azure Blue	1937	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Aster W.R. Temple's Deep Rose	1937	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Aster W.R. Temple's White (or Lemple's)	1937	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Aster White	1924	Bk. 1, P. 219	
Aster, Flesh Pink Queen of the Market	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Aster, 2 vars.	1936	Bk. 5, P. 250	W.E. Marshall & Co., Inc., 150 West 23 rd St., New York, NY
Aster, Cal, 2 varieties	1934	Bk. 3, P. 145	William W. Hunt
Aster, Crimson Queen of the Market	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Aster, L oz, 3 varieties	1934	Bk. 3, P. 145	William W. Hunt
Aster, Scarlet Queen of the Market	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Astermum White	1921	Bk. 1, P. 131	
Astermum lavender	1923	Bk. 1, P. 189	
Astermum Pink	1923	Bk. 1, P. 189	
Astermum white	1923	Bk. 1, P. 189	
Astermum Rose Pink	1921	Bk. 1, P. 131	
Baby's Breath Gypsophlia elegans g alba	1908	Bk. 7, P. 308	
Baby's Breath Gypsophlia elegans g rosea	1908	Bk. 7, P. 308	
Balloon flower, Platycodon grandiflora mixed	1902	Bk 11, P. 4	herbaceous perennial
Batchelor Buttons, Centaurea Imperialis deep lavender			
Beard-tongue Penstemons mixed	1902	Bk 11, P. 4	

Species	Date	Reference Book, Page	Notes
Begonia erfordii	1927	Bk. 1, P. 284	
Begonia semperflorens	1926	Bk. 1, P. 266	
Begonia, Lady Mac in 2 1/4 " pots	1937	Bk. 5, P. 207	Roman J. Irwin, Inc. 38 West 27 th St., New York City
Begonia, Lady Mac in 2 1/4 " pots	1938	Bk. 5, P. 207	Roman J. Irwin, Inc. 38 West 27 th St., New York City
Begonia, Lady Mac Begonia in 2 1/4 " pots	1935	Bk. 5, P. 207	Roman J. Irwin, Inc. 38 West 27 th St., New York City
Begonia, Lady Mac in 2 1/4 " pots	1936	Bk. 5, P. 207	Roman J. Irwin, Inc. 38 West 27 th St., New York City
Begonia, Melior in 2 1/4 " pots	1937	Bk. 5, P. 207	Roman J. Irwin, Inc. 38 West 27 th St., New York City
Begonias Melia	1924	Bk. 3, P. 159	Roman J. Irwin
Blue Lace Flower, <i>Trachymene caeruleum</i>	1922	Bk. 1, P. 151	
Briza maxima	1903	Bk 11, P. 36-37	
Browallia, Speciosa Major	1938	Bk. 5, P. 353-354	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Browallia, Speciosa Major	1938	Bk. 5, P. 353-354	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Browallia, Speciosa Major	1938	Bk. 5, P. 353-354	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Burning Bush Kochia	1908	Bk. 7, P. 308	
Burning Bush, Kochia trichophylla	1915	Bk. 16 P. 184	
Calceolaria	1903	Bk 11, P. 35-36	
Calceolaria	1927	Bk. 1, P. 301	36 ordered may have been used as house plant or as part of scheme
Calceolaria Hybrid perfection	1908	Bk. 7, P. 308	
Calceolaria Stewartii & Pink Beauty	1928	Bk. 1, P. 314	24 Ordered
Californian poppy, Eschscholzia mixed	1902	Bk 11, P. 4	
Calliopsis atrosanguinea	1903	Bk 11, P. 35-36	
Calliopsis grandiflora	1903	Bk 11, P. 35-36	
Calliopsis lanceolata	1903	Bk 11, P. 35-36	
Campanula, Telham Beauty	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Candytuft carmine, Iberis sempervirens	1903	Bk 11, P. 35-36	
candytuft	1904	Bk. 11, P. 74	
Canna	1926	Bk. 1, P. 270	150 Ordered
Canna Victory	1927	Bk. 1, P. 288	200 ordered
Canna	1926	Bk. 1, P. 269	100 Ordered
Canna Mrs Alfred F Conrad	1923	Bk. 1, P. 191	100 Ordered
<i>Cannas</i> x 'Mrs. Alfred F. Conard'	1918	Bk. 1, P. 36	100 ordered
Carnation	1918	Bk. 1, P. 37	650 ordered
Carnations Belle Washburn	1922	Bk. 1, P. 156	Red carnation
Celosia	1910	Bk. 16 P. 15	
Centaurea imperalis	1921	Bk. 1, P. 131	
Centaurea Imperalis			
Centaurea Imperalis delicate lilac	1910	Bk. 7, P. 322	
Centaurea Jubilee Gem No 1880	1937	Bk. 5, P. 120	Henry A. Dreer, 1306 Spring Garden St., Philadelphia, PA
Centureas cayanus	1922	Bk. 1, P. 165	
Cineraria	1912	Bk. 16, P. 60	
Cineraria Feltham Beauty	1922	Bk. 1, P. 164	

Species	Date	Reference Book, Page	Notes
Cineraria Dwarf	1910	Bk. 7, P. 306	
Cineraria Giant	1910	Bk. 7, P. 306	
Cineraria Intermediate Blue forget-me-not	1922	Bk. 1, P. 164	
Cineraria matchless Tall Mix	1910	Bk. 7, P. 306	
Cineraria mix	1903	Bk. 11, P. 66	
Cineraria stellata	1923	Bk. 1, P. 189	
Cineraria Superb mixed	1922	Bk. 1, P. 164	
Coleus	1904	Bk. 11, P. 71	
Cornflower	1910	Bk. 7, P. 322	Royal Sweet Sultan
Cosmos	1903	Bk 11, P. 35-36	
Cosmos	1924	Bk. 11, P. 71	
Cosmos 3 vars	1924	Bk. 1, P. 219	
Cosmos Lady Lenox	1908	Bk. 7, P. 308	
Cosmos Midsummer Giant	1914	Bk. 16 P. 132	
Cosmos New Double Early	1923	Bk. 1, P. 189	
Cosmos Orange Flare	1935	Bk. 5, P. 250	W.E. Marshall & Co., Inc., 150 West 23 rd St., New York, NY
Cyclamen	1926	Bk. 1, P. 257	6 packets
Cyclamen 8 vars	1924	Bk. 1, P. 219	
Cyclamen Coum	1902	Bk 11, P. 4	More likely to have been used outside in the ground, deep rose, pale pink7 white colors were available at this time
Cyclamen S's Giant Mixed	1922	Bk. 1, P. 164	
Cyclamens	1926	Bk. 1, P. 282	
Dahlia Agnes	1921	Bk. 1, P. 124	These are Mignon, bedding dahlias at around 18 inches high and are in Totty advert in the garden; Agnes, purple
Dahlia Albion	1921	Bk. 1, P. 124	Albion, white
Dahlia Countess of Pembroke	1921	Bk. 1, P. 124	Countess of Pembroke, pale lilac
Dahlia Daffodil	1921	Bk. 1, P. 124	Daffodil, yellow
Dahlia Daphne	1921	Bk. 1, P. 124	Daphne, Deep maroon
Dahlia Dazzler	1921	Bk. 1, P. 124	Dazzler, orange/scarlet
Dahlia Etna	1921	Bk. 1, P. 124	Etna, crimson
Dahlia Jubilee	1921	Bk. 1, P. 124	Jubilee, Pink
Dahlia Nivena	1921	Bk. 1, P. 124	Nivena, white
Dahlia Olive	1921	Bk. 1, P. 124	Olive, orange
Dahlia Salbach	1924	Bk. 1, P. 216	
Daisy Double rose, Leucanthemum	1902	Bk 11, P. 20	
Daisy Double white, Leucanthemum ?	1902	Bk 11, P. 20	
Daisy, Bellis Giant Flowering Pink	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Delphinium, Blue Wrexham	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Dianthus	1903	Bk 11, P. 35-36	
Dianthus	1930	Bk. 1, P. 328	1 packet
Doronicum, Pardalianches	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Dracaena	1925	Bk. 1, P. 252	50 ordered

