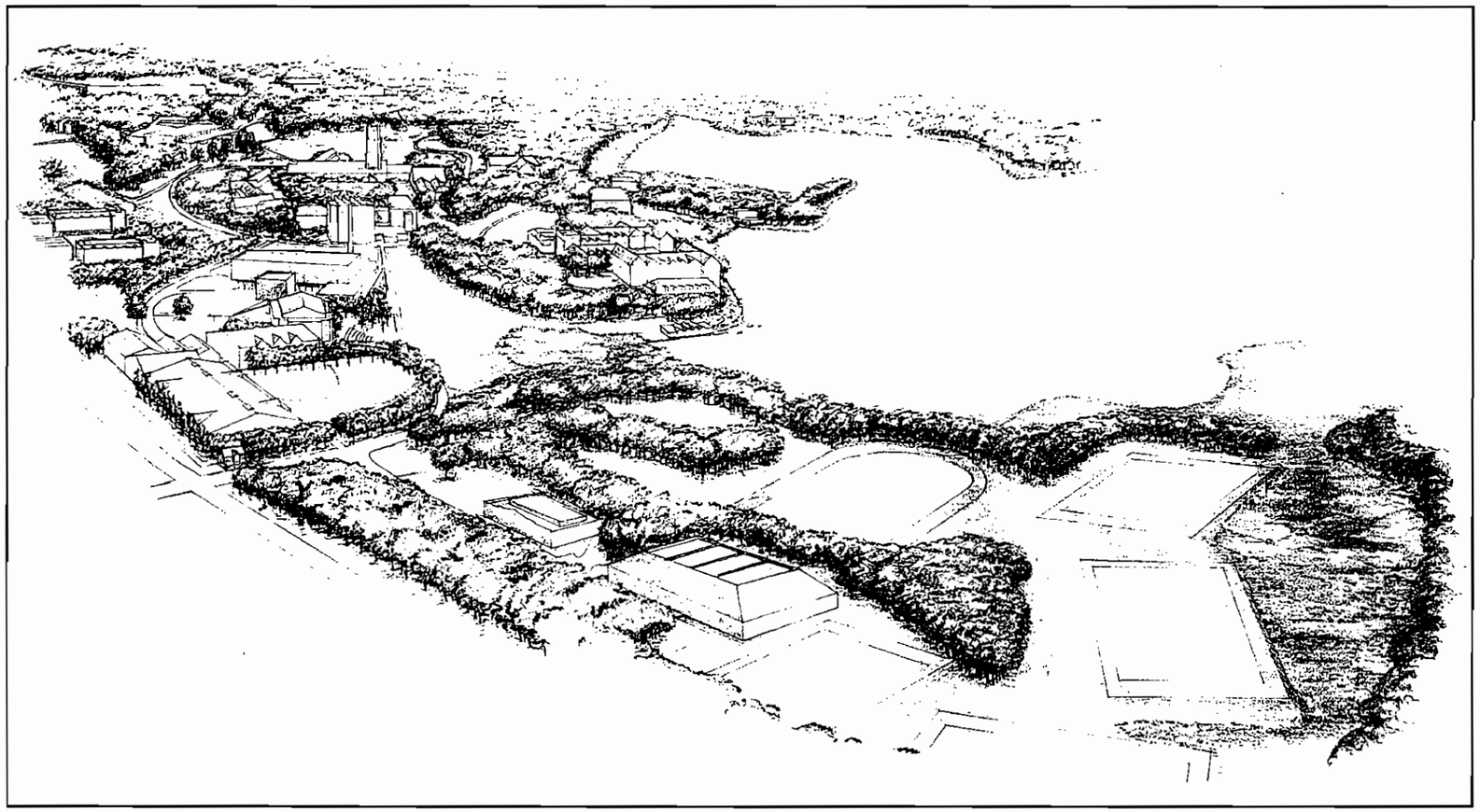
Wellesley College 1998 Landscape Master Plan



Michael Van Valkenburgh Associates, Inc., Landscape Architects
15 August 1998

WELLESLEY COLLEGE 1998 LANDSCAPE MASTER PLAN

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Wellesley College 1998 Landscape Master Plan Foreword

Throughout its 125-year history, Wellesley College has shown a keen understanding of the benefits resulting when the pedagogic goals of an academic community are enhanced by the campus as a place. Wellesley's founders, presidents, and pioneering women faculty carefully selected a particular campus form for specific social and philosophical reasons combined with a strong measure of practicality. This aesthetic—rooted in the values of the eighteenth–century Romantic poets—draws from the spiritual power of the natural world as the foundation of an idealized environment for learning.

Today Wellesley faces a unique set of challenges about the physical forms of the campus, the solutions of which are not obvious. The nearly built-out condition of the campus makes expansion and growth difficult. Also, the maturity of its vegetation, the secondary feeling of some landscape areas, the decline of infrastructure, the tired quality of many landscape areas, the inappropriate dominance of the automobile, and the aging of historic architectural and site structures define the essence of the challenge today. By necessity, a significant portion of this master plan advocates restoration and renewal based on a careful interpretation of the still valid ideologies of the past. Perhaps most pressing is the need to reassert the primacy of the pedestrian and to clear many of the campus road edges that are choked and made dangerous by cars parked everywhere.

The year-long 1998 campus landscape master planning process was conducted with a steering committee and an advisory committee that included representation of faculty, alumnae, staff, trustees, and students. The process was structured around a series of specific working papers that explored the most pressing issues of the contemporary campus: historical and philosophical underpinnings; parking, circulation, and wayfinding; landscape structure; infrastructure; adjoining land parcels; signage; lighting; management and maintenance. Each of these was part of a summary that established the goals and principles of the 1998 Master Plan.

Each working paper was distributed in draft form, discussed at a campus meeting, and then revised. Subsequent to the working papers phase, the actual master plan alternatives were tested in drawing and model form. Numerous public meetings were held throughout this phase.

Throughout Wellesley's history, the campus has often been challenged by unexpected change, including the 1914 destruction of the centralized College Hall, the addition of the automobile on a small-scale campus conceived originally for carriages, and the accommodation of the mid–twentieth–century growth in the importance of the sciences at Wellesley. The 1998 Master Plan also addressed an unexpected challenge: the opportunity to mitigate the presence of a major toxic waste site at Paint Shop Pond, which was acquired by the college in the 1920s after lead chromates had been dumped by others. The Paint Shop Pond site includes a seriously polluted major wetland that is part of the watershed of the Charles River Basin. Although many environmental and biological engineering studies will inform the Paint Shop Pond cleanup process, the Master Plan has suggested an approach of combining engineering and landscape architecture. More study is needed because this work will take place at the intersection of the frontiers of science, engineering, and design. The Master Plan proposal would allow the cleanup operations, if achievable environmentally, to be the catalyst for a much needed expansion of the nearby intramural and varsity playing fields and also for the rebuilding of a new system of waterways that would transmit water through the riparian system between Lake Waban and Morse's Pond.

Alternatives, Additional Studies, New Policies, and Post–Master Plan Evaluation

The Master Plan is specifically intended as a series of alternatives. In some areas actual choices are presented; in others a final recommendation is merely a proposal that may or may not be acted on in the future. Some of the master planning recommendations for the Paintshop Pond area will require careful coordination with the ongoing work of the consulting engineers and the state's regulatory agencies, which may be reticent about wetland re-creation in the absence of preemptory scientific validation. Under the direction and guidance of a landscape architect, a traffic engineering firm should be part of a separate design project to carry out the extensive parking and roadway components of this project. The architects addressing the campus center should work in tandem with the traffic team because the recommendation of combining performance-related portions of a campus center with a parking structure near Alumnae Hall is the result of careful consideration of both existing site and architectural conditions. Without a doubt, this will be the most challenging architectural commission undertaken at Wellesley, and a highly skillful and cooperative team will be required.

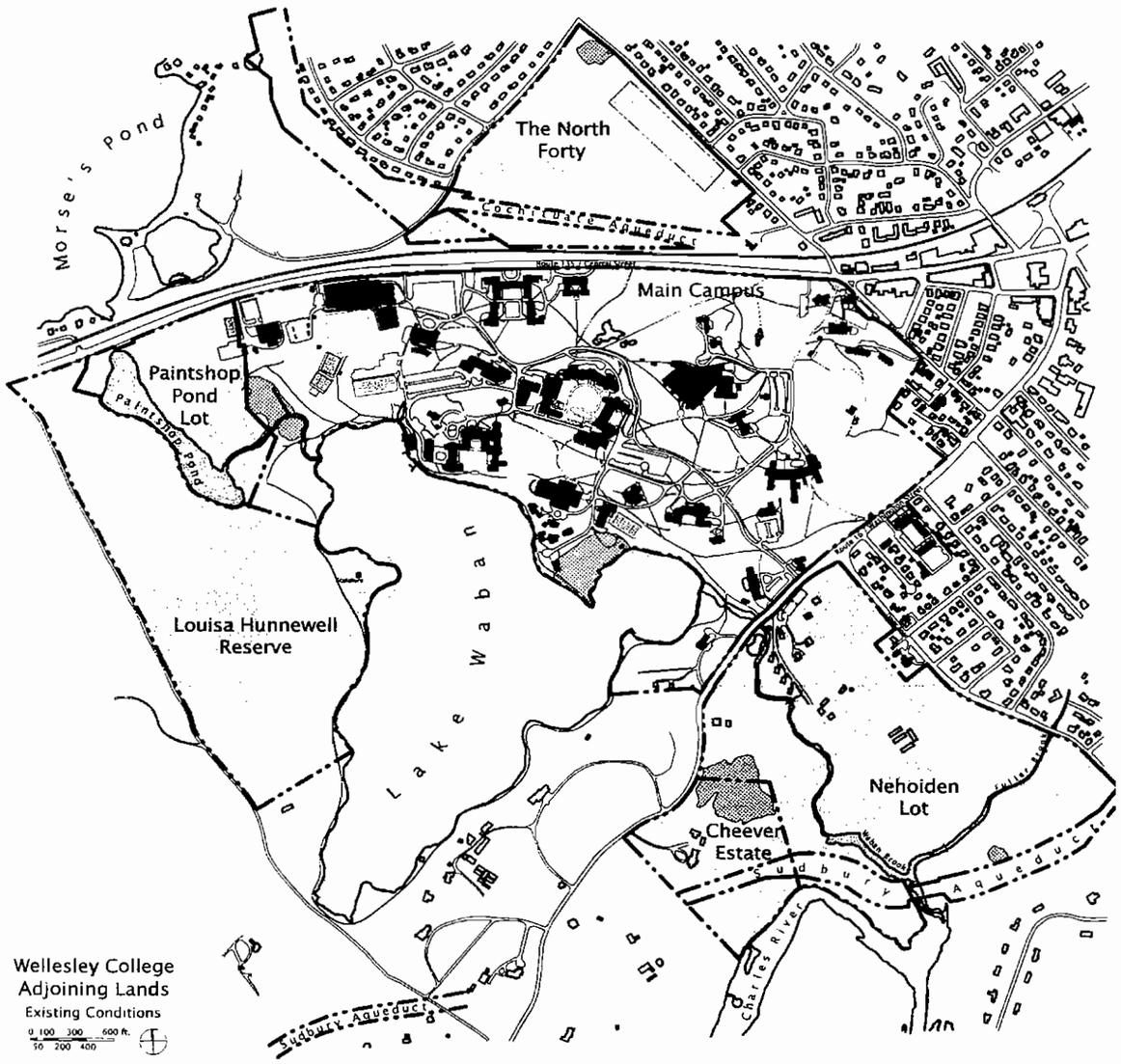
If substantially realized, the Master Plan will significantly improve the campus as a whole, but there will be evolving consequences. The College needs to have in place a standing committee (or even one person) to monitor the realization of these complex and interconnected recommendations.

This group or person would be a landscape advocate and would be responsible for coordinating policy-related decisions—specifically parking and maintenance—that may need to change as the work proceeds.

The Master Plan will also require continuous long-term assessments: for example, any regulatory restrictions on future alterations to the restored wetlands must be followed, and the success of the revised and expanded maintenance operations should be scrutinized to assure that the tide of suburbia that quietly swept across the campus has been reversed.

The 1998 master planning process grew out of the concerns of a group of Wellesley alumnae who felt that the campus was "spending down" the legacy of its landscape heritage. After a year of thinking and planning, the community is clearly galvanized around a desire to control the destiny of its remarkable and historically significant landscape. A sense of pride about the imminent renewal of the campus landscape can be felt in the community. The Master Plan, if fully implemented, will be costly and challenging. But there are few colleges with a more important historic landscape tradition than Wellesley, and the prospect of a renewed and transformed landscape feels promising and imminent. It has been a great pleasure to work with your committee to ponder and to chart a series of alternatives for the future of this exceptional campus.

Michael Van Valkenburgh
August 10, 1998



Parcel Recommendations

Wellesley College possesses considerable land holdings in parcels adjacent to the Main Campus. The Master Plan recommendations for the future use of each land parcel are outlined below. These recommendations reflect two guiding principles:

- *Immediate Future Development Should Be as Dense as Possible and Confined to the Main Campus While Respecting Existing Forms and Patterns as They Relate to the Landscape:* The main campus landscape is based on a model of intense development of the dispersed hillsides, thereby making parts of the college relatively separate from each other, necessitating a large amount of connective infrastructure. This model has resulted in an appealing integration of architecture and landscape, but presents an ongoing challenge to keep the campus pedestrian-oriented, with all elements easily accessible.

- *Underdeveloped Parcels of Wellesley's Indigenous Surroundings Should Be Preserved as Critical Elements of the Idyllic Setting of the Campus:* There are several advantages to preserving the undeveloped parcels. As this Master Plan cannot anticipate all future needs for Wellesley, preserving as much of the adjacent land for unforseen future uses is prudent insurance. It is in the interest of the college to avoid increasing the amount of land and facilities that require maintenance. Several of the undeveloped adjacent land holdings require relatively little maintenance. Finally, as the suburban region surrounding Wellesley becomes more developed, the visual and ecological benefits of large undeveloped parcels of land will increase. Undisturbed forest areas are important wildlife and native plant refuges and also help protect the watershed of Lake Waban and the quality of the groundwater.

Cheever Estate: The Cheever Estate parcel should remain undeveloped and the wetlands on the property should be protected.

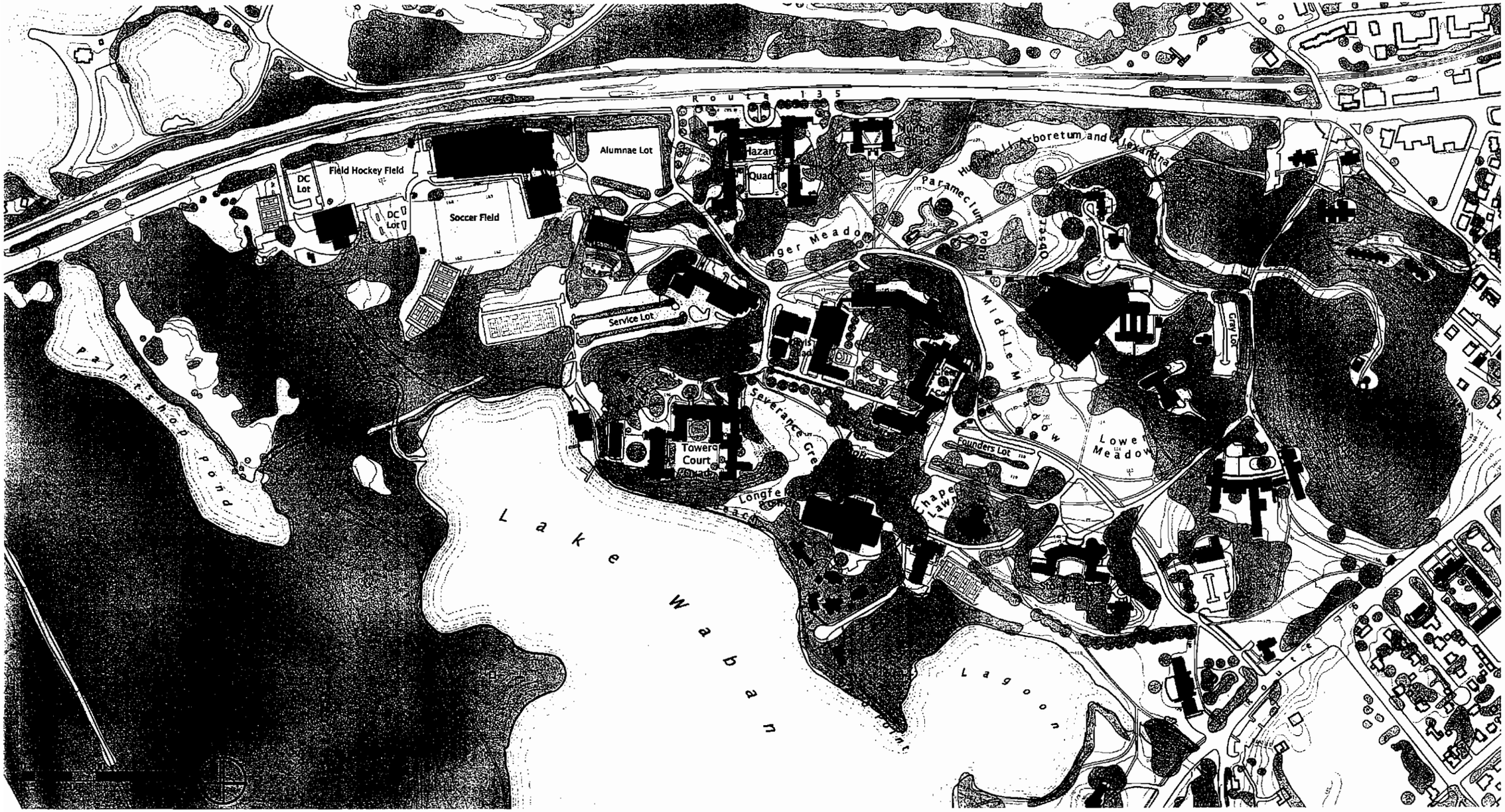
Nehoiden Lot: The Master Plan recommends that the present use of the golf course continue. Wellesley College operates a large-scale composting operation in the southern section of the property. This use should be monitored to contain the area utilized for this purpose and to ensure that there is no encroachment onto adjacent wetlands.

Louisa Hunnewell Reserve: The Hunnewell Reserve should remain undeveloped and undisturbed. All landholdings adjacent to Lake Waban require immediate repair and restoration to the lake-edge trail and plantings. This work is necessary to reverse the degradation of this important delicate landscape and to protect the water quality of Lake Waban.

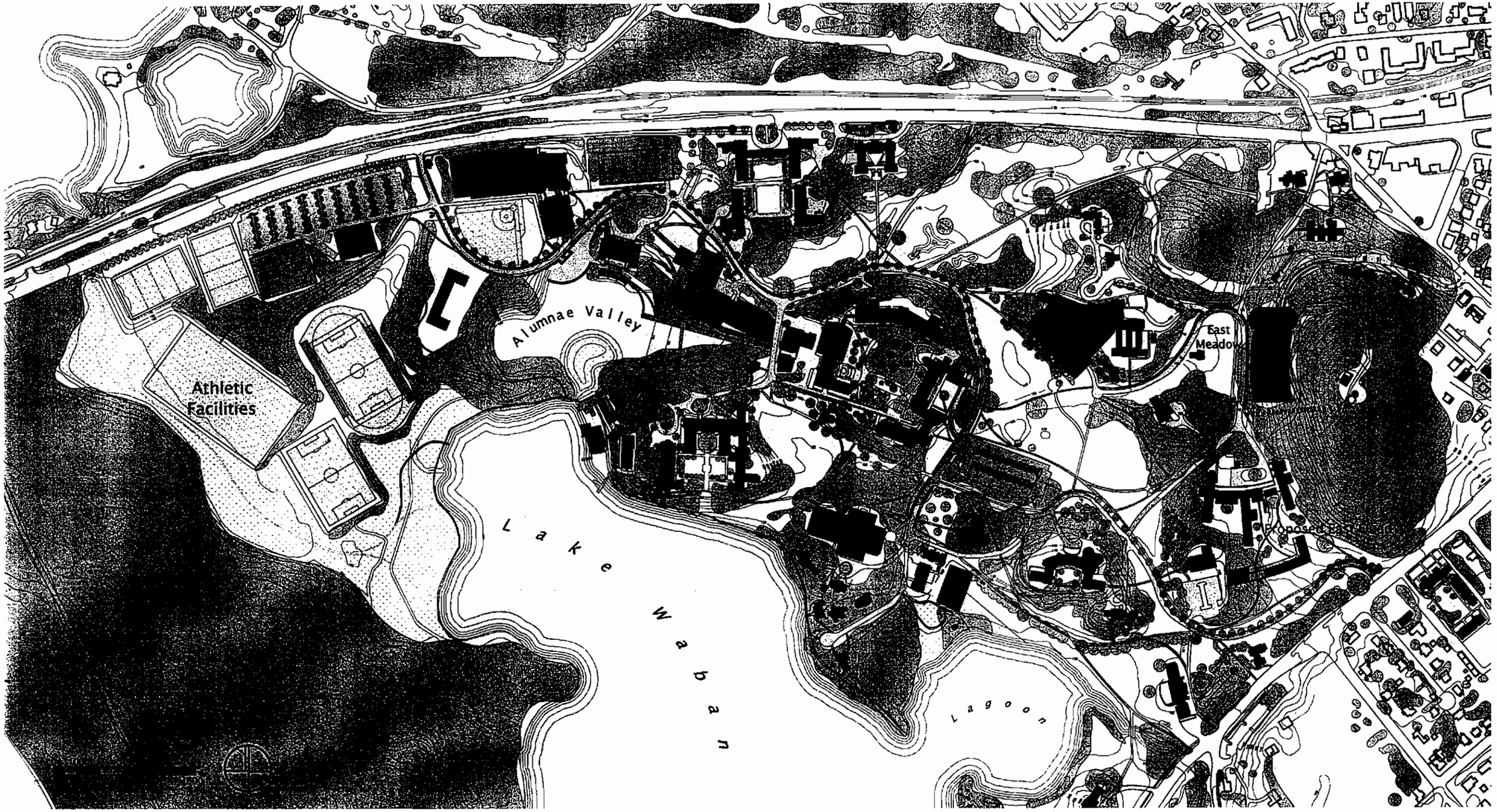
North Forty: The Master Plan recommends limited use of the North Forty contingent on the success of the recommended active use of the Paint Shop Pond parcel. Although the North Forty is adjacent to the main campus, access is severely limited by the need to cross Route 135, the MBTA tracks, and the Cochituate Aqueduct. Access to the North Forty via existing streets from the main campus is indirect, and the traffic generated by any intensive use of the parcel by the College might be disturbing to the neighborhood. The Master Plan recommends that three low-intensity college uses be sited on the parcel (for example, faculty housing and an intercollegiate library book depository building could be sited on the North Forty without a direct infrastructure connection to the college). These low-intensity uses will not significantly increase traffic on existing roadways. A third recommended use for the North Forty is to establish an open cut-grass field adjacent to the existing community gardens that can be used for event parking. The Master Plan recommends the development of the Paint Shop Pond parcel for athletic facilities for the college. If regulatory issues or a lack of cooperation between pertinent agencies preclude this use, the Master Plan recommends the development of the North Forty for varsity and intramural athletic facilities. Plans for this alternative development, including the location for a proposed bridge, are outlined in Working Paper Three A.

The Main Campus and Paint Shop Pond: The Master Plan recommends that the College develop the western portion of the existing Main Campus as expanded athletic facilities as part of a large-scale remediation of the Paint Shop Pond parcel. This and other projects for the Main Campus parcel are described in the following section.

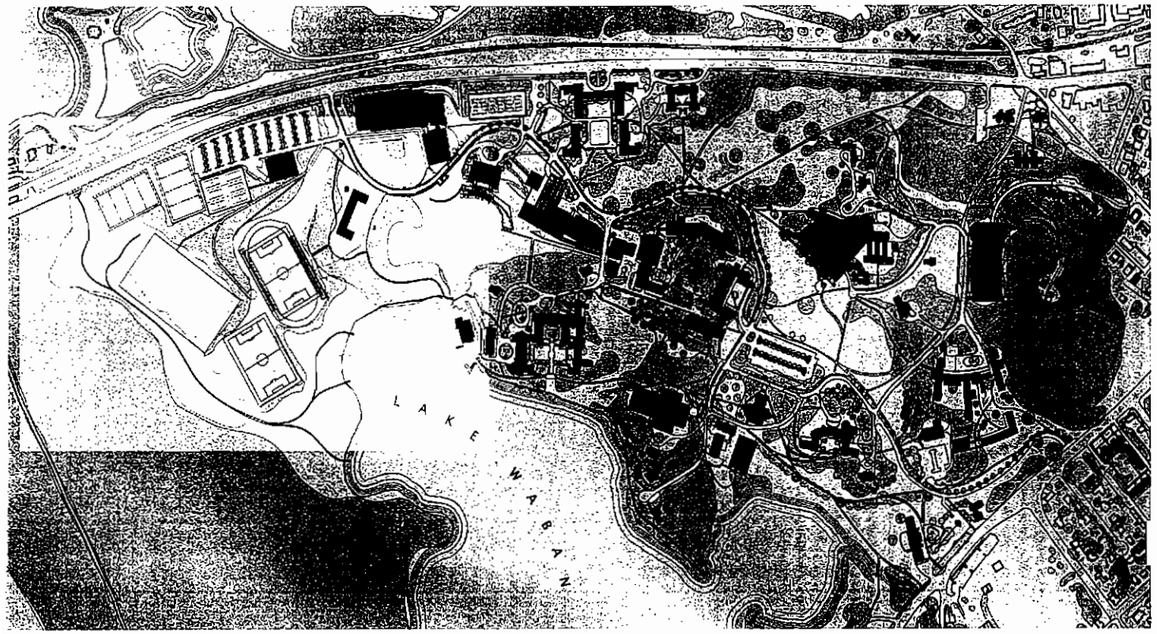
1998 Wellesley College Existing Conditions

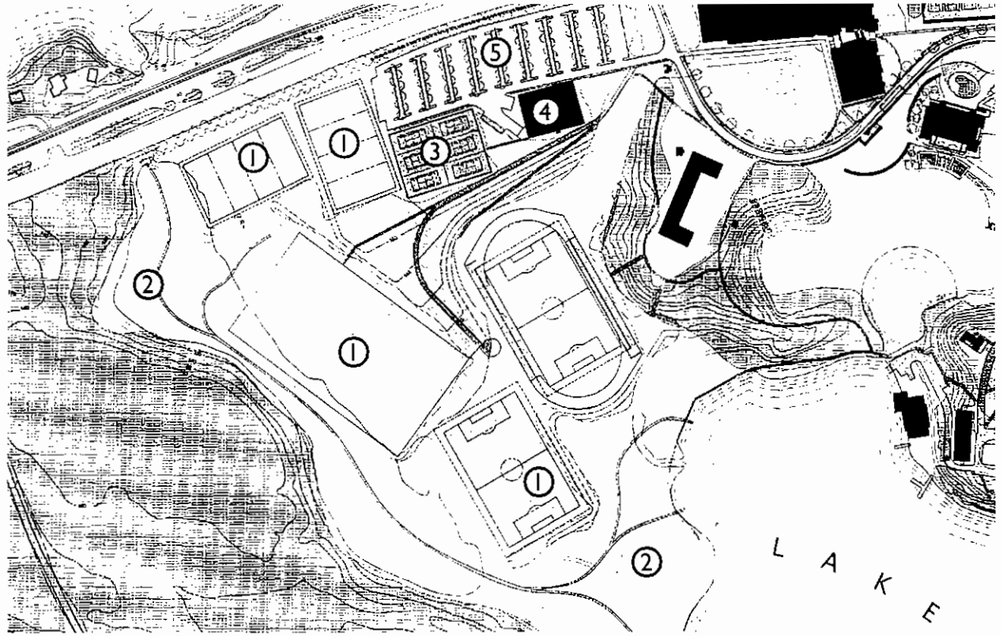


1998 Wellesely College Landscape Master Plan



Combine Remediation of the Paint Shop Pond Area with Expansion of Athletic Fields and Flood Control Infrastructural Changes





The Master Plan proposes a large-scale project involving extensive reshaping of topography as part of the anticipated Paint Shop Pond remediation to address three important issues:

- The mitigation of the extensive soil and sediment contamination in the area by the containment of the polluted soil in a sealed landfill. This will require deforestation of most of the parcel and substantial regrading of the land.
- The combination of this earthwork with the construction of new playing fields, because of the severity of regrading necessary to address the pollution problem in a permanent way.
- The construction of a new wetland and riparian stream system on the top surface of the landfill to create a biologically engineered conveyance of storm water from Morse's Pond to the Lake Waban system as well as to replace displaced wetlands. This new system will also address flood control changes necessitated by the highway upstream of the site.

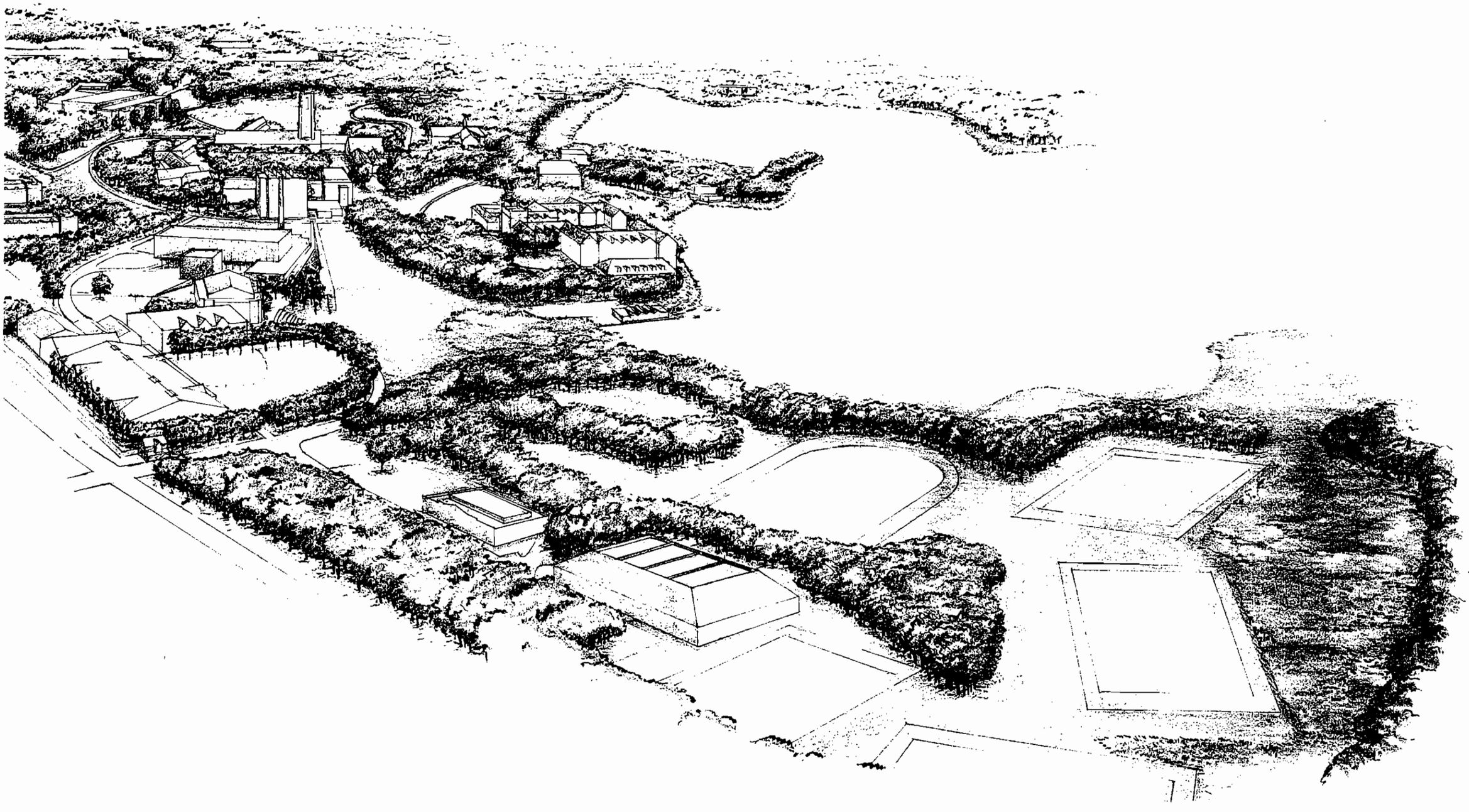
1. **Athletic Fields:** The proposed playing fields fulfill the expressed need for varsity field hockey and soccer and provide a large multipurpose field that can accommodate a variety of intramural sports and varsity practice. The regrading of the site shapes the landform into terraces that offer earth-form seating areas for spectators. New plantings serve as windbreaks and reduce the visibility of the fields from across Lake Waban, while restoring important connective corridors for animal movement across the site.

2. **Engineered Stream Channel and Wetlands:** The Master Plan recommends the construction of a bioengineered stream channel and wetlands as a means of conveying water through the Paintshop area and surrounding landscape. This natural system is proposed in lieu of a pipe or culvert solution; it will require further study of engineering and permitting, and the coordination of governing agencies with jurisdiction over these lands.

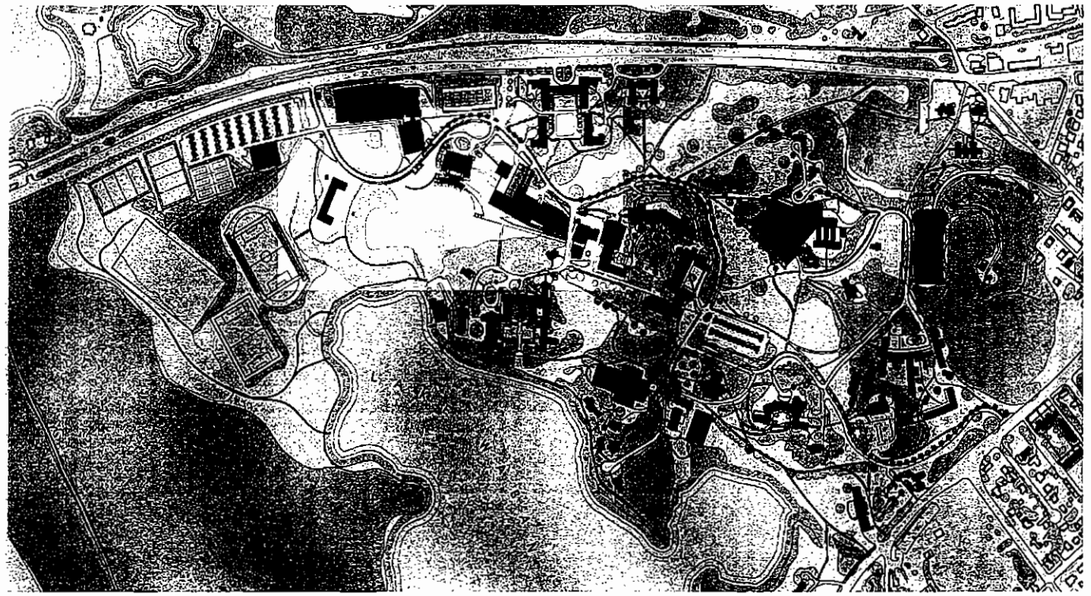
3. **Indoor Tennis Pavilion:** The site for an indoor tennis pavilion holds the enclosure back sufficiently from the road to allow screening of this new large building by rows of trees.

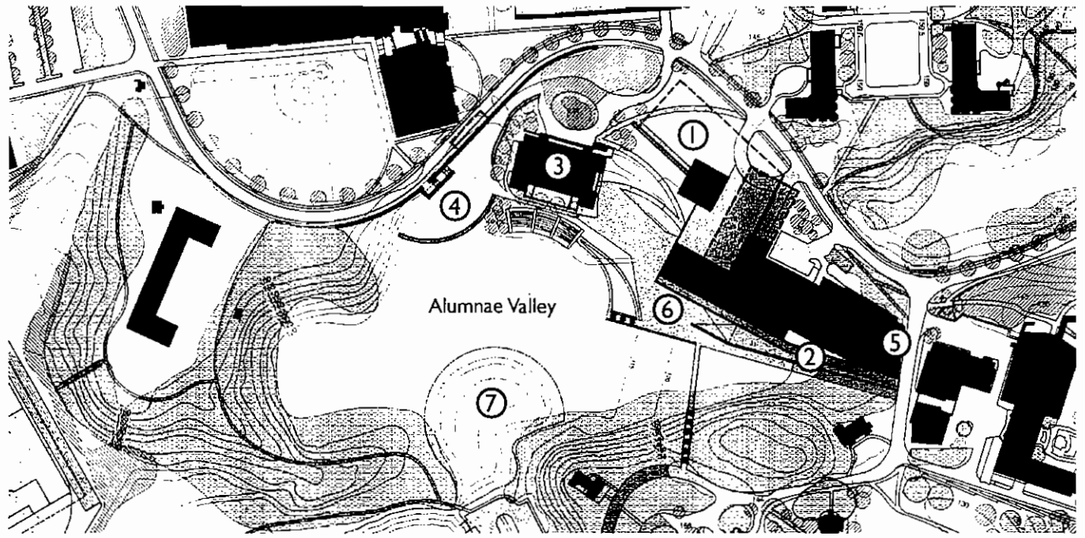
4. **Distribution Center:** The existing Distribution Center building is to remain. Proper vehicular access to the single truck dock is provided along with adequate employee parking.

5. **Surface Parking Lot:** A large surface parking lot consolidates the piecemeal parking that exists in this area. The parking lot plan allows for twelve-foot-wide planting islands to provide adequate root run for extensive plantings of large shade trees to visually break up the lot and to offer shade for parked cars.



Restore Alumnae Valley as a Vital Part of the Main Campus





1. **Alumnae Valley Parking Structure and Performance Center:** As a key element of the 1998 Master Plan, this structure provides alternative parking for cars now parked in the Service Lot and on Norumbega Hill, allowing the Service Lot to be restored to an open valley landscape as proposed in the 1921 Master Plan. The plan proposes that several offices and shops be moved out of the Physical Plant and that the existing Service Building be demolished, while maintaining the Power Plant. The plan also proposes the creation of a theater and performing arts complex to be associated with the new parking structure. This new complex would include a large multifunction space, a contemporary black-box theater, spaces for dance classes, and rehearsal rooms. For a more detailed explanation of the architectural program, see Working Paper Nine, Architectural Report. This ensemble of buildings acknowledges the presence of Alumnae Hall and seeks to build a stronger connection between this area and the Davis Museum, eliminating the "back door," disconnected quality relative to the rest of the campus.

2. **Covered Connector:** As part of the New Parking structure, the Master Plan suggests the construction of a level, covered pedestrian connector from the South Face of the park structure across the South Facade of the Power Plant.

3. **New Alumnae Hall:** Alumnae Hall represents a particular era and provides an irreplaceable setting for certain activities, and for these reasons it should be retained. The Master Plan recommends the refurbishment of Alumnae Hall as it was designed, with the restoration of the lower-level ballroom to full size and the retention of the original theater. Alumnae Hall is a unique and glorious building. Any attempt to retrofit Alumnae Hall for uses other than those originally intended or to change the sizes of the original spaces would both diminish the dignity and charm of the existing building and fail to supply the types of spaces required of new buildings.