Species	Date	Reference Book, Page	Notes
Dracaena indivisa	1922	Bk. 1, P. 165	
Dracaena indivisa	1923	Bk. 1, P. 193	
Dracaena indivisa	1924	Bk. 1, P. 221	50 Ordered
Dracaena indivisa	1928	Bk. 1, P. 311	50 Ordered
Dracaena Indivisa No 2386	1937	Bk. 5, P. 120	Henry A. Dreer, 1306 Spring Garden St., Philadelphia, PA
Dracanea	1931	Bk. 1, P. 343	50
Dracena Indivisa	1935	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Dracenea Ind	1934	Bk. 3, P. 145	William W. Hunt
Dracera ludivisa	1927	Bk. 1, P. 292	12 Ordered
Eragroskis elegans	1903	Bk 11, P. 36-37	
Erianthus Ravennae	1903	Bk 11, P. 36-37	
Eschscholzia californica	1903	Bk 11, P. 35-36	
Eulalia Japonica fol. Vit	1903	Bk 11, P. 36-37	
Eulalia Zebrina	1903	Bk 11, P. 36-37	
Evan's Boston Giant Mignonette	1902	Bk 11, P. 20	Boston Giant Lettuce?
Fern, Asparagus plumosus nanus 2 ¼" size (\$4.)	1935	Bk. 5, P. 11	J. F. Anderson, Short Hills, NJ
Fern, Asparagus plumosus nanus 2 ¼" size (\$4.)	1935	Bk. 5, P. 11	J. F. Anderson, Short Hills, NJ
Fern, Asparagus sprengeri oprengeri 2 ¼" size (\$4.)	1935	Bk. 5, P. 11	J. F. Anderson, Short Hills, NJ
Ferns Asparagus sprengeri oprengeri 2 ¼" size (\$4.)	1937	Bk. 5, P. 11	J. F. Anderson, Short Hills, NJ
Ferns, assorted in 2 ¼" pots	1935	Bk. 5, P. 11	J. F. Anderson, Short Hills, NJ
Ferns, assorted in 2 ¼" pots	1936	Bk. 5, P. 11	J. F. Anderson, Short Hills, NJ
Ferns, assorted in 2 ¼" pots	1937	Bk. 5, P. 11	J. F. Anderson, Short Hills, NJ
Ferns, Pteris (Dish) in (50 in 3" pots, 50 in 2 ¼" pots)	1937	Bk. 5, P. 11	J. F. Anderson, Short Hills, NJ
Ferns, Pteris (Dish) in (50 in 3" pots, 50 in 2 ¼" pots)	1937	Bk. 5, P. 11	J. F. Anderson, Short Hills, NJ
Ferns, Pteris (Dish) in (2 ¼" pots)	1938	Bk. 5, P. 11	J. F. Anderson, Short Hills, NJ
Ferns, Pteris (Dish) in (2 ¼" pots)	1938	Bk. 5, P. 11	J. F. Anderson, Short Hills, NJ
Firecracker vine, Spanish Flag, Mina Lobata	1902	Bk 11, P. 4	
Forget-me-not	1902	Bk 11, P. 20	
Foxglove mixed, Digitalis	1902	Bk 11, P. 4	
Fuchsia	1912	Bk. 16, P. 58	50 Double, 50 Single May have been park of bedding scheme or for planters
Gallardia, Grandiflora, compacted	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Geranium dwarf Pelargonium	1910	Bk. 7, P. 338	50 ordered
Geranium Pelargonium	1910	Bk. 7, P. 338	200 ordered of same variety
Geum, Double Orange Queen	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Giant Sweet Sultan	1910	Bk. 16 P. 5	
Gloxinea	1903	Bk 11, P. 35-36	
Gypsophila elegans	1921	Bk. 1, P. 124	

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Helianthus cucumerifolia	1903	Bk 11, P. 35-36	
Helianthus cucumerifolia stella	1903	Bk 11, P. 35-36	
Helianthus Maximiliana	1903	Bk 11, P. 35-36	
Helichrysum	1903	Bk 11, P. 35-36	
Helichrysum ? mixed	1925	Bk. 1, P. 247	
Heliotrope	1902	Bk 17, P. 115	
Heliotrope	1911	Bk. 16, P. 11	400 ordered
Heliotrope	1917	Bk. 1, P. 15	
Heliotrope Royal Fragrance	1924	Bk. 1, P.21 7	
Heliotrope Pearly Blue	1914	Bk. 16 P. 132	
Ipomoea sloteri Cardinal Climber	1917	Bk. 1, P. 14	
Lantana	1922	Bk. 1, P. 153	150
Lantanas	1921	Bk. 1, P. 123	200 ordered described as white and red
Lantanas Delicatissima 2 ¼" pots	1935	Bk. 5, P. 411	E.F. Weaver, Greenhouses, Wichita, Kansas
Lantanas Lavender Queen 2 ¼" pots	1935	Bk. 5, P. 411	E.F. Weaver, Greenhouses, Wichita, Kansas
Lantanas Sensation 2 ¼" pots	1935	Bk. 5, P. 411	E.F. Weaver, Greenhouses, Wichita, Kansas
Lantanas Violet Thing 2 ¼" pots	1935	Bk. 5, P. 411	E.F. Weaver, Greenhouses, Wichita, Kansas
Lantanas Weeping 2 ¼" pots	1935	Bk. 5, P. 411	E.F. Weaver, Greenhouses, Wichita, Kansas
Larkspur	1917	Bk. 1, P. 26	This may be consolida ambigua
Larkspur, Giant Imperial Dazzler	1938	Bk. 5, P. 353-354	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Larkspur, Giant Imperial Blue Spire	1938	Bk. 5, P. 353-354	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Lemon verbena	1904	Bk. 11, P. 71	
Lily Erabu xxx	1936	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Lily Erabu xxx (sp?)	1935	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Lily Formosum	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Lily Harrisii xxx	1936	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Lily, Harrisii	1933	Bk. 3, P. 145	William W. Hunt
Lily, Harrisii	1935	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Lily, Harrisii 2 nd size for Easter forcing	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Lily, Harrisii, 2 nd size	1937	Bk. 5, P. 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Lily, Regale	1933	Bk. 3, P. 145	William W. Hunt
Lobelia cardinalis	1903	Bk 11, P. 35-36	
Lobelia speciosa	1903	Bk 11, P. 35-36	
Loddon Gold Sunflower	1902	Bk 11, P. 4	
Malope graniflora rosea	1903	Bk 11, P. 35-36	
Marie Louise Violet	1914	Bk. 16 P. 149	
Marie Louise Violet	1916	Bk. 16 P. 226	
Marie Louise Violet	1918	Bk. 1, P. 72	800 ordered
Marie Louise Violet Plants	1912	Bk. 16, P. 74	800 ordered Double violet, mauve color, very fragrant.
Marie Louise Violet Plants	1913	Bk. 16, P. 112	

Species	Date	Reference Book, Page	Notes
Marie Louise Violet Plants	1915	Bk. 16, P. 193	
Marigold C. of Gold	1937	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Marigold Little Brownie	1936	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Marigold Royal Scot	1935	Bk. 5, P. 250	W.E. Marshall & Co., Inc, 150 West 23 rd St., New York, NY
Marigold Sunset Gts. (Giants?)	1937	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Marigold Tagetes patula 'Legion of Honour'	1908	Bk. 7, P. 308	Golden yellow dark markings still available
Marigold, Little Brownie	1934	Bk. 3, P. 145	William W. Hunt
Marvel of Peru, Mirabilis jalapa	1902	Bk 17, P. 106	Is a perennial but could have been used as an annual or biannual
Mignonette Allen's Defiant	1903	Bk. 11, P. 45	
Mignonette Allen's Defiant	1903	Bk. 15, P. 59	
Mignonette Bod. Majesty	1915	Bk. 16 P. 196	
Mignonette common sweet 1oz		Bk 11, P. 4	
Mignonette Eliasr	1903	Bk. 11, P. 66	
Mignonette Machet	1903	Bk. 15, P. 59	
Mignonette Macheta	1903	Bk. 11, P. 45	
Mignonette, Machet	1903	Bk 11, P. 35-36	
Mignotte Machet	1922	Bk. 1, P. 155	
Morning Glory Ipomoea violacea	1913	Bk. 16 P. 106	
Morning glory, Ipomaea grandiflora noctiflora	1902	Bk 11, P. 4	Climber
Morning glory, Ipomaea Imperialis	1902	Bk 11, P. 4	Climber
Morning glory, Ipomaea sinesata	1902	Bk 11, P. 4	Climber
Myosotis, Royal Blue	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Myosotis, Royal Blue	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Narcissus	1924	Bk. 1, P. 235	
Nasturtium Lobb's mixture	1923	Bk. 1, P. 189	Nasturtium Lobb's mixture contains Queen Victoria, Lucifer, Spitfire and Lily Shridt
Nasturtium	1904	Bk. 11, P. 71	
Nasturtium	1904	Bk. 15, P. 213	
Nasturtium	1908	Bk. 7, P. 308	
Nasturtium	1924	Bk. 1, P. 218	
Nasturtium Golden Dwarf King	1910	Bk. 7, P. 318	
Nasturtium King of Tom Thumb	1910	Bk. 7, P. 318	
Nasturtium, No 3273 Orange Gleam	1937	Bk. 5, P. 120	Henry A. Dreer, 1306 Spring Garden St., Philadelphia, PA
Nasturtium, No 3277 Scarlet Gleam	1937	Bk. 5, P. 120	Henry A. Dreer, 1306 Spring Garden St., Philadelphia, PA
Nasturtium, No 3285 Golden Gleam	1937	Bk. 5, P. 120	Henry A. Dreer, 1306 Spring Garden St., Philadelphia, PA
Nasturtium Dwarf Gold Queen	1920	Bk. 1, P. 99	
Nemophila Menziesii insignis	1924	Bk. 1, P. 222	
Nicotinia	1904	Bk. 11, P. 71	

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Nigella Damascena	1903	Bk 11, P. 35-36	
Pachysandra terminalis Japanese Spurge	1902	Bk 17, P. 135	May have been used as ground cover in walled garden
Painted Tongue, Salpiglossis	1922	Bk. 1, P. 155	Similar flower to Petunia but 2 ½ size but has a more upright form and can grow up to 3 feet
Pansies Bod. Challenge	1912	Bk. 16, P. 80	Challenge series are Medium sized winter hardy perennial, masses of medium sized blooms on compact plants. In a full range of colors
Pansy	1903	Bk. 11, P. 58	Order for 37 different sorts
Pansy	1922	Bk. 1, P. 175	
Pansy Ice King	1924	Bk. 1, P. 219	
Pansy March Beauty	1924	Bk. 1, P. 219	
Pansy Col. Green	1924	Bk. 1, P. 219	
Pansy Emperor William	1904	Bk. 11, P. 87	
Pansy Green Gts. (Giants)	1935	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Pansy Green Gts. (Giants)	1935	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Pansy Hunt's Superb	1936	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Pansy ice king	1923	Bk. 1, P. 189	
Pansy March beauty	1923	Bk. 1, P. 189	
Pansy special mixture	1902	Bk 11, P. 20	
Pansy Victoria	1904	Bk. 11, P. 87	
Pansy Victoria	1904	Bk. 14, P. 8	
Pansy White	1904	Bk. 11, P. 87	
Pansy White	1904	Bk. 14, P. 8	
Pansy William	1904	Bk. 14, P. 8	
Pansy winter queen	1923	Bk. 1, P. 189	
Pansy winter snow	1923	Bk. 1, P. 189	
Pansy Winter Snow	1924	Bk. 1, P. 219	
Pennisetum Ruppelianum	1903	Bk 11, P. 36-37	
Perennial Sweet Pea, Lathyrus latifolius (Hardy Pea) red	1902	Bk 11, P. 4	Climber
Perennial Sweet Pea, Lathyrus latifolius mixed	1902	Bk 11, P. 4	Climber
Periwinkle Vinca Rosea	1920	Bk. 16 P. 91	
Persian Cyclamen Cyclamen Persicum mixed	1902	Bk 11, P. 4	More likely to have been used in Greenhouse at this time
Petunia	1903	Bk 11, P. 35-36	
Petunia	1904	Bk. 15, P. 213	
Petunia	1923	Bk. 1, P. 185	
Petunia Balcony 3 var.	1937	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Petunia Balcony Blue	1936	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Petunia Balcony Pink	1936	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Petunia Balcony White	1936	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY

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Petunia Bar Harbor Bty	1936	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Petunia Dainty Lady	1937	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Petunia double	1904	Bk. 15, P. 213	
Petunia double mix	1904	Bk. 11, P. 71	
Petunia Julius Dreffe	1925	Bk. 1, P. 247	
Petunia New All Double	1936	Bk. 5, P. 250	W.E. Marshall & Co., Inc., 150 West 23 rd St., New York, NY
Petunia Violet Queen	1921	Bk. 1, P. 124	
Petunia, Balcony, 3 varieties	1934	Bk. 3, P. 145	William W. Hunt
Petunia, Bar Harbor Beauty	1934	Bk. 3, P. 145	William W. Hunt
Petunias	1924	Bk. 1, P. 216	
Phlox Hybrids mixed, Myosotis Elisa Fourobert	1902	Bk 11, P. 4	
Poppy – Shirley	1903	Bk 11, P. 35-36	
Poppy Coccinean fl. Pl.	1903	Bk 11, P. 35-36	
Poppy Glaucum	1903	Bk 11, P. 35-36	
Poppy shirley	1904	Bk. 11, P. 71	
Poppy Shirley mix	1904	Bk. 15, P. 213	
Portulaca, 3 vars.	1935	Bk. 5, P. 250	W.E. Marshall & Co., Inc., 150 West 23 rd St., New York, NY
Portulace	1904	Bk. 15, P. 213	
Portulace	1904	Bk. 11, P. 97	
Pot marigold, Calendula 'Prince of Orange'	1917	Bk. 1, P. 26	
Primula	1924	Bk. 1, P. 231	50 Ordered
Primula	1930	Bk. 1, P. 336	50
Primula	1924	Bk. 1, P. 231	75 Ordered
Primula _____	1923	Bk. 1, P. 198	25 Ordered
Primula _____	1923	Bk. 1, P. 198	25 Ordered
Primula _____	1927	Bk. 1, P. 296	12 Ordered
Primula American Legion	1927	Bk. 1, P. 296	12 Ordered
Primula Double lavender	1927	Bk. 1, P. 296	12 Ordered
Primula lilac	1924	Bk. 1, P. 219	
Primula macaloides King Alfred	1923	Bk. 1, P. 198	25 Ordered
Primula macaloides Townsendi	1923	Bk. 1, P. 198	25 Ordered
Primula Mal. Superba	1935	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Primula Mal. Superba	1936	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Primula malacoides	1922	Bk. 1, P. 171	
Primula malacoides Rohiere	1921	Bk. 1, P. 138	25 Ordered
Primula malacoides conspicua	1921	Bk. 1, P. 138	25 Ordered
Primula malacoides p_____	1922	Bk. 1, P. 178	
Primula Obconica Grandiflora	1919	Bk. 1, P. 73	
Primula oberonia	1927	Bk. 1, P. 293	12 Ordered
<i>Primula oberonia grandiflora</i>	1917	Bk. 1, P. 21	
Primula oberonia mixed	1923	Bk. 1, P. 198	50 Ordered