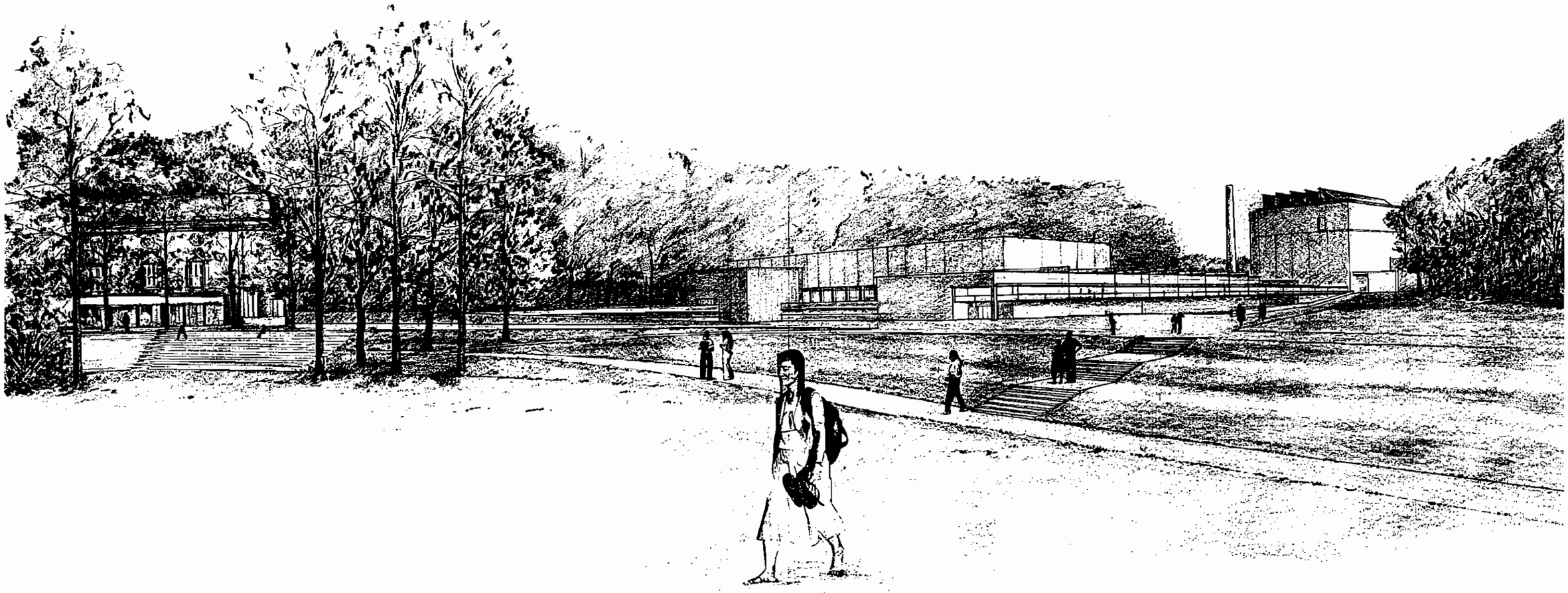
4. **Outdoor Performance Area:** As a complement to the traditional spaces within Alumnae Hall and the Greek Theater, the Master Plan proposes several new flexible performance and entertainment-related spaces. At present, outdoor performances take place on Severance Green. Utilities and the stage to support these activities are provided on an ad hoc basis. The Master Plan proposes the extension of the upper terrace level west of the Greek Theater, creating a flexible stagelike space, the backdrop of which would be the new Athletic Hill Road retaining wall, explained elsewhere in this report. A small equipment building is proposed as part of the new construction to provide utility hookups. The proposed ramp would connect Alumnae Circle with the new terrace level, allowing trucks and equipment access. The stagelike area would address the restored Alumnae Valley and would accommodate audiences of varying size.

5. **Portal Building:** The Master Plan recommends that as part of the development of this area, the police station and Physical Plant office would be relocated to a new structure just west of the Davis Museum. The proposed building would anchor the end of the pedestrian connector to the Alumnae Valley parking structure. This building would create a new east facade on the end of the Power Plant and relocate the campus police in a more prominent and visible structure. The new building should create a portal to Alumnae Valley by building on the architectural promenade created by the Jewett and Davis stairs,.

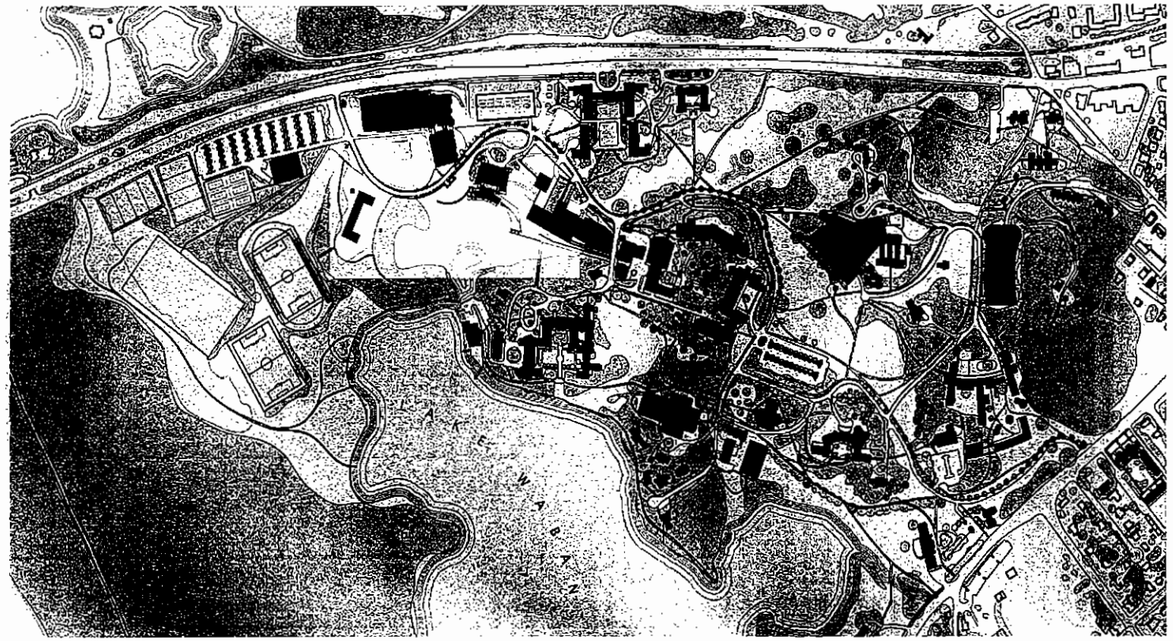
6. **Landscape Terrace:** The grade of the area south of the Power Plant is proposed to be raised to create an intermediate terrace level close to the east elevation of Alumnae Hall. This new terrace would lessen the steepness of the slope connecting Alumnae Valley to the Davis Museum, making this slope ADA accessible. Raising the land in this area would also deemphasize the presence of the Power Plant along this corridor. The functioning of the Power Plant and the ability for trucks to access the south facade would be accommodated by the construction of a retaining wall that creates a narrow service yard along the south facade. A ramp at the west end of the service yard allows trucks to access the space. A paved pathway from the Davis Museum to the terrace would be desired to accommodate pedestrians and occasional service vehicles.

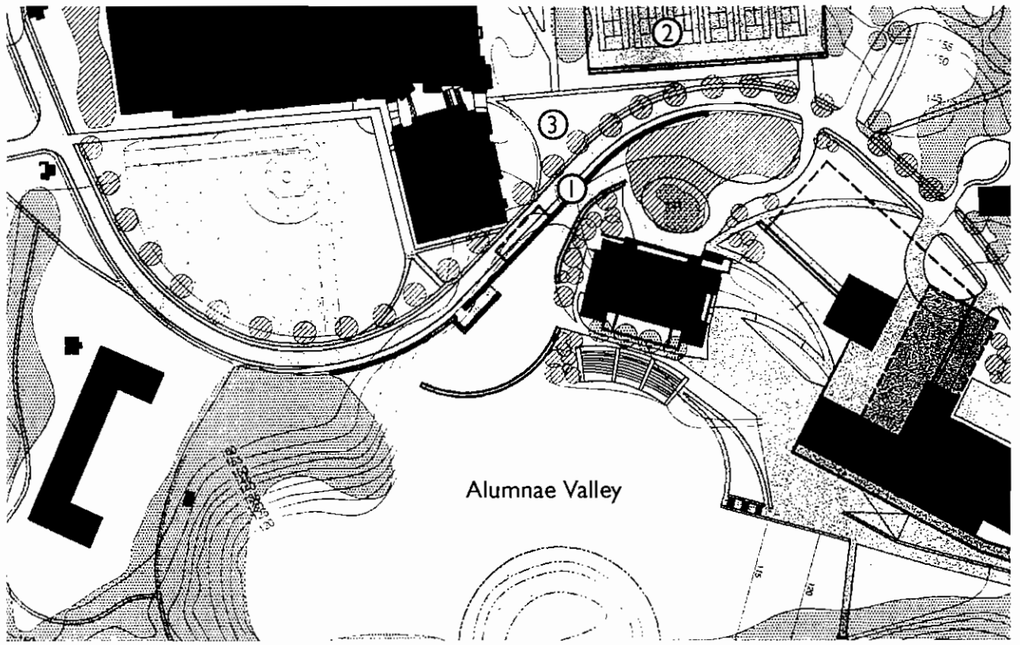
7. **Marsh Inlet:** As a general guiding principle, the Master Plan recommends the revitalization of the natural systems of the campus. The presence of a remnant stream, identified in the 1921 Master Plan with a small canoe turning pond, has inspired the recommendation to create a new landscape element that reasserts the presence of the natural water system at the edge of the restored Alumnae Valley. Neither natural nor artificial in appearance, the new marsh is a circular inlet on the axis of Alumnae Hall that receives water from existing underground campus storm pipes, filters that water, and releases it into Lake Waban. The inlet could accommodate canoes from Lake Waban which would enter under the existing bridge.

View of Restored Alumnae Valley



Create a Vital Circulation Connection Between the West Campus and the Academic Core





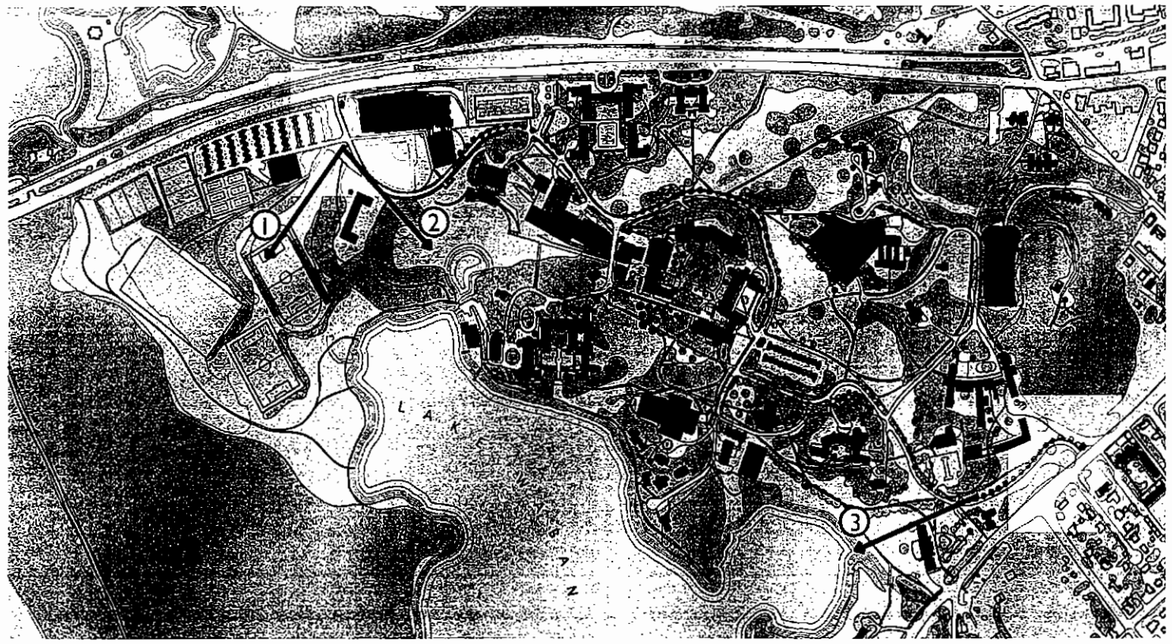
One critical concept of the Master Plan is to change the nature of the west campus by creating a vitally needed connection within the campus form, to connect this area into the daily life of the rest of the campus. Essential to this concept is a safe, beautiful, and functional vehicular and pedestrian connection between the central campus and the western areas including the Athletic Center area, the Distribution Center, and Paint Shop Pond.

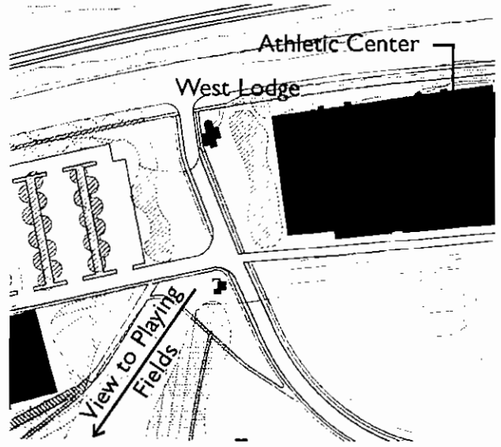
1. **Athletic Hill Ramp:** To create a critical link between the center of campus and the west campus, the Master Plan suggests the extension of College Road west from the Alumnae Circle area to the proposed West Lodge entrance. The proximity of the Athletic Center and Alumnae Hall and the steepness of the terrain in the area between the buildings will require the proposed road to traverse this section of ground on a structure. A large retaining wall akin to the wall and ramp structure used at Green Hall will be needed to negotiate the steep slope of the existing ground. Besides facilitating automobile and pedestrian connections through this area, the needed retaining wall would also have stairs and a ramp incorporated into the face on the Alumnae Valley side. The stairs would offer access from the floor of Alumnae Valley up to the Athletic Center. The ramp would connect Alumnae Circle to the stage area giving service vehicles access to the lower level. The wall and an associated equipment building would provide a backdrop and support structure for an area that could be used as a large outdoor stage spilling into Alumnae Valley

2. **Athletic Center Parking Deck and Tennis Courts:** A two-level parking structure is proposed on the site of an old gravel borrow pit, with outdoor tennis courts on the roof. The relatively low profile of the structure (the lower level of which could be partially below grade) would have minimal visual impact on Route 135. This location allows parking and the tennis courts to be close to the Athletic Center. The existing entrance to College Road on Route 135 would be closed with the opening of the new West Lodge entrance (explained elsewhere in this report).

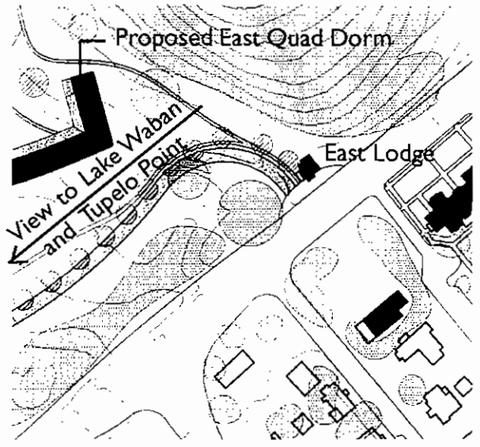
3. **Athletic Center Entry Landscape :** The proposed realignment of College Road and the replacement of Alumnae Lot with a parking structure of smaller ground floor area will open up the area in front of the Athletic Center to be regraded and allow a clearer and ADA-accessible connection to the Athletic Center.

Restore the Historic East and West Lodge Entrances and Improve Campus Arrival





West Lodge Entry



East Lodge Entry

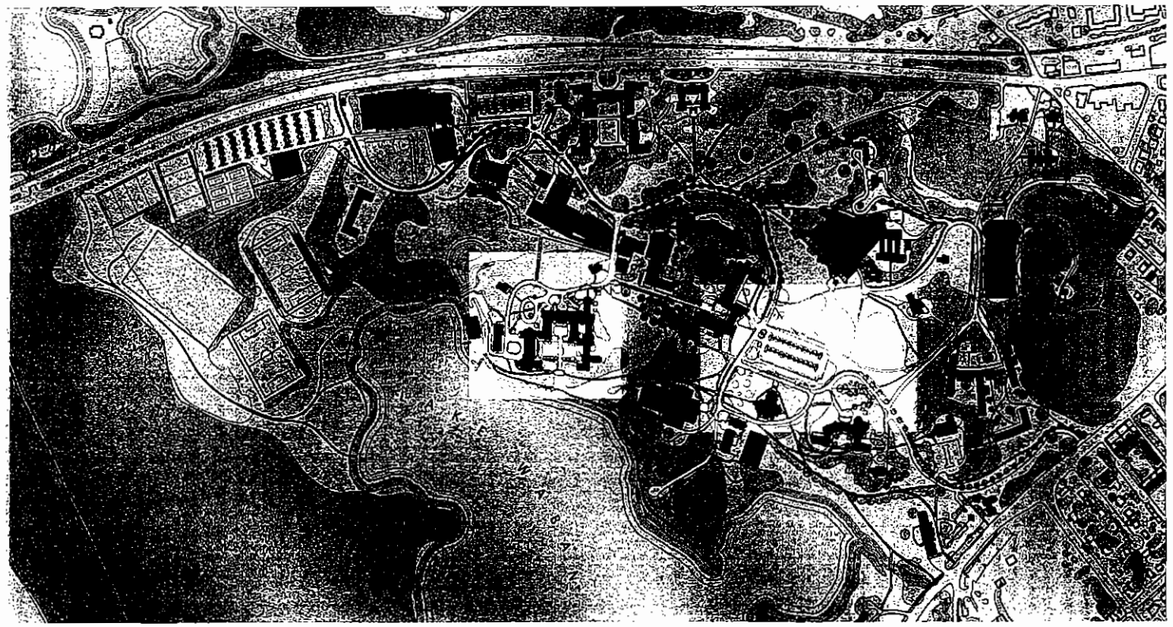
The Master Plan proposes that the College change both of the existing entries, thus reestablishing part of the historic arrival sequences to the institution. The proposed changes are meant to reflect the evolving role of the college within the community and to improve and actively shape the experience of people coming to the College by a more careful consideration of the form and symbolism of the entries. The proposed entries incorporate several important concepts, including an acknowledgment of the rich historical legacy of the College and its architecture. To achieve this, the new entries incorporate the original gate lodge buildings. The proposed entries also acknowledge the unique role of the natural landscape in giving form and structure to the College. The design of the proposed entries make references to how Wellesley's buildings and structures traditionally defer to the landscape, allowing it to shape experience. Both new entry roads are proposed to pass through spaces that contain the lodge houses, then open out to major landscape features. These include Lake Waban to the east and the new playing fields to the west.

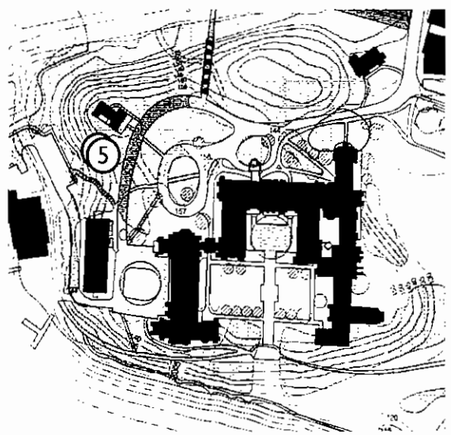
1. **West Lodge Entry:** The Master Plan recommends creating a new vehicular campus entrance at the historic West Lodge. The alignment of the new campus road is located west of the Lodge, to allow room for robust tree plantings to the east and west that screen the end elevation of the Field House and the proposed surface parking.
   The end of the new landscape room created by the bracketing of plantings opens to the southwest and allows views of the playing fields, new wetlands, and the existing forested hillside beyond the Paint Shop Pond site.

2. **Proposed College Road Views:** The new College Road extends south from the West Lodge entry toward the southern ridge of the Western Promontory above Alumnae Valley. A broad sweeping curve provides views of the proposed Alumnae Valley below and of Tower Court.

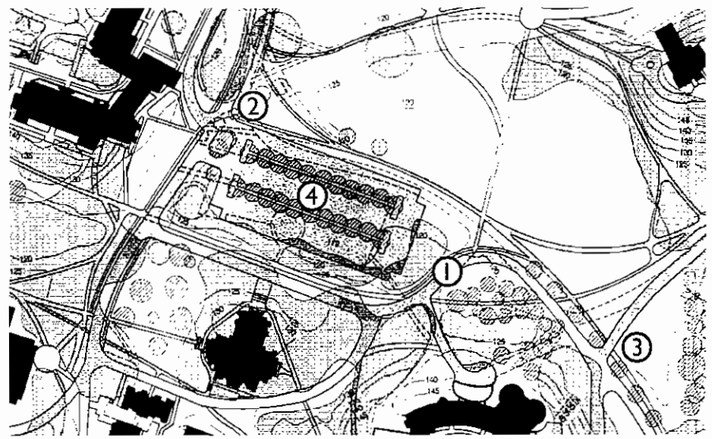
3. **East Lodge Entry:** The Master Plan recommends closing the existing Route 16 entry and reestablishing the entrance at East Lodge with a traffic light. The association of the new entry with the lodge will strengthen the visitor's connection with the College's historic character upon arrival on the campus. Closing of the present entry will allow the expansion of the operations of the College Club, including new parking areas. Finally, and most important, the new road alignment will redirect the views of drivers and pedestrians toward Lake Waban and Tupelo Point, establishing this important landscape feature early in the entry sequence. This recaptures the Olmstedian use of cart ways as means to reveal the landscape through movement through the campus. The placement of the new dorm building also focuses views toward the Lake and is intended to transform the existing view of the dorms from East Lodge to improve the presentation of campus architecture at the entry.

Realign Roadways to Calm Traffic, Reveal the Campus, and Reduce Pavement





Claflin, Lake House, Boat House Connection



Founders Area Road Realignment

An essential component of the Master Plan is the change to several campus roadways. The need for these changes was made evident in the master planning process, during which five principles evolved from careful study of the relationships among campus circulation, the landscape, and the life of the campus. The next step in the implementation of these changes will be to study the roadway with a traffic engineer who has experience with specialized problems of traffic calming. The five principles are:

A. *Safety:* Foremost among the motivations for changes in the campus roadway system is the need to improve several unsafe conditions. Changes made to College Road in the early 1960s have resulted in a roadway that encourages traffic to speed through the campus. The parkway layout of the roadway, with its long, flat curves, engenders relatively high speed. These conditions conflict with the need for most of the campus population to cross this road several times a day.

B. *Wayfinding:* The proposed roadway changes will partially restore the original College Road layout as explained in Working Paper Two and Working Paper Two A. The original road layout was carefully designed to direct views toward important landmarks including Stone Tower and Lake Waban, to orient people to important wayfinding elements of the campus landscape.

C. *Clarity:* The Master Plan assumes that whenever possible, the road layout should explain and reveal the wonderfully complex structure of the Wellesley campus.

D. *Function:* The College Campus is based on a dispersed development model that requires full connectivity of the elements for the campus to function properly. The roadway system should provide the connectivity needed for vehicles and pedestrians alike.

E. *Beauty:* The proposed changes to the roadway system reduce paved areas and lessen their impact on the landscape.

1. **Historic Road Restoration:** The Master Plan proposes the reestablishment of the historic alignment of College Road along the side of the Chapel, and the closing and removal of the 1960s segment of College Road that parallels Founders Lot. As explained in Working Paper Two, this historic alignment focuses the attention of automobile users on critical landmarks of the central campus, and changes the nature of College Road from a commuter shortcut to a low-speed, highly orchestrated series of views, turns, and stops. Seeing the central core of the campus from roadways is one of several experiences that structure an understanding of campus organizational patterns.

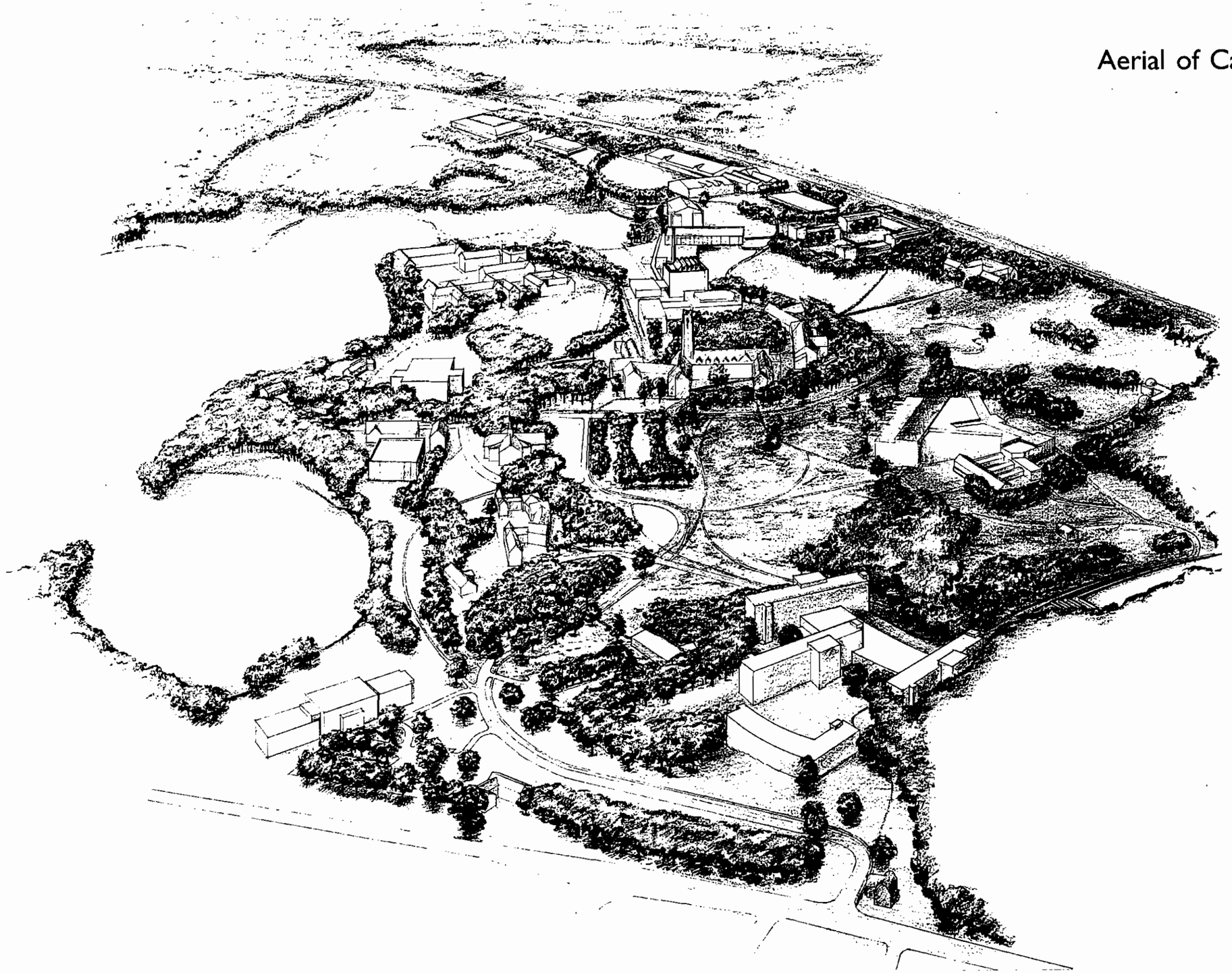
2. **Intersection of Tupelo Lane and College Road:** The Master Plan envisions this intersection as a three-way stop. Critical views into the heart of the campus and of Severance Green would be cleared of recently added extraneous rhododendron in the dell, and parked cars would be relocated.

3. **Intersection of College Road and Christmas Tree Alley:** The Master Plan recommends the simplification of this confusing intersection to a T-intersection as shown, and the expansion of the meadow in place of the eliminated 1960s roadway.

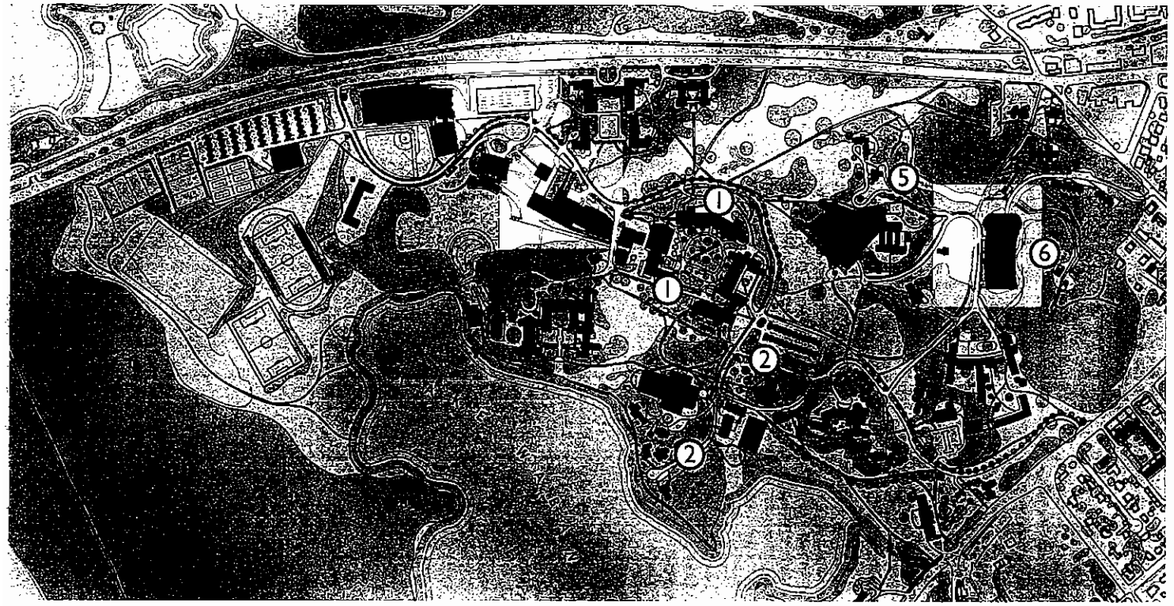
4. **Founders Lot Reorganization:** The Master Plan recommends the removal of pavement and parking spaces in the area immediately adjacent to Founders Hall and the reconfiguration of Founders Lot to accommodate the same number of cars that park in the lot today, while allowing the new College Road to pass by unimpeded.

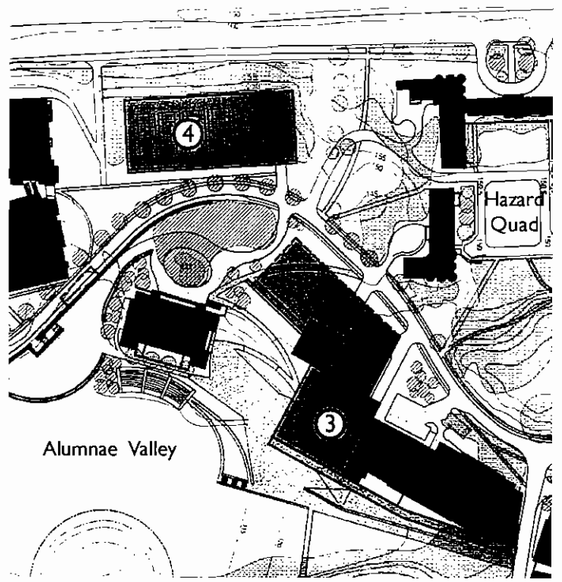
5. **Claflin, Lake House, Boat House Connection:** The Master Plan proposes the removal of the road from the southern edge of Alumnae Valley. To accommodate access to the Boat House, the plan proposes reestablishing the roadway connection between Tower Court Hill and the motor courtyard between Lake House and Claflin. The landscape in this area would be revitalized and reshaped, and the eroded, overgrown slope would be repaired and new trees and understory plantings added.

Aerial of Campus from the East

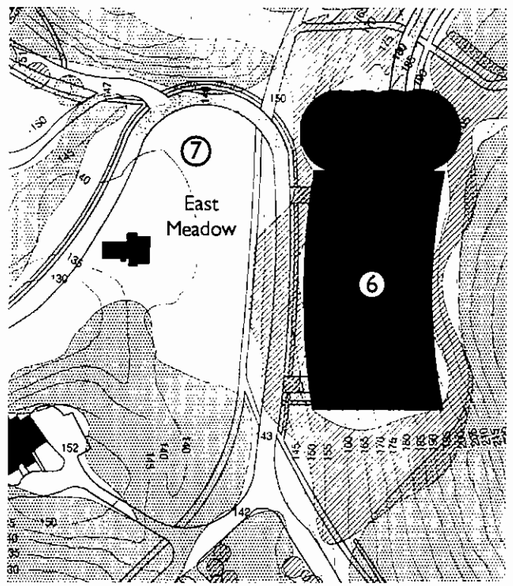


Create New Parking Structures to Store Relocated Cars away from Roadways and Incrementally Expanded Parking Lots





Proposed Alumnae Valley Parking Structure



Proposed Water Tower Hill Parking Structure

An investigation of the history of the college landscape and observations of existing conditions reveal that the space required to park cars has outgrown the current capacity, such that major portions of the campus are either marred by the presence of parked cars or reduced to being back-door or service areas, and no longer positive features of the landscape. The Master Plan proposes to relocate surface parked cars from numerous locations to three carefully sited and designed parking structures built along hillsides or on hilltops, while maintaining open valleys, in accordance with the principles of the overall landscape strategy. A detailed accounting of existing parking spaces and proposed changes is included in Working Paper Two.

1. **Jewett Hall and Pendleton Hill Ramps:** The Master Plan recommends the removal of the parallel spaces on all roads on Norumbega Hill. Parking in these locations is inefficient, unsightly, and extremely unsafe, causing unnecessary conflicts between moving cars, parking or parked cars, and pedestrians in the ramped roadways. These corridors are heavily used by faculty, staff, and students to access the quad during class changes. The existing roadway should be narrowed accordingly, and curbing and walking paths that parallel the roadway added in some areas.

2. **Tupelo Lane and Chapel Road:** The Master Plan recommends the termination of the practice of parking along Tupelo Lane and the road south of the Chapel, as well as the removal of the small parking lot at the corner of Tupelo Lane and the road south of the Chapel.

3. **Alumnae Valley Parking Structure:** The Master Plan proposes a 300-car parking structure as the primary means to achieve the Alumnae Valley restoration. This structure and another new parking facility on the Alumnae Lot site would accommodate the surface parking that presently takes place on Norumbega Hill and in the Service Lot. A key element of the parking structure is a weather-protected and level pedestrian connection that links the stair portal at the Davis Museum to the parking structure.

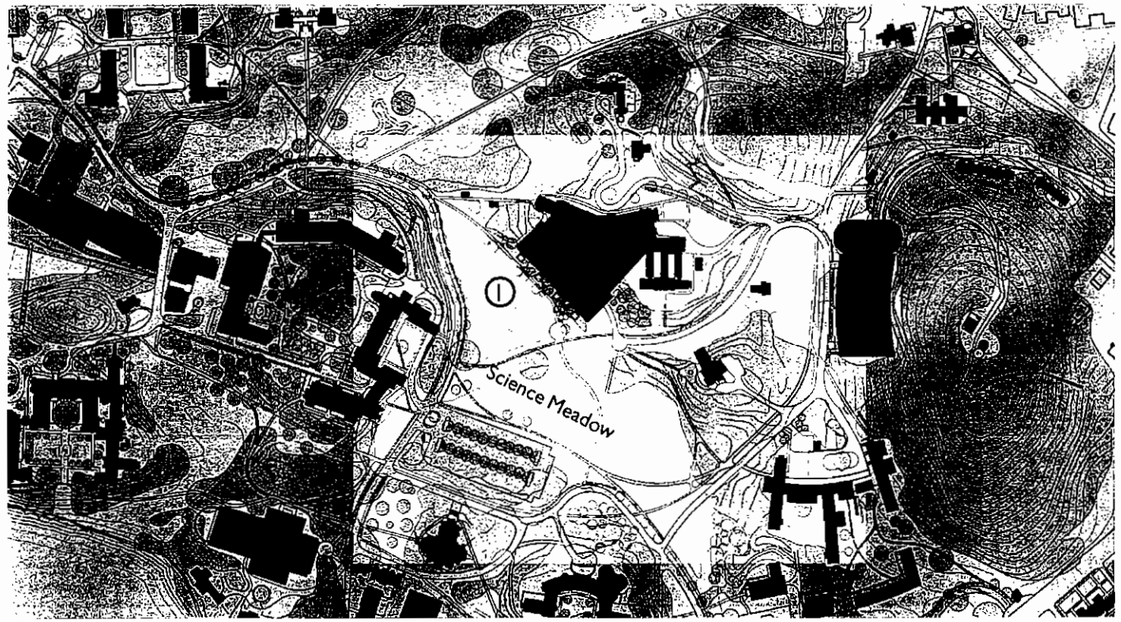
4. **Athletic Center Parking Structure:** Built on the site of Alumnae Lot, this structure condenses the area needed for parking in this area, therefore allowing a new entry landscape to the Athletic Center and affording a stronger connection between this area and the Main Campus. The close proximity to the Athletic Center makes the top deck of the structure a perfect place for outdoor tennis courts.

5. **Sage Area:** The Master Plan recommends the complete removal of all at-grade parking in the Sage Area, the reduction of pavement to travel-line widths, and the extension of the meadow planting up to the edges of the paved areas, as illustrated in Working Paper Eight. The front door to Sage should be made handicapped-accessible, and the overgrown yews in the traffic circle should be removed. The addition of many new shade trees is also recommended.

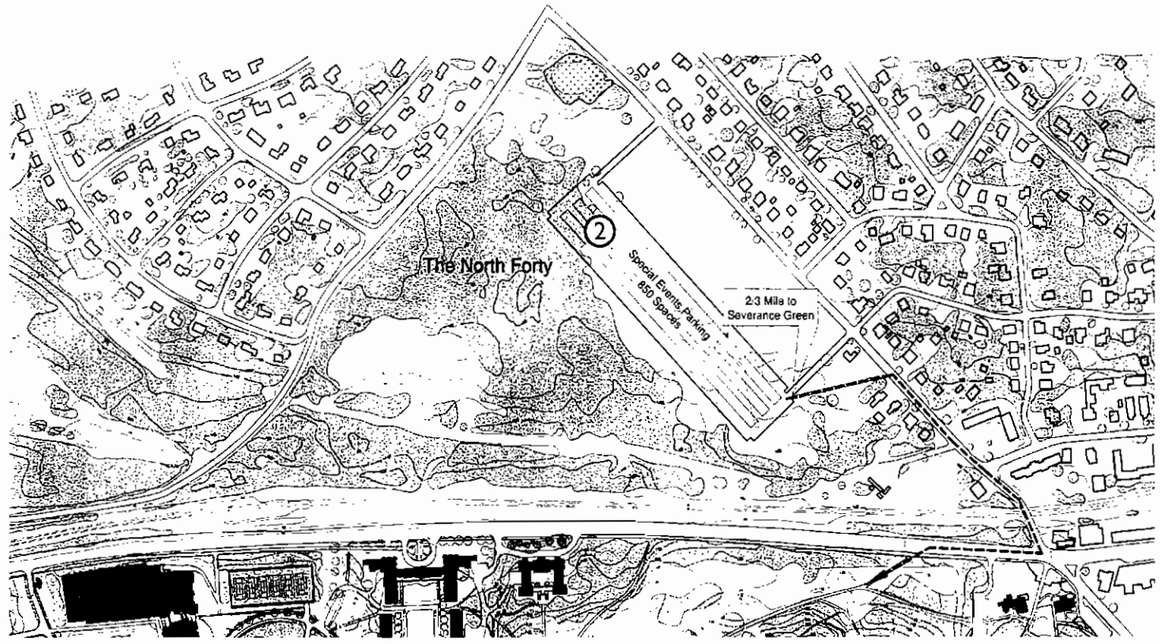
6. **Water Tower Hill Parking Structure:** The Master Plan recommends the construction of a stepped 450-car parking structure into the base and side of Water Tower Hill just east of Gray Lot. As a result, parking along Christmas Tree Alley, Gray Lot, the lower Simpson Lot, and the so-called Sage area would be eliminated an moved to this new structure. It is also suggested that an employee vehicular entrance to the parking structure be built as an extension of Weston Dining Terrace Drive, to allow direct access to the parking structure without having to drive through the main campus. Faculty and staff who work in the Science Center area would be assigned to this parking structure. The Water Tower Hill structure should be stepped to conform to the contour of the hill, with innovative plantings on the roofs rather than parked cars. Views from the decks west to the Science Center and the Stone Tower would help to orient visitors to the main campus.

7. **Gray Lot (East Meadow):** The Master Plan recommends the removal of Gray Lot and the lower Infirmary Lot south of Gray Lot and the replacement of those pavement areas with a reinstated East Meadow. Also suggested is the realignment of the north end of Christmas Tree Alley near the intersection of Fiske Walk and the drive to Sage. This area is proposed as a single sweeping curve. New walks would receive pedestrians from the proposed parking structure and Fiske Walk, and connect to the walk to Sage and the Academic Quad.