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Primula Robin	1927	Bk. 1, P. 296	12 Ordered
Primula rose	1924	Bk. 1, P. 219	
Primula sinensis rosea and alba	1902	Bk 11, P. 4	Possibly for display in Mansion may have been used as bedding display
Primula stellata	1903	Bk 11, P. 35-36	
Primula Townsendii	1927	Bk. 1, P. 296	12 Ordered
Primula white	1924	Bk. 1, P. 219	
Primula, Dacokii's Pink	1934	Bk. 3, P. 145; Could be Darokeii	William W. Hunt
Primula, Pulverulenta	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Primula, Pulverulenta	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Primulus stellata Mixed	1921	Bk. 1, P. 122	
Pyrethrum, New Double Hybrids	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Ricinus	1904	Bk. 11, P. 75	
Ricinus Cambodgensis	1903	Bk 11, P. 35-36	
Ricinus Gilsoni mirabilis	1903	Bk 11, P. 35-36	
Ricinus Lauzibariensis	1903	Bk 11, P. 35-36	
Ricinus sanguineus	1903	Bk 11, P. 35-36	
Rockcross, Arabis Alpina	1902	Bk 11, P. 4	
Salvia Zurich	1921	Bk. 1, P. 124	Zurich is a dwarf salvia described as ideal for bedding
Salvia Bedman	1912	Bk. 16, P. 60	
Salvia Farinacea	1938	Bk. 5, P. 353-354	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Salvia Salmon Pink	1922	Bk. 1, P. 152	25 Salmon Pink Bonfire (salvia)
Salvia splendens 'Clara Bedman'	1908	Bk. 7, P. 308	Syn. "Bonfire" still available red
Salvia Splinda	1903	Bk. 11, P. 66	
Salvia Zurich	1908	Bk. 7, P. 308	Dwarf sage
Salvia, Welwyn Pink	1938	Bk. 5, P. 353-354	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Schizanthus	1922	Bk. 1, P. 175	
Schizanthus large flowered hybrids	1922	Bk. 1, P. 164	
Schizanthus Relictus	1921	Bk. 1, P. 122	
Schizanthus Wisetomensis	1921	Bk. 1, P. 122	
Schizanthus Wisetomensis	1922	Bk. 1, P. 164	
Sea Lavender, Statice	1903	Bk 11, P. 35-36	
Shasta Daisy	1903	Bk. 11, P. 45	
Smilax	1904	Bk. 15, P. 213	
Snapdragon Antirrhinum Carmine	1908	Bk. 7, P. 308	
Snapdragon Antirrhinum Cerissia	1908	Bk. 7, P. 308	
Snapdragon Antirrhinum Fairy Queen	1908	Bk. 7, P. 308	
Snapdragon Antirrhinum Lileacum	1908	Bk. 7, P. 308	
Snapdragon Antirrhinum Lyteum	1908	Bk. 7, P. 308	
Snapdragon Antirrhinum Queen Victoria	1908	Bk. 7, P. 308	
Snapdragon Antirrhinum Salmon	1908	Bk. 7, P. 308	

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Snapdragon Coates Yellow Perfection	1936	Bk. 5, P. 207	Roman J. Irwin, Inc. 38 West 27 th St., New York City
Snapdragon seed Sunset	1935	Bk. 5, P. 207	Roman J. Irwin, Inc. 38 West 27 th St., New York City
Snapdragon Sunset	1936	Bk. 5, P. 207	Roman J. Irwin, Inc. 38 West 27 th St., New York City
Snapdragon Terry's Surprise Improved	1936	Bk. 5, P. 207	Roman J. Irwin, Inc. 38 West 27 th St., New York City
Snapdragon Velvet Beauty	1936	Bk. 5, P. 207	Roman J. Irwin, Inc. 38 West 27 th St., New York City
Snapdragon white	1904	Bk. 11, P. 71	
Snapdragon, Alice Sunshine Seed	1935	Bk. 5, P. 207	Roman J. Irwin, Inc. 38 West 27 th St., New York City
Snapdragon, Coate's Yellow Perfection	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Snapdragon, Terry's Surprise Snapdragon Seed	1935	Bk. 5, P. 207	Roman J. Irwin, Inc. 38 West 27 th St., New York City
Snapdragon, Velvet Beauty	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Snapdragon, Velvet Beauty Seed	1935	Bk. 5, P. 207	Roman J. Irwin, Inc. 38 West 27 th St., New York City
Snapdragons Anthrinnium Col	1904	Bk. 15, P. 224	
Snapdragons, Antherineum Mandaramum	1916	Bk. 16 P. 223	
Snapdragons, Antirrhinum	1902	Bk 11, P. 4	
Sneezeweed, Helenium bigelovii	1902	Bk 11, P. 4	Yellow herbaceous perennial
Statice blue	1924	Bk. 1, P. 216	
Stipa pennata	1903	Bk 11, P. 36-37	
Stock Brompton	1903	Bk 11, P. 36-37	
Stock ten week	1904	Bk. 11, P. 71	
Sweat Pea Anita Wehrman	1915	Bk. 16 P. 200	
Sweat Pea Fair Orchid	1915	Bk. 16 P. 196	
Sweet Alyssum	1903	Bk. 11, P. 66	
Sweet pea	1903	Bk. 15, 24	
Sweet Pea	1930	Bk. 1, P. 334	
Sweet Pea	1930	Bk. 1, P. 334	
Sweet pea 4lbs	1902	Bk 17, P. 130	
Sweet Pea Blue	1936	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Sweet Pea Bluebird	1922	Bk. 1, P. 162	
Sweet Pea E Burke	1916	Bk. 16 P. 229	
Sweet pea Eckfords mix	1904	Bk. 11, P. 71	
Sweet Pea Ely. Attraction	1935	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Sweet Pea Ely. Fortyniner	1935	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Sweet Pea Ely. Greeting	1935	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Sweet Pea Ely. St. Rose	1935	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Sweet Pea Ely. Vulcan	1935	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Sweet Pea Ely.[early?] Memory	1935	Bk. 5, P. 183	William M. Hunt & Company, 115 West 45 th St, New York, NY
Sweet Pea Euchantress	1921	Bk. 1, P. 137	
Sweet pea Farq' Col Hybrids	1903	Bk. 15, P. 41	
Sweet Pea Flamingo	1921	Bk. 1, P. 137	

Species	Date	Reference Book, Page	Notes
Sweet Pea Glitters	1922	Bk. 1, P. 162	
Sweet Pea Illumination	1921	Bk. 1, P. 137	
Sweet Pea Illumination	1922	Bk. 1, P. 162	
Sweet Pea Lavender	1921	Bk. 1, P. 137	
Sweet Pea Lavender	1936	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Sweet Pea Lavender	1936	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Sweet Pea Lavender Orchid	1914	Bk. 16 P. 157	
Sweet Pea Mrs Alex Wallace	1912	Bk. 16, P. 77	Mrs Alex Wallace Pinkish lavender colour. The sweet pea could be used as cut flowers or as part of a display
Sweet Pea Mrs Alex Wallace	1913	Bk. 16 P. 117	Mrs A Wallace is described as Lavender or mauve. This is one of the varieties that Boddingtons entered into the Sweet Pea trials at Cornell University in 1911
Sweet Pea Mrs. Chas. ?	1920	Bk. 1, P. 107	
Sweet Pea Mrs. Heir	1921	Bk. 1, P. 137	
Sweet Pea Mrs. Kean	1922	Bk. 1, P. 162	
Sweet Pea Mrs. Warren G. Harding	1921	Bk. 1, P. 137	
Sweet Pea Mrs. Warren G. Harding	1922	Bk. 1, P. 162	
Sweet Pea Orange	1936	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Sweet Pea Orange Orchid	1916	Bk. 16 P. 229	
Sweet Pea Orchid Beauty	1914	Bk. 16 P. 157	
Sweet Pea Orchid Beauty	1915	Bk. 16 P. 196	
Sweet Pea Rose	1936	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Sweet Pea Rose Queen	1916	Bk. 16 P. 229	
Sweet Pea Rose Queen	1921	Bk. 1, P. 137	
Sweet Pea Rose Queen	1922	Bk. 1, P. 162	
Sweet Pea Salmomid	1916	Bk. 16 P. 229	
Sweet Pea Scarlet	1936	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Sweet Pea Wallacea	1912	Bk. 16, P. 77	
Sweet Pea Wallacea	1913	Bk. 16 P. 117	Wallacea is described as mauve
Sweet Pea Yarrowa	1915	Bk. 16 P. 176	
Sweet Pea Yarrowa	1916	Bk. 16 P. 229	
Sweet Pea Zvolanek's Pink	1936	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Sweet peas	1904	Bk. 15, P. 213	
Sweet peas	1904	Bk. 16, P. 259	
Sweet Peas	1934	Bk. 3, P. 159	Roman J. Irwin
Sweet peas 'Anita _____'	1917	Bk. 1, P. 24	
Sweet Peas 'Anita Wehrmann'	1911	Bk. 1, P. 1	
Sweet Peas 'Anita Wehrmann'	1911	Bk. 1, P. 1	
Sweet peas 'Blue Flaked'	1917	Bk. 1, P. 25	
Sweet peas 'Mrs. J.M. Baker?'	1917	Bk. 1, P. 24	
Sweet peas 'Orchid Beauty_____'	1917	Bk. 1, P. 24	
Sweet peas 'Rose Queen	1917	Bk. 1, P. 24	

Species	Date	Reference Book, Page	Notes
Sweet peas 'Salmonia_____'	1917	Bk. 1, P. 24	
Sweet peas Lathyrus Mrs Shankey	1904	Bk. 11, P. 97	
Sweet Peas Le Marquis	1913	Bk. 16 P. 117	Le Marquis is a dark blue
Sweet peas mixed	1902	Bk 11, P. 4	
Sweet Peas Ridgefield Beauty	1920	Bk. 1, P. 107	
Sweet Peas, Blue Sensation Winter Flowering	1938	Bk. 5, P. 354	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Sweet Peas, Early flowering Spencer	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Sweet Peas, Exposition Pink Spencer	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Sweet Peas, Majestic Rose Spencer	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Sweet Peas, Red Bird Spencer	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Sweet Peas, Red Bird Winter Flowering	1938	Bk. 5, P. 354	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Sweet Peas, Summer Flowering Royal Purple	1937	Bk. 5, P. 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Sweet Peas, Summer Flowering, Pinkie	1937	Bk. 5, P. 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Sweet Peas, Zbolonek's Blue Sensation	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Sweet Peas, Zbolonek's Orange	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Sweet William mixed, Dianthus barbatus	1902	Bk 11, P. 4	
Sweet William, Newport Pink	1937	Bk. 5, P. 341, 353	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Sweetpea Lathyrus Mrs. Eckford	1903	Bk 11, P. 36-37	
Sweetpea Lathyrus Black Knight	1903	Bk 11, P. 36-37	
Sweetpea Lathyrus Lady Grisel Hamilton	1903	Bk 11, P. 36-37	
Sweetpea Lathyrus Prima Donna	1903	Bk 11, P. 36-37	
Sweetpea Lathyrus Salopian	1903	Bk 11, P. 36-37	
Sweetpea Sadie Burpee	1903	Bk 11, P. 36-37	
Tagetes	1936	Bk. 5, P. 250	W.E. Marshall & Co., Inc., 150 West 23 rd St., New York, NY
Tobacco Plant	1904	Bk. 15, P. 213	
Tom Thumb Nasturtium	1915	Bk. 16 P. 184	
Tom thumb, Nasturtium (climbing mixed)	1902	Bk 11, P. 4	
Tulip _____	1923	Bk. 1, P. 205	100 Ordered
Tulip Baron de la Tonnaye	1921	Bk. 1, P. 143	
Tulip bulbs	1924	Bk. 1, P. 235	2900 Ordered do not know varieties
Tulip Clara Butt	1923	Bk. 1, P. 205	100 Ordered
Tulip Clara Butt	1920	Bk. 1, P. 110	Clara Butt is pink/rose
Tulip Clara Butt	1921	Bk. 1, P. 143	All Darwin hybrids
Tulip Fen Brilliant	1923	Bk. 1, P. 205	100 Ordered
Tulip Golden Bronze	1923	Bk. 1, P. 205	100 Ordered
Tulip King Alfred	1923	Bk. 1, P. 205	100 Ordered
Tulip Madam Krelage	1921	Bk. 1, P. 143	Madam Krelage is purpleish rose, blush pink

Species	Date	Reference Book, Page	Notes
Tulip Margaret	1920	Bk. 1, P. 110	Margaret is deep blush
Tulip Moonlight	1923	Bk. 1, P. 205	100 Ordered
Tulip Mr Farmcombe Sanders	1923	Bk. 1, P. 205	100 Ordered
Tulip Mr Farncombe Sanders	1921	Bk. 1, P. 143	Mr Farncombe Sanders is scarlet
Tulip Mrs. Potty Palmer	1921	Bk. 1, P. 143	Mrs Potter Palmer is glowing purple
Tulip Pride of Haarlem	1923	Bk. 1, P. 205	100 Ordered
Tulip Pride of Haarlem	1921	Bk. 1, P. 143	
Tulip Pride of Haarlem	1920	Bk. 1, P. 110	These are Darwin hybrids Pride of Haarlem is cerise
Tulip Rev Ewbank	1920	Bk. 1, P. 110	Rev. Ewbank is mauve
Tulip Rev. Ewbank	1921	Bk. 1, P. 143	
Tulip Sir Issac Lawrence	1923	Bk. 1, P. 205	100 Ordered
Tulip two varieties	1920	Bk. 1, P. 110	
Tulips Darwin	1921	Bk. 1, P. 137	700 Ordered
Verbena	1904	Bk. 11, P. 74	
Verbena	1930	Bk. 1, P. 328	
Verbena Helen Willmott	1922	Bk. 1, P. 151	Trachymene caeruleum
Verbena Main. Blue	1908	Bk. 7, P. 308	
Verbena Mam. Pink	1936	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Verbena Mammoth white	1924	Bk. 1, P. 218	
Verbena Mammoth white	1924	Bk. 1, P. 221	
Verbena Mayflower	1936	Bk. 5, P. 250	W.E. Marshall & Co., Inc., 50 West 23 rd St., New York, NY
Verbena Miss Willmott	1936	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Verbena Pink	1908	Bk. 7, P. 308	
Verbena Scarlet Defiance	1908	Bk. 7, P. 308	
Verbena White	1908	Bk. 7, P. 308	
Verbena, Crimson Glow	1938	Bk. 5, P. 353-354	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Verbena, Mau. Pink	1934	Bk. 3, P. 145	William W. Hunt
Verbena, Miss Willcott	1934	Bk. 3, P. 145; Could be Willmicott	William W. Hunt
Verbena, Venosa	1938	Bk. 5, P. 353-354	Stumpp & Walter Co., 132-138 Church Street, New York, NY
Vinca Alba	1920	Bk. 16 P. 91	An 1907 article in the garden describes Vinca alba as being used in a bedding scheme.
Vinca alba	1927	Bk. 1, P. 284	
Vinca Claret-Colored	1936	Bk. 5, P. 250	W.E. Marshall & Co., Inc., 150 West 23 rd St., New York, NY
Vinca Rosea	1926	Bk. 1, P. 266	
Vinca rosea	1929	Bk. 1, P. 326	
Vinca Roses	1927	Bk. 1, P. 284	
Vinca, Rosea, Rose	1937	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Viola Blue Butterfly	1936	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Viola spp	1917	Bk. 1, P. 22	800 ordered
Violet	1920	Bk. 1, P. 102	800 Ordered
Violet plants	1910	Bk. 7, P. 338	600 ordered