Restore Science Center Meadow Landscapes and Relocate Event Parking to the North Forty



Science Meadow



Special Events Parking- North 40

The Master Plan identifies the Science Center meadow landscapes as critical elements in the diverse mosaic of landscape types of the campus. The meadows contribute to the diversity of types of landscape experiences throughout the year. The Master Plan research has highlighted Wellesley's unique tradition of a campus form and structure that is site specific, building on the diverse indigenous geomorphology, soils and natural plant communities associated with these forms. The recent significant loss of the area of wet meadows on campus—which includes losses of meadow area to parking in Founders, Service, and Gray Lots and to active recreation on Munger, plus the continual filling and mowing on Science Center Meadow—has reduced meadows to weak vestiges of their original presence. It is precisely this suburbanization and loss of diversity and plant specificity that the Master Plan recommends to reverse drastically.

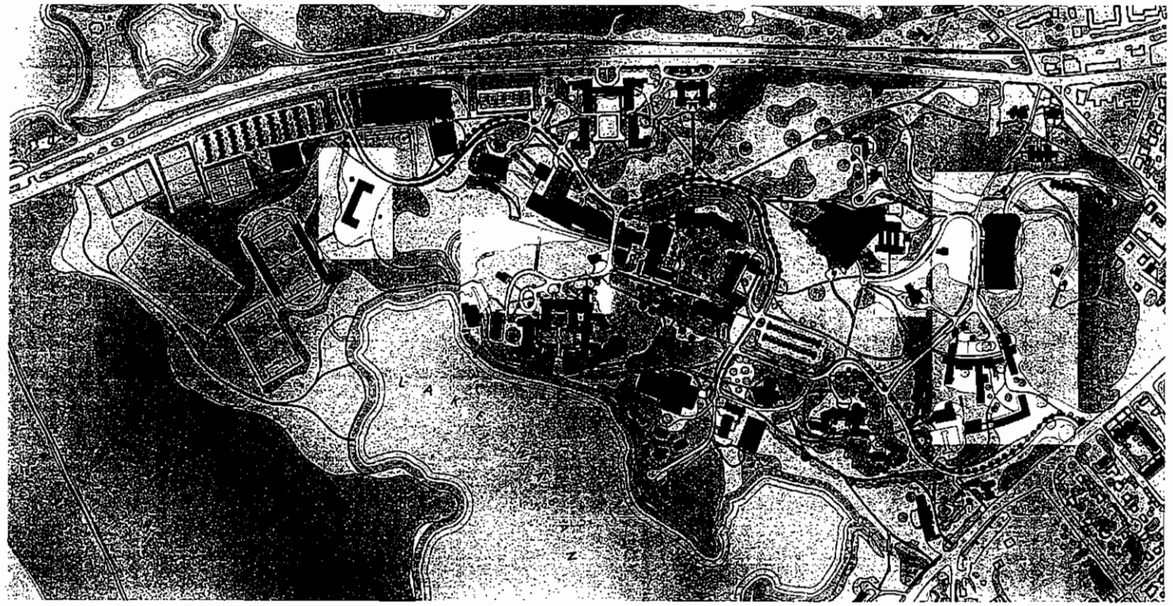
The conversion of the meadows to native plantings will reduce the maintenance and upkeep of these areas to a small fraction of the amount of care needed for lawns. Establishment of native plantings does require considerably more maintenance than lawns, but the reduction of future irrigation, fertilizer, pesticides, and mowing have considerable long-term cost benefits. In addition, these meadows add to the campus in terms of the seasonal complexity, beauty, biodiversity, and wildlife habitat they provide. Once established, the meadows will require cutting or burning once a year. This removal of the previous season's ripened plant material should occur in late winter or very early spring. If timed correctly, this maintenance will result in a bare landscape for approximately two weeks, followed by a vigorous flush of bright green spring growth. The grasses and wildflowers should be allowed to grow unimpeded throughout the summer. The bright green of early spring will be followed by the more muted greens and wildflowers of summer, followed by the ochre and russet foliage of fall and the muted tans, browns, and grays of winter. The plant material should be left to stand all winter, thereby camouflaging the puddles that will and should occur in those areas during that season.

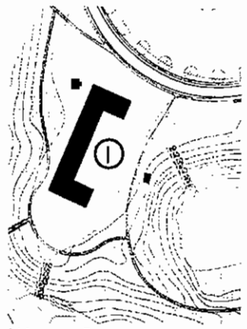
As explained in Working Paper Three, the Master Plan urges Wellesley to embrace these meadow landscape plant communities as living systems, recognizing the importance of these areas as something more than aesthetic amenities. By consciously cultivating the wet meadow landscapes, the College will be renewing the historic Wellesley tradition of cultivating the natural features of the site for their ecological importance as well as aesthetic enjoyment.

1. **Science Center Planting:** The Master Plan recommends the planting of shade trees on both sides of the path directly south of the Science Center, in the area between the stair towers. This planting will extend the hillside planting to provide beneficial shading of the building during summer months and soften the oblique view of the building from College Road, while maintaining views from the stair towers.

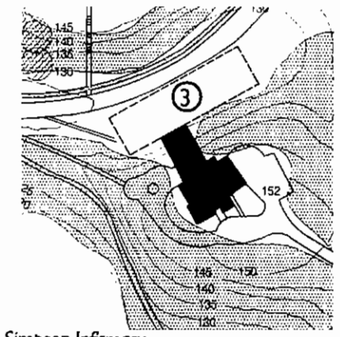
2. **Events Parking:** At least two to three events a year require more parking then can be provided by the existing lots. During these times it has been the practice to use the meadow landscapes as overflow parking. This practice must be discontinued. The mowing necessary to park on the meadows prevents the development of a desirable plant palette, and the removal of plant material in early autumn, for parents weekend, leaves an unsightly stubbly surface throughout the winter. The Master Plan identifies a plot of land southwest of the existing gardens in the North Forty that could be maintained as an open landscape with annual mowing that could provide event parking for 700–850 cars. Although this lot would be in walking distance from the main campus, the College could also utilize an intensive shuttle service to this location for large events.

Future Building Sites, Buildings to Be Removed, and Sites to Be Preserved

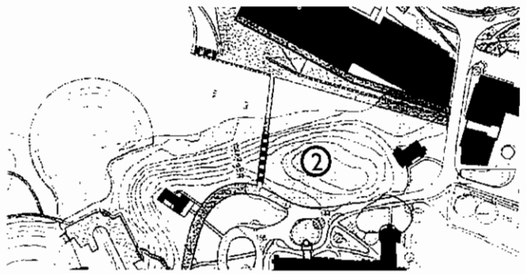




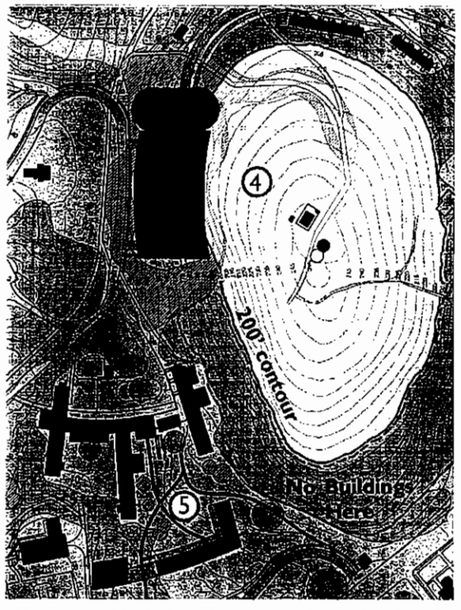
Western Promontory



Simpson Infirmary



Tower Court Hill



Water Tower Hill Parking Structure and East Quadrangle

The Master Plan identifies Wellesley's historic pattern of building on hilltops as one that respects the natural topography of the campus landscape of delicate hillocks and open, interconnecting valleys. As such, a pattern has been established whereby buildings are primarily sited on hilltops in courtyard configurations or into hillsides and occasionally at the edge of major open space. Through this pattern the valley landscape remains open. These valley landscapes, by their form and the absence of buildings, become the basic spatial structuring element of the campus landscape. Respecting this historical patterns of campus development, the Master Plan recognizes that there are very few remaining substantial new building sites on the Main Campus. There are also several sites that, despite their technical adherence to the principles of building on hilltops and hillsides, should be excluded from consideration for other reasons.

1. **Western Promontory Building Site:** In concurrence with F. L. Olmsted Jr.'s 1902 letter to President Caroline Hazard, the Master Plan identifies the Western Promontory (site of the abandoned tennis courts) as an important building location. It is the last major site on the Main Campus. The Master Plan recommends saving this site for an unanticipated major new program.

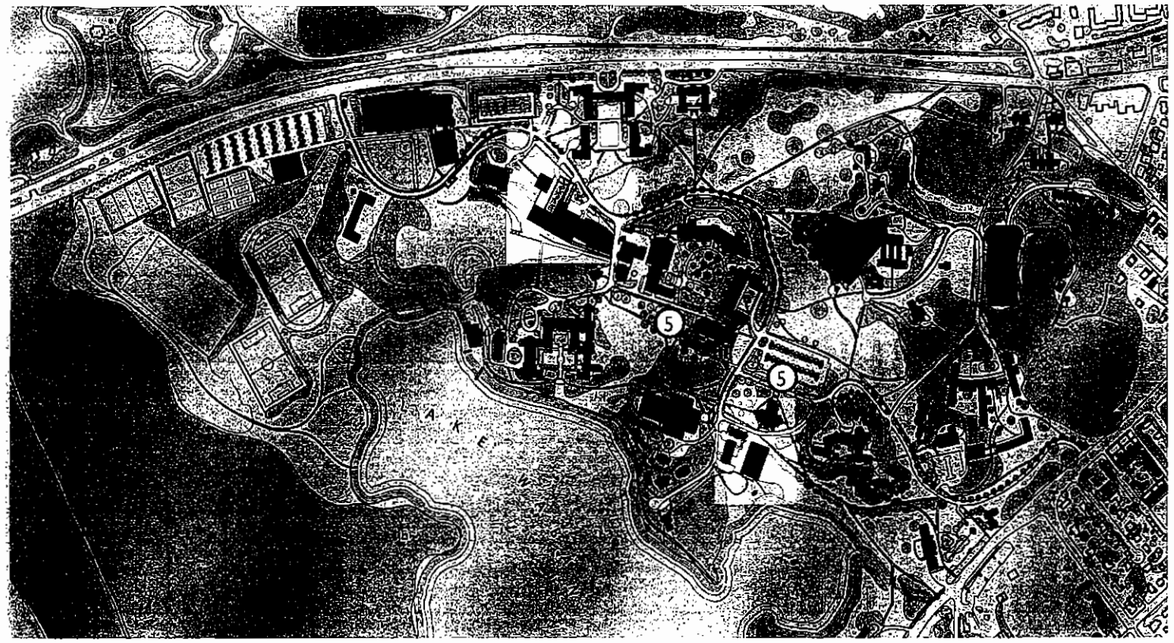
2. **Tower Court Hill:** The hillside north of Tower Court and south of the Power Plant should remain undeveloped. Given the presence of the Power Plant on this location, a building in this hillside would create an overly urbanized feel.

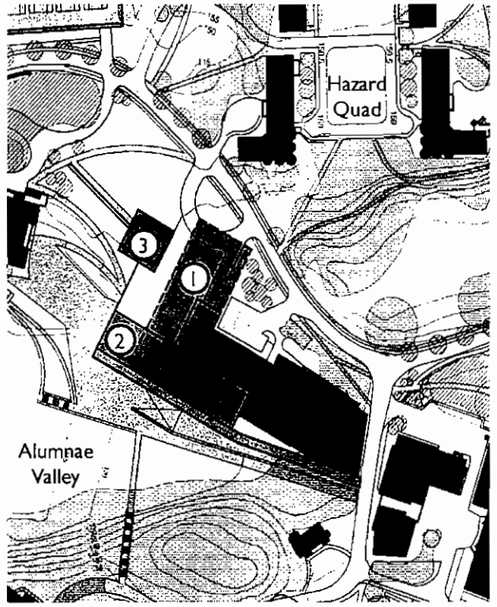
3. **Simpson Infirmary:** The Master Plan recommends the demolition of the World War II-era addition to Simpson Infirmary and the relocation of the various programs located within the building elsewhere, to facilitate a visual and spatial connection between the new East Meadow and the restored middle and lower meadows below the Science Center.

4. **Water Tower Hill:** The Master Plan calls for the construction of a stepped parking structure into the western side of Water Tower Hill in the area immediately adjacent to Gray Lot and the restoration of Gray Lot to an open valley landscape. The height of this building should be held to approximately 50 feet as measured from Christmas Tree Alley. To keep the mass of the building within the existing tree canopy line, no additional building should rise above the 200-foot contour, as illustrated, to limit the visibility of structures built on the hill from other parts of campus. Any future building should not extend further south from the proposed site than past McAfee Hall, to allow the landscape and the forested hillside to be the primary feature and form giver of the East Lodge entry landscape.

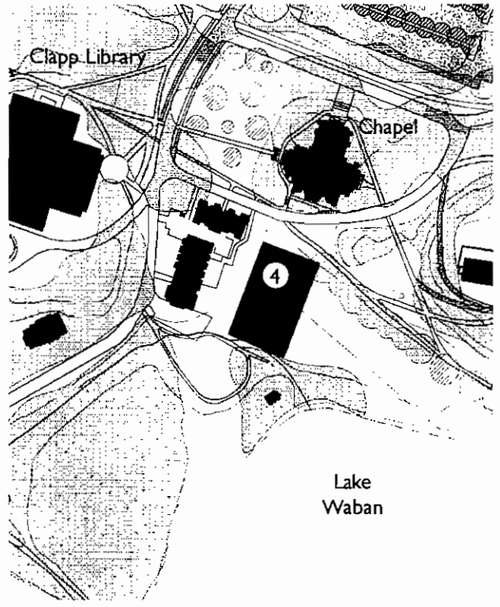
5. **East Quad:** In response to the need for new dorm rooms, the Master Plan recommends adding to the Freeman, Bates and McAfee Dorm Complex. As shown in the Master Plan, a new dorm building could be used to configure a new quad space between itself and Bates and McAfee Halls, thereby creating a grounded landscape space similar to the courtyard spaces of the other dorm complexes.

Locate the Campus Center Activities at Two Separate Sites to Correspond with their Functions and to Establish Proximity to Existing Supportive Programs





Performance Center



Study Center

The Master Plan recommends the accommodation of the program of the Campus Center on two separate sites, highlighted above. Each proposed center is placed to take advantage of other existing campus uses in site that are idealy suited for the individual centers. The division of the campus center program is such that performance and event-related activities involving visitors to the campus and requiring parking will be located in the proposed Performance Center in the West Campus between Alumnae Hall and the Power Plant. Academic functions and student organizations that do not require parking and that would benefit from a more central location near the Chapel and Library are to be located in the Schneider Center area. Detailed architectural program breakdowns are included in Working Paper Nine, Architectural Report.

1. **Performance Center:** Campuswide activities that are performance related or that call for visitor parking are to be located in association with a new planned parking structure built into the hillside north of the Service Lot.

2. **Multipurpose Space:** A key element of the new Performance Center is a large, multipurpose space that will accommodate a broad variety of functions ranging from conferences to social dances and concerts.

3. **Black Box Theatre:** The Plan recommends the construction of a modern black box theatre as part of the Performance Center to compliment the traditional spaces of Alumnae Hall and allow the existing ballroom in Alumnae Hall to be restored to full size.

4. **Campus Study Center:** As a complement to the performance-related center proposed for the Alumnae Valley area, the Master Plan recommends that an academically related center be built in place of the existing tennis courts east of the Schneider Center. Key elements would include an all-night study center, the relocation of the computer center from the Library, dining facilities including an all-night facility, study carrels, offices for student organizations, and the relocation of the bookstore from Pendleton.

The plan also proposes the restoration of Schneider Center (formally Billings Hall) to its original configuration as a multipurpose space, with the removal of the interior platforms and the removal of the connection to Billings, formerly the Music Building. As suggested by the plan, the space between these buildings and the Study Center could be developed as a south-facing courtyard following the model of other quads and spaces on campus, with views oriented toward Lake Waban. As part of this project, the edge of Lake Waban should be reconfigured to bring the wetland landscape adjacent to the south and west facades of the new center. This additional wetland could create a natural foreground to the lake view and compensate for building near this sensitive area.

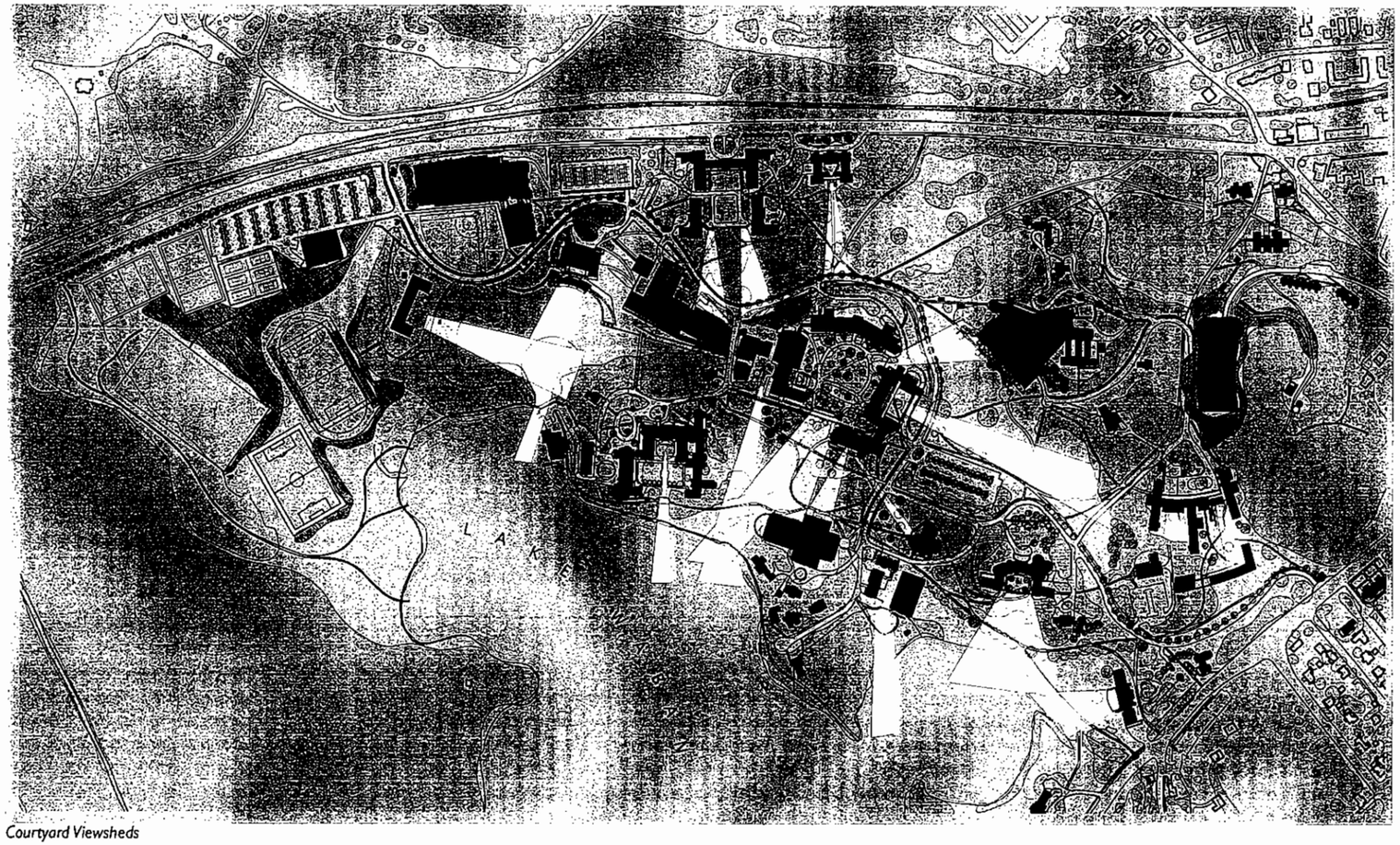
5. Alternative Sites: Other alternative locations for the Campus Center were studied during the master planning process. Two sites that required careful scrutiny were a location immediately south of the Academic Quad and west of Founders Lot and another location immediately north of the Chapel on Founders Lot.

The Academic Quad site, although centrally located, was found to be too small to accommodate the anticipated program. This site would require a substantial portion of the building to be underground. There is also no way to associate parking with this scheme, thereby reducing the ability of this site to host social events.

The Founders Lot site was also attractive in terms of being centrally located. But careful study with three-dimensional models revealed that it was impossible to accommodate the required program on this site without drastically changing the character of the central campus. Although some surface parking could be included, an underground parking structure in this location is practically impossible because the water table is very close to the ground surface, thereby necessitating extremely expensive construction and a 24 hour de-watering system. These studies were instrumental in leading the master planning team to conclude that the best way to accommodate the proposed Campus Center program was to split it between the two sites described above.

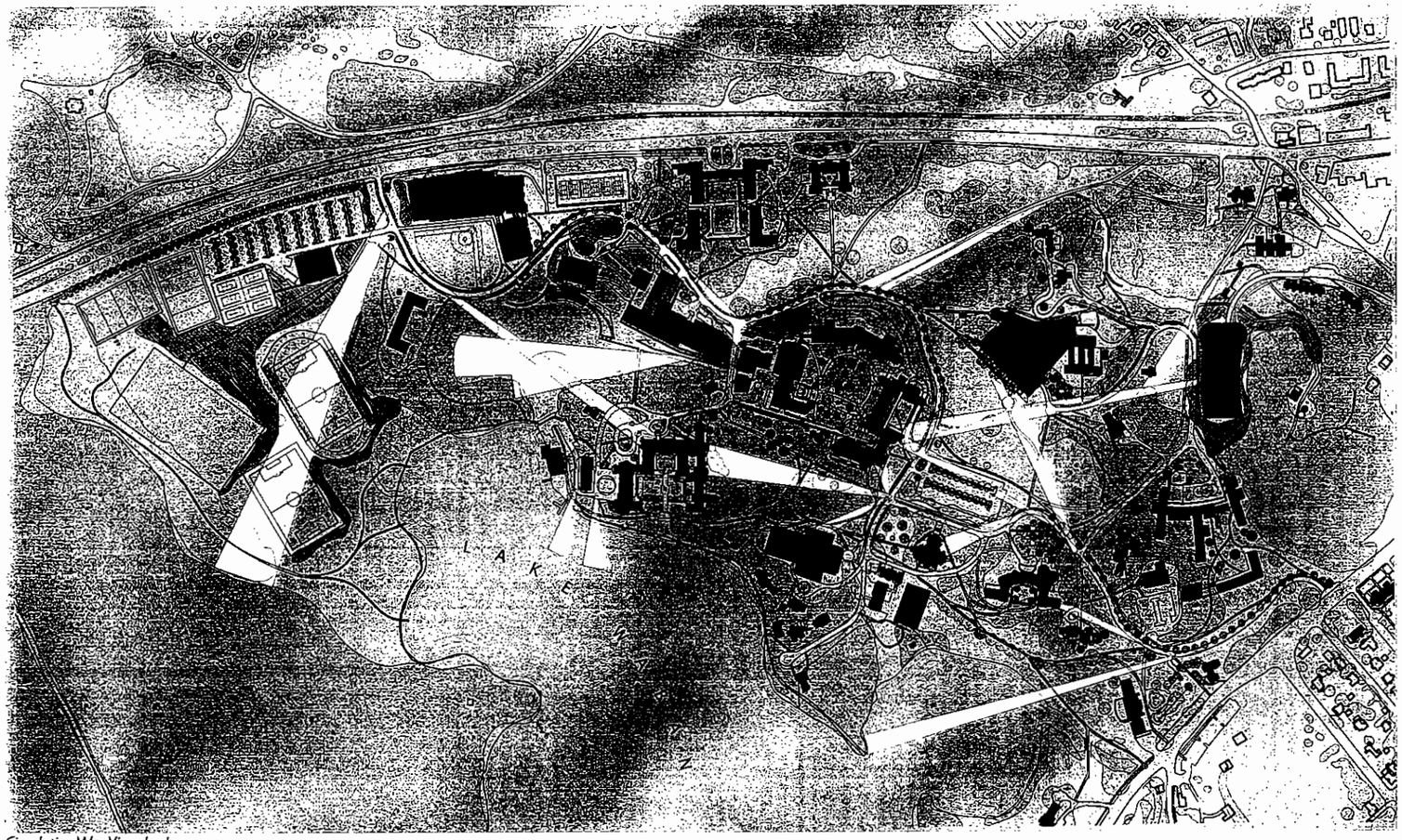
Restore and Maintain Viewsheds from Hilltop Courtyards and Quads

Courtyard Viewsheds: The Master Plan calls for the slopes that define the southern edge of each hilltop courtyard to be managed and trees to be pruned to provide views into and out of the courtyard. Each of these viewsheds should assume the particular character of its specific location, with special attention to existing planting. For example, it is suggested that Tower Court have a relatively narrow view aperture centered on the lower landscape terrace. Hazard Quad, on the other hand, historically had lateral openings aligned on the circulation ways in the courtyard, leaving the center of the view obscured. For Stone Davis, the bowl-shaped land form to the south of the court implies a more sweeping view beneath a thinned, high-limbed overstory canopy. The Master Plan recommends the removal of one Norway spruce along the Jewett Hill ramp to allow views from the Davis Courtyard across Severance Green to Lake Waban. More detailed illustrations of these modifications are included in Working Paper Eight.



Courtyard Viewsheds

Restore and Maintain Viewsheds from Circulation Ways



Circulation Way Viewsheds

Circulation Views: The Wellesley College campus landscape is complex, and even long-term users can be confused about the relationship between parts. The Master Plan notes that over time many views to key landmarks and landscape features on campus have become obscured by vegetation and need to be restored. When these view corridors are reestablished, they will once again explain the landscape to pedestrians and drivers and also reveal the beauty and complexity of the campus. Many of the view corridors do not need to be entirely open, but should depend on being able to see under tall canopy trees. Each particular view corridor would be studied individually to find the best way to achieve the views described above.

Restore Wooded Hillsides and Replant Campus Groves

1. **Hillside Restoration:** The Master Plan identifies the wooded hillsides as critical elements of the college landscape. These plantings serve to exaggerate the verticality of the landscape, thereby heightening the contrast between hills and the open valleys below. In many locations on campus the hillside plantings are in need of attention. Work that needs to be done includes selective editing and removal of undesirable species as well as planting of appropriate understory trees, shrubs, and ground covers. A one-time project to correct the preponderance of undesirable species and establish appropriate understory plantings could be followed up by a simpler annual management regime.

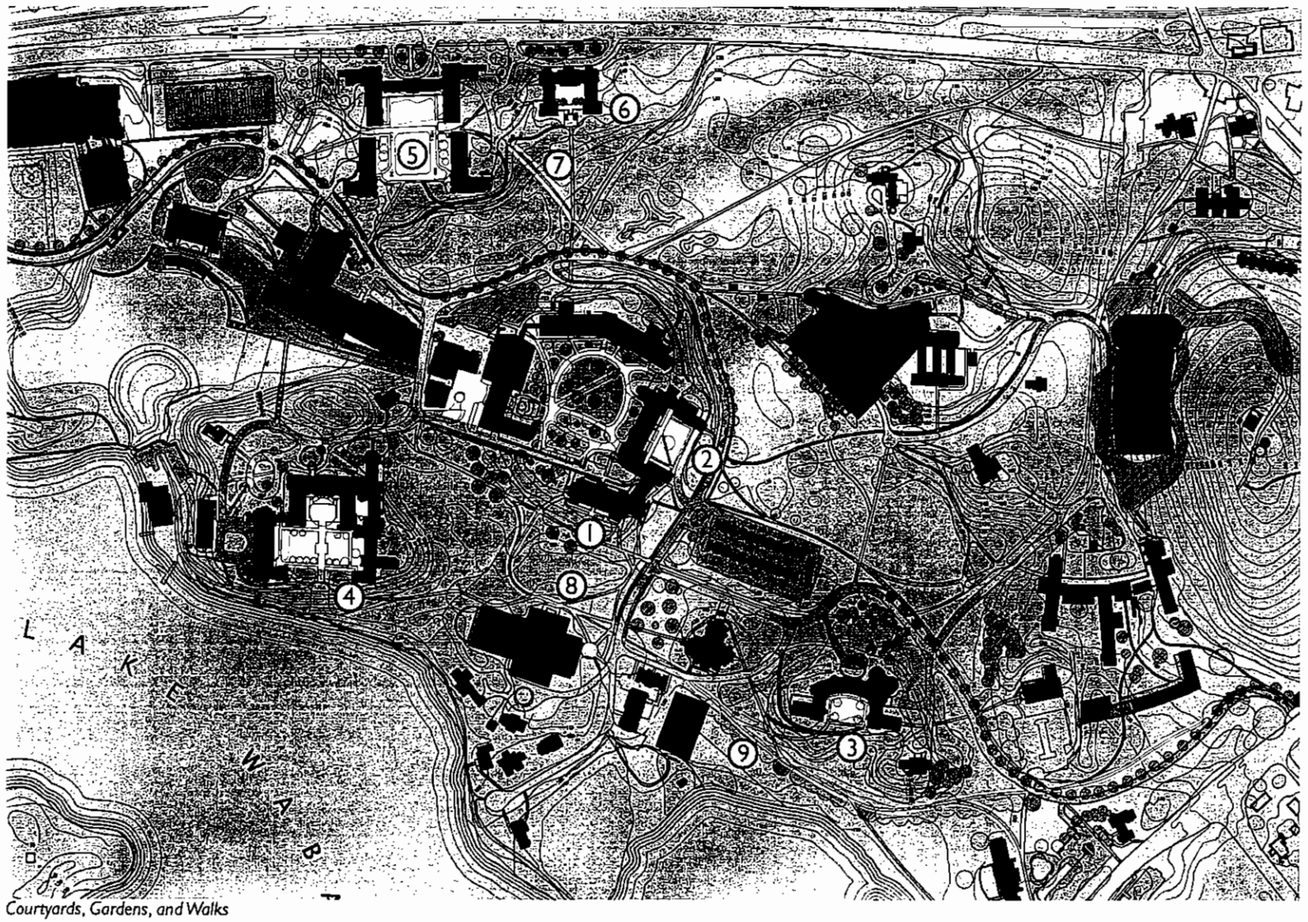
2. **Davis Service Area and Pendleton Hill:** The Master Plan recommends the extension of the hillside planting that exists along Pendleton to the area across the back of Davis. The existing driveway should be narrowed and the land form extended with the use of low retaining walls to allow the planting of new large trees and understory plants in this area. This will require the removal of several parking spaces, to be relocated in the new Alumnae Valley Lot.

3. **Grove Replanting:** The trees of the major groves of the campus are quite mature, with an almost complete absence of a younger generation of trees. The Master Plan recommends a one-time planting of 250–300 trees to replace many recent removals, which would be followed up with a more modest annual replacement program.

    A. *Academic Quad Grove:* the Master Plan recommends the initiation of a grove-planting project to provide the next generation of trees in this and other areas described in Working Paper Eight. Also shown in the Academic Quad are two new paths that accommodate desire lines in the area as well as a new ramp system to allow access from the handicapped parking spaces on the Jewett Hill ramp to the quad.
    B. *Rhododendron Dell/ Chapel Lawn Grove*
    C. *Tower Court Hill Grove*
    D. *Sage Area Grove*

4. **Street Tree Plantings:** The Master Plan recommends the reestablishment of street tree plantings along select sections of College Road as shown. Plantings north of Norumbega Hill would extend the plantings from the Pendleton slope and create a visually narrower roadway corridor, with a slowing effect on cars. New street trees on the eastern portion of College Road will frame views of the meadows and structure the entry sequences from Route 16. Street trees along the proposed extension of College Road to West Lodge structure this movement corridor and form views across Alumnae Valley to Tower Courtyard.

Hillsides and Groves



Courtyards, Gardens, and Walks

Restore Campus Courtyards, Gardens, and Walks

The Master Plan recommends the restoration of many parts of the historic Main Campus, including the courtyards and campus walks. Many of the proposed renovation changes called for in the Master Plan are illustrated in Working Paper Eight.

1. **Founders Terrace:** The surface of Founders Terrace should be restored, as recommended in Working Paper Four. Additional changes should include the addition of one or two new oak trees just south of the terrace, and the careful pruning of rhododendron to allow views to the Library entrance and to the Chapel from the terrace.

2. **Green Hall Courtyard:** The Master Plan recommends the removal of parking from the Green Hall Courtyard and the reestablishment of the courtyard as it appears in historic photographs. Several handicapped-accessible parking spaces are to remain behind Founders Hall, and the existing deteriorated handicapped-accessible ramp in the courtyard should be replaced.

3. **Stone Davis:** The Master Plan recommends the closing and removal of the western service area of Stone Davis, a vestige of the old two-entry system. Two new walks to connect the courtyard to the central campus are proposed as well. The Master Plan also recommends removing one of the front entry drives and modifying the entry to facilitate vehicular turnaround, thereby simplifying the intersection with Christmas Tree Alley. Finally, the view from the courtyard to Lake Waban must be maintained, and the clearing of the sapling trees to a select few as directed by a landscape architect is necessary. To provide views from College Road to Stone Davis, the Master Plan recommends the selective limbing of the pine grove east of Stone Davis. This also would allow views of the east elevation of the building. Careful placement of low-grade understory plantings would help to screen the large service area on the lower level.

4. **Tower Courtyard and Garden:** The Master Plan recommends the complete renovation of Tower Court Garden. The poor condition of the old oak in the upper terrace may necessitate its removal, thereby enabling the redesign of this area to seamlessly incorporate ramped handicapped access to all levels of the garden and building entries. Archival research of Fletcher Steele's design for the courtyard should be undertaken as part of the renovation of the space.

5. **Hazard Quad:** The Master Plan recommends several changes for Hazard Quad: the selective clearing of viewsheds from the quad spaces, the restoration of the surrounding hillside landscape, the restoration of the quad spaces, and the removal of parked cars. Also recommended are the restoration of all peripheral service areas and the existing Route 135 entry landscape.

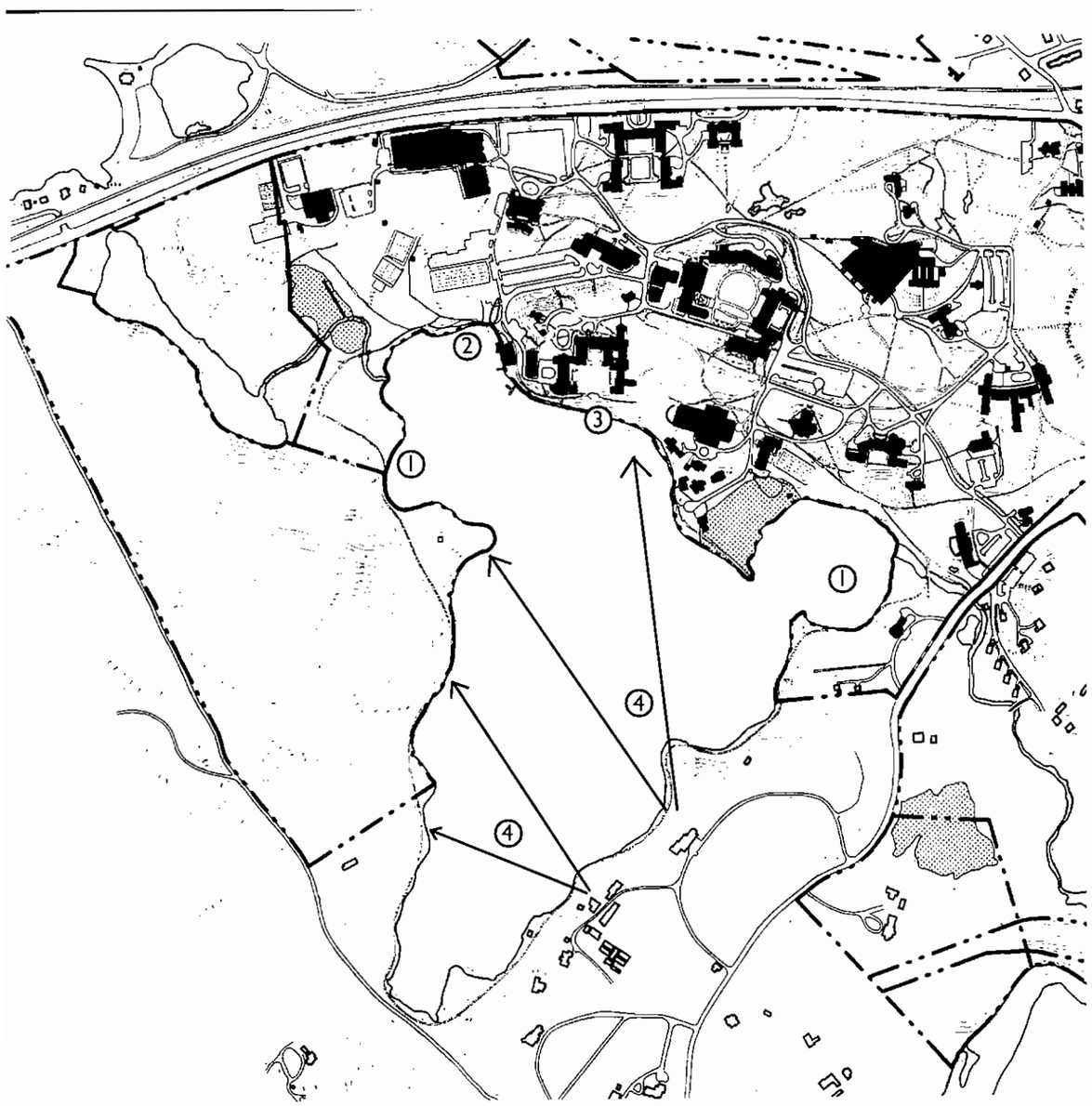
6. **Munger Quad:** As outlined in Working Paper Eight, Munger Quad and the Route 135 entry to Munger are in need of complete refurbishment, including the repair of pavements and metalwork, the replacement of overgrown shrubs, and the restoration of the lawns and planting beds.

7. **New Path to Hazard and Munger:** The Master Plan recommends the construction of a new handicapped-accessible path along the slope south of Hazard Quad to allow access to the quad and to Munger and to provide a pathway that engages campus users in the planted hillside landscape.

8. **Library Pathways:** The Master Plan recommends the reconsideration of all pathways in this area. Changes should include widening where necessary to accommodate service vehicles, the extension of a path along the old Brick Walk alignment to respond to a desire line in that area, and the rerouting of the path from the Library toward the north to accommodate gentle slopes that discourage cutting across Severance Green.

9. **Brick Walk:** The Master Plan recommends the restoration of Brick Walk to its original material, the extension of a new path that connects the College Club to Brick Walk, and the reforestation of the hillside southeast of Oak Woods, with the careful presentation of views from this house to the lake.

Restore Lake Waban Landscape



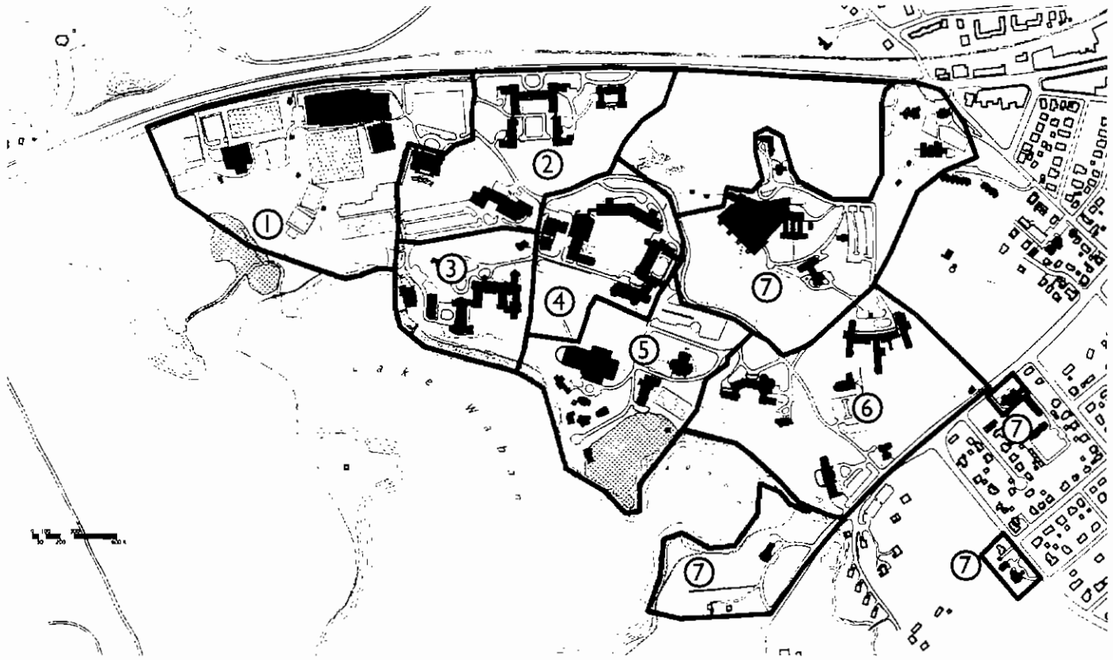
1. **Lake-Edge Restoration:** Areas around the lake and the lake-edge path are severely eroded. Erosion is particularly bad at points around the lake where people enter the water. The Master Plan recommends that a comprehensive project be initiated to correct these problems with sensitive solutions that incorporate new concepts of bioengineering combined with careful design to restore and prevent further degradation of this important resource.

2. **Boat House Area:** The Master Plan suggests the total renovation of the Boat House area, construction of a new boat ramp east of the inlet bridge, and new pavement that corrects the heavily eroded and ad hoc quality of this area. Additionally, the plan calls for the replacement of the stair to Lake House with a safer stair that is sensitive to the delicate location. The plan also anticipates the possible need to repair or replace the large concrete retaining wall that carries the road from Tower Court to the Boat House. A final feature of the proposed changes is selective clearing of the hemlocks in this area to allow views to the lake, as illustrated in Working Paper Eight.

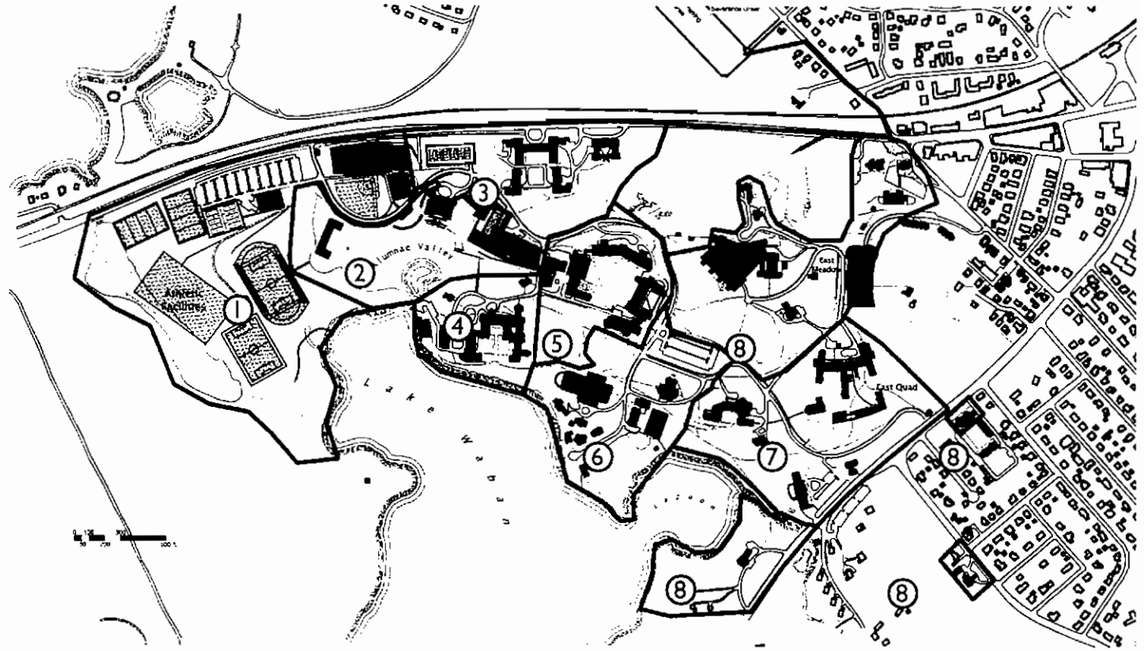
3. **Beach:** The Master Plan proposes the extension of irrigated lawn from Severance Green to the beach area, combined with the revitalization of the lawn, including improvements to the soil in this area.

4. **Views from Neighboring Properties:** Special care should be taken to ensure that proposed changes to the campus landscape take into consideration views of Wellesley College from Lake Waban, and all reasonable effort should be made to not affect these views adversely.

Initiate a Modified Zoned Landscape Maintenance Program with Increased Personnel for Present and Future Needs



Proposed Maintenance Zones for Existing Campus



Proposed Maintenance Zones for Master Plan

It is the recommendation of the Master Plan that the number of personnel utilized to maintain the campus be increased. It is recommended that a modified version of zone maintenance be employed. The proposed expanded campus will require an increase in maintenance personnel as additional areas are brought into full usage. New areas will include the expanded athletic facilities and the Alumnae Valley area.

The crew for the existing campus would be broken down as follows:

Zone 1 **2.5 Staff members**
Zones 2-6 **1 Staff member each (5 total)**
Zone 7 **2.5 Staff members (Including Waban and Cheever houses)**

10 crew members assigned to specific zones.

The area included in each zone will be adjusted over time but will remain relatively fixed. Although responsible for their individual zones, all staff members will be available to float between zones as needed. In addition to the crew assigned to zones, the following crew is needed:

1 Grounds Foreman
1 Assistant Grounds Foreman
2 Arborists
3 Member mowing and shovelling crew
2 Member litter management crew

Total of 19 crew members required for existing Main Campus (not including golf course).

Discussion with senior crew members indicate that this total would be commensurate with the crew in place in the late 1960s. A full build out of the Master Plan including all the proposed athletic fields and Alumnae Valley will require 3-4 additional crew members.

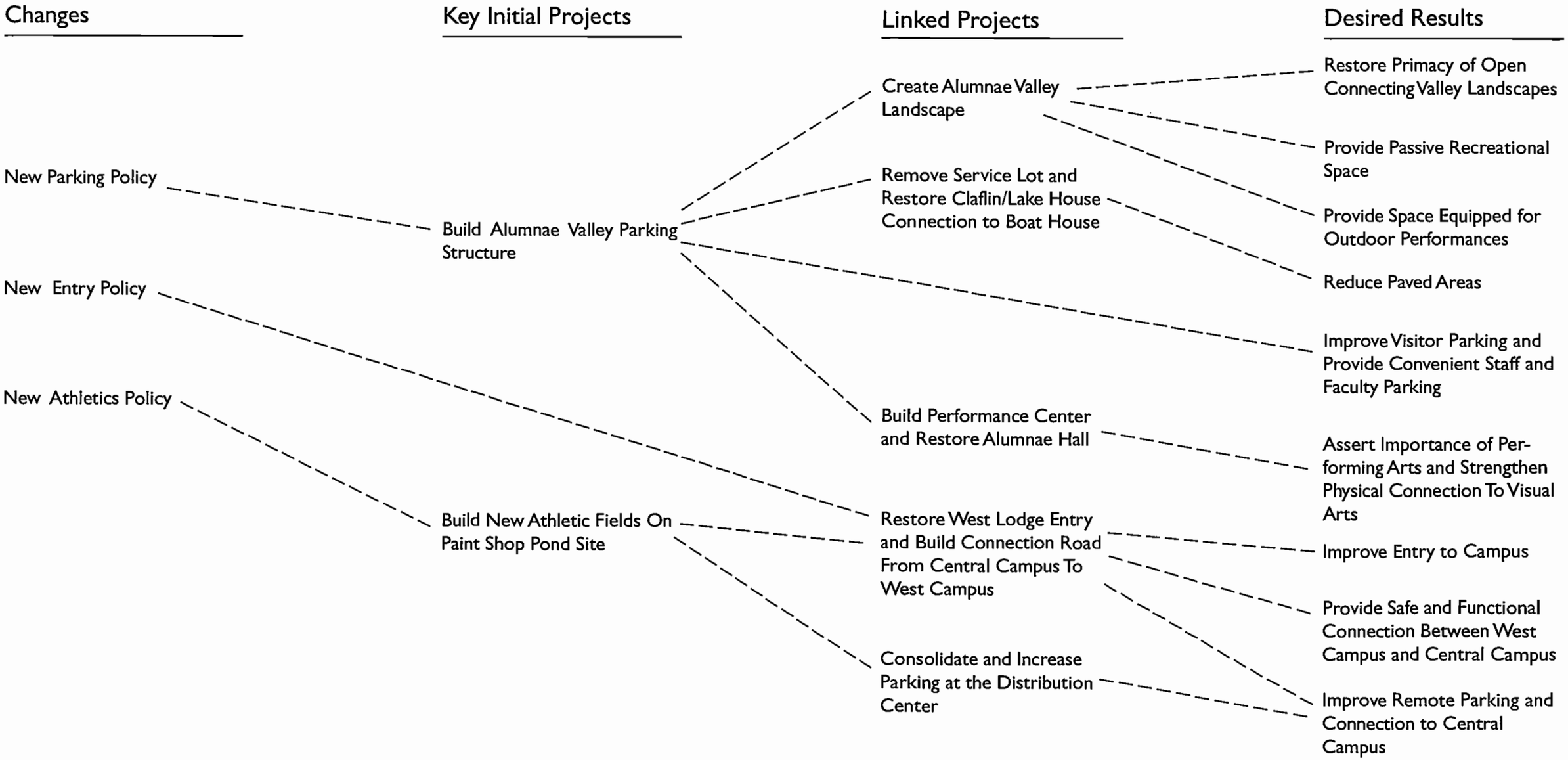
Wellesley College 1998 Landscape Master Plan

Master Plan Project Priorities and Decision Pathways

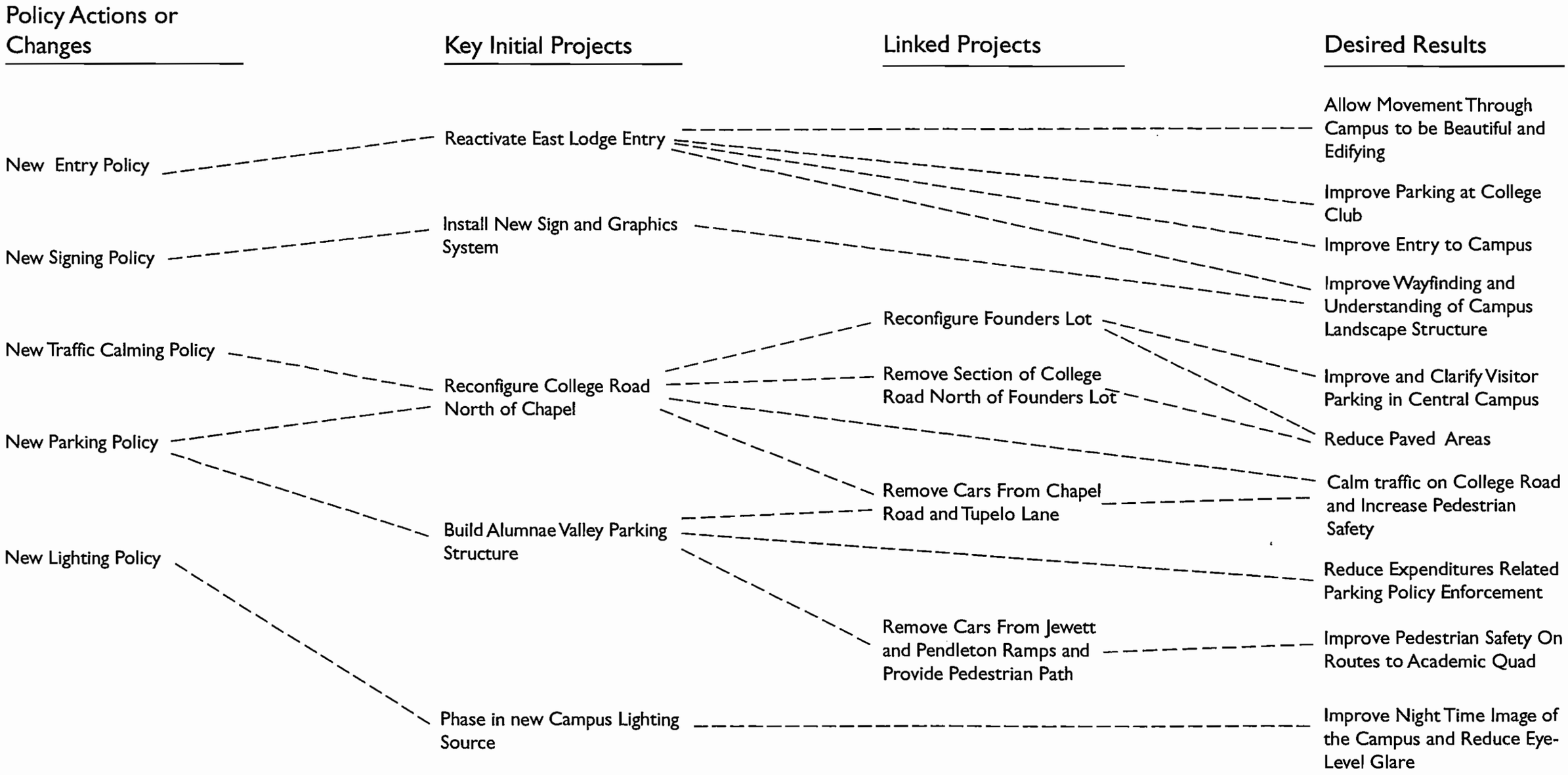
Michael Van Valkenburgh Associates, Inc., Landscape Architects
15 August 1998

Landscape Master Plan Project Priorities and Decision Pathways

Priority One: Expand Campus to the West

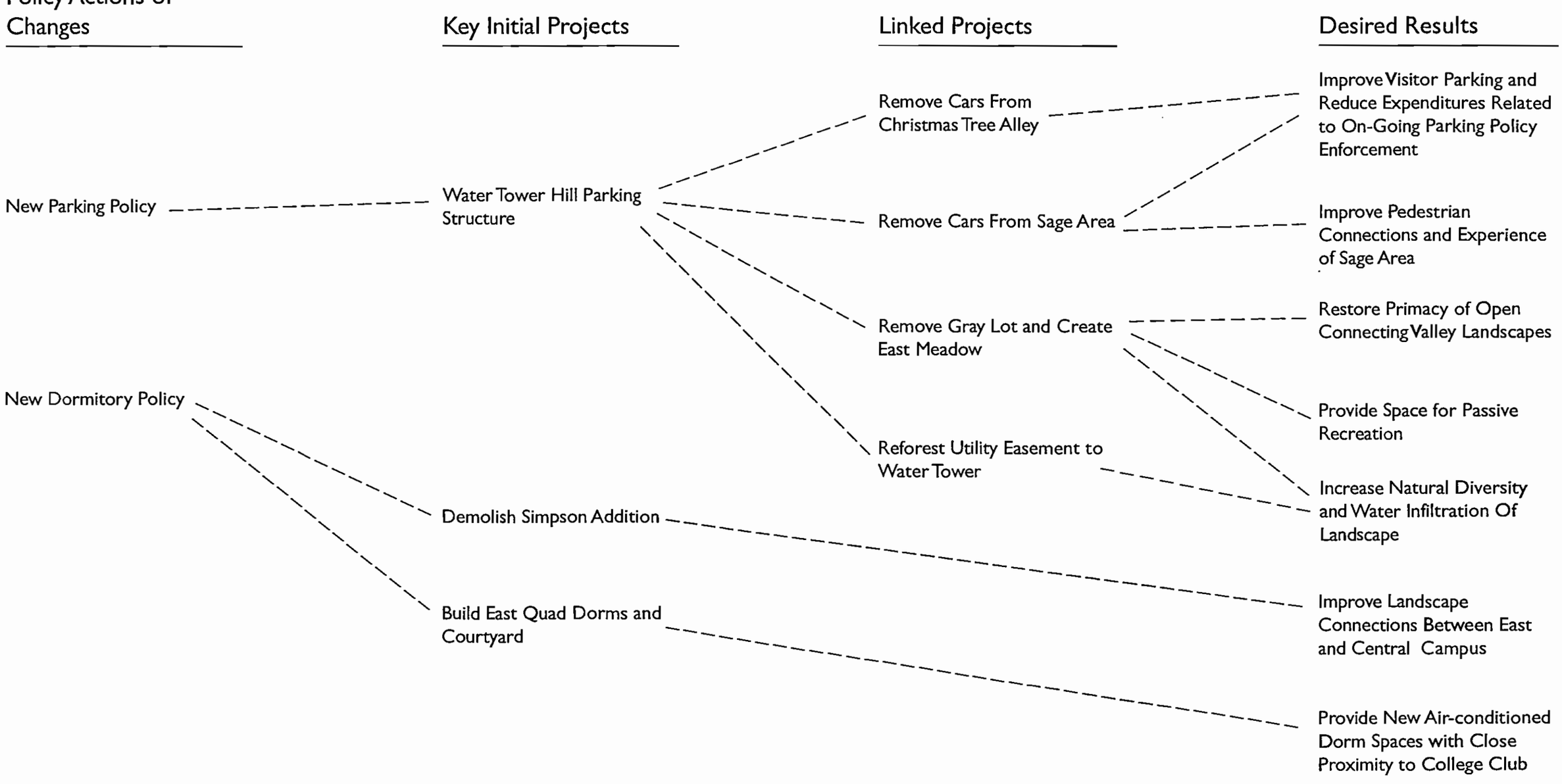


Landscape Master Plan Project Priorities and Decision Pathways
Priority Two: Improve Campus Safety, Wayfinding, and Clarity



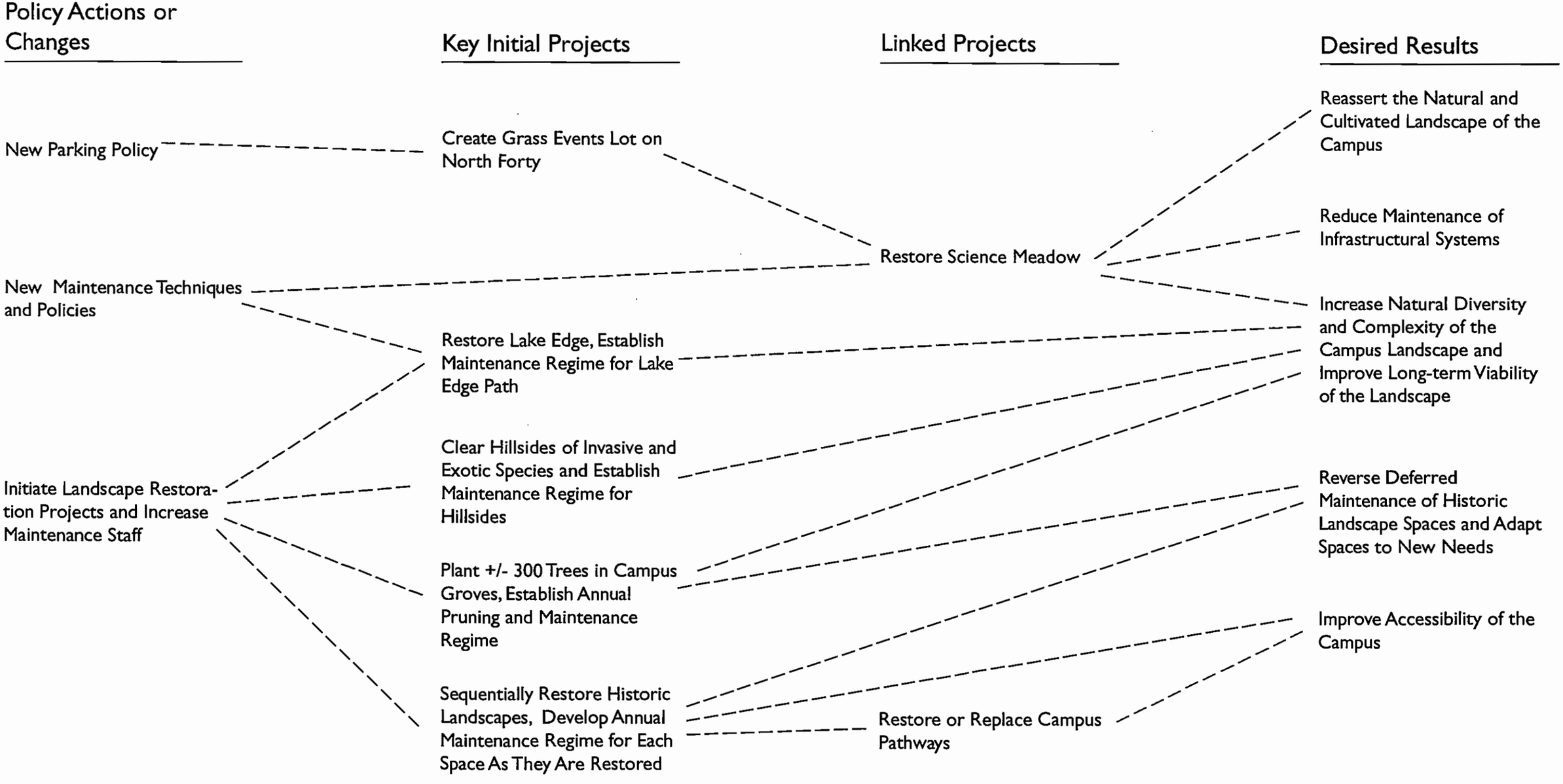
Landscape Master Plan Project Priorities and Decision Pathways

Priority Three: Revitalize East Campus



Landscape Master Plan Project Priorities and Decision Pathways

Priority Four: Reverse Incremental Degradation and Deferred Maintenance of the Campus Landscape

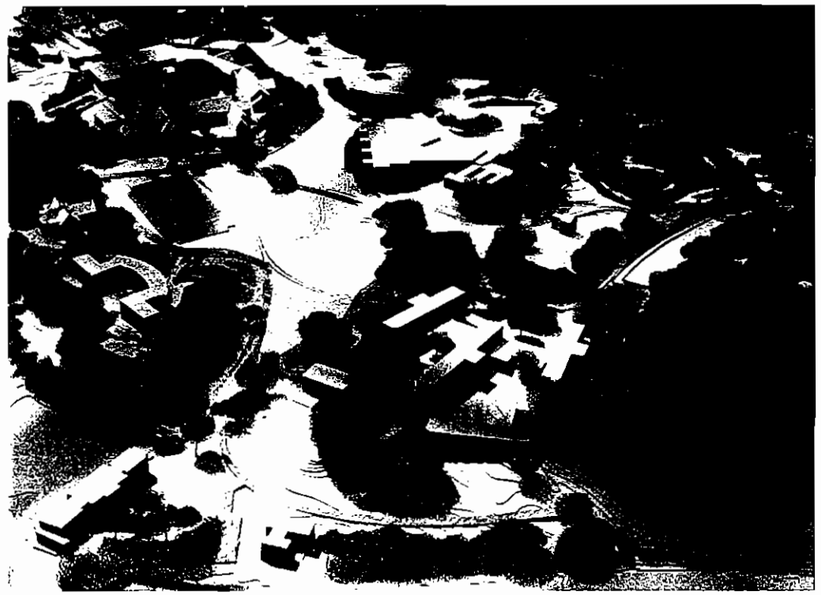


Wellesley College 1998 Landscape Master Plan

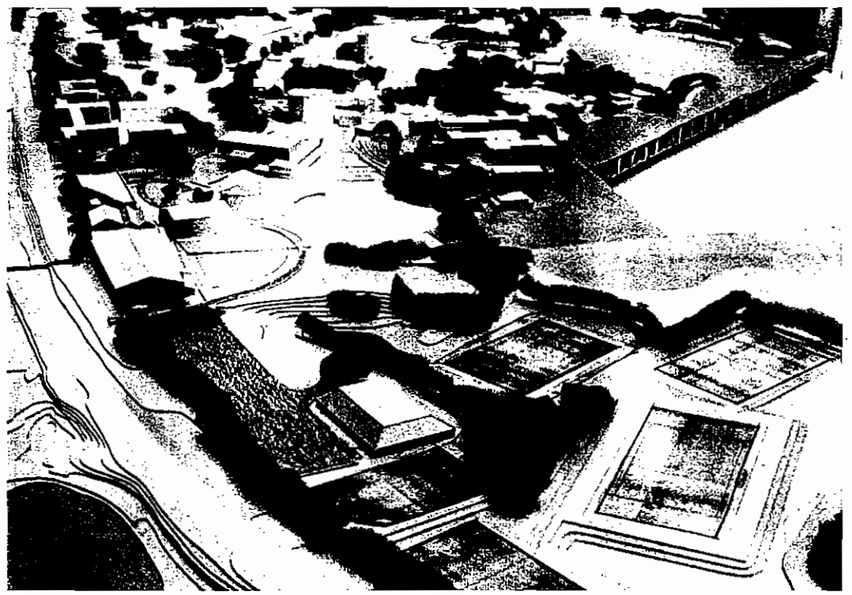
Working Papers:

Working Paper One	Continuing the Feeling of Immensity in Wellesley's Campus: Toward a Paradigm of the Campus Structure
Working Paper Two	Circulation and Parking
Working Paper Two A	Landscape Forms and Spaces as Records of College History
Working Paper Three	The Campus Landscape: Utility and Environmental Systems
Working Paper Three A	Wellesley's Adjoining Lands: Preserving an Idyllic Surrounding
Working Paper Four	Campus Landscape: How Structure and Type Refine Space
Working Paper Five	Principles of the Master Plan
Working Paper Six	Lighting
Working Paper Seven	Campus Signing
Working Paper Eight	The Interdependence of Design and Maintenance
Working Paper Nine	Architectural Report

Michael Van Valkenburgh Associates, Inc., Landscape Architects
15 August 1998

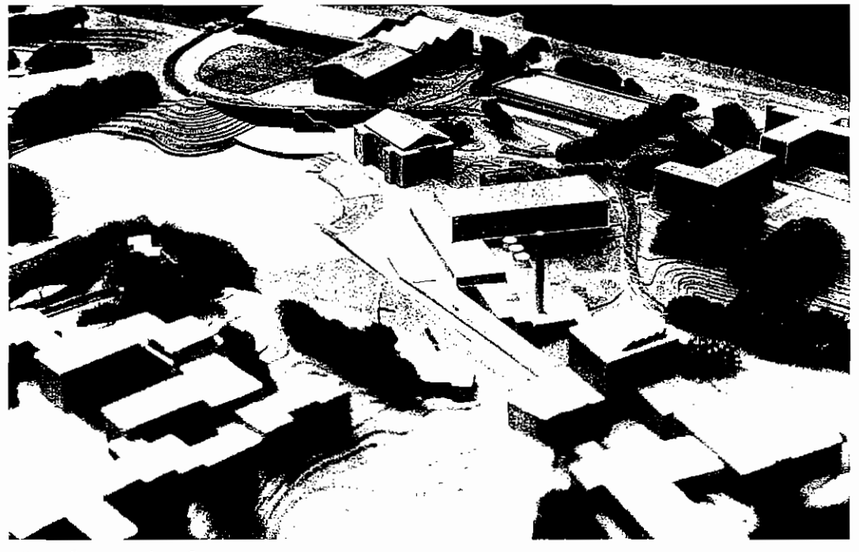


Sketch model view from east



Sketch model view from west showing proposed playing fields

View of proposed Alumnae Valley



View of proposed performance center

Introduction – Working Papers One to Nine and the Master Planning Process

A Working Papers

The following working papers represent a record of the master planning process. Written sequentially over a period of nine months, these papers were the tools by which the master planning team addressed individual aspects as they pertain to the campus landscape. The working papers created on-going summaries about these investigations. As records of a process and because final conclusions were only drawn at the end of the process, the working papers may in places include proposals or ideas that were in the end set aside, but that are included to illustrate the path by which the recommendations were reached.

Other information included in the working papers:

- Additional Information About Specific Subjects Including Signage, Lighting, and Architecture
- Historical Research and Site Observations
- Philosophical, Functional, or Aesthetic Underpinnings of the 14 Master Plan Concepts
- Mapping and Analysis of Existing Conditions

B Study Model of Campus

The master planning team built a large, three dimensional working model of the campus at a scale of 1"=60' for use as a design tool. The model was also used to communicate ideas to the Committees and the College Community to help explain the complex structure of the campus and the three dimensional and spatial parameters of the Master Plan proposals.

Wellesley College 1998 Landscape Master Plan

Working Papers:

Working Paper One	Continuing the Feeling of Immensity in Wellesley's Campus: Toward a Paradigm of the Campus Structure
Working Paper Two	Circulation and Parking
Working Paper Two A	Landscape Forms and Spaces as Records of College History
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Working Paper Three A	Wellesley's Adjoining Lands: Preserving an Idyllic Surrounding
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Michael Van Valkenburgh Associates, Inc., Landscape Architects
15 August 1998

Wellesley College 1998 Landscape Master Plan

Working Paper One:
Continuing the Feeling of Immensity in Wellesley's Campus:
Towards a Paradigm of the Campus Structure

Michael Van Valkenburgh Associates, Inc., Landscape Architects
17 October 1997

Continuing the Feeling of Immensity in Wellesley's Campus: Towards a Paradigm of the Campus Structure
17 October 1997

Planning for the renewal of the Wellesley campus requires that many factors be analyzed and interpreted. Every time we meet with a new person or group at Wellesley—and these meetings have been on going for the past two weeks—we are acutely alerted to the range of ideas brought forth. As our work continues, each of these ideas will be taken into consideration. But before we get far along in addressing complex practical problems, we feel compelled to develop a careful understanding of how the campus works as a spatial, formal, historical, and social place. The campus today is not the result of one person's vision, or even of one master plan from a single moment in time. It is, instead, the result of a century of tireless devotion by many Wellesley Presidents, several faculty spanning years and whole careers of teaching, numerous students and alumnae, and a few architects and landscapes architects. Somehow—but with remarkable clarity—the campus has incrementally grown and changed over the decades—until recently—with a consistent vision for what "works" as part of the campus. This working paper begins the development of a paradigm for establishing a basic consensus about what this vision has been and how it might be activated as part of the master planning process. Ours is not an attempt to explain things that cannot be explained, but rather an attempt to rediscover that, although Wellesley looks informal and feels complete, the process of maintaining, reinvigorating, or adding to this feeling is equal to tinkering with a built landscape masterpiece, one that has slowly evolved from the hearts, souls, and lives of a century of people dedicated to a college with an exceptional education mission.

The genius of Wellesley's campus is partly rooted in the landscape itself. The early twentieth century decision to allow landscape to be the most important symbolic and structural element of the campus remains the foundation of the legacy that has made the Wellesley campus so remarkable. This decision to elevate the importance of the landscape—and the ability of the resulting landscape to prompt feelings of personal "psychological immensity," to use Gaston Bachelard's phrase—established the fundamental meaning and structure of the campus form. Wellesley's campus is an intricate, complex, and romantic place, and, crucially, one that allows each student to imagine her own completion of the meaning of this landscape. In this personal reading, each student comes to value the campus uniquely.

It is no coincidence that, in 1902 F. L. Olmsted Jr., and in 1914 the Wellesley faculty, rejected plans for a new Beaux Arts campus which were produced following the destruction of College Hall by fire. An axial, orthogonally geometric plan would have obliterated the topographic relief and native landscape so admired by Olmsted and by Wellesley students. The faculty recognized that a Beaux Arts campus presumed the leveling of Wellesley's subtle, glaciated, natural landscape of hills and valleys, and, while traditional academic orthogonal spaces might inspire feelings of awe, these spaces would not allow the individual to develop her own feelings and imagining about this place. Instead, Wellesley eventually settled on a much more complex and site-responsive campus form that essentially is still intact.

Today, the irregular form of the campus landscape, with its capacity to be understood multivalently, is a simulacrum of the diversity of each Wellesley student's journey toward self-knowledge. Indeed, to again refer to Gaston Bachelard's idea in *The Poetics of Space*, the campus evokes the psychological condition that has nurtured, now nurtures, and will nurture the genius of Wellesley's women. In 1998, our task as master planners will be to decipher the foundations of this quality, to contemplate its present and future relevance, and to plan for its renewal and reinvention.

A Conceptual Paradigm of the Campus Structure

Some aspects of Wellesley's landscape are formally composed; others are grounded in ecological processes.

Although much has been written about Wellesley's evolution, as master planners we feel a need to develop a conceptual paradigm of how the campus works as a formal, physical structure that supports its academic mission.

In the twentieth century, the Wellesley campus is unique in the way that it establishes a condition that allows each student to experience feelings of boundlessness. As part of our planning for reinvigorating this condition, the design paradigm we shall now present begins to explain how the campus is constructed as an artifact. At the risk of overly emphasizing the philosophical aspects of this planning process in this early phase of work, we all need to agree on what this paradigm is. We must find a simple way to explain how the complexity of Wellesley's campus works, so that we will not set about repairing something that we don't understand.

Aesthetically, the Wellesley campus is both Romantic and modern—Romantic like an eighteenth-century English landscape and modern in its use of civil engineering, its overall integration of infrastructure, and finally, in its use of collage as the primary compositional strategy.

As a spatial composition, the Wellesley landscape is partly the result of preserving the original indigenous landscape of the site, partly the result of adding a series of built landscape pieces (roads, buildings, and so on), and partly the result of how the process of time itself continues to transform it. Like all landscapes, Wellesley's is a dynamic and energy-driven system: it cannot be "restored" like a piece of furniture. But we can renew this landscape by revisiting previous conditions and intentions (Elizabeth Meyer's report on the history of the campus will be part of the next working paper). By sorting through these past intentions we can decide which conditions and ideas of the past would be sensible and desirable to renew. It is also possible that by viewing the present campus through the lens of the past intentions we can decide if the master plan needs to invent new pieces of the landscape to solve current problems on the campus that were not present seventy-five years ago.

Palimpsest

Thinking of Wellesley's landscape as a palimpsest provides a useful way to grasp how the campus has evolved. *Palimpsest* is a term that refers to the condition of ancient scrolls on which texts were written over previous texts, resulting in a scroll on which pieces of the older texts sometimes were legible. Layers or fragments of older writings join with more recent writings on the same page. So in landscape terms, a palimpsest is a condition in which the landscape also is the result of older and newer landscapes becoming one condition in which it is difficult to decipher the pieces as separate, and the landscape is the result of a fortuitous historical collage.

Defining the Wellesley landscape as a palimpsest has advantages and drawbacks. The advantages include the recognition that the campus is an accrual of landscape and architectural conditions from numerous points in time, and that this accrual is not only desired, but should also inform how the master plan will guide the evolution of the campus. The weakness of thinking of the Wellesley campus as a palimpsest lies in the reinforcement of the cliche that landscapes are static artifacts, whereas a built landscape is, in fact, a kind of dynamic artifact, constantly altering through natural and artificial processes.

Dynamic Artifact

The qualities of the landscape as a dynamic artifact result from the conscious making of landscape for particular practical and symbolic reasons *and* from the way that the processes of nature—plant growth and change, weathering, nutrient and soil structure transitions—change the character of that landscape. A palimpsest, therefore, is a good way to read a landscape at any one moment. But a palimpsest fails to acknowledge a conscious decision to make the various new landscape pieces legible. Part of the obfuscation of the conscious, collage quality of the campus today results from the way the landscape has continued to change on its own. For instance, shrubs that were planted perhaps as decorative foils against buildings have grown up to be large trees that block critical vistas. Just as ecologists should no longer describe the natural landscape as resulting in a static climax condition, designers should consciously plan for all built landscapes to be dynamic artifacts in perpetual change. It is for these reasons that this master plan will also place great emphasis on the management and maintenance of the landscape. The incremental adjustments of the campus via maintenance eventually shape most of the experiences of the Wellesley campus. Whether consciously intended or the result of unrelated forces, the nature and degree of maintenance can, for the visitor become the primary expression of the campus. (The issue of maintenance will be addressed in a later working paper.)

Meaning of the Campus

One of the challenges of deciphering meaning in the Wellesley campus is separating how people first experience the Wellesley landscape and then, later, how they begin to ascribe meaning to that landscape. An individual student's understanding of the campus landscape originates when she first learns how to find her way in the landscape. Eventually, this learning about way-finding eventually transforms itself into more complex associations, of which way-finding is a small part. It is how the campus nurtures the imagination of its students and the eventual personal rewards garnered from this nurturing that must guide the master plan and its recommendations for solving the practical problems of the campus.

Structure of the Campus

Once we agree on the essential impact, or "meaning," of the Wellesley campus, our next step is to decipher the connection between that meaning and the structure of the campus. An understanding of the structure of the campus landscape must address what the elements of this landscape are, their relationships to each other, and how they work to give the campus the feeling and character treasured by generations of Wellesley students.

Initial Way-finding and Campus Form

The form of the Wellesley campus is unlike many other campuses. Wellesley's campus is partly inspired by the English Romantic landscape tradition which sets it in opposition formally, to many college campuses that existed at the time of Wellesley's inception. Many campuses, like the Lawn at the University of Virginia and Harvard Yard are very different in their basic structural form partially because they came more directly out of the orthogonally structured collegiate architectural traditions which were in tern based on monastic courtyard models. Wellesley's "unlikeness" to these more tradition bound campus forms is an asset and a liability. It is an asset in that it is a built expression of Wellesley's particular educational mission, and the fact that mission is different from other earlier schools. It is a liability in that the spatial organization of the campus operates without the conventional formal language of a traditional campus. Since most people at first interpret a new landscape based on their associations with similar landscape types (a college is a college is a college), Wellesley's unusual campus causes some of the "problems" that people initially have with the landscape. Unfamiliar landscape types can be understood as unfriendly. So people may ask: What is the message here, one of privilege? How? Why?. Is this intended to be unwelcoming? Perhaps. At the same time though, people who are familiar with the campus know the difficulty of quickly understanding stems from a cherished complexity that continues to work very well in other regards that we have started to allude to earlier. Therefore, initial wayfinding on the campus is a complex issue and an understanding of the feelings of disorientation that first time visitors and freshmen may have should guide the graphic designer's signage in the later part of this master plan.

Figure, Ground, Landscape Space

Architects talk about architectural space using the terms of *figure* and *ground*. In architecture, figures are defined by their outside walls, whereas ground defines the plane of the various architectural spaces defined by the figures. In landscapes with simple spatial structure, such as Harvard Yard, there is a direct correspondence between the walls of the architectural space and the feeling of the space itself. The overall spatial condition of the Wellesley landscape is more teaching value—that

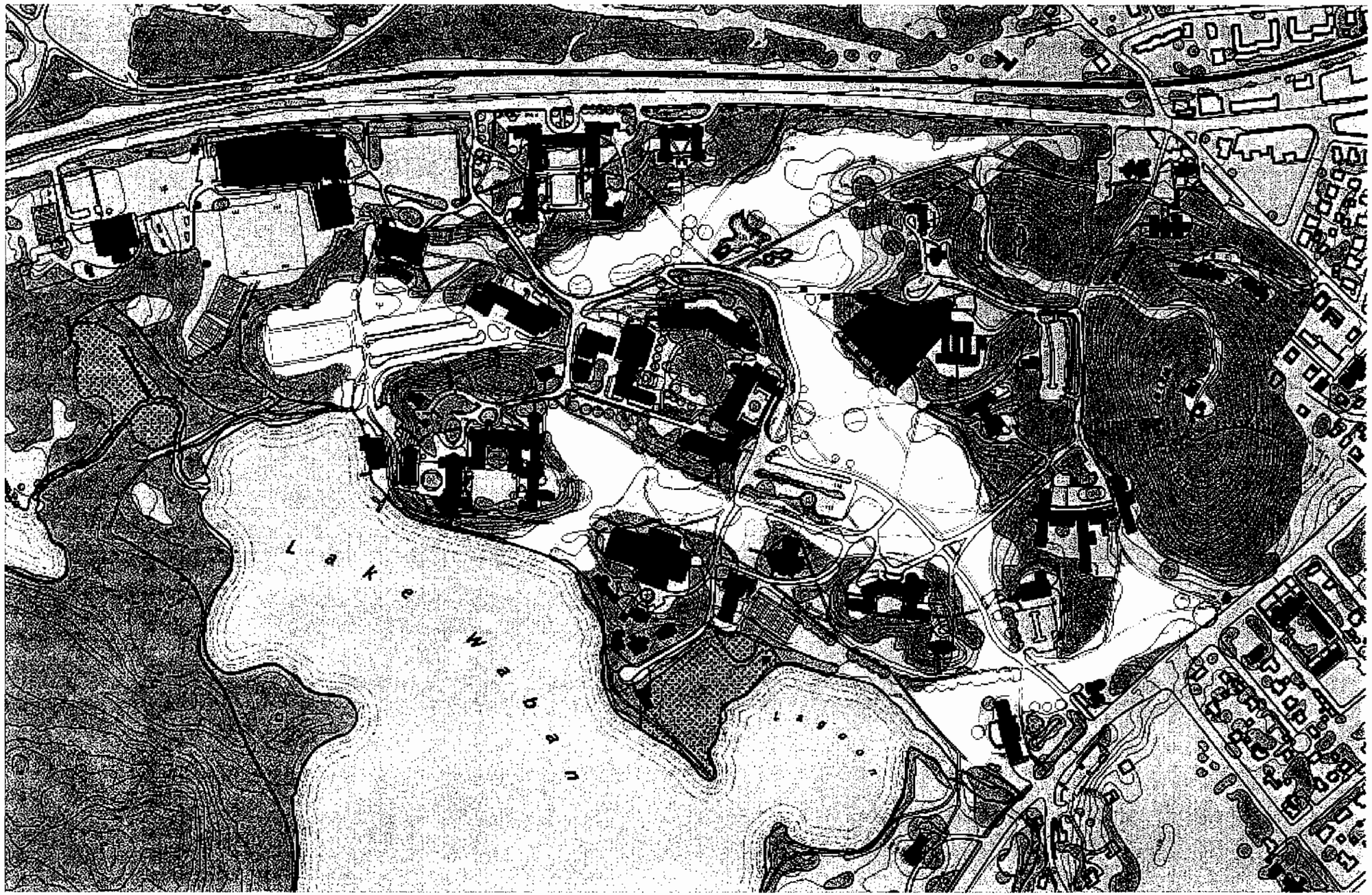


Diagram illustrating the open, connecting valley landscapes that spatially structure the campus.