Species	Date	Reference Book, Page	Notes
Violet plants	1910	Bk. 16 P. 15	
Violet plants	1921	Bk. 1, P. 141	700 ordered
Violets, double	1911	Bk. 16, P. 39	
Wallflower Blood Red, Cheiranthus	1902	Bk 11, P. 20	
Wallflower Primrose yellow, Cheiranthus	1902	Bk 11, P. 20	
Zinnia Alice?	1904	Bk. 11, P. 71	
Zinnia Best Pink	1924	Bk. 1, P. 222	
Zinnia Casino	1904	Bk. 11, P. 71	
Zinnia Dazzler	1904	Bk. 11, P. 71	
Zinnia dk. Pink	1923	Bk. 1, P. 189	
Zinnia Double	1925	Bk. 1, P. 247	
Zinnia Fantasy	1936	Bk. 5, P. 250	W.E. Marshall & Co., Inc., 150 West 23 rd St., New York, NY
Zinnia Lil. Golden Gem	1937	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Zinnia Lil. Scarlet Gem	1937	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Zinnia Lill. Golden Gem	1936	Bk. 5, P. 184	William M. Hunt & Company, 115 West 45 th St, New York, NY
Zinnia Tall Double mixed	1922	Bk. 1, P. 155	
Zinnia Tall double mixture	1921	Bk. 1, P. 124	
Zinnia Wilson?	1904	Bk. 11, P. 71	
Zinnia, 2 vars	1936	Bk. 5, P. 250	W.E. Marshall & Co., Inc., 150 West 23 rd St., New York, NY
Zinnia, D. J. mixed	1934	Bk. 3, P. 145	William W. Hunt
Zinnia, Golden Gem Lilliput or Baby	1937	Bk. 5, P. 120	Henry A. Dreer, 1306 Spring Garden St., Philadelphia, PA

APPENDIX E: PERENNIALS

The following table lists the perennials that have appeared in the perennial gardens, including those specified by Cridland in 1916, those specified in the 1941 National Park Service rehabilitation plan, and those that are currently being grown.

Perennials for the Lower Perennial Garden

Scientific Name	Cultivar	Common Name	Cridland (1916)	NPS (1941)	Existing
<i>Achillea</i>	'Coronation Gold'	Yarrow			X
<i>Aconitum fisheri</i>		Dwarf Monkshood	X	X	X
<i>Anemone hupehensis</i>	Var. japonica	Japanese Anemone	X		X
<i>Aquilegia vulgaris</i>	'Grandmother's Garden'	Columbine			X
<i>Astilbe</i>	'Deutschland'	Astilbe		X	X
<i>Astilbe</i>		Astilbe			X
<i>Campanula persicifolia</i>		Bellflower			X
<i>Chrysanthemum</i>		Chrysanthemum		X	X
<i>Coreopsis</i>	'Early Sunrise'	Tickseed			X
<i>Dianthus barbatus</i>	'Newport Pink'	Sweet William		X	X
<i>Dianthus deltoides</i>		Maiden Pink		X	X
<i>Digitalis mertonensis</i>		Foxglove			X
<i>Eryngium</i>		Sea Holly			X
<i>Gaillardia grandiflora</i>		Blanketflower		X	X
<i>Geum</i>		Avens			X
<i>Hemerocallis</i>	'Hyperion'	Daylily			X
<i>Hosta</i>	'Green Fountain'	Hosta			X
<i>Hosta</i>	'Invincible'	Hosta			X
<i>Iberis</i>	'Alexander White'	Candytuft			X
<i>Iberis sempervirens</i>		Candytuft	X		X
<i>Iris germanica</i>		German Iris (Dwarf and Tall)			X
<i>Iris sibirica</i>		Siberian Iris			X
<i>Leucanthemum x superbum</i>		Shasta Daisy	X		X
<i>Limonium</i>		Sea Lavender			X
<i>Linum perenne</i>		Blue Flax	X	X	X
<i>Mertensia virginica</i>		Virginia Bluebells		X	X
<i>Nepeta mussinii</i>		Catmint		X	X
<i>Peony</i>	'Sarah Burnhardt'	Peony			X
<i>Phlox</i>		Pink and Blue Plox			X
<i>Phlox divaricata</i>		Early Blue Phlox	X		X
<i>Phlox subulata</i>		Creeping Phlox			X
<i>Platycodon grandiflorus</i>		Japanese Bellflower (Balloonflower)	X	X	X
<i>Rudbeckia</i>		Black-Eyed Susan			X
<i>Scabiosa</i>	'Butterfly Blue'	Blue Bonnet			X
<i>Scabiosa caucasica</i>		Blue Bonnet	X		X
<i>Thermopsis</i>		Goldenbanner		X	X

Scientific Name	Cultivar	Common Name	Cridland (1916)	NPS (1941)	Existing
Tradescantia		Spiderwort			X
Veronica longifolia		Speedwell			X
Veronica spicata	'Goodness Grows'	Speedwell			X
Viola	'Freckles'	Tufted Pansy			X
Anemone hupehensis		Chinese Anemone		X	
Anthericum liliastrum		St. Brun's Lily	X		
Aquilegia	Dobbie's Imperial Hybrids	Hybrid columbine		X	
Aquilegia chrysantha		Golden Columbine	X		
Aquilegia coerulea		Blue Columbine	X		
Aquilegia flabelata	'Nana Alba'	White Dwarf Columbine	X		
Aster	'St. Egwin'	St. Egwin Aster	X		
Aster alpinus		Early Aster	X		
Aster amellus	'Beauty of Ronsdorf'	Pink Hardy Aster	X		
Aster curtisi (syn. A. curtisii)		Lavender Aster	X		
Astilbe	'Venus'	Meadowsweet	X		
Begonia		Begonia		X	
Campanula medium		Bellflower		X	
Campanula persicifolia	'Grandiflora Alba'	Bellflower		X	
Centaurea montana		Hardy Cornflower	X	X	
Chrysanthemum	'Golden Queen'	Yellow Hardy Chrysanthemum	X		
Chrysanthemum	'Model'	White Chrysanthemum	X		
Chrysanthemum	'Souer Melaine'	White Chrysanthemum	X		
Chrysanthemum arcticum		Arctic Daisy	X	X	
Chrysanthemum maximum	'Alaska'			X	
Delphinium				X	
Delphinium chinensis (syn. Consolida chinensis)		Dwarf Chinese Larkspur	X		
Delphinium formosum		Indigo Larkspur	X		
Dianthus barbatus		Sweet William	X		
Digitalis	Giant Shirly Hybrids	Foxglove		X	
Digitalis purpurea		Foxglove	X		
Erigeron intermedia		Flea Bane	X		
Eryngium amethystinum		Sea Holly		X	
Eupatorium coelestinum (syn. Conoclinium coelestinum)		Hardy Ageratum	X		
Funkia caerulea (syn. Hosta ventricosa)		Plantain Lily	X		
Funkia subcordata (Syn. Hosta subcordata)	Var. grandiflora			X	
Hemerocallis dumortieri				X	
Hemerocallis fulva				X	
Hesperis matronalis		Sweet Rocket	X		
Iris				X	
Iris germanica	'Blue Boy'	Blue German Iris	X		
Iris kaempferi	'Bluebird'			X	