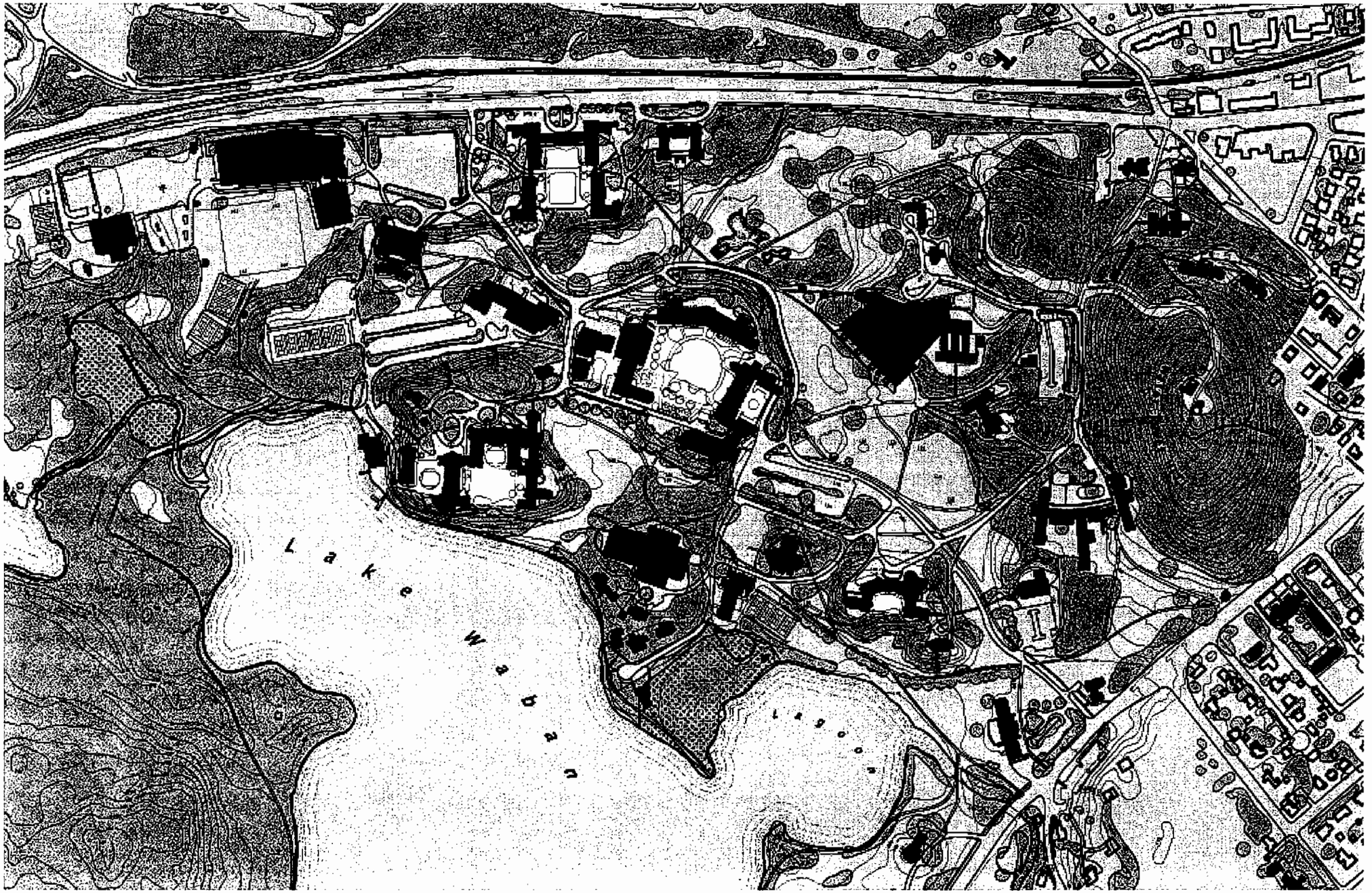


Diagram highlighting hilltop courtyards and quads

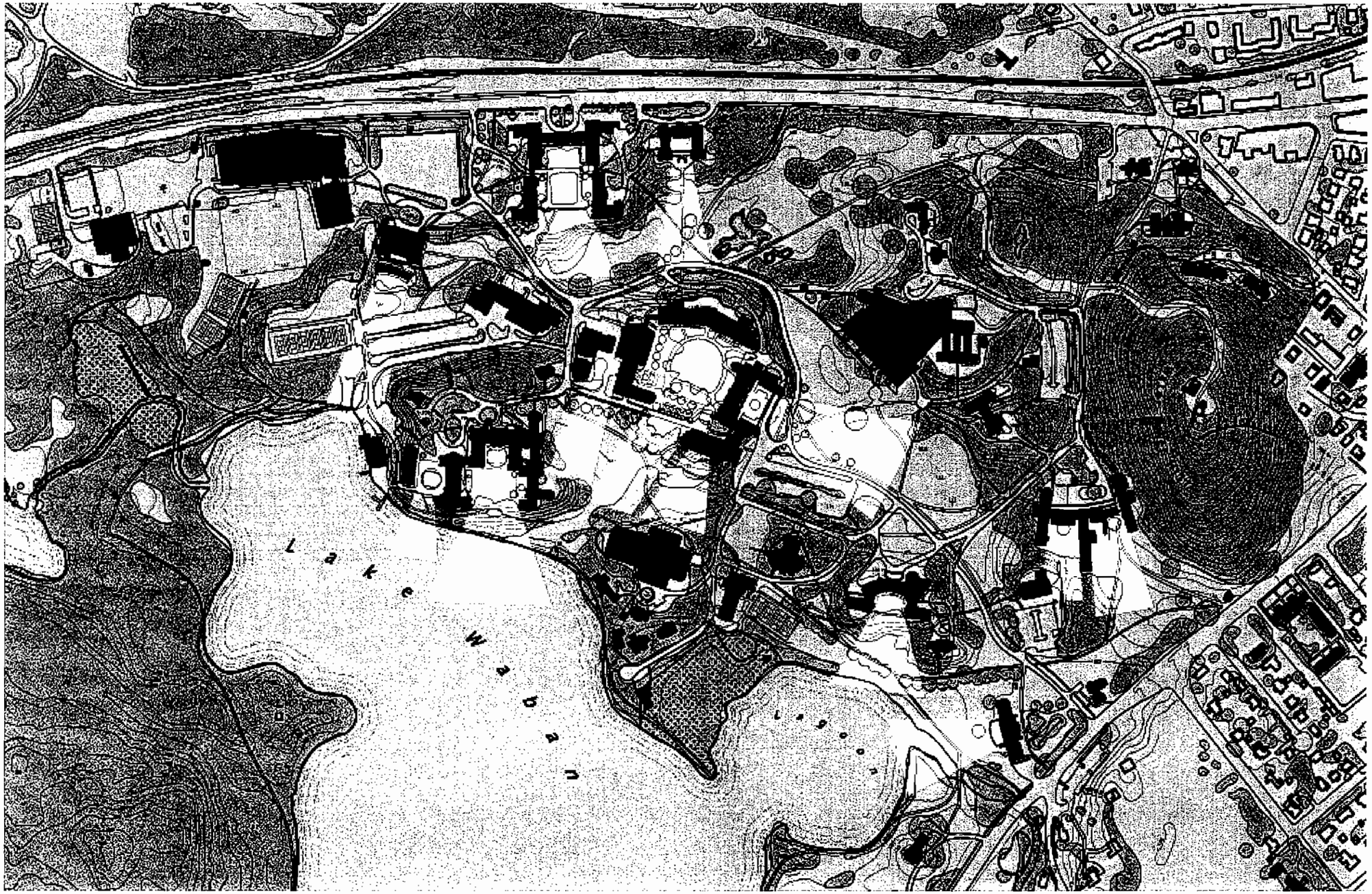


Diagram illustrating relationship between courtyard and quads and the landscape

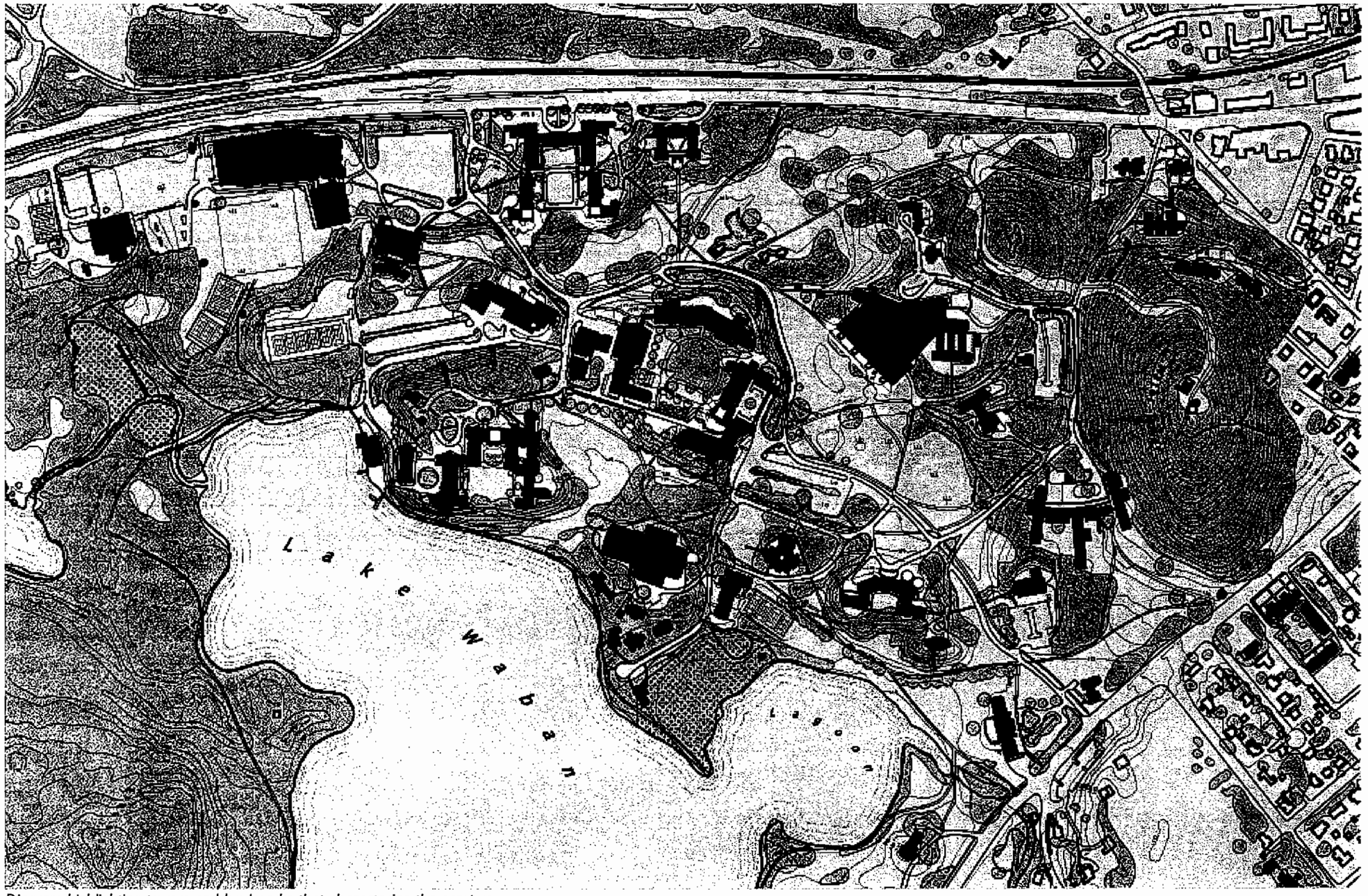


Diagram highlighting towers and landmarks that characterize the campus

fluid and dynamic and less defined by the figures of the buildings. At Wellesley, landscape space moves up hills, around hills, across the open water of Lake Waban, and disappears into seemingly boundless forests. The fluidity of these spaces provides a crucial vehicle for creating the feeling of immensity in the Wellesley campus. To paraphrase J. B. Jackson, even the landscape that at first seems bafflingly complex can eventually be deciphered and admired.

Hills, Towers, Valleys

The approach to, navigation through, and understanding of the Wellesley campus is always one of experiencing the towers of the buildings as set within an enveloping, larger landscape. The beacons and the monitors in this landscape are the towers of Wellesley, dispersed amidst its topographic grove of spaces on the ground that seems to move and shift. Like buoys and lighthouses, Wellesley's towers are orientation points in the uncharted sea of the landscape.

In spatial terms, the Wellesley landscape is a complex system of buildings and circulation infrastructure, laid over and inserted within a variegated landscape. But beyond its inclusion of basic structural elements, Wellesley's campus is a remarkable departure from the structure and the feeling of most other American campuses. This departure results from the irregular complex forms of the landscape, in particular the explicit connection between the formal structure of the buildings and the roads, which are calibrated to appear informal.

Elements of the Campus Landscape

The campus can be divided into the following elements:

1. The topography: An idiosyncratic collection of glaciated forms including small hills and valleys.
2. The vegetation: a mosaic of groves, lawns, meadows, thickets, borders, botanic garden, edges, tree lines, and specimen plants.
3. The hydrologic systems: Lake Waban and the ponds, wetlands, and infrastructural drainage system.
4. Infrastructural systems of circulation for people and cars.
5. Architectural and non-architectural objects: cars, lights, benches etc..

The above elements engage in an interplay between the elements and with people through felt experience and contemplation.

Campus Spaces and Topography

In his 1902 report to President Caroline Hazard, F. L. Olmsted, Jr. emphasized the unique topographic condition of the Wellesley College site, the delicate irregularity of the glaciated landscape, with its dry hilltops and moist valleys. This primary distinction of "hills and valleys"—with the hills as places for buildings and the valleys as preserved open space—creates one of the guiding principles of the campus site design.

- Hilltops:

Norumbega, Tower Court, and others.

- Hillsides:

Generally, these have not been built on at Wellesley, but Green Hall provides an extraordinary example of how the development of a careful architectural section can allow buildings to be constructed as the slope of the land changes.

- Vistas:

In terms of defining the spatial conditions of the campus landscape, the hilltops provide the key vantage points for looking out into the landscape. Far from dominating the landscape, the buildings on the hilltops and the preservation or addition of new plantings on the hillsides have integrated and veiled the buildings in the landscape. But critical to the balance of "refuge and prospect" that these buildings and vistas create is the establishment of open sight lines from the building promontories. Today, many of these sight lines have been lost, thus dissolving unintentionally a crucial organizational aspect. Photographs from earlier points in the twentieth century reveal a campus where vistas and sight lines provide reference points to and from these towers, as well as a visible explanation of the larger structure of the campus. The overgrowth and closing of many of these vistas is a regrettable loss, but also an attribute that is readily reclaimable.

- Valleys:

The valleys of the Wellesley campus organize the open space system. Over the years, the preservation of this valley-related open space system has been reinforced by certain programmatic needs for open spaces: athletics and recreation, college events (forming of the "W," providing places for the graduation tents...). The valley spaces are divided: the outer valley includes the circulation road; the inner valley is pedestrian The valley system becomes interrupted at the power plant and at the side of Alumnae Hall.

The free form, ranging, and connected nature of the valley spaces creates one of the most interesting landscape features of the Wellesley campus—an elongated and connected valley. Adapting the analogy from architecture of figure and ground, the "walls" of these spaces are a combination of the topography of the hillsides and the vegetation on the hillsides. There are no discreet transitions from "room to room." The operative words for the structure of Wellesley's campus are *romantic continuity*. The landscape continuity results from an intricate mosaic of landscape conditions that yields great diversity within a strong but simple geological framework of hilltops, hillsides, valleys, wetlands, and lakes. Carefully formed, these landscape pieces produce an interlocking landscape of groves, lawns, playing fields, and shrub-filled dells.

Vegetation

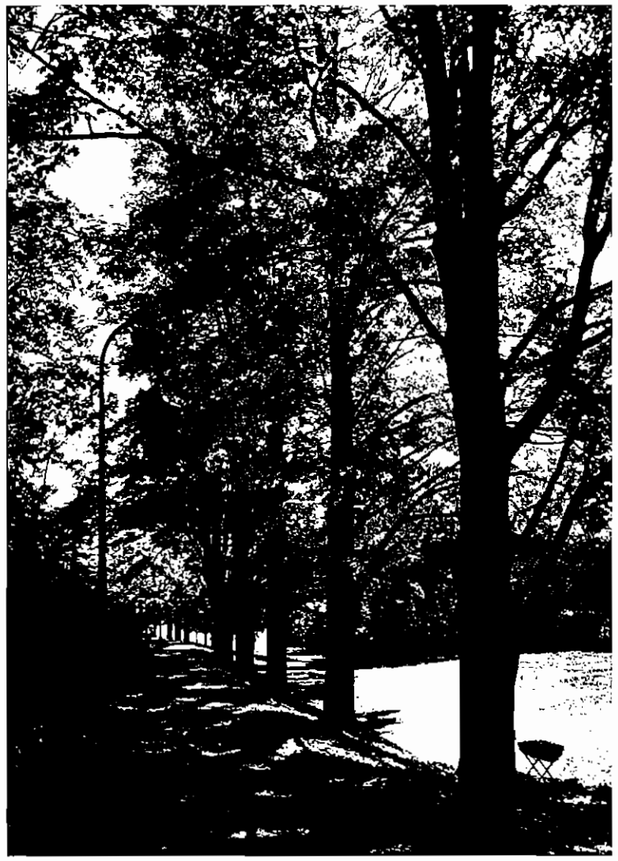
Second in importance only to the landform, the plantings of the Wellesley campus create an overall continuity and shape the character of the landscape. The most important are the dense groves of numerous species—a mix of native trees and exotic ornamental trees, introduced for their

occur at the valley edges, hillsides and hilltops. The plantings of Wellesley campus are in need of radical attention. In particular the master plan will bring a new clarity to the purpose of the plantings in the overall structure of the campus. In recent years the occasional plant here and there and the oddly chosen species seem to have been the result of incrementalism. Although the intentions surrounding the circumstances of these plantings were surely honorable, a feeling of "ad hoc-ism" prevails. It is precisely with the plantings of the campus that poetic intent and pragmatic necessity converge.

Our inventory of vegetation types is not yet completed. Our presentation on Thursday will include a plan that introduces an analysis of landscape space needs. This will compliment Scogin Elam & Bray's architectural space needs analysis (which follows), and our analysis of ADA accessibility for the buildings and the site, which follows.

Wellesley College 1998 Landscape Master Plan

Working Paper Two:
Circulation and Parking



Michael Van Valkenburgh Associates, Inc., Landscape Architects
24 November 1998

Wellesley College Master Plan

Working Paper 2: Parking and Circulation - Executive Summary

24 November 1997

1.0 Guiding Principles of Parking and Circulation Today

1.1 Parking and circulation need to be understood as integral components of the Wellesley campus landscape in terms of the following principles:

- **Beauty**: What are the historical and contemporary roles of parking and circulation in creating the unique beauty of the Wellesley campus?
- **Function**: The full connectivity of the parts of the campus as a whole is essential for its proper functioning. How can we balance vehicular accessibility and service with the needs of pedestrians?
- **Clarity**: What is the importance of clarity as a goal of the circulation of the campus?
- **Wayfinding**: How are roads, paths, and parking a part of wayfinding on campus?
- **Safety**: What are the safety issues on campus?

2.0 Conditions of Parking and Circulation Today

2.1 Cars play a crucial role in the life of Wellesley College and its beautiful but dispersed campus. As a result, cars are parked everywhere: along roads, at the edges of crucial historic open spaces, in front of key vistas and sight lines, at building entrances, in service areas, and sometimes on lawns and meadows that historically were intended to be left open as part of the organization of the campus landscape. Most of this ad hoc parking has come about incrementally; for example, in 1966 the Jewett Hill Road was widened to accommodate snowplows, and soon after parallel parking was added at the road edge.

2.2 One of the functions of College Road, the main road of the Wellesley campus, is to allow people to understand where the center of the campus is, how to get there, and where to park. How successful is College Road in this regard? Before the 1961 relocation of College Road from the edge of Severence Green to the edge of the "Outer Meadow," College Road accomplished all of these objectives extremely well.

2.3 Pedestrians and vehicles freely mix on the Wellesley campus, and safety is an issue. In our view, the mixing of moving cars, parked cars, bicycles, and pedestrians in some locations, including Pendleton Hill Road, Jewett Hill Road, and Tower Court Road, creates serious safety concerns. Threats to safety exist elsewhere on the campus: for example, the speed of vehicles on College Road is in conflict with the numerous and necessary pedestrian crossings; and the awkward vehicular circulation route through Gray Lot creates potential for dangerous conflicts between cars.

2.4 In general, the pedestrian circulation of the campus for able-bodied people works quite well, excluding those areas where conflicts with vehicles exist. But the steep topography of the campus sets severe limits to people using wheelchairs.

2.5 In our view, some parking currently allowed in the campus center should be removed (cars parked on the road edges around the Chapel Lawn, for instance). If this were done, there would be a need to replace this centralized parking. This problem could be partially resolved by a different parking management strategy, i.e. enforcing the use of existing remote lots and improving shuttle service to these lots.

2.6 There is a severe shortage of parking in the Science Center-Observatory-Sage area -- nine academic departments reside in the Science Center alone -- but the demand for daily parking in this area has never been seriously addressed. There is also a shortage of visitor parking. Remote parking seems impractical to service the needs of the whole northeast area of the campus.

2.7 A parking garage, at first consideration, might seem anathema to some, given the romantic qualities of the Wellesley campus. Yet we believe that an inventive design for a parking structure joined with campus programmed functions -- such as a new campus center -- could yield an interesting hybrid building type, thus transforming the negative concerns often associated with a parking structure.

2.8 The Service Parking Lot is unlike the rest of the Wellesley campus. It occupies an important valley that was intended to be open space, undermining the historic Olmsted principle of spatial organization at

Wellesley, where open valleys were meant to be surrounded with buildings on adjacent ridges and hilltops.

2.9 Parking for special events is inadequate in the campus core, particularly near the Science Center and College Club.

3.0 Questions and Ideas about Parking and Circulation

3.1 Should we reexamine how College Road works as part of reinforcing the clarity of the campus? When approaching the campus from Route 16, should College Road be partially restored to its former historical alignment, that is, after passing Stone Davis, should College Road turn south and pass the Chapel (as it did before 1961)? Then should it turn north before Rhododendron Dell, passing in front of Founders Hall and Green Hall, where it could then connect back to its current College Road orientation? Would this partial realignment of College Road better present the center of the campus within the daily arrival and exit sequence of most campus users?

3.2 Are the main campus entrances, although perhaps beguiling in their subtlety, inappropriately understated? Should these entrances be enhanced? How? With what message? Should the current campus entrance from Route 16 be relocated to one of the former entrances? Should there be a new campus entrance at the northeast area of the campus (to replace the long-closed Fiske Gate) that would reestablish a link to the village?

3.3 Certain buildings on campus could easily be made to comply with the spirit of current ADA requirements -- for example, a wheelchair-accessible main entrance could be added to the Science Center, an important place for public lectures.

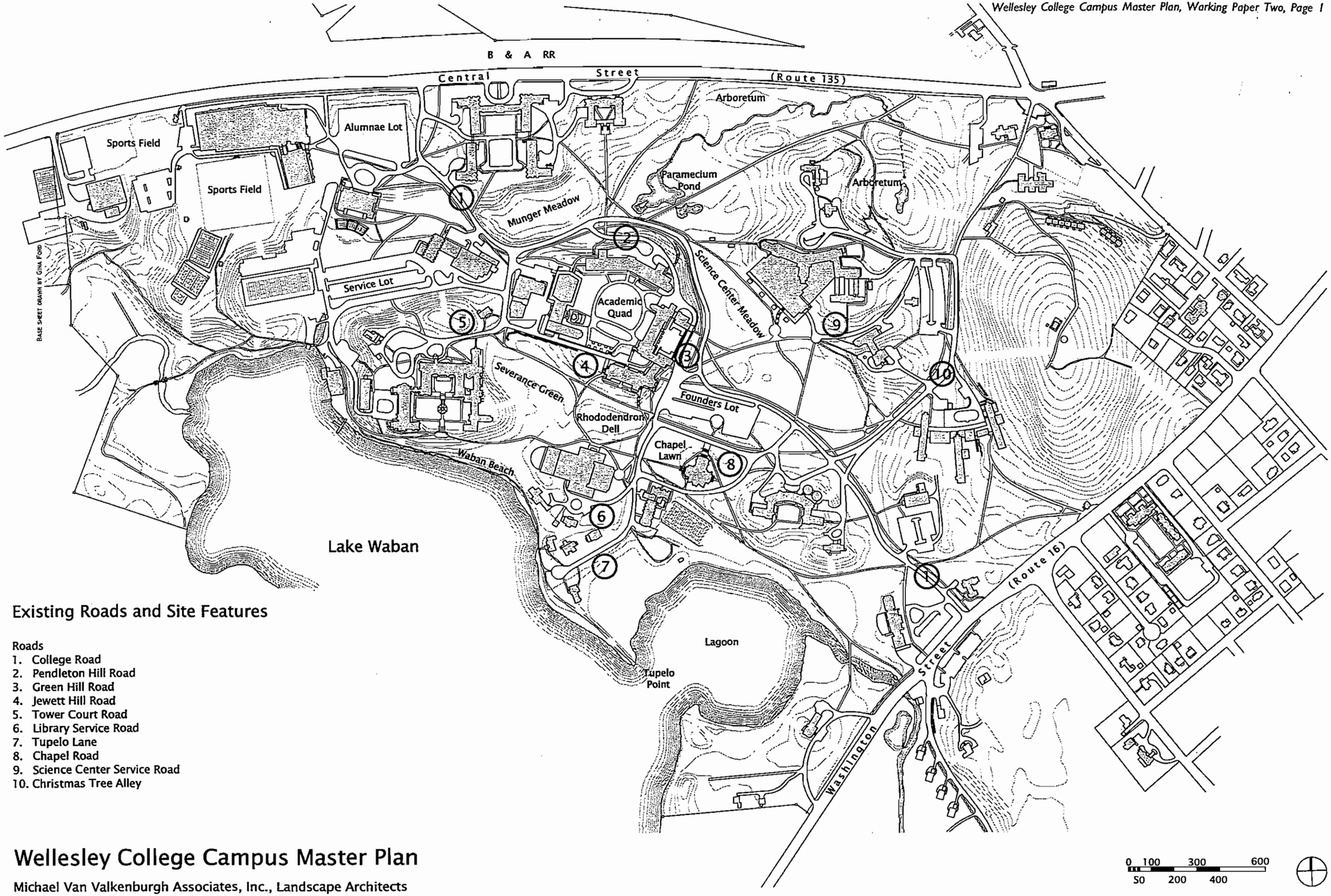
3.4 Would Wellesley benefit from a centrally and carefully sited new building, such as a Campus Center, that incorporates a significant parking structure (with parking embedded and enlivened by the round-the-clock activities of such a multifunctional building)? Could the siting and landscape strategies for the new structure place it on the side of a hill or partially underground?

3.5 Should all parallel parking at the edge of secondary roads be removed? Where should these parking spaces be relocated -- to other existing lots or to new parking sites on campus?

3.6 Should we reevaluate current parking management practices to include the allocation of different types of parking stickers based on varying staff needs for cars during the day?

3.7 Should the college get tough on parking violations?

3.8 Should parking for medium and large events be accommodated in remote areas enhanced with a better shuttle service?



Existing Roads and Site Features

Roads

1. College Road
2. Pendleton Hill Road
3. Green Hill Road
4. Jewett Hill Road
5. Tower Court Road
6. Library Service Road
7. Tupelo Lane
8. Chapel Road
9. Science Center Service Road
10. Christmas Tree Alley

Wellesley College Campus Master Plan

Michael Van Valkenburgh Associates, Inc., Landscape Architects

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WORKING PAPER TWO: CIRCULATION AND PARKING

24 November 1997

Introduction

Working Paper Two focuses on how pedestrian and vehicular circulation and parking are integral parts of both the functioning and the aesthetics of the Wellesley College campus. The dominance of parked cars on the campus today represents one of the largest changes in the fabric of the campus in this century. This dominance not only changes the visual appearance of the Wellesley campus, but it also changes its safety, its sense of welcomeness, and its ability to be understood by visitors and newcomers to the campus. Choices about circulation and parking therefore will present some of the most challenging aspects of the master planning process. To understand some of the specific observations about the campus in Working Paper 2, it was necessary for us to use specific place names. A map of the campus with the names is provided on page 1.

This working paper is organized as follows: a general discussion of parking and circulation is intermixed with annotated, recent photographs; this is followed by preliminary observations about road alignments, a summary of parking and recommendations, an evaluation of service areas, and a discussion of compliance with ADA guidelines and requirements.

Vehicular Circulation

The presence of parked cars everywhere on the campus, especially near the Chapel and on the roads leading up to the Academic Quadrangle, greatly undermines the beauty and lessens the safety of these areas. This is particularly acute on the ramps leading to the Academic Quadrangle, where the mingling of people with moving and parked cars on sloped, curved roads creates dangerous conditions for both students and visitors. The recent increase in the use of the meadows for overflow parking shatters the tranquillity and the sense of openness that the meadows provide in the overall campus design. A similar erosion of the overall campus landscape has occurred in many other places where cars have excessively intruded on the landscape.

We need to return to the idea of the campus as a complex, three-dimensional collage of functional and aesthetic elements to understand how circulation is an integral part of the design of the Wellesley campus. The roads, walkways, and stairs are the engines of the campus landscape; these built elements activate the experiential qualities of the campus by structuring how people move through space. The particular alignment of roads and paths shape and reveal what parts of the campus are seen from where. To illustrate this in a simple way, if you take both hands and cup one on each side of your face, next to your eyes, and imagine moving forward in space, this illustrates the way that roads and paths point us to, lead us through, and sequence what parts we see of the campus landscape. Design decisions about the placement of roads and walks visually connect us to the key elements of the campus. The resulting alignments and views, when experienced in time and through space, can be calibrated to produce widely varying experiences for campus users.

At its most fundamental level, circulation allows us to get from here to there on the campus, from where we are to where we want to be. Planners call these desire lines, in recognition of the simple human impulse to move through space with economy. On campuses organized around level quadrangles these desire lines, whether vehicular or pedestrian, often yield more or less straight lines from one place to another. But the steep topographic relief of the Wellesley campus and its unusual, irregular, and romantic spatial organization, yield a complex series of roads, paths, ramps, and stairs that allow us to navigate through the landscape. The serendipity and the surprise of these elements contribute to the formation of Wellesley's great landscape. In terms of the master plan, what does it mean to say that a road structures how we see and experience the campus landscape? Given that most of the roads on the Wellesley campus are two-way, each road forms a brief but important beginning of how we see each landscape, then structures a larger and much more complex middle portion of that experience, and finally influences our last impression of a place before we leave. Successful road alignments that fit and enhance the Wellesley campus landscape need to exploit all of these qualities, and the existing roads at Wellesley are variously successful in this regard. These alignments of the existing roads at Wellesley, and some preliminary master plan ideas, are further annotated in the later plan sections of this Working Paper.

Basic experiential and practical differences arise from the speed differential of pedestrians and of people driving cars. Moreover, the safety issues raised by moving cars and their visual impact are quite different from the impact of people walking. For a campus as small and as dense as Wellesley's, the safety impact of vehicles is significant and getting more serious each year. The impact of vehicles is even more worrisome when cars are driven, as they often are now, in excess of 20 miles per hour.

Existing Entrances

Photograph 2.1 Fiske Gate

As a vehicular entrance, Fiske Gate is impractical: it is too narrow for modern vehicle widths and current driving speeds; it is part of an untenable five-way intersection. The closing of Fiske Gate had several important negative side effects for the campus, including the loss of a crucial formal entrance or threshold marker; the loss of a physical and symbolic connection to Wellesley Village; the loss of activity in that corner of the campus; the creation of a "backdoor" quality to the entire northeast section of the campus; and the loss of automotive surveillance of this area.

Photograph 2.2 East Entry - Route 16

The east and west campus entrances are deficient in that they provide no qualities of a gateway and no sense of crossing a threshold from the outside to the inside of the Wellesley campus.

Photograph 2.3 West Entry - Route 135

Campus Roads: Arrival

At Wellesley College the moment of arrival on campus is precise: it occurs either when turning from Route 16 or from Route 135. Historically, East Lodge, West Lodge, and the Fiske Gate were quintessential campus gates with strong overtones of privacy and wealth. Not one of these historic entries is used as a vehicular entrance to the campus today. Today, however, the newer campus entries create an underwhelming experience full of compromising ambiguity. Some of the perceived feeling of unwelcomeness that has been reported may originate with the uncertainty of this first message to visitors, who are left to wonder if they have arrived at Wellesley at all. Better signage and a more carefully considered design of the arrival landscape and markers of the campus are needed. But these issues raise important issues about the particular message of these entries when they are redesigned. Welcoming? In what way? How assertively?

The first view of the landscape upon arrival on campus from the west, or Route 135, is acceptable, but somehow not commensurate with the rest of the campus. But when entering from Route 16, the first view of the campus is quite poor. At the Route 16 entrance, a long, flat view down the roadway reveals nothing about the campus landscape structure. Nor does this view show us any buildings, not even the towers on hilltops that are crucial referencing elements on the Wellesley campus. In short, the campus entrances today provide neither the clarity nor the beauty once provided by the earlier entries.

The campus entrances need demonstrative gateways and clear signage. It is always reassuring to enter the campus during occasions when big banners welcoming alumnae and parents are stretched overhead from the trees. The clarity of this symbol of arrival and the open invitation that these banners provide make an uncompromised statement. The redesign of these entrances could project such an enthusiastic welcome. Better and more substantial signage and the clarification of the moment of arrival with gates, piers, or plantings (perhaps embracing groves of trees) could be considered at major campus entries.

Depending on other interrelated decisions in the planning process, it may also be worthwhile to ask whether the core campus is adequately served by the two existing campus entrances. In particular, the intense use of the Science Center and the relative inaccessibility of this area raise the question of whether a new campus entrance is needed in this area. Depending on its feasibility, a new entry from Route 135 through the Distribution Center area and below the Sports Center, along Lake Waban, and connecting to the Boat House area should be reviewed.

Another issue related to vehicular circulation is how the campus is viewed from state and town roads running by the main entrances. In particular, the string of parking areas that starts near the Distribution Center and then segues to the rear of the Sports Center could be improved, perhaps with a uniting row or grove of trees along this section of the road.

Campus Roads Need to Reveal the Campus Landscape

As discussed at the outset, after passing through the threshold of the campus, visitors' experiences are structured by the alignments of the road and what is "shown" in the surrounding landscape as users pass along the roads. For reasons of clarity, legibility, and to restore the once profoundly beautiful, historical rhythm of the road, landmarks need to be carefully referenced by what is seen from the road: at Wellesley these referencing landmarks include the towers on hills, the valleys, Lake Waban, and dominant buildings including the Science Center, the Davis Art Center, and Green Hall with its stone tower. In the early stages of arrival, visitors to the campus receive their first impressions of the possible destinations; they either begin to wonder or they soon discover how to find specifically where they are going. For these reasons, the road alignments frame the experience of the road. This framing is perhaps more important for long-term users who are using the road for more than first time way finding. But the measured way in which the road is laid out also helps first time users to understand where they are.

Arrival at the Heart of the Campus

Every academic institution has a place that everyone would agree represents the heart and soul of the institution. At Wellesley, that area (in our view) is the space that includes Severance Green and Rhododendron Dell, defined at its edges by Tower Court, the Library, the Academic Quad, and Memorial Chapel. Perhaps others would argue that this space is the academic quad, but to us this is the center of classroom learning, not of campus life. Arrival by automobile to the area near Founders and the Library is disorienting because of the awkward shift of College Road to the north side of Founders Lot. The motivation for this major change in circulation in 1961, which became the basis for several other important decisions concerning the alignment of Wellesley's campus roads, arose from contemporary theories about vehicular safety. The 1961 relocation of College Road from the Severance Green side of Norumbega Hill to the other side has had both positive and negative effects. This "new" campus road is sited at the edge of the outer valley and pleasantly reveals this beautiful and structurally crucial piece of the campus. But the road was shifted from the center and for this reason has remained a perimeter connector road. Although this road approaches Green Hall, it fails to give drivers the sense that they have arrived at the center of Wellesley. This is a regrettable loss, especially since the original road layout fostered a wonderful sense of arrival to the middle of campus as one entered the precinct framed by Green Hall, the Library, the

Chapel, and Founders Hall. As a result, people coming by car today are deprived of ever actually arriving at the campus center. Moreover, this area of the campus has the feeling of a town in which the main street has been turned into a pedestrian mall, and this sense is heightened by the road edge occluded with parked cars.

The closing of the campus entrance from Wellesley Village, and even the abrupt, truncated condition of the new Route 16 entrance, were motivated by safety concerns that grew out of design profession attitudes in the 1950s and 1960s about the relationship between pedestrian and automobile circulation. When College Road was relocated, the prevailing view held that separating different modes of transportation was the way to achieve safety. This has not proven to be true in all cases, and therefore, the thinking on this in the late twentieth century has changed. As it turns out, and as is true with College Road, it is precisely the separation of cars from people and smaller-scale spaces that has created or exacerbated dangerous conditions. In other words, the use of design language of a pedestrian-free parkway without sidewalks, right-angle turns, or the close presence of buildings, gives drivers the cue that they can drive in a faster, more relaxed way, and they often become impatient or frustrated if other conditions (like students crossing the road) impede them.

For these reasons, the drive along College Road needs to be reevaluated in terms of how it structures our basic understanding of what the campus is and how it presents itself as an ensemble of views. Can we see buildings in the distance? Are we allowed to catch glimpses of the key referencing locators, towers, Lake Waban, special buildings? How can a careful consideration of the character of the road better integrate roads as a fully engaged part of the landscape?

Parking

Although significant portions of the Wellesley campus were planned in the era of the automobile, the number of cars on the campus today gives the feeling that cars are everywhere. Our choices for addressing this problem, and the degree to which we want to reclaim a less parked car-dominated campus, present difficult master planning challenges. The choices, especially the question of parking decks, could have significant costs associated.

The large number of cars presents several problems, including:

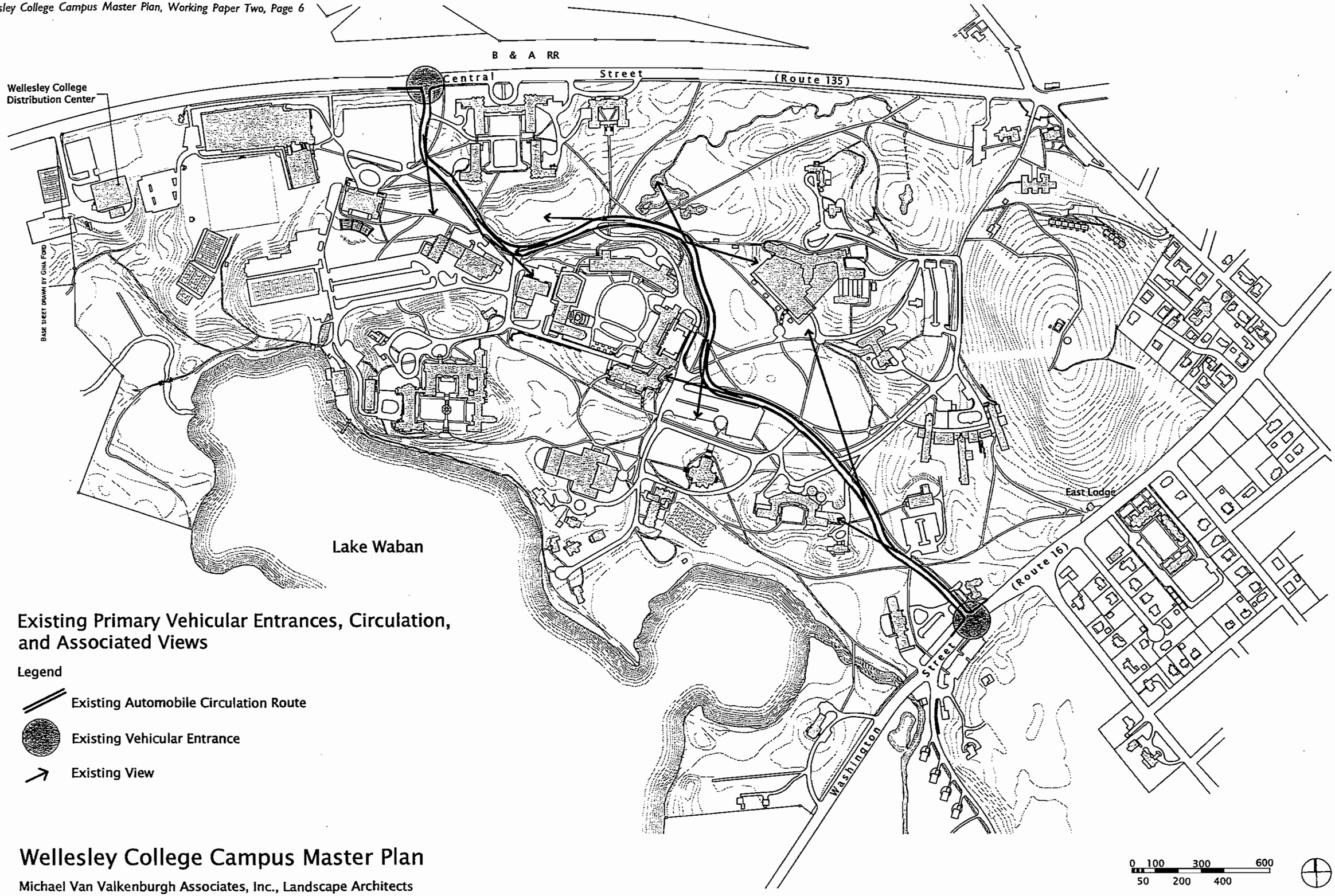
- Cars everywhere create a ubiquitous feeling of suburbia. This is contrary to the positive feeling of irregularity and unevenness that is the essence of the historic Wellesley campus landscape. This unevenness is a crucial component of the multivalent readings of the landscape. The placement of cars around the entire edge of the Chapel lawn makes this space feel isolated and fenced in, as opposed to being a part of a larger campus fabric.

- Cars parked along road edges greatly limit views into and across the landscape, creating rows of cars at the edges of spaces and walks. These cars take the place of open road edges that provide important vantage points for seeing, feeling, and framing the campus landscape. Perhaps even more important is that these cars parked at edges create a dangerous condition for pedestrians who use the roads and walkways. Our discussion with Frank Urbano, the Wellesley College Chief of Police, underscored our concern that street and road edges lined with cars creates a safety problem by making it difficult for drivers to see pedestrians stepping into the roadway. In many parts of the campus, the less trafficked streets and roads also serve as ways for walkers and bikers, creating a dangerous combination of people and cars.

- The materiality and the scale of cars create a level of information in the foreground of each campus view that is antithetical to the historic way in which landscape views were normally structured at Wellesley. Cars are cars, but trees are not only trees.

- The "technology" of trucks and plows for snow removal, campus maintenance, and the like is doing permanent damage to the plantings around the roads and parking lots and (in certain places, e.g. on the walk above Green Beach) is causing a dust-bowl quality in paths that are not wide enough for the wheel base of the maintenance trucks that use the paths with increasing frequency. There also is the sense that permanent damage is being caused by cars to the overall quality of the natural landscape, its biodiversity, complexity, and the subtlety of the campus plantings.

As part of this planning process, it is important to remember that cars offer a kind of freedom, allowing people to come and go from the campus. This freedom has been mentioned by many sources and is particularly important to students, who can at times feel isolated at Wellesley College. There are advantages to the abundance of cars: advantages in terms of freedom for students, advantages for recruiting students, advantages for community services activities and for other extracurricular commitments, advantages for attracting visitors to the museum and to conferences, concerts, etc. We are sure that you have come across others.



Existing Primary Vehicular Entrances, Circulation, and Associated Views

Legend

- Existing Automobile Circulation Route
- Existing Vehicular Entrance
- Existing View

Wellesley College Campus Master Plan

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Existing West to East Campus Entry Sequence

Photograph 2.4 West Entry - Route 135

Although somewhat more attractive than the east entrance, the west entrance of College Road from Route 135 is unceremonious, with no solid signage and no architectural features to mark one's arrival.

Photograph 2.5 View toward Davis Museum

The first clear view of a building along this entry sequence is the service area of the Davis Museum, an unfortunate (but easy to correct) introduction to the Wellesley campus.

Photograph 2.6 View toward Meadow

This is a typical view from College Road. The broad flat curves of the road alignment encourage a driving speed inappropriate for a road that students regularly cross.

Photograph 2.7 View toward Founders Lot

This section of College Road focuses on Founders Lot, but offers no clues about the location of the core of the campus or how to get there or where to park.

Existing East to West Campus Entry Sequence

Photograph 2.8 East Entry - Route 16

The east entrance does not direct the driver's view toward any identifiable landscape features or landmarks of the campus.

Photograph 2.9 View toward Stone-Davis Hall

After the entrance the road passes Stone-Davis Hall without providing drivers with a visual clue that Stone Davis is there: this is the result of an overabundance of white pine trees in this location.

Photograph 2.10 View of Science Center

The first identifiable building seen as part of this entry sequence is the Science Center. It is seen without the context of the other academic buildings. Although it is a striking building, the isolation of the Science Center contributes to a confusing initial reading of the campus.

Photograph 2.11 View of Stone Tower

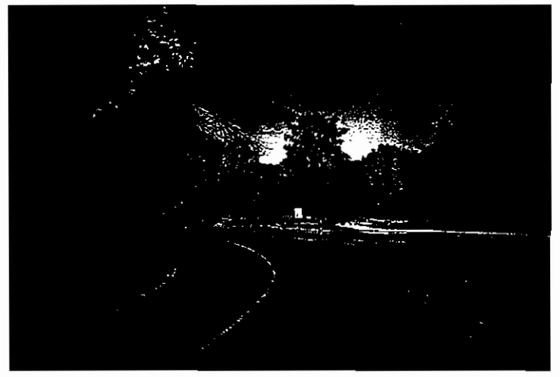
Stone Tower is briefly glimpsed, but College Road then sweeps away from Founders Hall and Green Hall. Although Founders Lot is visible from College Road, its entrance is blocked by automatic gateways.

Photograph 2.12 College Road North of Green Holl

In terms of views from College Road, fleeting glimpses of Green Hall and Pendleton Hill Road are seen through the trees. The peripheral location of College Road at the outer edge of Norumbega Hill and the nature of the broad, flat curves of the road alignment give the driver the impression that this is a parkway drive and that arrival on campus has not yet occurred.

Photograph 2.13 Green Hall - Pendleton Hill Road Ramp

Green Hall seems important from this vantage point on College Road but there is no clue about how to get there.

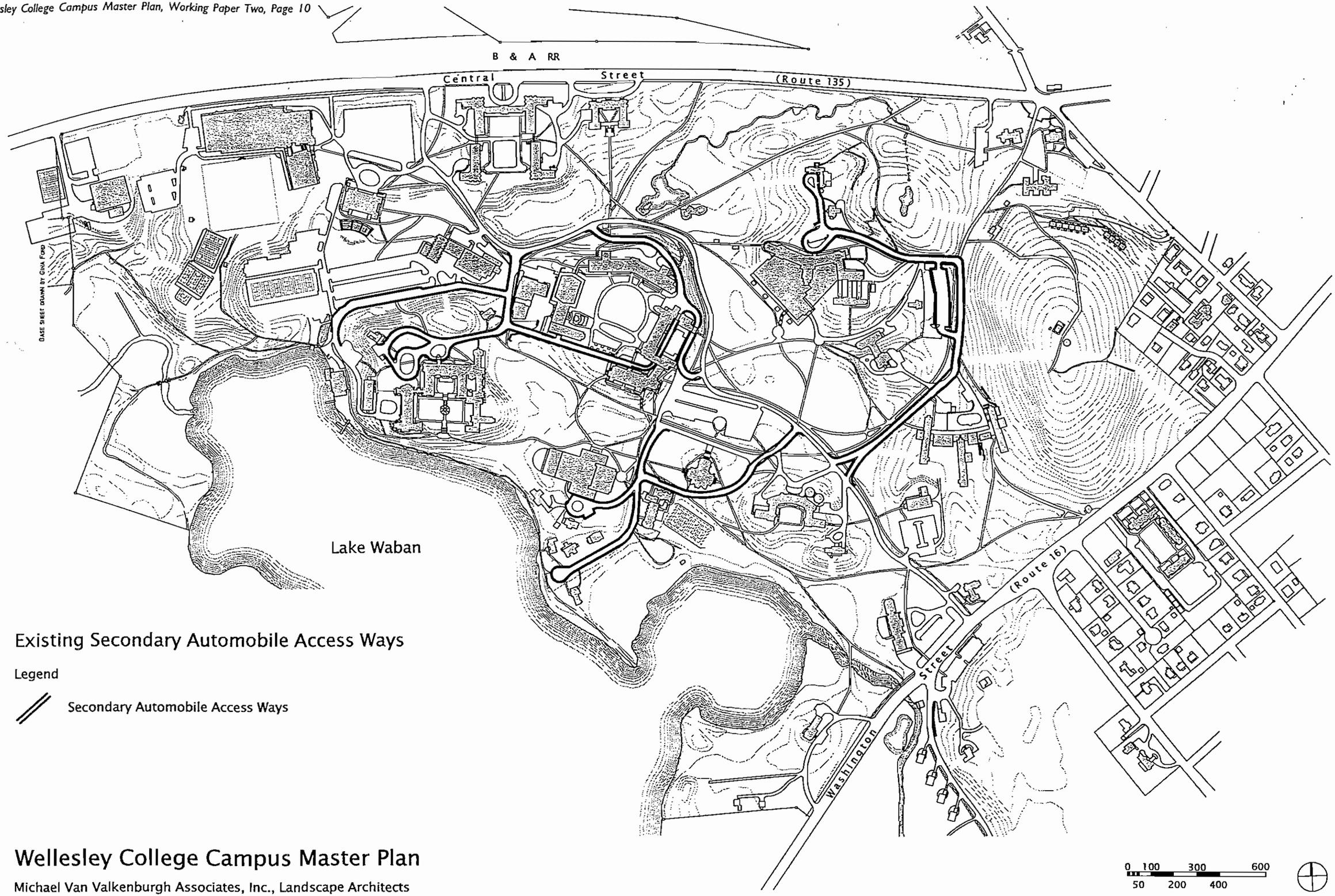


Photograph 2.14 View taword Science Center Meadow

The road in this stretch focuses on the abstract landscape of the outer valley but provides no vistas or clues about one's proximity to the campus center.

Photograph 2.15 View toward Parameceum Pond

By this point visitors in a car have crossed through 65 percent of the campus, but still feel as though they have not yet arrived. Parameceum Pond can be seen to the right in this photograph.



Existing Secondary Automobile Access Ways

Legend

Secondary Automobile Access Ways

Wellesley College Campus Master Plan

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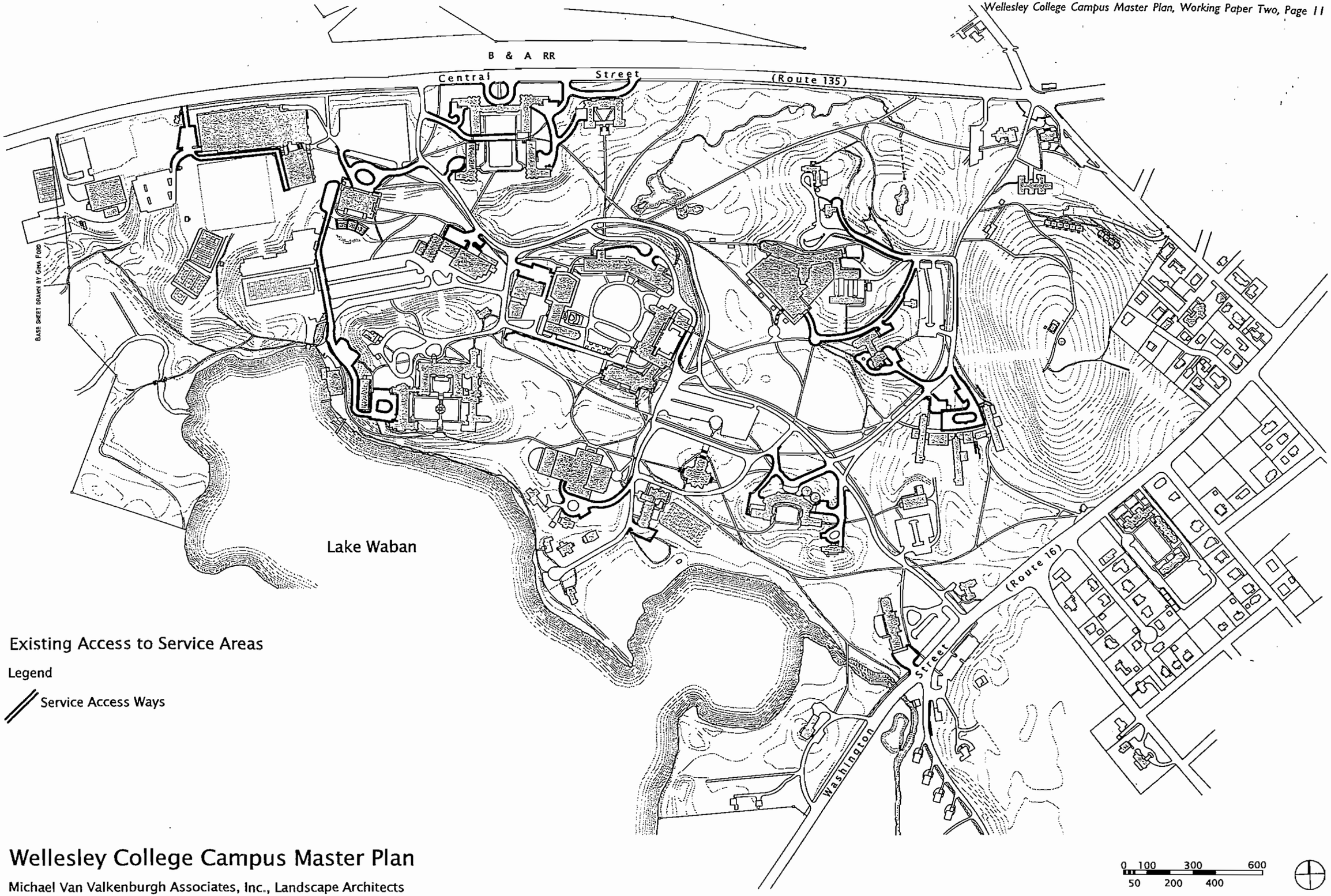

Wellesley College Campus Master Plan

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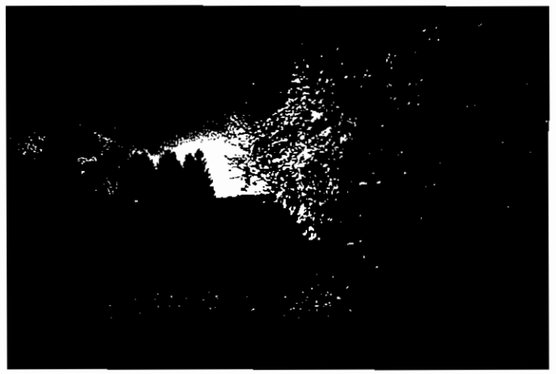
Possible New East Lodge Campus Entry Sequence

Photograph 2.16 East Lodge Entrance

Reactivating the old East Lodge entrance would reestablish a clear threshold into the east portion of the campus. Also, closing the present east entrance near the Wellesley Club would create more room to accommodate the extra parking needed in that area. Modification to the entrance would include installing a traffic light, widening the cut in the retaining wall and widening the spaces between the the entry piers.

Photograph 2.17 View West from East Lodge Entrance

After moving through the gate, a driver would catch a glimpse of the new dorms between the huge European beech trees that remain from the original homestead.



Photograph 2.18 View toward Lake Wobon

At this point the new drive would turn in a southwesterly direction. This would orient the view directly on the lagoon of Lake Waban, establishing the lake as an important landscape feature and orienting device in the campus structure.

Photograph 2.19 View toward Tupelo Point

The road would continue in this direction to this point, orienting the viewer toward Tupelo Point across the lagoon.

Photograph 2.20 View toward Stone-Davis Hall

At this point the new entrance drive would turn toward Stone-Davis Hall and realign with the existing College Road. The evergreens in front of Stone-Davis could be selectively thinned of lower branches to allow views of the prominent ends of Stone-Davis Hall and of the circular dining halls. These architectural elements could operate as useful landmarks from other parts of campus.

Possible New Entrance from Route 135 Near Fiske Gate

Photograph 2.2 Break in Hedge Row

A break in the existing pine hedgerow west of the Fiske parking lot provides a good location to reestablish an entrance in the northeast section of campus.

Photograph 2.22 View South from Route 135

A new substantial gate and sign in this location would create a clear connection between Wellesley College and Wellesley Village.

Photograph 2.23 View East along Arboretum Path

This new entrance drive would be aligned in an east-southeast direction to connect with the old Fiske Drive south of the Daycare Center. The original Fiske Walk and Gate would remain a pedestrian way.

Possible Realignment of College Road North of the Chapel

Photograph 2.24 View toward Stone Tower

Drivers proceeding west on the possible new adjustment of College Road after passing Stone-Davis could catch their first glimpse of Stone Tower, as shown above. As a result, a first clue about the location of the core of the Wellesley campus would be revealed.

Photograph 2.25 View toward the Chapel

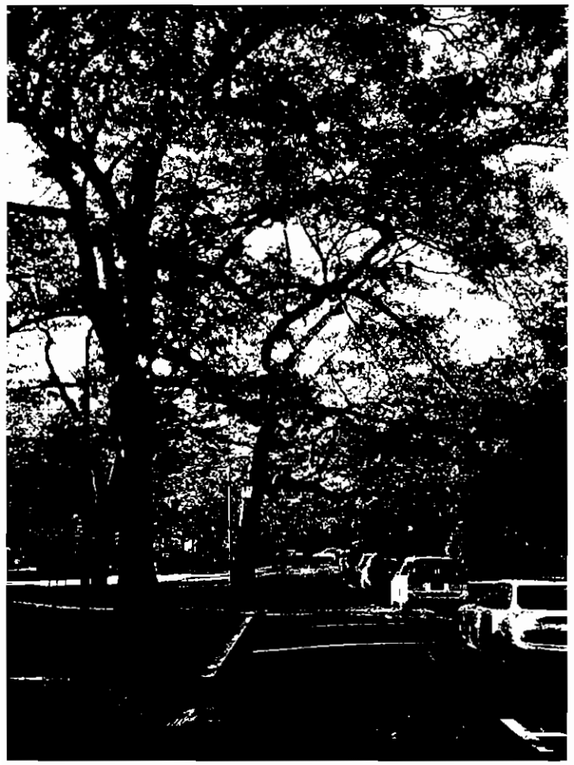
Instead of proceeding straight along the north edge of Founders Lot, the new College Road could turn left (southwest) and head directly toward the Chapel.

Photograph 2.26 View of the Chapel Precinct

At this point, the new College Road would direct drivers toward a three-quarter view of the Chapel. This view would establish an understanding that this is a special precinct with a smaller scale and slower driving speed. People would understand, as they did in the past, that they have arrived at the center of the campus.

Photograph 2.27 View of the Chapel Precinct from Proposed Road

Possible Realignment of College Road, continued



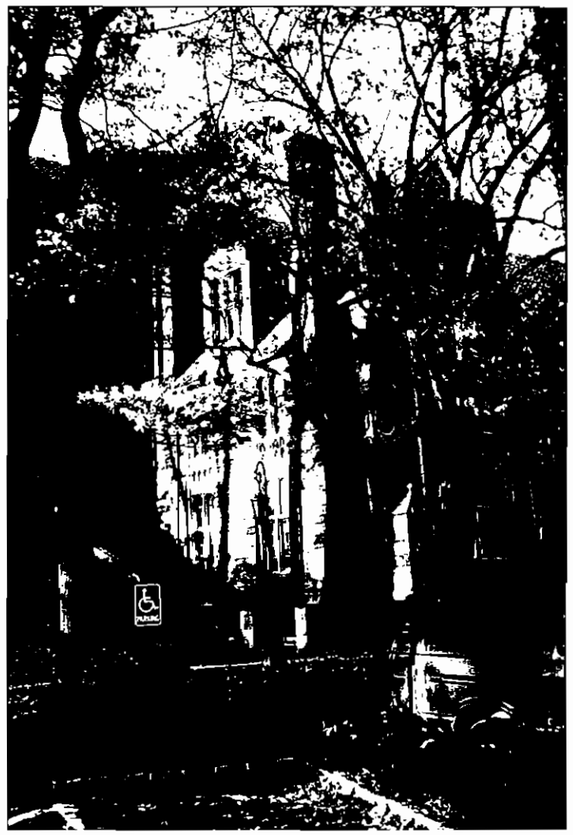
Photograph 2.28 View along Chapel Road

Photograph 2.29 Chapel Road without Cars

These two photographs show this area with and without parked cars. The absence of parked cars not only greatly improves the space visually, it allows plenty of room for College Road to pass through this area as it once did without widening the right-of-way.

Photograph 2.30 Cars Parked on Tupelo Lane

The removal of the parallel parked cars on Tupelo Lane and the removal of extra rhododendrons planted to screen those cars would allow a key view deep into Severance Green. At this point visitors could glimpse all the key elements of the campus including Clapp Library, Severance Green, and Founders and Green Halls.



Photograph 2.31 View of Founders Hall

After stopping at the intersection with Tupelo Road, drivers could have this view of Founders Hall. There is the real feeling here that one has arrived at the most important part of the campus.

Photograph 2.32 East of Green Hall

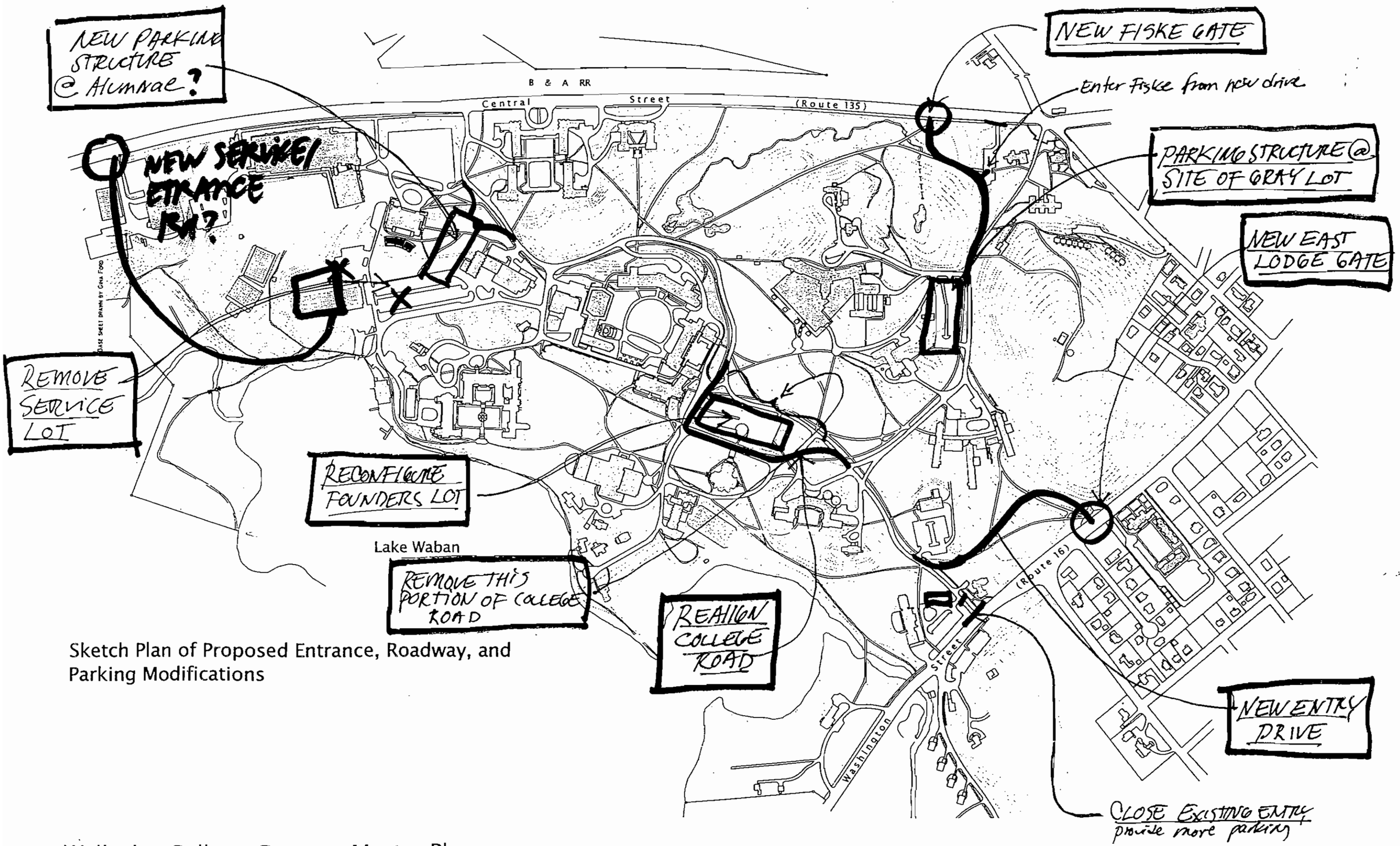
This picture taken at 6:00 a.m. shows how the area in front of Green Hall looks without cars. Parking in this area would be relocated to a reconfigured Founders Lot, and excess pavement would be removed.

Photograph 2.33 Visitor Parking at Green Hall

Same view with cars.

Photograph 2.34 View toward Science Center

After passing the Green Hall ramp, the new road would reconnect with the existing College Road. The Science Center, as is seen from this vantage point within the context of other academic buildings, would make a lot more sense to the visitor. The dialogue between the Science Center and Green Hall, located across the meadow from each other, would be underscored with the resulting new vantage point.



Sketch Plan of Proposed Entrance, Roadway, and Parking Modifications

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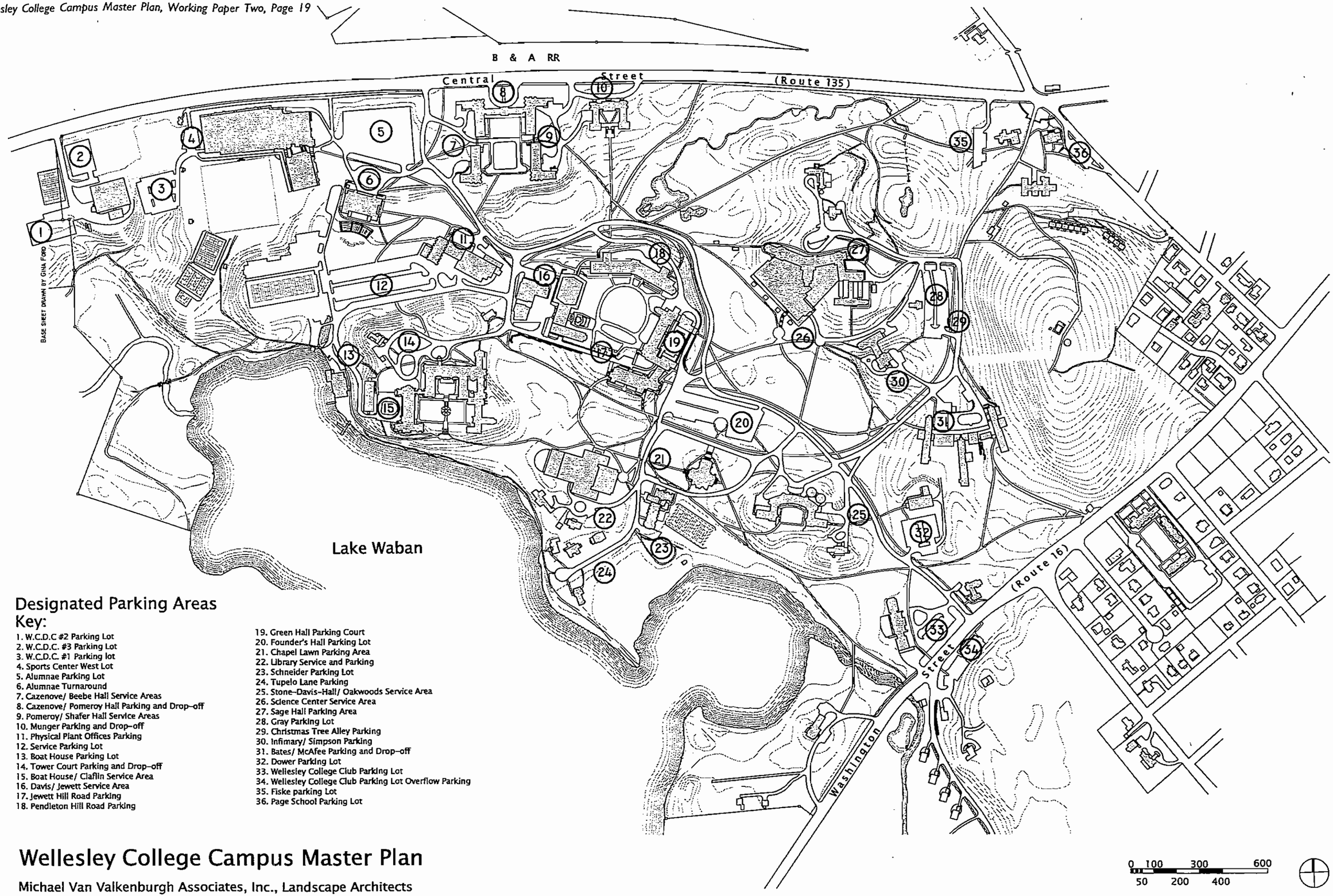

Designated Parking Areas Key:

1. W.C.D.C #2 Parking Lot
2. W.C.D.C. #3 Parking Lot
3. W.C.D.C. #1 Parking lot
4. Sports Center West Lot
5. Alumnae Parking Lot
6. Alumnae Turnaround
7. Cazenove/ Beebe Hall Service Areas
8. Cazenove/ Pomeroy Hall Parking and Drop-off
9. Pomeroy/ Shafer Hall Service Areas
10. Munger Parking and Drop-off
11. Physical Plant Offices Parking
12. Service Parking Lot
13. Boat House Parking Lot
14. Tower Court Parking and Drop-off
15. Boat House/ Claflin Service Area
16. Davis/ Jewett Service Area
17. Jewett Hill Road Parking
18. Pendleton Hill Road Parking
19. Green Hall Parking Court
20. Founder's Hall Parking Lot
21. Chapel Lawn Parking Area
22. Library Service and Parking
23. Schneider Parking Lot
24. Tupelo Lane Parking
25. Stone-Davis-Hall/ Oakwoods Service Area
26. Science Center Service Area
27. Sage Hall Parking Area
28. Gray Parking Lot
29. Christmas Tree Alley Parking
30. Infimary/ Simpson Parking
31. Bates/ McAfee Parking and Drop-off
32. Dower Parking Lot
33. Wellesley College Club Parking Lot
34. Wellesley College Club Parking Lot Overflow Parking
35. Fiske parking Lot
36. Page School Parking Lot

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PARKING SUMMARY AND RECOMMENDATIONS

Overview

Through on-site observation, analysis of recent surveys and parking data provided by the College, and meetings with Wellesley faculty, administrators, and students, we have come to believe that the parking problems at Wellesley, though complex, can be resolved. The following is a preliminary summary of the main parking issues. Data supporting this summary are tabulated in Appendix 1 and have been reviewed by Bob Bossange and Barry Monahan.

Availability versus Demand for Convenient Parking

- There are 2,093 individual registered vehicles and 1,630 paved parking spaces: eighty percent of individual registered vehicles therefore may be parked on the campus at once. At first glance these statistics seem to indicate that the number of parking spaces is sufficient because everyone is not on the campus at once. However, a breakdown of the numbers by type of user indicates the possibility of insufficient parking for certain groups. For example, there are 1,377 vehicles registered to faculty and staff, with a daily average of only 800 spaces available.

- Convenience has created a demand that factors into our analysis as much as space availability. Campus surveys indicate that parking areas along roadways within close proximity to facilities such as Simpson, Sage, Jewett, and Pendleton are consistently filled to capacity during weekdays, while nearby parking areas such as Gray, Alumnae, and Service Lots always have a significant amount of available parking. An increased demand for convenient parking has led to a proliferation of makeshift parking, primarily along secondary roadways. This condition has exacerbated the perception of a parking shortage on campus.

- Peripheral parking areas, such as Alumnae Lot and Distribution Center Lots (DC), are underused. Surveys conducted by the Campus Police in 1996 indicated that between 9:00 A.M. and 5:00 P.M. 30 to 50 percent of the total spaces were available. For example, this year during Parents Weekend, although approximately 100 cars were parked in the meadow, Alumnae Lot was at times used only at 50 percent of capacity. All of these lots are poorly connected to primary circulation routes, which accentuates the perception of their remoteness. In reality, the Alumnae Lot is no farther from the campus core than the Service Lot.

- The demand for parking in Founders Lot, the most desired parking area for staff (as illustrated by the waiting list and seniority system of assigning these parking spaces), indicates a need for more centralized parking for staff.

- The use of nearly all secondary roadways for staff parking in Simpson/Sage/Infirmary area indicates a need for a centralized, minimum 100-car, parking area.

Staff Parking

- Although it is difficult to precisely measure daily parking supply versus demand and the influence of other factors such as convenience, it appears that staff parking is adequate. However, there seems to be an inadequate amount of staff parking in the Sage/Simpson/Infirmary area.

Student Parking

- With the exception of 50 student spaces in Dower Lot and 48 spaces for continuing education / commuter students along Christmas Tree Alley and adjacent to Alumnae Hall, all student parking is located in peripheral lots. Campus Police surveys and on-site observation point out that these lots are not fully occupied during peak hours indicating that student parking is adequate.

Visitor Parking

- Visitor parking is woefully inadequate. It is both poorly marked and insufficient in key central areas such as the Academic Quad, the Davis Museum, and the Science Center. This lack of parking projects a negative image to campus visitors. More visitor parking that is clearly marked and convenient to the campus center is required.

Types of Parking

The primary types of parking currently on the Wellesley campus are: small decentralized lots, large centralized lots, large peripheral lots, parking along secondary roadways, and parking in service areas. Each one of these parking types will be discussed in detail relative to specific problem recommendations.

Parking along Secondary Roadways

The use of secondary roadways for parallel parking has permeated most of the campus core, to the detriment of the visibility of the landscape and the safety of pedestrians and cars. Pedestrian safety, particularly along heavily traveled corridors such as Pendleton Hill Road and Jewett Hill Road, is seriously threatened.

- Narrow roadways and blind curves along heavily

traveled corridors such as Pendleton Hill Road and Jewett Hill Road present a serious threat to pedestrian safety.

- Views from roadways, particularly from high points, are blocked for both motor vehicles and pedestrians due to the cars parked along the perimeter. A good example of this is along Pendleton Hill Road where long views into the campus are denied.

- Road narrowing, caused by the addition of parallel parking, has created confusing and dangerous circulation patterns such as forcing the southbound circulation toward College Road through Gray Parking Lot, thus requiring parked cars to back into oncoming traffic.

Parking in Service Areas

As is the case with parking along roadways, the illegal, makeshift parking of cars (such as on lawns, under trees, on paths) has proliferated in many service areas to the visual, physical, and functional detriment of the campus.

- Parking in the service area at Pendleton clutters the entrance to the bookstore, impedes service access to this area, and obstructs long views to the landscape from inside adjacent classrooms. Additionally, this area serves as a primary entrance for students arriving to the Academic Quad via Pendleton Hill road. Not only does the clutter create an unsightly entry but the potential also arises for dangerous conflicts between pedestrians, service vehicles, and cars.

- The service area for the Library also functions as a drop-off for this building and a primary entry/drop-off for Harambee House and Acorn House. Haphazard parking in this area confuses circulation and gives visitors a negative impression.

- Head-of-house parking, prominently sited at the drop-off at Munger Hall and at entrances to Beebe and Shaffer, compromises the integrity of the surrounding landscape and architecture.

Parking Required for ADA Compliance

- There is an insufficient number of handicap parking spaces on campus to meet the Americans with Disabilities Act (ADA) requirement of one handicap space per 25 regular spaces. Currently many handicap parking spaces are adjacent to service entrances.

Parking for Special Events

- An average of 5,000 outside events are hosted annually. These events range in size, location, and duration.

- There seems to be a critical need for more event parking at the College Club, where several events are held each day, and in the Science Center Area, where weekday parking demand is inadequate.

- Parking in the meadow should be either strictly controlled or eliminated.

Evaluation of Service Areas

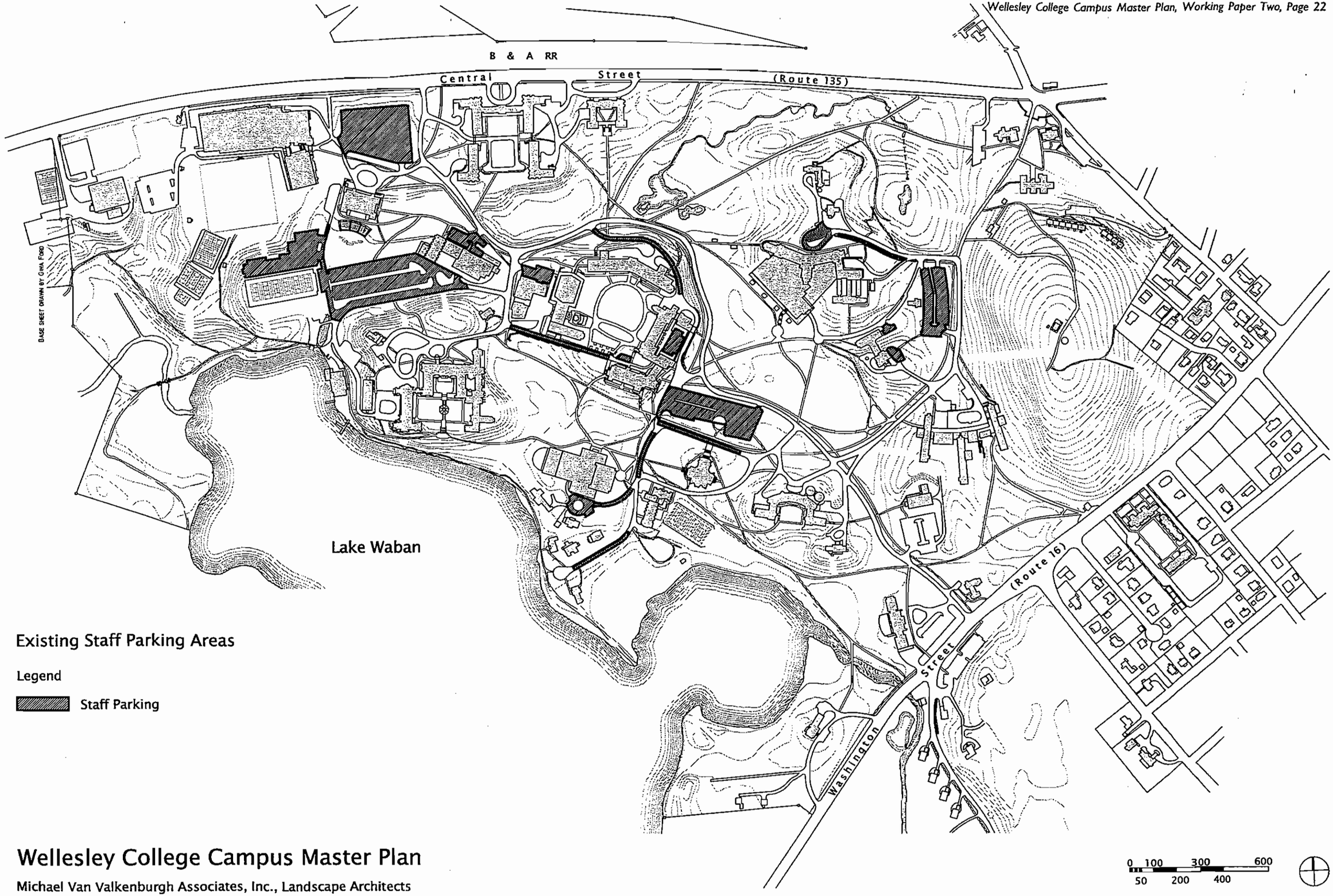
Each building or building group has its own service area and many of these are required to serve the nine dining facilities on campus. In addition to the parking issues already outlined, other problems were identified:

- Since the completion of the Davis Museum in 1994, the service area for this building has become a focal point upon entry from Route 135.