Scientific Name	Cultivar	Common Name	Cridland (1916)	NPS (1941)	Existing
<i>Iris kaempferi</i>	'Eleanor Perry'			X	
<i>Iris kaempferi</i>	'White Swan'			X	
<i>Iris kaempferi</i>		Japanese Iris	X		
<i>Iris pallida</i>	'Dalmatica'	Lavender Flag Iris	X		
<i>Iris sibirica</i>	'Perry's Blue'			X	
<i>Iris sibirica</i>	'Snow Queen'			X	
<i>Lilium candidum</i>				X	
<i>Lilium auratum</i>				X	
<i>Lobelia syphilitica</i>	'Hybrida'	Blue Hardy Lobelia	X		
<i>Papaver orientale</i>	'Orientale'			X	
<i>Papaver orientale</i>	'Perry's White'			X	
Peony	'L'Esperance'	Pink Peony	X		
Peony				X	
Phlox	'Antonin Mercie'	Lavender Phlox	X		
Phlox	'Eugene Densanvilliers'	Mauve Phlox	X		
Phlox	'Helene'	Lavender Early Phlox	X		
Phlox	'Independence'	White Hardy Phlox	X		
Phlox	'Miss Lindgard'	Early White Phlox	X		
Phlox	'Von Lassburg'	White Hardy Phlox	X		
Phlox amoena		Dwarf Pink Phlox	X		
Phlox decussata	'B. Comte'	Phlox		X	
Phlox decussata	'Von Lassburg'	Phlox		X	
Phlox divaricata	Var. canadensis	Phlox		X	
Phlox suffruticosa	'Miss Lingard'	Phlox		X	
<i>Physostegia virginica</i>		Obedient Plant	X		
<i>Platycodon grandiflorus</i>	'Alba'	Japanese Bellflower (Balloonflower)		X	
<i>Platycodon grandiflorus</i>	'Maresi'	Japanese Bellflower (Balloonflower)	X		
<i>Platycodon mariesi</i>		Balloonflower		X	
Rosa		Yellow Roses	X		
<i>Scabiosa caucasica</i>	Var. alba	White Blue Bonnet	X		
<i>Statice gmelini</i> (syn. <i>Limonium gmelinii</i>)		Sea Lavender	X		
<i>Statice latifolia</i> (syn. <i>Limonium latifolia</i>)		Sea Lavender		X	
<i>Stokesia cyanea</i>		Stoke's Aster	X		
<i>Tradescantia virginica</i>	'James C. Weguelin'	Spiderwort		X	
Trollius		Globe Flower		X	
<i>Veronica longifolia</i>	Var. subsessilis	Speedwell	X	X	
<i>Veronica spicata</i>		Speedwell		X	
Viola	'White Perfection'	Tufted Pansy	X		
<i>Viola adorata</i>	Var. semperflorens	Tufted Pansy		X	
<i>Viola cornuta</i>	'Sutton's Apricot'	Tufted Pansy		X	
<i>Viola purpurea</i>		Tufted Pansy	X		

Perennials for the Upper Perennial Garden

Species	Variety or Cultivar	Common Name	Cridland (1934)	NPS (1941)	Existing	Notes
Achillea	Moonshine	Yarrow			X	Suitable as a substitute species.
Achillea ptarmica	The Pearl	Yarrow			X	Suitable as a substitute species.
Ajuga reptans		Carpet Bugle	X			
Alyssum saxatile (syn. Aurinia saxatile)		Basket-of-Gold	X		X	
Anchusa myosotidiflora (syn. Brunnera macrophylla)		Siberian Bugloss	X			
Anemone hupehensis		Japanese anemone			X	Not suitable in upper perennial garden.
Anemone japonica (syn. A. x hybrida)	Alba	White Japanese Anemone		X		
Aquilegia	Mrs. Elliott (possibly Mrs. Scott Elliott)	Columbine	X			
Aquilegia		Columbine			X	Suitable.
Aquilegia	Dobbie's Imperial Hybrids	Columbine		X		
Aquilegia flabellata	Nana	Dwarf Columbine	X		X	
Arabis alpina		Alpine Rockcress		X	X	Suitable as a substitute species.
Artemisia frigida		Fringed Sage	X			
Asclepias tuberosa		Butterfly Weed	X			
Aster	Fuscia	Aster			X	Low, small asters suitable as a substitute species.
Aster		Aster			X	Low, small asters suitable as a substitute species.
Aster dumosus	Professor Kippenburg	Aster			X	Low, small asters suitable as a substitute species.
Baptisia australis		Wild Blue Indigo	X		X	
Campanula carpatica		Tussock Bellflower	X			
Campanula medium		Canterbury Bells		X		
Campanula persicifolia	Grandiflora Caerulea	Bellflower, Willow Bell		X		
Campanula persicifolia	Grandiflora Alba	White Willow Bell		X		
Centaurea montana		Hardy Cornflower	X	X	X	
Cheiranthus allionii		Wallflower	X			
Chrysanthemum		Mums			X	Suitable as a substitute species.
Chrysanthemum arcticum		Arctic Daisy		X		
Daphne cneorum		Rose Daphne		X		

Species	Variety or Cultivar	Common Name	Cridland (1934)	NPS (1941)	Existing	Notes
<i>Delphinium chinensis</i> (syn. <i>Consolida chinensis</i>)		Chinese Larkspur	X			
<i>Delphinium chinensis</i> (syn. <i>Consolida chinensis</i>)	Tom Thumb	Chinese Larkspur	X			
<i>Dianthus barbatus</i>	Newport Pink	Pink Sweet William		X		
<i>Dianthus deltoides</i>		Maiden Pink	X	X		
<i>Dianthus plumarius</i>	Cyclops	Garden Pinks	X			
<i>Digitalis</i>		Foxglove			X	Not suitable in upper perennial garden.
<i>Digitalis</i>	Giant Shirley Hybrids	Foxglove		X		
<i>Dracocephalum ruyprechtianum</i>	(unknown species)	Dragonhead	X			
<i>Eryngium amethystinum</i>		Amethyst Sea Holly		X		
<i>Eupatoruim coelestinum</i> (syn. <i>Conoclinium coelestinum</i>)		Hardy Ageratum	X			
<i>Gaillardia grandiflora</i>		Basket Flower			X	Suitable as a substitute species.
<i>Geum</i>		Avens			X	Suitable as a substitute species.
<i>Gypsophila repens</i>		Creeping Baby's Breath	X			
<i>Helianthemum mutabile</i> (syn. <i>H. nummularium</i>)	Mutabile	Rockrose	X			
<i>Hemerocallis</i>	Hyperion	Daylily			X	Daylilies not suitable in upper perennial garden.
<i>Hemerocallis fulva</i>		Daylily		X		
<i>Hemerocallis lilioasphodelus</i>		Lemon Lily (Daylily)			X	Daylilies not suitable in upper perennial garden.
<i>Hemerocallis thunbergii</i>		Daylily		X		
<i>Huechera sanguinea</i>		Coral Bells	X			
<i>Iberis sempervirens</i>		Candytuft	X		X	
<i>Iris kaempferi</i>	Bluebird	Blue Japanese Iris		X		
<i>Iris kaempferi</i>	White Swan	White Japanese Iris		X		
<i>Iris pseudacorus</i>		Yellow Flag Iris			X	Suitable.
<i>Iris pumila</i>		Dwarf Iris	X			
<i>Iris sibirica</i>	Snow Queen	Siberian Iris			X	Suitable.
<i>Lilium auratum</i>		Lily		X		
<i>Lilium hansonii</i>		Lily		X		
<i>Lilium lancifolium</i>		Tiger Lily			X	Lilies not suitable in upper perennial garden.
<i>Lilium regale</i>		Lily		X		
<i>Linum perenne</i>		Perennial Flax	X			