- The service area at Bates/Freeman is a focal point upon entry to the New Dorms.

- Service access to the Chapel is complicated by two problems: the lack of a pull-off from the drive in front of the Chapel and the presence of a staircase that impedes access from the lower level.

- Access to the loading dock from Science Center Road no longer accommodates large tractor-trailer trucks, which have increased in length to 42 feet. Turnaround in this area is limited to small trucks only. In recent months, large trucks have refused to deliver to this entrance because of the inability to turn around.



Existing Staff Parking Areas

Legend

Staff Parking

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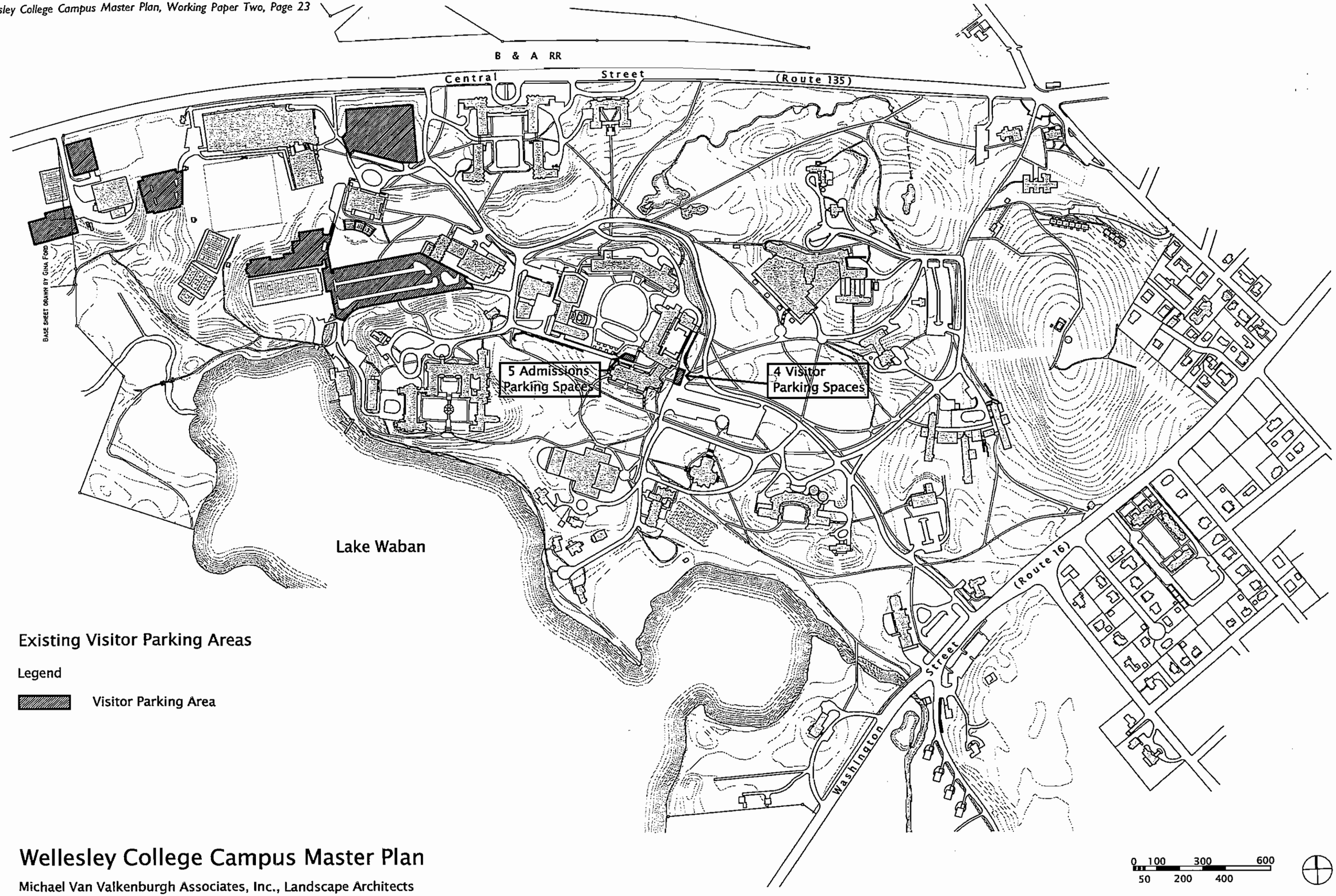

Existing Visitor Parking Areas

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Visitor Parking Area

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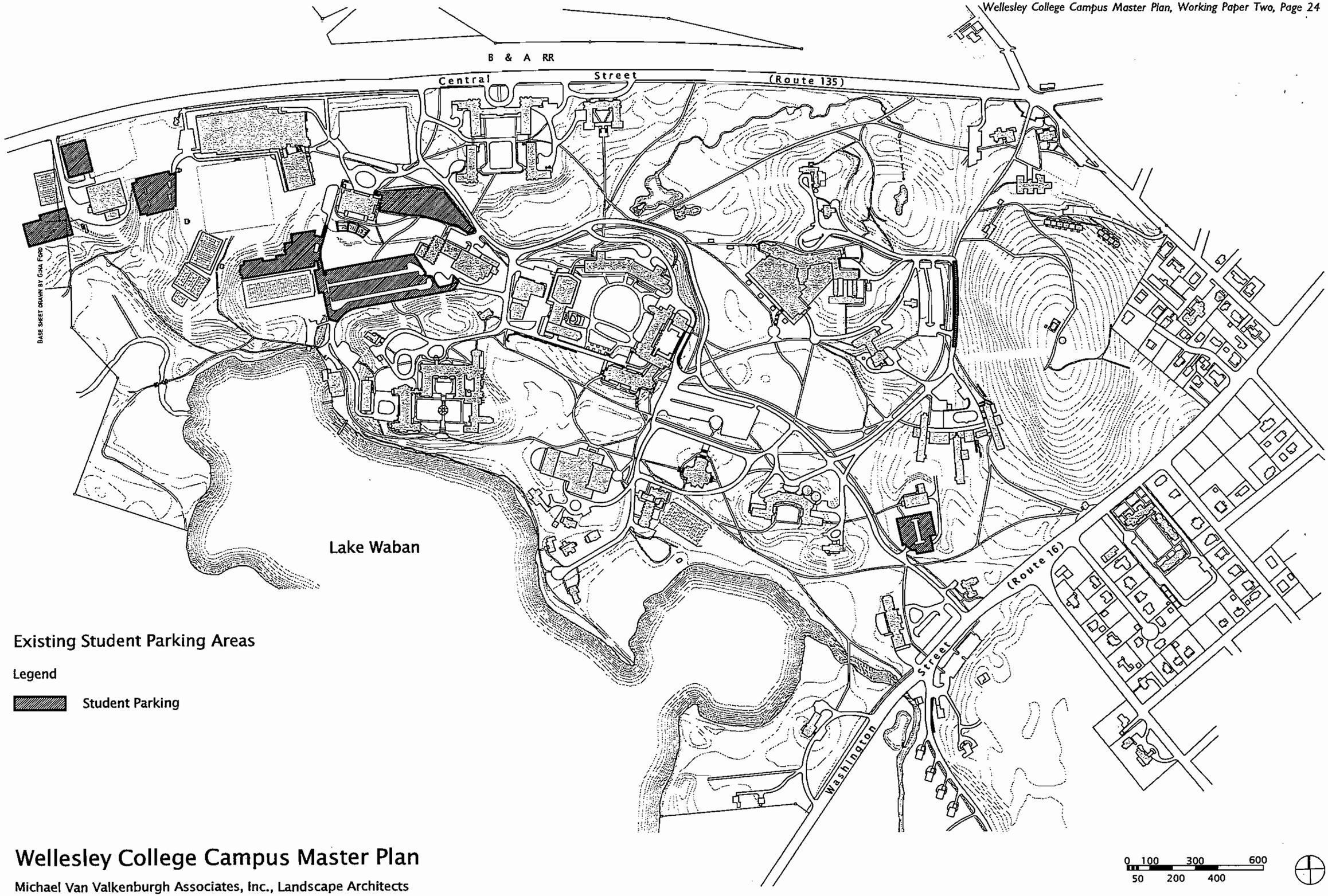

Existing Student Parking Areas

Legend

Student Parking

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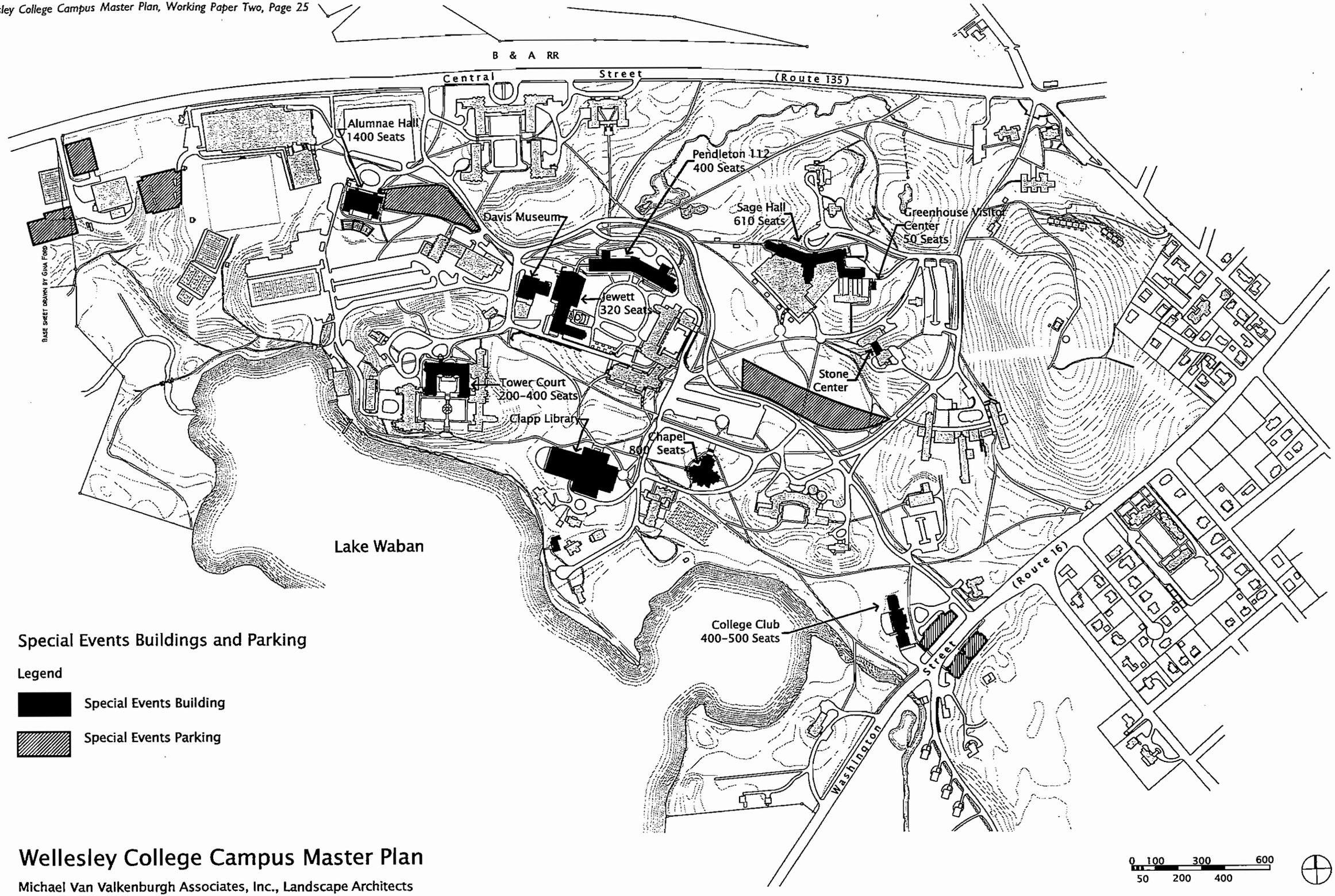

Special Events Buildings and Parking

Legend

- Special Events Building
- Special Events Parking

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Goals

The following preliminary list of goals should be discussed and evaluated:

- Increase the amount and visibility of visitor parking. Establish a centrally located visitor parking area or increase the number of designated spaces accessible to key campus locations, such as the Academic Quad. Provide a minimum of 30 centrally located visitor spaces:
  - If expansion of Founders Lot is possible through realignment of College Road, designate 10 spaces for visitor parking.
  - Allot 20 spaces in Dower Lot for visitor parking.
- Remove parking from along roadways, particularly where the safety of pedestrians is threatened.
- Remove parking from service areas in excess of the absolute minimum required for deliveries.
- Increase the quantity of parking near the campus core through the addition of one or more centrally located parking decks. The success of a parking deck on Wellesley's campus would depend greatly on its location.
- Improve pedestrian- and shuttle service-connections between peripheral parking areas (such as Alumnae and DC Lots) and destination points (such as campus center and dorms). This will reduce the perception of danger and "remoteness" of these areas. Improve safety measures (lighting, emergency call boxes) in these areas.
- Parking for events scheduled during peak college hours (weekdays during the academic year) should be in peripheral areas only. The success of this strategy is contingent upon implementation of regular shuttle service to destination points.

Specific Recommendations

Possible Parking Relocated from along Roadways:
Preliminary Unit Cost for Surface Parking Removal: $250.00 - $500.00 per space.

- Relocate 22 spaces from Jewett Hill Road and 29 spaces from Pendleton Hill Road to a parking deck between Alumnae Hall and the Physical Plant.
- Relocate 22 spaces from along the roadways surrounding the Chapel Lawn and Tupelo Road. Parking here, though convenient, seriously compromises the beauty of this area and impedes long views into the surrounding landscape such as Rhododendron Dell and Severance Green.
- Relocate a total of 82 spaces from along Christmas Tree Alley, Science Center Road, and the Simpson/Infirmary parking area to a proposed deck at Gray Lot.
- Remove 6 spaces from the vicinity of the main entrance of Tower Court. Further study is required to determine where these spaces may be relocated.

Other Possible Parking to Be Relocated:

- Relocate 14 parking spaces from the drop-off area at the College Club (not including handicap spaces). This parking impedes the drop-off location and the circulation while cluttering the front of the building.
- Remove head-of-house parking from prominent areas such as Hazard Quad and the front doors of buildings. Although it is important to retain convenient parking for heads-of-houses, current parking at front entrances is an eyesore, and as far as we can determine, unnecessary. We propose to relocate 6 spaces from the north side of Hazard Quad and 2 spaces from the center of the Quad.
- Relocate 34 spaces from the "temporary" Continuing Education (C/E) parking east of Alumnae Hall. Parking in this area is problematic for several reasons: it is difficult to access and therefore disruptive to surrounding areas. Furthermore, it compromises the visual integrity of the surrounding landscape and architecture and represents an inefficient use of land.
- Remove all non-service parking from service areas. Determine the minimum number of spaces required for each area.

Proposed Parking Expansion in Existing Lots

Preliminary Unit Cost for Surface Parking Expansion: $2,500.00 - $3,000.00 per space.

Additional parking is required at both the College Club and Founders parking lots. Strategies presented in the circulation section of this Working Paper that address the need to improve the entry sequence also present opportunities for reconfiguring and expanding parking in these areas.

Proposed Parking in Structures

Preliminary Unit Cost for Above-Grade Parking Structures: $10,000.00 - $17,000.00 per space.

There are several reasons to consider parking structures on the Wellesley Campus. The topography provides opportunities for the placement of one or more discretely fitted large buildings into the campus

while improving linkages between different areas that may otherwise be separated by significant grade changes.

The following sites are being considered for parking structures for several reasons. The quantity and location of spaces to be removed from adjacent roadways, the surrounding context, and the suitability of topographic conditions will allow ADA mandated connections to the surrounding campus areas.

- **Parking Structure on Gray Lot**

  Gray Lot is centrally located and within a short distance to all major facilities on the east side of campus. Yet it is topographically isolated from its surroundings by its placement in a low valley with adjacent facilities on the surrounding hillsides. The placement of a parking structure on this site should be evaluated. Clearly there is a need for staff parking for the surrounding facilities including the Science Center, the greenhouses, the Arboretum, Simpson, Infirmary, Stone Center, Day Care Center, and the Observatory. In combination with a new entrance near Fiske Gate (as discussed in the circulation section of this paper), this currently "lost" area of campus would be re-activated. Also visitors, students, and staff could directly enter the east side of campus, thereby reducing the volume of traffic on College Road.

  Preliminary studies indicate that a three- to four-level garage with a capacity of 250 to 350 cars could be appropriately fitted to this site. This new parking area would accommodate 174 spaces proposed for relocation (see map of Problematic Parking Spaces), and would provide additional parking for special events, and visitors. Furthermore, senior parking in the Dower Lot (50 spaces) could be relocated to this area, thereby making the Dower Lot available for either College Club, visitor, or special event parking.

  An alternative option for reconfiguring circulation and increasing the area of the existing surface parking lot may yield an additional 30 to 40 spaces. Both options assume the relocation of Gray House and will require further study.

- **Parking structure between Alumnae Hall and the Physical Plant.**

  The greatest problem with the Service Parking Lot is its location. The lot occupies a valley which should be reclaimed as programmed open space such as athletic fields. Furthermore, its placement destroys critical connections between Alumnae Hall and Lake Waban and between the campus core (Jewett/Davis and the Academic Quad) and the western side.

  Locating parking in a valley physically separated from its surroundings makes ADA routes either impossible or convoluted and costly at best. Many of the people who park in this lot are visitors and all of its drawbacks create a poor first impression of the campus. Finally, the surface runoff generated from this large paved area has a negative environmental impact on Lake Waban.

  A parking structure between Alumnae Hall and the Physical Plant would provide needed parking near the campus center with appropriate and accessible linkages to the Academic Quad through Jewett/Davis. A parking structure in this location would directly serve traffic entering from the west entrance. The site offers the potential to "bridge" topographic changes between the surrounding areas and to improve pedestrian and ADA circulation while subsequently allowing a multi-level structure to be integrated into the surrounding context. Another advantage is that a parking structure could be incorporated into an architectural connection across the south side of the Physical Plant.

  Preliminary studies indicate that a structure appropriately placed in this location could accommodate up to 300 cars, not to exceed 3 levels.

- **Parking structure on Alumnae Lot or DC Lot #1.**

  These two sites have been explored as alternative locations for a parking structure. Their peripheral locations make them less favorable sites than the other options presented.

  Presently there are no valid reasons for considering these sites for parking structures. However, if future programmatic development and improved connections to these areas were to be considered, increased parking in these areas could be investigated.

- **Parking structure below Founders Lot**

  Preliminary Unit Cost for Above-Grade Parking Structures: $20,000.00 - $25,000.00 per space.

  Because of its proximity to the Academic Quad and the need to relocate 82 spaces from the surrounding roadways, it would be remiss not to consider the idea of expanding parking at Founders Lot. Road realignment in this area could yield an additional 25 to 30 surface spaces. The majority of spaces displaced from adjacent roadways would be relocated to proposed structures at either Gray or Alumnae Hall.

  A single level, below-grade structure with a

capacity of 80 to 100 cars may be considered for this area. Immediate subsurface investigation to ascertain the location of the water table is required. A parking structure that is mostly under the water table should be avoided as the long-term costs of de-watering equipment, which needs to be run constantly, would be cost prohibitive and undesirable.

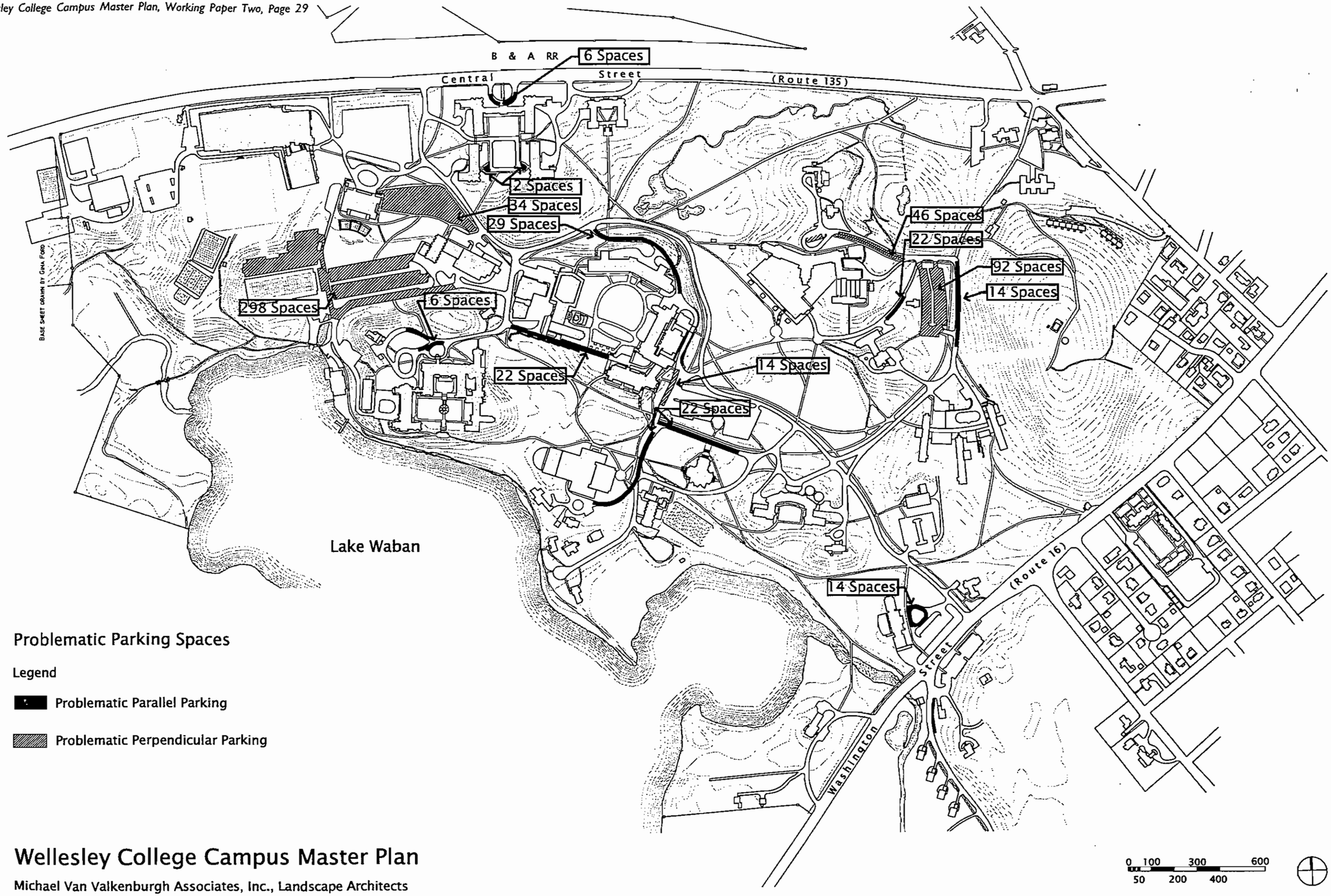
Parking for Special Events

All events scheduled for peak college hours, except for those that can be accommodated at the College Club Parking Lot, need to utilize peripheral parking areas. The successful management of remote parking, including safe parking areas and regular shuttle service to destination points, is vital to the success of this strategy.

Events scheduled during off-peak hours (e.g. evenings, weekends, and during the summer) can continue to utilize all campus lots. Expanded parking in the Service and Gray Lots will provide needed off-peak parking for all size events closer to destinations such as Alumnae Hall, Davis Museum, Sage Hall, the Greenhouse Visitor Center, and the Stone Center.

Parking in the meadow should be discontinued as it is impossible to support a desirable meadow grass planting in this area with the mowing schedule that event parking requires. Late summer mowing would leave the meadow in a compromised state for most of the winter.

The option of permanently banning parking from the meadow should be discussed. It is unclear whether additional peripheral parking for large events would then be required for large events (such as expansion of the DC Lots).



Problematic Parking Spaces

Legend

Problematic Parallel Parking

Problematic Perpendicular Parking

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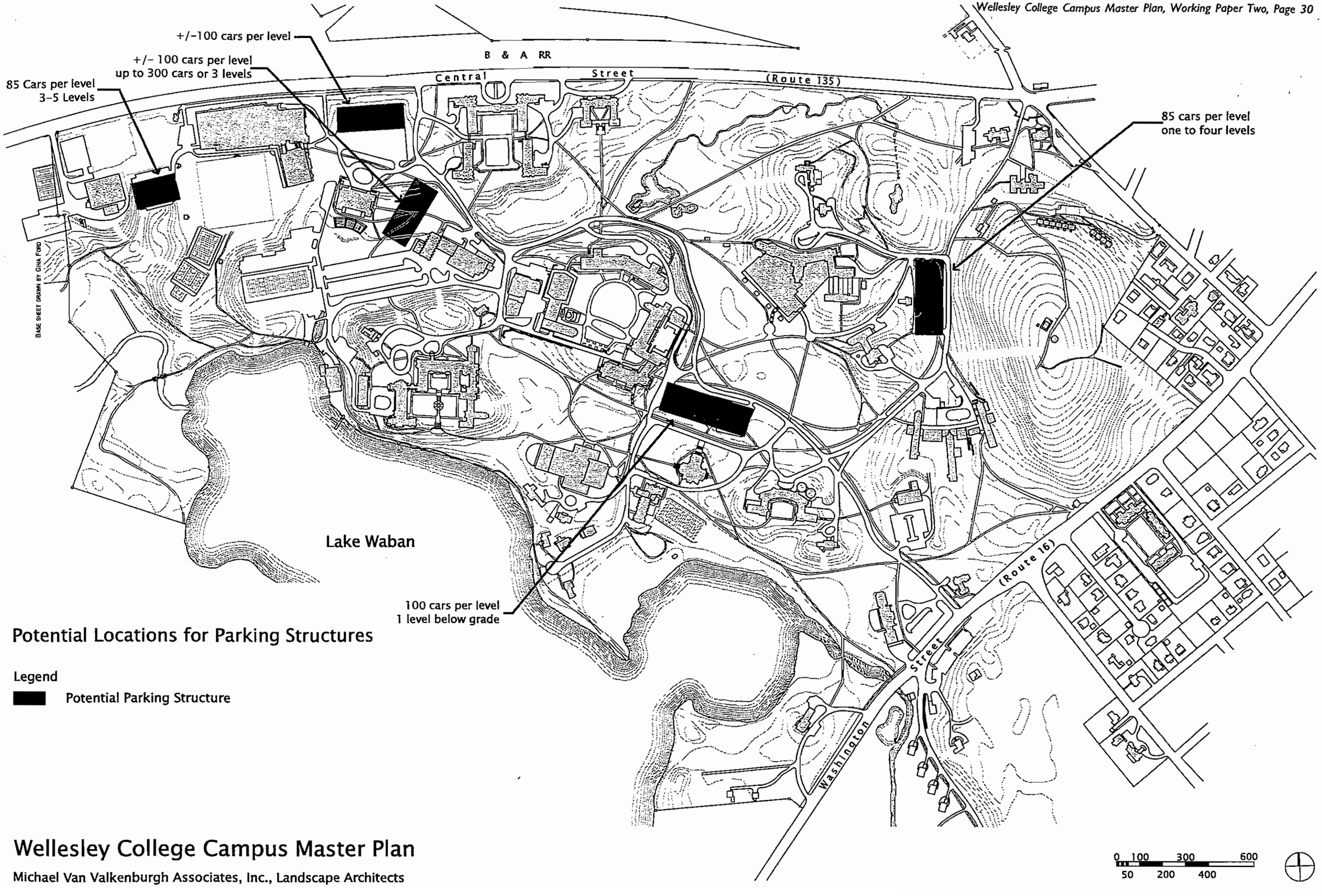

Potential Locations for Parking Structures

Legend

Potential Parking Structure

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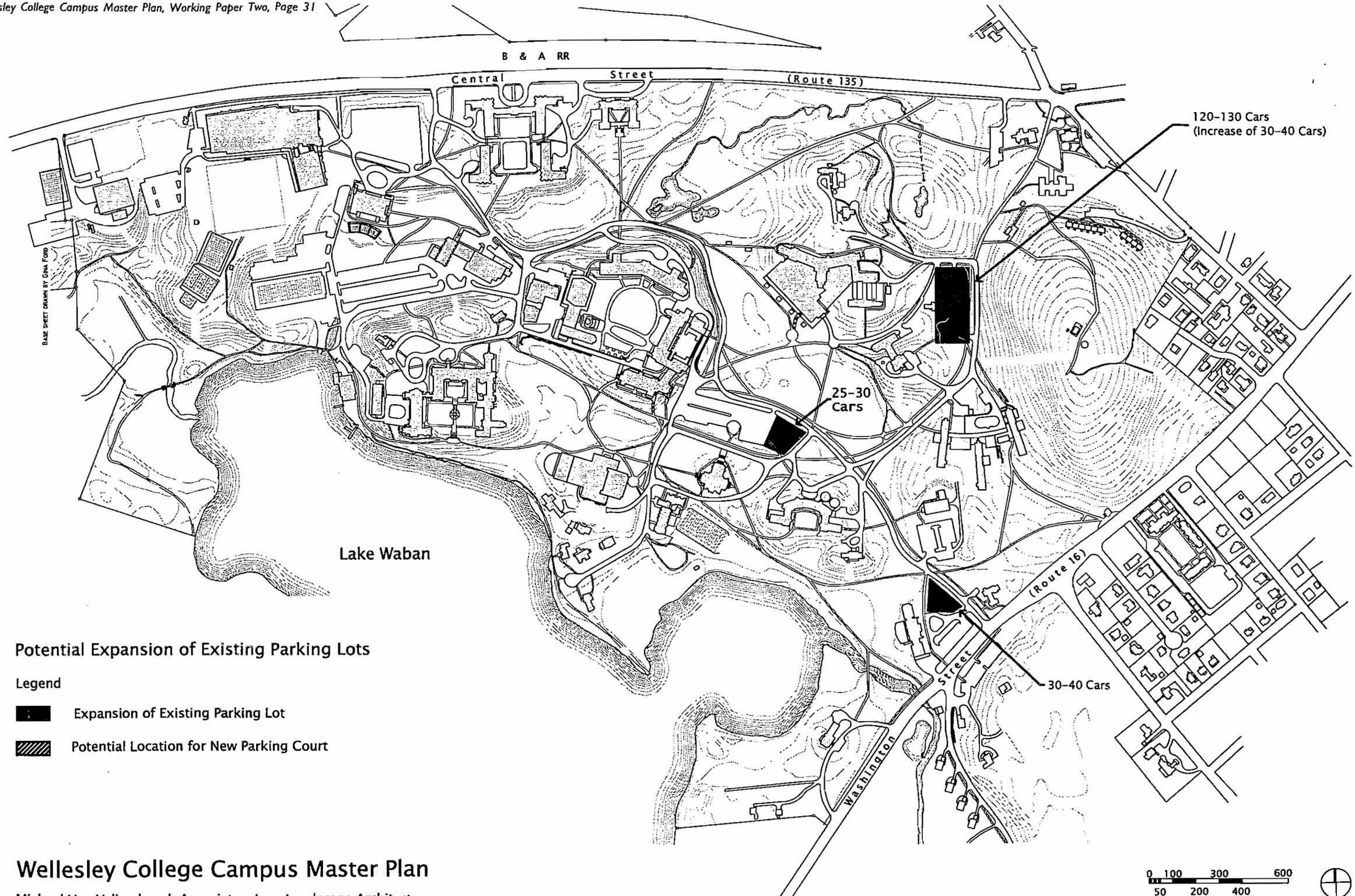

Potential Expansion of Existing Parking Lots

Legend

- Expansion of Existing Parking Lot
- Potential Location for New Parking Court

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Pedestrian Circulation: ADA Compliance

Area Description

The following list assigns names to the areas designated in the *Americans with Disabilities Act: Evaluation of Wellesley College Campus*, Working Paper One, submitted on 17 October 1997. See *Appendix 2* for specific data regarding each area; see also the adjacent page for the location of the areas designated below.

Area 1:	Route 16 Entry
Area 2:	Stone-Davis Hall Hill
Area 3:	"New Dormitory" Area
Area 4:	Fiske Gate Area
Area 5:	Science Center Area
Area 6:	Clapp Library, Schneider Center, and Chapel Area (Rhododendron Dell)
Area 7:	Academic Quad
Area 8:	Tower Court Hill
Area 9:	Hazard Quad
Area 10:	Sports Center and Distribution Center
Area 11:	Wellesley College Residential Properties

Inventory and Recommendations

This summary of the issues related to ADA accessibility on the Wellesley College campus is divided into three categories. The first category evaluates campus accessibility as a whole, that is, "Can I get from area to area?" The second category evaluates movement within the individual areas, or how people traverse from building to landscape to building. The third category addresses the relationship between building entrances and parking/drop-off areas.

Access throughout Campus

The existing topography limits pedestrian accessibility throughout the Wellesley College campus. The required solutions can be divided into major improvements and minor improvements.

Major improvements:
These improvements are needed to create accessibility from area to area through the Wellesley College campus, and include major regrading of paths, the possible installment of structural elements into hillsides (ramps and walls), and/or the realignment of existing paths. For example, to create access in compliance with ADA to Stone-Davis Hall from the chapel, a ramp or a series of paths would need to be created at an appropriate path gradient. These changes will be substantial in both their site impact and their construction cost.

Minor improvements:
The campus has several existing paths that, with minor changes, would create connections on the campus in compliance with ADA. These minor changes include curb cuts, repair of existing path surfaces, and minor regrading. One example of this type of minor improvement is the path adjacent to College Road from the Washington Street entrance to Munger Meadow. By reconfiguring sections of the path and adding curb cuts, the path would meet ADA guidelines. These changes are less expensive and less intrusive on the existing landscape as compared to the major improvements listed above.

Access within Individual Areas

- Creating accessibility between buildings in each area should be given priority before undertaking the linkage to other areas. This would assure that people can access everything in that area unassisted by others. However, this does not diminish the need for a long-term campuswide accessibility plan, but rather stresses it by reconfiguring weak connections that will create a larger network as areas are joined.
A good example of the breakdown of accessibility between areas is at Academic Quadrangle. Pendleton Hall and Founders Hall both contribute to the vertical definition of the quadrangle, but they are not accessible to one another or to the Academic Quadrangle. Creating access to the Academic Quadrangle from each building could make the quadrangle serve as a link. These links would allow people to enjoy the campus landscape rather than relying on routes along roads and service areas.
- Some areas of the campus, although accessible, offer circuitous and poorly marked routes. Better signage and more direct pedestrian routes are necessary. To arrive at Green Hall, for example, there is no wheelchair-accessible entrance from the ground level. Better signage to direct handicapped people to the second-level parking court, or through Founders Hall would create a clearer path to Green Hall.

Individual Building Access

- Just over half of the buildings (56%) have ADA-accessible entrances. However, several of these buildings are inaccessible between the parking / drop-off area and the building entrance. These need modifications (mainly the addition of curb cuts recommended throughout the campus) to make the accessible building entrances also accessible from the site. Without these connections, the so-called accessible building entrances are unusable. For example, at Tower Court curb cuts are needed to allow access

between the vehicular drop-off area and the building.

The buildings that are not accessible (44%) need modifications including ramps, which will allow permanent wheelchair access to individual buildings and be significant in construction cost. Buildings that currently use temporary structures for accessibility need to consider permanent solutions that can be sensitively integrated into the landscape and architectural character. One example is Severance Hall, which does not have permanent wheelchair access; instead temporary wooden ramps allow access, but they are unsafe and compromise the character of the architecture.

- Some larger, connected building complexes rely on a single wheelchair-accessible entrance for the entire complex. For example, Sage Hall has no accessible entrance, but uses the entrance from the Science Center. This is confusing and indirect for a person who requires a wheelchair-accessible entrance to Sage Hall.

- Almost half of all ADA-accessible buildings offer only secondary or service entrances for wheelchair access. The accessible entrance into the Science Center, for example, is located at a secondary entrance adjacent to the service entry, located on a remote side of the building. These types of entrances may call into question how the college views disabled individuals. Wherever possible, accessibility should occur at the primary entrance. If this is not possible given interior limitations or considerations of architectural integrity, then the secondary entrance should be designed to feel like a significant building entry. The entrance to the dormitories in the Hazard Quad is a good example of how secondary entrances can work well with the architecture and also create a welcoming entry.

Conclusion

The characteristics that make Wellesley College such an exciting place to visit, work, and learn, especially its topographic diversity, are the same characteristics that make it difficult to meet current ADA codes. However, coherent and simultaneous consideration of the three categories listed above would enhance connections throughout the campus while eliminating piecemeal additions. Such planning would create integrated solutions and improve movement through the campus. While individual buildings and their surroundings can be made to comply with ADA guidelines, it may never be possible to contiguously connect these areas into a cohesive whole which meets all of these guidelines. However, with careful planning and creative solutions many critical areas can be linked, linkages within areas can be improved, and all buildings can be entered from an ADA-compliant vehicular drop-off point, thereby complying with the law and facilitating the movement of disabled individuals around campus.

As an initial step toward identifying areas for further study, the following is an outline of possible accessible connections to be considered. The numbers are keyed to the attached plan, *Americans with Disabilities Act: Evaluation of Wellesley College Compliance.*

1. A ramp connection to The Hazard Quadrangle could be made across the south-facing slope in front of the quadrangle, with a possible connection to the north side of Munger Meadow.

2. This is a critical break in the accessible network of paths on the campus, because this link connects College Road with the Jewett Road ramp and access to Norumbega Hill. A connection at this point would require large-scale regrading of this area, but this redesign could be incorporated as part of a reconsideration of the Davis Museum service area.