Species	Variety or Cultivar	Common Name	Cridland (1934)	NPS (1941)	Existing	Notes
Lobelia		Lobelia			X	Suitable as a substitute species.
Lupinus	Hybrids	Lupine		X		
Lupinus polyphyllus		Big-leafed Lupine	X			
Lychnis haageana		Campion	X			
Mazus reptans		Creeping Mazus	X			
Mertensia virginica		Virginia Bluebell, Virginia Cowslip		X	X	Suitable as a substitute species.
Nepeta mussini		Catmint	X	X	X	
Nierembergia rivularis		Whitecup, White Cup Flower		X		
Oenothera missouriensis		Missouri Primrose	X			
Ophiopogon japonicus		Mondo Grass	X			
Papaver orientale	Mrs. Perry	Poppy		X		
Phlox	B. Comte	Dwarf Phlox		X		
Phlox divaricata		Phlox	X			
Phlox diverticata	Canadensis	Phlox		X		
Phlox maculata	Rosalinde	Phlox			X	Suitable.
Phlox subulata	Rosea	Creeping Phlox	X			
Phlox subulata	White Delight	Phlox			X	Suitable.
Phlox subulata	Alba	White Phlox		X		
Phlox suffruticosa	Miss Verboom	Phlox		X		
Phlox suffruticosa	Miss Lingard	Phlox		X		
Platycodon grandiflorus	Maresi	Balloon Flower	X			
Platycodon grandiflorus		Bellflower		X		
Plumbago larpentae (syn. Ceratostigma plumbaginoides)		Plumbago	X	X	X	
Polemonium richardsonii		Jacob's Ladder	X			
Poppy		Poppy			X	
Primula veris		Cowslip	X			
Primula x bullesiana	Moerheim Hybrids	Primrose		X		
Prunella grandiflora		Self-heal	X			
Pulmonaria	Johnson's Blue	Lungwort			X	
Rudbeckia fulgida	var. speciosa	Black-eyed Susan			X	Not suitable in upper perennial garden.
Satureia alpina		Savory	X			
Scutellaria baicalensis		Baical Skullcap	X			
Sedum sarmentosum		Bunge	X			
Silene maritima		Sea Campion	X			
Statice latifolia (syn. Limonium latifolia)		Sea Lavender		X	X	Not suitable in upper perennial garden.
Stokesia laevis		Cornflower Aster	X		X	

Species	Variety or Cultivar	Common Name	Cridland (1934)	NPS (1941)	Existing	Notes
<i>Thalictrum aquilegifolium</i>	Album	White Meadow Rue		X		
<i>Thalictrum glaucum</i>		Meadow Rue		X	X	Not suitable in upper perennial garden.
<i>Thalictrum rochebruniamum</i>	lavender mist	Meadow Rue			X	Not suitable in upper perennial garden.
<i>Tradescantia</i>		Spiderwort			X	Not suitable in upper perennial garden.
<i>Veronica chamaedrys</i>		German Speedwell	X			
<i>Veronica longifolia</i>	Subsessillis	Speedwell		X		
<i>Veronica spicata</i>	Icicle	Speedwell			X	Not suitable in upper perennial garden.
<i>Veronica spicata</i>	Blue Charm	Speedwell			X	Not suitable in upper perennial garden.
<i>Veronica spicata</i>	Alba	White Spiked Speedwell		X		
<i>Vinca minor</i>		Periwinkle	X	X	X	
<i>Viola cornuta</i>	Sutton's Apricot	Pansy		X		
<i>Violas</i>		Pansies	X			

APPENDIX F: MOWING AND HAULING EQUIPMENT FOR FORMAL GARDEN MAINTENANCE

Mowing Equipment

A compact mower is needed to traverse the top of the slope between the lower annual terrace and the upper perennial garden. The clearance between the trumpet vine trunk and the top of the slope is 4'-6" or 54 inches. Husqvarna makes the most compact riding mower, but has a smaller engine. All of the zero turn riding mower equipment listed below would be suitable.

Hauling Equipment

A power wagon can be used to haul materials into and out of the garden. The DR Power Wagon would also fit between the trunk of the trumpet vine and top of the slope.

Zero Turn Riding Mower Equipment					
Model	Mowing Blade Width	Width (with discharge chute up)	Length	Horsepower	Cost
Husqvarna RZ3016	30"	35.5"	66.5"	16.5 hp	\$2,300
Husqvarna RZ4222	42"	43"	75"	22 hp (or 16.5)	\$3,200 (or \$2,400)
Scag Freedom Z Zero Turn Mower	36"	37"	73"	18 hp	\$5,800
Hustler Sport Zero Turn Mower	42"	44.4"	71"	17.5 hp	\$3,100
Cub Cadet RZT 42	42"	45"	67"	22 hp	\$2,500
Grasshopper Front Mount Series 616	44"	44"	96"	16 hp	\$7,300
John Deere EZ TRAK Z225 Residential Zero Turn Mower	42"	44"	74"	18.5 hp	\$2,900
Motorized Hauling Equipment					
Model	Volume Capacity	Width	Length	Speeds	Cost
DR Power Wagon	5.1 cu ft	34"	81"	4 speeds	\$1,800
Muck Truck GXV Heavy Duty Self-Propelled Dumping Wheelbarrow	6 cu ft, capacity can be expanded w/ extension	28"	61"	4 speeds	\$2,650
Neuton Self Propelled Garden Cart #22721	5 cu ft, 200 lbs, capacity expanded w/ leaf catcher			2 speeds, Battery powered	\$320

APPENDIX G: SAMPLE SOURCE FOR CONCRETE GARDEN BENCHES

The following was printed from the web page of Belson Outdoors, a vendor of outdoor furnishings (http://www.belson.com/tpcb.htm). It is included to provide an example of the size, style, and materials of compatible benches, as well as an estimate of pricing. Other sources for the benches may be located, including local sources, custom design, or on-site fabrication.



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Traditional Concrete Park Bench



Elegantly Styled Park Bench

The straight concrete park bench features a square classical style. This precast concrete park bench will beautify any setting. This concrete park bench features a stylish old world look with the durability of steel reinforced concrete. Little or no maintenance is needed.

This charming traditional precast concrete park bench is ideal for high traffic areas and offer a touch of architectural class. These precast concrete park benches are perfect for any area that demands additional seating space and an upscale design. This bench is available in multiple colors shown below.

Model TF5041 | Traditional Park Bench

Dimensions: 72"L x 20"W x 18"H

Weatherstone Concrete Color Options



Ground Glass Concrete Finish Options

Finish Option



weather stone

Matrix Options



Glass Color Options



- Weekly Specials
- Featured Products
- Buying Guides
- ▼ Browse by Category
- Barbecue Grills
- Barbecue Smoker Grills
- Banquet Tables
- Benches
- Bike Racks
- Bleachers | Grandstands
- Boulevard Banners
- Bus Stop Shelters
- Canopy Tents
- Cigarette Receptacles
- Dimensional Lumber
- Drinking Fountains
- Exercise Equipment
- Fire Rings
- Flags
- Floor Matting
- Food Service Equipment
- Message Centers
- Park Benches
- Park Grills | Camp Stoves
- Parking Lot Equipment
- Patio | Cafe Furniture
- Pet Products
- Picnic Tables
- Planters
- Pool Furniture
- Sanitation Equipment
- Security
- Sports Equipment
- Tables
- Trash Receptacles
- Umbrellas
- Universal Access
- ▼ Browse by Material
- Concrete
- Fiberglass
- Thermoplastic Coated
- Metal | Aluminum | Steel
- Recycled Plastic
- Resin
- Wood

▼ Item Specific Details Available on Linked Model Numbers Below

6' Precast Concrete Bench		Qty
TF5041	Concrete Color <input type="text" value="Concrete Color"/>	(500 lbs) \$617.00
6' Precast Concrete Bench Ground Glass Concrete Finish		Qty
TF5041-CUS3	Choose Finish Options Below	(500 lbs) \$802.00
Finish Options	Weatherstone <input type="text" value="Weatherstone"/> Choose Matrix <input type="text" value="Choose Matrix"/> Choose Glass <input type="text" value="Choose Glass"/>	

(Prices F.O.B. Origin)
Some Assembly Required

Add to Order Form
Review Order Form

Related Products



Precast Concrete
Decorative Park Bench



42" Concrete Planter



Round Concrete
Trash Cans



Concrete Traffic Bollards

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