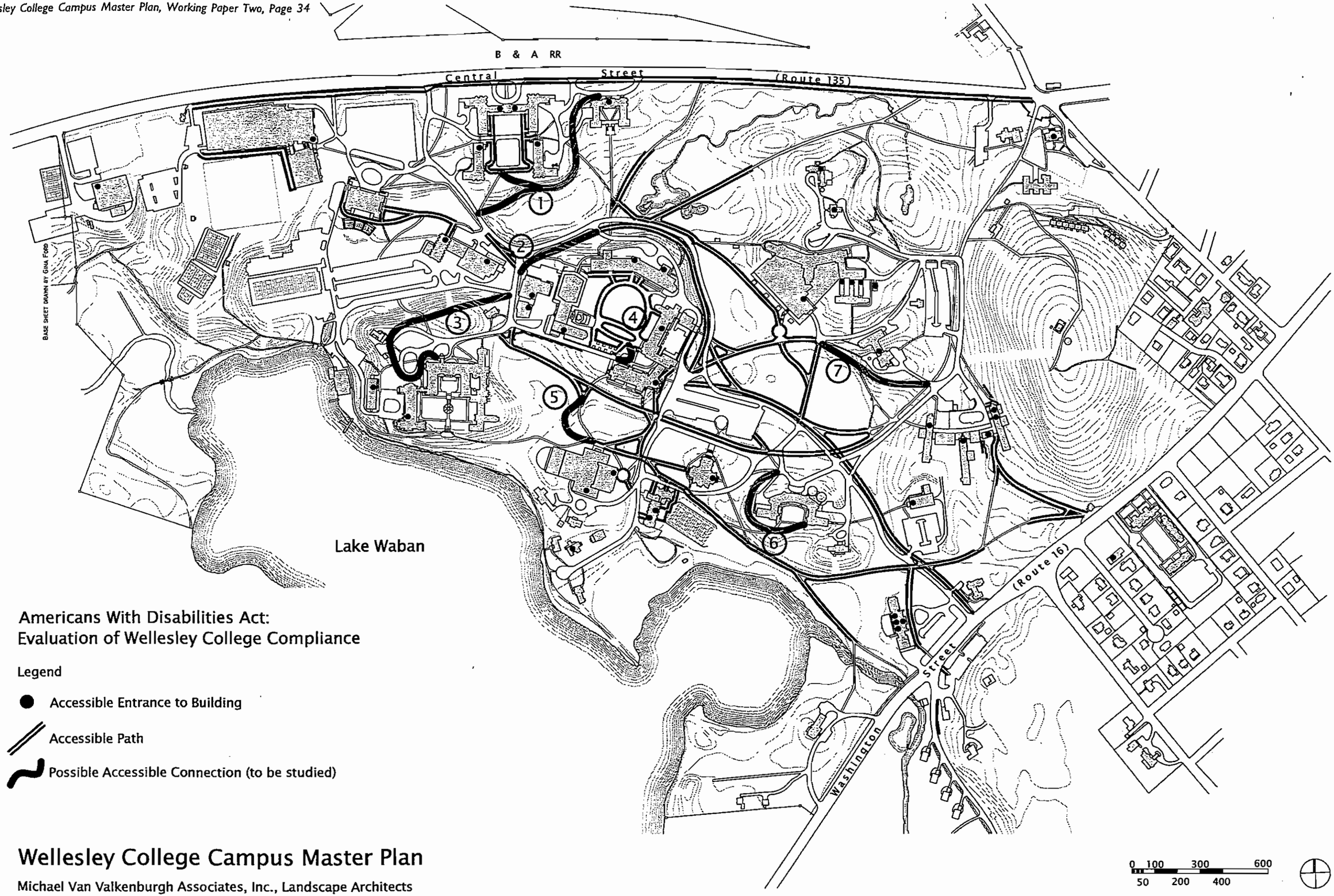
3. It may be possible to bend a connection between Tower Court and the Davis Museum along the north side of the hill.

4. An accessible connection needs to be made between the end of the Jewett Road ramp and the Academic Quadrangle.

5. This path through the Rhododendron Dell could be realigned to be within acceptable slope limits.

6. A connection to Stone-Davis Hall is difficult. It may be possible to spiral around from the bottom of the main drive to the south-facing courtyard.

7. This connection from Freeman is another critical missing linkage, which could possibly also connect the Gray Lot area to the center of campus.



Americans With Disabilities Act: Evaluation of Wellesley College Compliance

Legend

- Accessible Entrance to Building
- Accessible Path
- Possible Accessible Connection (to be studied)

Wellesley College Campus Master Plan

Michael Van Valkenburgh Associates, Inc., Landscape Architects

Parking Inventory: Evaluation of Wellesley College Campus Appendix Number One

Wellesley College Campus Master Plan
Working Paper Number Two

Michael Van Valkenburgh Associates, Inc.
Landscape Architects
24 November 1997
Revised August 1998

Introduction:

The following document is a survey of the parking areas at Wellesley College. The survey includes all parking areas designated for parking by the Campus Police, such as paved lots, unpaved lots, service areas, and parallel parking along campus roads. This survey does not include all parcels outside of the main campus core, unless otherwise noted.

Wellesley College Existing and Proposed Parking by Type and Lot

Lots		Faculty/Staff	Students	CE / Davis Students	Head of House	Maintenance/ Wellesley College Vehicles	DC Operations	Food Service	Handicap	Visitors	Totals
Alumnae Hall East	exist.			34							34
Alumnae Lot	exist.	100	100						1	30	231
Christmas Tree Alley	exist.			16							16
College Club Drop-Off	exist.									14	14
EXISTING LOTS TO BE REMOVED											
Front of Chapel	exist.	20							2		22
Gray Lot	exist.	83								9	92
Jewett Ramp	exist.	16							1	5	22
Pendleton Ramp	exist.	24									24
Phys. Plant/Police Lot	exist.	12	4						1	3	
Road to Science Ctr.	exist.	25							2		27
Sage Lot	exist.	53	3						1		57
Service Lot	exist.	123	100			75					298
EXISTING LOTS TO REMAIN											
Bates/McAfee Lot	exist.	5			4				3		12
	prop.	**5**			**4**			**1**	**3**		13
	exist.	16	1						3	41	61
College Club Lot	**prop.**	**16**	**1**					**1**	**3**	**27**	48
	exist.									51	51
College Club Overflow Lot	**prop.**									**51**	51
	exist.				6						6
Dorm Quad	**prop.**										0
	exist.		49		1				1		51
Dower Lot	**prop.**				**1**				**1**		2
	exist.	12	3						6		21
Green Hall Lot	**prop.**	**12**	**3**						**6**		21
	exist.	41									41
Infirmary/Simpson Lot	**prop.**	**41**	**2**								43
	exist.		3						1		4
Stone-Davis Lot	**prop.**		**2**					**1**	**1**		4
	exist.				5				1		6
Tower Court	**prop.**				**5**			**1**	**1**		7
EXISTING LOTS TO BE EXPANDED											
	exist.		100				25			72	197
DC Lots	**prop.**		**125**			**75**	**25**	**25**			250
	exist.	140							2	14	156
Founder's Lot	**prop.**	**97**	**28**							**33**	158
PROPSED STRUCTURES											
Alumnae Valley Parking Structure	**prop.**	**213**		**30**	**12**			**20**	**13**	**42**	330
Athletic Center Parking Structure	**prop.**	**70**	**89**					**11**		**30**	200
Water Tower Hill Parking Structure	**prop.**	**179**	**150**	**66**				**15**	**17**	**41**	468
Totals	exist.	650	363	0	16	75	25	0	23	225	1357
	prop.	**633**	**400**	**96**	**22**	**75**	**25**	**75**	**45**	**224**	**1595**

Inventory of Parking and Circulation

Area 1- Route 16 Entry:[1]

Parking Lots/ Areas	Total Parking Spaces	Type of Parking[2]	Parallel or Perpendicular Parking Spaces[2]	Surface Condition	Notes:
Wellesley College Club Parking Lot (Adjacent to Wellesley College Club)	44	3 Handicap Parking Spaces 41 Undesignated Parking Spaces	33 Perpendicular Parking Spaces 11 Parallel Parking Spaces	Asphalt (Good condition)	Circulation is congested at the turnaround. Removing the parallel parking and rearranging the handicap parking will create better circulation and a pronounced arrival (drop-off area).
Wellesley College Club Parking Lot (East of Route 16)	51	51 Undesignated Parking Spaces	51 Perpendicular Parking Spaces	Asphalt (Good condition)	Parking lot is secluded, but allows access to Wellesley College Club. The path that runs from the lot to the College Club needs to be regraded for handicap access.
Wellesley College Club Service Area	17	1 Reserved Parking Space 16 Wellesley College Club Employee Parking Spaces (4 Spaces are double in length for truck parking)	17 Perpendicular Parking Spaces	Asphalt	
Dower Parking Lot	51	1 Handicap Parking Space 1 Head of House Parking 49 Student Lottery Parking Spaces	51 Perpendicular Parking Spaces	Asphalt (Fair condition)	Parking spaces are distributed by lottery selection to senior students that reside on the eastern part of campus.

Total Parking Spaces within Area = 165

Area 2- Stone-Davis-Hall Hill:

Parking Lots/ Areas	Total Parking Spaces	Type of Parking	Parallel or Perpendicular Parking Spaces	Surface Condition	Notes:
Stone-Davis Hall Drop-off	1	1 Handicap Parking Space	1 Perpendicular	Asphalt (Good condition)	
Stone-Davis Hall Service Area	2	1 Food Service Parking Space 1 Campus Vehicle Parking Space	2 Perpendicular	Asphalt (Fair condition)	On several visits there has been illegal parking in this area. Parking occurs in grass and on sidewalks.
Oakwoods Cul-de-sac	1	1 Campus Vehicle Parking Space	1 Perpendicular	Asphalt (Good condition)	

Total Parking Spaces within Area = 4

1 *Areas designated correspond to plan, "Inventory of Parking and Circulotion" (18 November 1997)", attached.*

2 *The following terms and phrases are defined to help the reader accurately assess and understand the conditions within this document.*

Undesignated *No signage to verify sticker requirements.*
Perpendicular *Parking Space that is accessed by pulling or backing in to a space at ≈90 degrees to the turning aisle.*
Parallel *Parking space that is accessed by parallel parking*

Area 3- New Dormitory and Science Center Area:

Parking Lots/ Areas	Total Parking Spaces	Type of Parking	Parallel or Perpendicular Parking Spaces	Surface Condition	Notes:
Freeman Service Area	5	1 Handicap Parking Space 1 Head of House Parking Space 1 Food Service Parking Space 2 Reserved Parking Spaces	4 Perpendicular 1 Parallel	Asphalt (poor condition)	On several visits there were automobiles that were illegally parked, and blocking service vehicles, access to reserved parking spaces, and pedestrian movement.
Bates/ McAfee Parking/ Drop-off	8	2 Handicap Parking Space 3 Head of House Parking Space 3 Not Designated Parking Spaces	8 Perpendicular Parking Spaces	Asphalt	
Gray Parking Lot	92	9 Visitor Parking Spaces 3 Reserved Parking Spaces 80 "I", "G" and "SC" Decal Parking Spaces	92 Perpendicular Parking Spaces	Asphalt (fair condition)	East bay of Parking lot is also used for circulation between Sage Parking Area and College Avenue. Parking for Day Care Center.
Christmas Tree Alley/CE (Road)	16	16 Commuter Student Parking Spaces	14 Parallel Parking Spaces	Asphalt (fair condition)	Parallel parking prohibits two way access for automobiles.
Science Center Service Area	1	1 Handicap Parking Space	1 Perpendicular Parking Space	Asphalt	Handicap entrance is designated, for Science Center and Sage Hall, service area.
Sage	44	1 Handicap Parking Space 1 Reserved Parking Spaces 42 Undesignated Parking Spaces	36 Perpendicular Parking Spaces 10 Parallel Parking Spaces	Half asphalt and half lawn and gravel (poor condition)	Parking spaces are not defined. A few parking spaces are too close to the base of trees. Area does not have designation of who is to park there. Circulation problems include: Entering and exiting through Gray parking lot and automobile circulation within the area.
Road to Science Center Service	22	"SC" Decal Parking Spaces	18 Parallel Parking Spaces 4 Parallel Parking Spaces	Half asphalt and half lawn	Parking spaces are not defined. A few parking spaces are too close to the base of trees.
Greenhouse Parking	4	1 Handicap 3 Undesignated Parking Spaces	3 Perpendicular Parking Spaces 1 Parallel Parking Space	Asphalt	Handicap parking space blocks service entry for Greenhouse. Existing parking space prohibits the use of the curb cut.
Sage Hall Service Area	13	13 Undesignated Parking Spaces	11 Perpendicular Parking Spaces 2 Parallel Parking Spaces	Asphalt	Area is not accessible for trucks with the existing parking. Circulation is tight because of amount of spaces within the area.
Whitin House Parking Lot/ Service Area	Undesignated	Undesignated	Undesignated	Asphalt	Drive in allows access to the garage door for service and parking.
Infirmary Parking	21	1 Reserved Parking Space 20 "I" Decal Parking Spaces	19 Perpendicular Parking Spaces 2 Parallel Parking Spaces	Asphalt	
Infirmary/Simpson Area	22	1 Reserved Parking Space 21 "I" Decal Parking Spaces	22 Perpendicular Parking Spaces	Asphalt	

Total Parking Spaces within Area = 248

Area 4- Fiske Gate Area:

Parking Lots/ Areas	Total Parking Spaces	Type of Parking	Parallel or Perpendicular Parking Spaces	Surface Condition	Notes:
Fiske Parking Lot	28	28 Undesignated Parking Spaces	28 Perpendicular Parking Spaces	Asphalt	Faculty/Staff Parking
Page School Parking Lot	22	1 Reserved Parking Space 21 Undesignated Parking Spaces	22 Perpendicular Parking Spaces	Asphalt	
Weston Terrace-Faculty Housing	13	13 Undesignated Spaces		Asphalt	

Total Parking Spaces within Area = 63

Area 5- Academic Quad

Parking Lots/ Areas	Total Parking Spaces	Type of Parking	Parallel or Perpendicular Parking Spaces	Surface Condition	Notes:
Founder's Hall Parking Lot	170	2 Handicap Parking Spaces 4 Visitor Parking Spaces 150 Parking spaces by key access	150 Perpendicular Parking Spaces 6 Parallel Parking Spaces	Asphalt	Parking for faculty and staff only.
Green Hall Parking Court	18	4 Handicap Parking Spaces 1 Reserved Parking Space 3 15 Minute Parking Spaces 10 "X" and "GS" Decal Parking Spaces	18 Perpendicular Parking Spaces	Asphalt	
Pendleton Hill Road	29	3 Visitor 2 30 Minutes 24 "P" Decal Parking Spaces	29 Parallel Parking Spaces	Asphalt	Parallel parking is a conflict with views and pedestrian traffic. "P" decal parking spaces are for Pendleton Hall faculty and staff parking only.
Green Hall Service Area	3	2 Handicap Parking Space 1 Reserved Parking Space	3 Perpendicular Parking Spaces	Asphalt	Parking spaces sit in the middle of a main pedestrian circulation path during class changes.
Pendleton Hall Service Areas	15	2 Handicap Parking Spaces 13 "P" Decal Parking Spaces	15 Perpendicular Parking Spaces	Asphalt	"P" decal parking spaces are for Pendleton Hall faculty and staff parking only.
Jewett Art Center/ Davis Museum Service Area	22	2 Handicap Parking Spaces 3 Davis Museum Parking Spaces 17 "J" Decal Parking Spaces	9 Perpendicular Parking Spaces	Asphalt	"J" decal parking spaces are for Jewett faculty and staff parking only.
Jewett Hill Road	22	1 Handicap Parking Space 1 Reserved Parking Space 5 Admissions Parking Spaces 15 "J" Parking Spaces	6 Perpendicular Parking Spaces 16 Parallel Parking Spaces	Asphalt	Parallel parking is a conflict with views and pedestrian traffic. "J" decal parking spaces are for Jewett faculty and staff parking only. Parallel parking along this road causes major pedestrian/ automobile conflicts, especially during class changes.

Total Parking Spaces within Area = 279

Area 6- Physical Plant and Service Parking lot:

Parking Lots/ Areas	Total Parking Spaces	Type of Parking	Parallel or Perpendicular Parking Spaces	Surface Condition	Notes:
Physical Plant/ Police Parking Lot	20	1 Handicap Parking Spaces 3 Visitor Parking Spaces 4 Police Parking Spaces 12 Physical Plant Staff Parking Spaces	15 Perpendicular Parking Spaces 5 Parallel Parking Spaces	Asphalt (Good Condition)	Circulation is tight through this area because of parking lot layout, parallel parking, and illegal parking.
Shakespeare House Parking Lot	2	2 Shakespeare House Parking Spaces	2 Perpendicular Parking Spaces	Asphalt	
Service Parking Lot	298	10 Campus Van Parking Spaces 3 Service Parking Spaces 13 Reserved Parking Spaces 272 Davis, Jewett, Lake House, and Decals "S" and "A" Parking Spaces	255 Perpendicular Parking Spaces 43 Parallel Parking Spaces	Asphalt	This lot is for junior and senior students, commuting students, Davis Museum visitors, campus vehicles, service vehicles, Jewett, Davis Museum, and Alumnae Hall faculty and staff.

Total Parking Spaces within Area = 320

Area 7- Chapel, Clapp Library, and Schneider Student Center Area:

Parking Lots/ Areas	Total Parking Spaces	Type of Parking	Parallel or Perpendicular Parking Spaces	Surface Condition	Notes:
Chapel Parking on Perimeter Roads	22	2 Handicap Parking Spaces 20 "LS" Decal Parking Spaces	4 Perpendicular Parking Spaces 18 Parallel Parking Spaces	Asphalt (Good condition)	Parking at west of chapel cuts off visual connection to Rhododendron Dell and Severance Green.
Schneider Center Parking Lot	13	13 Schneider Staff Parking Spaces	13 Perpendicular Parking Spaces	Asphalt	
Tupelo Lane Parking Area	11	11 Undesignated Parking Spaces	11 Parallel Parking Spaces	Asphalt	
Acorn Parking Lot	1	1 Undesignated Parking Space	1 Perpendicular Parking Space	Asphalt (Poor condition)	Area needs to be repaved.
Clapp Library Service Area	12	12 "LS" Decal Parking Spaces	6 Perpendicular Parking Spaces 6 Parallel Parking Spaces	Asphalt	Circulation is impeded because of illegal parking.
Hamarbee Parking Area	1	1 Hamarbee Staff Parking Space	1 Perpendicular Parking Space	Gravel	

Total Parking Spaces within Area = 60

Area 8- Tower Court Hill

Parking Lots/ Areas	Total Parking Spaces	Type of Parking	Parallel or Perpendicular Parking Spaces	Surface Condition	Notes:
Tower Court Parking Area(s)	6	1 Handicap Parking Space 5 Head of House Parking Spaces	6 Parallel Parking Spaces	Asphalt	Circulation is impeded because of illegal parking.
Claflin/ Lake House Service Area	13	3 Handicap Parking Space 2 Head of House Parking Spaces 6 Staff Parking Spaces 2 Food Service Parking Space	13 Perpendicular Parking Spaces	Asphalt	On several visits there was illegal parking by Wellesly College vehicles within and along the planting island.
Waban Parking Lot	12	12 Undesignated Parking Spaces (for public use)	12 Perpendicular Parking Spaces	Gravel (?)	Public parking required for access to the Lake.
Cervantes Parking Area	3	1 Handicap Parking Space 2 Cervantes Parking Spaces	3 Perpendicular Parking Spaces	Asphalt (Poor)	Area is not designated (with painted lines) and needs guardrail. Student parking.

Total Parking Spaces within Area = 34

Area 9- Alumnae Hall, Sports Center, and Hazard Quad Area:

Parking Lots/ Areas	Total Parking Spaces	Type of Parking	Parallel or Perpendicular Parking Spaces	Surface Condition	Notes:
Munger Parking/ Drop-off Area	7	2 Handicap Parking Space 1 Head of House Parking Space 4 Undesignated Parking Spaces	7 Parallel Parking Spaces	Asphalt	
Cazenove and Pomeroy Parking/ Drop-off Area	6	1 Handicap Parking Space 2 Head of House Parking Space 2 Reserved Parking Spaces 1 Undesignated Parking Space	6 Parallel Parking Spaces	Asphalt	
Shafer and Beebe Parking/ Drop-off Area	4	2 Handicap Parking Spaces 2 Head of House Parking Space	1 Parallel Parking Spaces	Asphalt	
Beebe Hall Service Area	3	3 Food Service and College Use Parking Spaces	3 Perpendicular Parking Spaces		On several visits illegally parked automobiles were blocking service vehicles, access to reserved parking spaces, and pedestrian movement.
Shafer Hall Service Area	0				
Munger Service Area	0				
Cazenove Hall Service Area	9	9 Undesignated Parking Spaces	8 Perpendicular Parking Spaces 1 Parallel Parking Space		On several visits illegally parked automobiles were blocking service vehicles, access to reserved parking spaces, and pedestrian movement.
Pomeroy Hall Service Area	6	6 Reserved for Food Service and Campus Vehicles	6 Perpendicular Parking Spaces		On several visits there were automobiles that were illegally parked, and blocking service vehicles, access to reserved parking spaces, and pedestrian movement.
Alumnae Parking Lot	213	213 Undesignated Parking Spaces	213 Perpendicular Parking Spaces	Asphalt	On several visits, parking spaces were available. This lot is for students who are juniors or seniors and commuting students.
Continuing Education Parking Lot	50	"CE" Decal Parking Spaces	50 Perpendicular Parking Spaces	Lawn	Continuing Education Students and Davis Scholars.
Alumnae Hall Drop-off Area (North side)	7	7 Undesignated Parking Spaces	7 Parallel Parking Spaces	Asphalt	Illegal and legal parallel parking diminishes the view to Alumnae Hall. Parking could happen in Alumnae Parking Lot
Alumnae Hall Service Area	1	1 Handicap Parking Space (Accessible to the Ruth Nagel Jones Theater)	1 Perpendicular Parking Space	Asphalt	
Sports Center Parking Lot- West	9	1 Handicap Parking Space 8 "SC" Decal Parking Spaces	9 Perpendicular Parking Spaces	Asphalt	

Total Parking Spaces within Area = 315

Area 10- Wellesley College Distribution Center Area:

Parking Lots/ Areas	Total Parking Spaces	Type of Parking	Parallel/ Perpendicular	Surface Condition	Notes:
D.C. Parking Lot #1	75	75 Undesignated Parking Spaces	70 Perpendicular Parking Spaces 5 Parallel Parking Spaces	Asphalt	This parking lot is for first year students with special needs and sophomore students.
D.C. Parking Lot #2	80	4 Handicap Parking Spaces 76 Undesignated Parking Spaces	80 Perpendicular Parking Spaces	Asphalt	This parking lot is for first year students with special needs and sophomore students.
D.C. Parking Lot #3	42	14 Reserved Parking Spaces 28 Undesignated Parking Spaces	38 Perpendicular Parking Spaces 4 Parallel Parking Spaces	Asphalt	This parking lot is for first year students with special needs and sophomore students. Reserved spaces are for Tennis Club members.

Total Parking Spaces within Area = 197

Area 11- Wellesley College Residential Parcels:

Parking Lots/ Areas	Total Parking Spaces	Type of Parking	Parallel/ Perpendicular	Surface Condition	Notes:
French House/ Carriage House Parking Lot	6	6 Not Designated Parking Spaces	4 Perpendicular Parking Spaces 2 Parallel Parking Spaces		Student parking.
Cedar Lodge Parking Lot	6	6 Reserved for Cedar Lodge Parking Spaces	6 Perpendicular Parking Spaces		Student parking.
Horton, Hallowell, and Shepard House Parking Areas	48	36 Not Designated Parking Spaces 12 Garage Parking Spaces	34 Perpendicular Parking Spaces 14 Parallel Parking Spaces		Faculty housing parking.
Ridgeway Parking Areas	15	15 Reserved for Ridgeway Residence Parking Spaces	15 Perpendicular Parking Spaces		

Total Parking Spaces within Area = 75

Total Parking Spaces = 1730

Notes: All parking spaces at Wellesley College require a parking sticker. The spaces that are considered illegal parking spaces have improper signage or painted lines. Most illegal parking occurs in service areas and turnarounds.

Americans with Disabilities Act: Evaluation of Wellesley College Campus Appendix Two

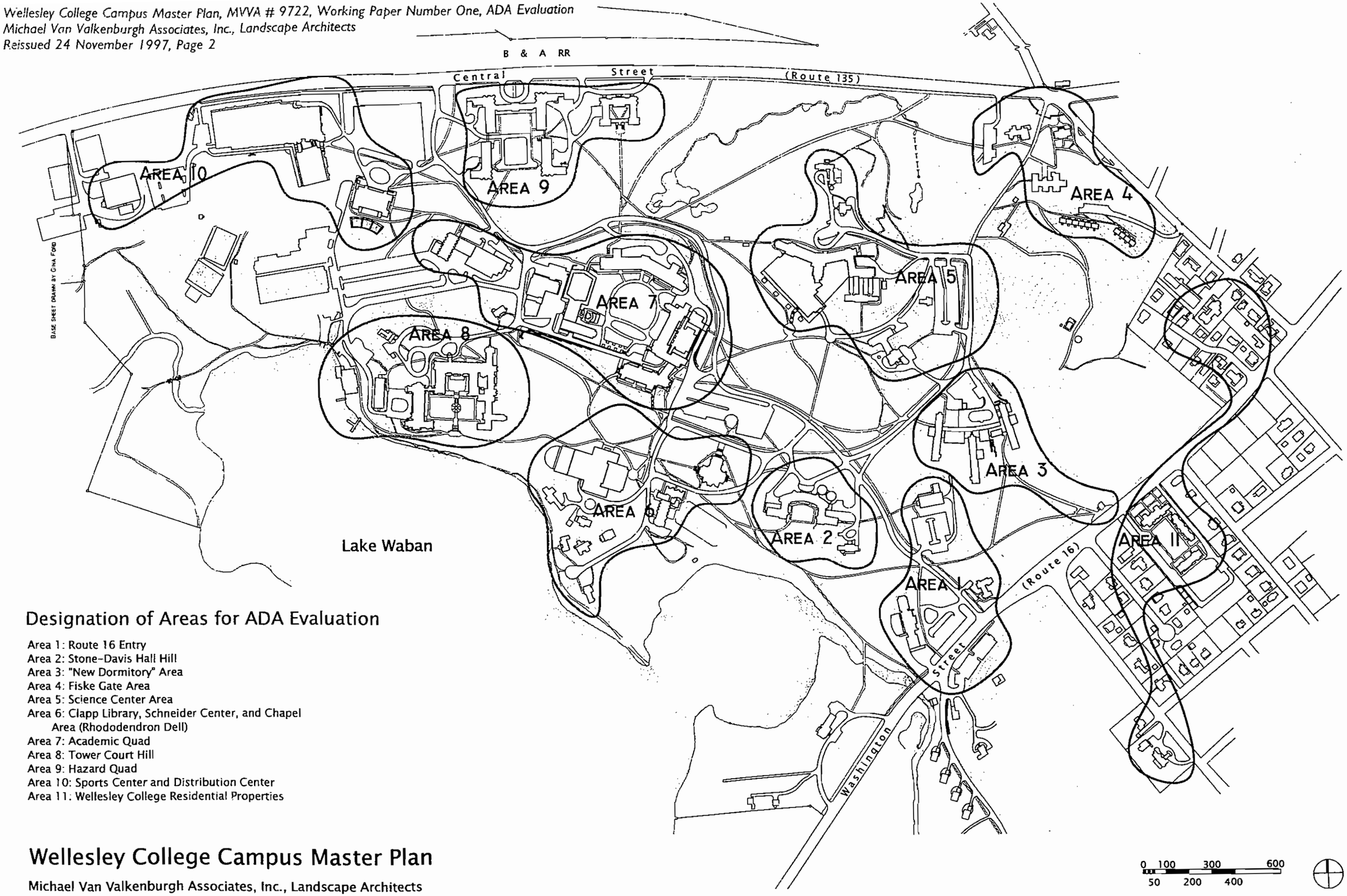
Wellesley College Campus Master Plan
Working Paper Number One

The following information was included in Working Paper Number One and is being included in Working Paper Number Two to help reference Pedestrian Circulation: ADA Compliance.

Michael Van Valkenburgh Associates, Inc.
Landscape Architects
17 October 1997
Resubmitted 24 November 1997

Introduction:

The following document is an initial survey of the Wellesley Campus to determine the compliance of the campus to the American Disabilities Act (ADA). Included in the survey are exterior walkways, parking areas, drop-off zones, and building entrances. The survey is divided into numbered areas that are keyed to the attached campus plan.



Designation of Areas for ADA Evaluation

Area 1: Route 16 Entry
Area 2: Stone-Davis Hall Hill
Area 3: "New Dormitory" Area
Area 4: Fiske Gate Area
Area 5: Science Center Area
Area 6: Clapp Library, Schneider Center, and Chapel Area (Rhododendron Dell)
Area 7: Academic Quad
Area 8: Tower Court Hill
Area 9: Hazard Quad
Area 10: Sports Center and Distribution Center
Area 11: Wellesley College Residential Properties

Wellesley College Campus Master Plan

Michael Van Valkenburgh Associates, Inc., Landscape Architects

Inventory of Exterior Conditions and Building Entries for ADA Access

Area 1*: Route 16 Entry

Overall Accessibility:
- All buildings within this area are accessible to each other if minor adjustments are made: curb cuts, entry alterations, and HCP spaces increased.
- Area 1 is currently accessible to Area 6 and parts of Area 7.
- Regrading along the College Road sidewalk can create access from Area 1 to parts of Area 10.

Individual Building Accessibility:

Building	Status of Building Entry **	Primary or Secondary Entrance**	Number of HCP*** Spaces	Parking	Drop-off Area	Distance from Parking/ Drop-off to Building	Accessibility from Drop-off, Parking Area, or Existing Pathways to Building Entrance.
Wellesley College Club	Accessible	Primary Entrance	3 (Not to Code) Need 5' aisle	Yes	Yes	80-120 feet	Need 5' painted aisle next to Handicap Parking (HCP).
Homestead	Not Accessible	Neither	0	No	Yes	30-70 feet	Slope is acceptable, but each entry has 3-4 risers and curb cuts are needed. Retaining wall opening for sidewalk is too narrow.
Dower House Orchard Apartments	Not Accessible	Neither	1 (Not to Code) Need 2 more HCP	Yes	Yes	90 feet	Slope is acceptable, but there is one riser at Primary entrance which makes the building not accessible.

Area 2: Stone-Davis Hall Hill

Overall Accessibility:
- No buildings are Handicap (HC) accessible to each other within area 2.
- Area 2 is not HC accessible to any other areas on Wellesley College.
- Primary arrival to HC parking/ drop-off is by automobile.
- One possible solution may be a connection along the south side of Stone-Davis-Hall.

Individual Building Accessibility:

Building	Status of Building Entry	Primary or Secondary Entrance	Number of HCP Spaces	Parking	Drop-off Area	Distance from Parking/ Drop-off to Building	Accessibility from Drop-off, Parking Area, or Existing Pathways to Building Entrance.
Stone-Davis Hall	Not Accessible	Neither	1 Space is not @ 2%, required slope	No	Yes	50 feet	Not accessible from surrounding pathways. Need curb ramp and the primary entrance has 3-4 risers and needs alterations to make accessible.
Oakwoods	Not Accessible	Neither	0	Yes	Yes	20 feet	Not accessible from surrounding pathways. Primary entry has 8 risers and needs alterations to be accessible.

** Areas designated correspond to plan, "ADA Inventory Areas (17 October 1997)", attached.*
*** The following terms and phrases are defined to help the reader accurately assess and understand the conditions within this document*

Accessible	*as defined by ADA requirements, for example at building entrances where the exterior elevation of a building entrance is flush with the interior elevation .*
Not Accessible	*in violotion of ADA requirements, for example at building entrances where the exterior elevation of a building entrance is not flush with the interior elevation (i.e. stoirs).*
Primary Entrance	*when the main entrance is at the front of a building.*
Secondary Entrance	*any entrance that is not the main entrance.*
******* HCP***	*Handicap Parking*

Area 3: "New Dormitory" Area

Overall Accessibility:
- Dormitory complex is not accessible to the East Lodge.
- East Lodge can be accessible with path adjustments and rear accessible exits from dormitory complex.
- This area is not accessible by ADA standards to any other areas on the Wellesley Campus.
- Primary arrival to HC parking/ drop-off is by automobile.

Individual Building Accessibility:

Building	Status of Building Entry	Primary or Secondary Entrance	Number of HCP Spaces	Parking	Drop-off Area	Distance from Parking/ Drop-off to Building	Accessibility from Drop-off, Parking Area, or Existing Pathways to Building Entrance.
Freeman Hall Bates/Freeman Dining Room	Accessible	Primary Entrance	1 Need to designate 5' aisle	Yes	Yes (Service Area)	150 feet	Need a curb ramp from drop-off and parking.
Bates Hall Hart Dining Room	Accessible	Primary Entrance	1	Yes	Yes	50 feet	
McAfee Hall Living Room	Accessible	Primary Entrance	Shared with above	Shared with above	Shared with above	180 feet	
Hemlock Apartments	Accessible	Primary Entrance (Two Entrances)	Shared with above	Shared with above	Shared with above	200- 240 feet	
East Lodge	Not Accessible	Neither	0	No	No		

Area 4: Fiske Gate Entrance

Overall Accessibility:
- No buildings in this area are accessible to each other.
- Buildings in this area are not accessible to other areas.

Individual Building Accessibility:

Building	Status of Building Entry	Primary or Secondary Entrance	Number of HCP Spaces	Parking	Drop-off Area	Distance from Parking/ Drop-off to Building	Accessibility from Drop-off, Parking Area, or Existing Pathways to Building Entrance.
Faculty Apartments	Not Accessible	Neither	0	Yes	Not designated		Slope is too steep to access from parking/ drop-off and pathways.
Fiske House	Not Accessible	Neither	0 (Not to code) Need to add 1 HCP Spaces	Yes	Not designated		Slope is acceptable, but need building entry alterations to enter from parking/ drop-off.
Page School	Accessible	Secondary Entrance	0 (Not to code) Need to add 1 HCP Spaces	Yes	Yes	40 feet	Building is now accessible by drop-off. One of the surrounding playgrounds are accessible.
Day Care Center	Not Accessible	Neither	0	No	No		Slope is too steep to access from path.

Area 5: Science Center Area

Overall Accessibility:
- All buildings in this area are not accessible to each other. More accessible entries to buildings and regrading of pathways are necessary to create full accessibility within this area.
- Area is not accessible to any other areas on the Wellesley Campus.
- Primary arrival to HC parking/ drop-off is by automobile.

Individual Building Accessibility:

Building	Status of Building Entry	Primary or Secondary Entrance	Number of HCP Spaces	Parking	Drop-off Area	Distance from Parking/ Drop-off to Building	Accessibility from Drop-off, Parking Area, or Existing Pathways to Building Entrance.
Sage Hall	Accessible through Science Center only	Secondary Entrance	One at Main Entry to Sage Hall + 1 Shared with Science Center	Yes	Yes, with the Science Center	Must go through the Science Center	Not accessible from existing pathways. Not accessible from Sage Hall Handicap Parking and Drop-off.
Whitin Observatory	Accessible	Primary Entrance	0	Yes	Yes	20 feet	Not fully accessible from existing pathways.
Whitin House	Accessible	Secondary Entrance	0	Yes	Yes	20 feet	Not fully accessible from existing pathways.
Science Center	Accessible	Secondary Entrance (Service Area)	1	No	Yes	100 feet	Not fully accessible from existing pathways.
Green House	Accessible	Primary Entrance	1	Yes	Yes	100 feet	Not fully accessible from existing pathways.
Gray	Not Accessible	Neither	0 (Not to code) Need one HCP for Gray	Yes	Yes	10 feet	Not accessible from existing pathways.
Infirmary	Accessible	Primary Entrance	0	Yes	Yes	10 feet	Not fully accessible from existing pathways.

Area 6: Clapp Library, Schneider Center, and Chapel Area

Overall Accessibility:
- All buildings are not accessible within this area. More accessible entries and regrading of pathways are necessary to create full accessibility within this area.
- Area 6 is accessible to Area 1 and parts of Area 7.
- Area 6 is accessible by pathways and automobile drop-off/ parking.

Individual Building Accessibility:

Building	Status of Building Entry	Primary or Secondary Entrance	Number of HCP Spaces	Parking	Drop-off Area	Distance from Parking/ Drop-off to Building	Accessibility from Drop-off, Parking Area, or Existing Pathways to Building Entrance.
Library	Not Accessible/ Accessible	Secondary Entrance	0	Yes	Yes	20 feet	The existing path does not meet code because of circulation. Building entry on the south side is accessible by automobile.
Schneider Center	Accessible	Secondary Entrance	0	Yes	Yes- Bus stop	210- 230 feet	Accessible from surrounding paths and automobile.
Chapel	Accessible	Secondary Entrance	0	No	Not designated		Existing path to accessible entry is too steep.
Continued Education	Accessible	Primary Entrance	0	No	Not designated		Temporary ramps create accessibility.
Acorn	Not Accessible	Neither	0 (Not to code) Need one HCP space.	Yes	Not designated	40 feet	Slope of existing path is acceptable, but 1 riser at entries.
Harambee	Not Accessible	Neither	0	No	Not designated		Slope of existing path is acceptable, but 6 risers at entries.
Z.A.	Not Accessible	Neither	0	No	Not designated		Slope of existing path is acceptable, but 3 risers at entries.
T.Z.E.	Not Accessible	Neither	0	No	Not designated		Slope is not acceptable and 1 riser at entry.
Slater	Not Accessible	Neither	0	No	Not designated		Slope of existing path is acceptable, but 1-2 risers at entries

Area 7: Academic Quad

Overall Accessibility:
- All buildings are not accessible to each other within Area 7.
- Academic Quad is not permanently accessible from any of its surrounding buildings. By creating HC access to Academic Quad it will create a link to its surrounding buildings.
- Parts of Area 7 are accessible to Areas 1 and 6.
- HC circulation in this area is confusing at entries and within the buildings.
- Most access to HC parking/ drop-off is dependent on the automobile.

Individual Building Accessibility:

Building	Status of Building Entry	Primary or Secondary Entrance	Number of HCP Spaces	Parking	Drop-off Area	Distance from Parking/ Drop-off to Building	Accessibility from Drop-off, Parking Area, or Existing Pathways to Building Entrance.
Physical Plant Offices	Accessible	Primary Entrance	0 (Not to code) Needs one HCP	Yes	Not Designated	60 feet	Slope is acceptable through parking lot.
Chilled Water Plant	Accessible through Physical Plant Offices	Primary Entrance	0 (Not to code) Needs one HCP	Yes	Not Designated	60 feet	Architecture does not allow accessibility through the whole plant.
Cogen Plant	Accessible	Primary Entrance	0 (Not to code) Needs one HCP	Yes	Yes	20 feet	Access through service entry.
Service Building Campus Police	Accessible	Primary Entrance	1	Yes	Not Designated	45 feet	Pathway connecting HCP and entry is too steep.
Shakespeare House	Not Accessible	Neither	0 (Not to code) Needs one HCP	Yes	No	40 feet	
Davis Museum/ Collins Cinema	Accessible	Primary Entrance	2	Yes	Yes (Service Area)	210 feet	
Jewett Art Center	Accessible	Secondary Entrance	2- Shared with Davis Museum	Yes	Not Designated	Parking- 450 feet Drop-off- 40 feet	Drop-off area needs to be designated.
Green Hall/ Administration Building	Accessible	Primary Entrance	4	Yes	Yes	150 feet	Grade at drop-off/ parking is acceptable, but surrounding paths/ roads are not accessible.
Founder's Hall	Accessible	Primary Entrance	2	Yes	Yes	200 feet	
Pendleton Hall	Accessible (3 entrances)	Secondary Entrances	2	Yes	Yes	20 feet	

Area 8: Tower Court Hill

Overall Accessibility:
- Buildings are not all accessible to each other within this area.
- All buildings, except the Boat and Lake House, can be accessible to each other if minor adjustments are made: curb cuts and entry alterations.
- Tower Court courtyard is temporarily accessible to the surrounding buildings. Making this area accessible will link all buildings surrounding the Tower Court courtyard.
- Area 8 is not accessible to any other Areas on the Wellesley Campus.
- Primary arrival to HC parking/ drop-off is by automobile.

Individual Building Accessibility:

Building	Status of Building Entry	Primary or Secondary Entrance	Number of HCP Spaces	Parking	Drop-off Area	Distance from Parking/ Drop-off to Building	Accessibility from Drop-off, Parking Area, or Existing Pathways to Building Entrance.
Tower Court	Accessible	Primary Entrance	1	Yes	Yes	110 feet	Slope is acceptable, but one riser at curb impedes accessibility.
Severance Hall	Not Accessible	Neither	Shared with above	Shared with above	Yes	270 feet	Primary entrance has wooden ramps, but the building is accessible through Tower Court.
Claflin Hall	Accessible	Secondary Entrance (Service entrance)	4	Yes	Yes	150 feet	
Lake House	Accessible	Primary Entrance	Shared with above	Shared with above	Yes	115 feet	
Boat House	Not Accessible	Neither	0 (Not to code) Needs one HCP	Yes	No		Area needs serious building alterations and ADA pathways installed from drop-off.
Cervantes House	Not Accessible	Neither	1	Shared with Tower Court	Yes	50 feet	Grade is acceptable from drop-off/ parking to entry, but there are 5 risers at building entry.

Area 9: Hazard Quad

Overall Accessibility:
- All buildings, with the exception of Munger, in this area are accessible to each other if minor adjustments are made: curb cuts and entry alterations.
- Area 9 can be connected with Area 10 by regrading existing pathways. This would also connect Area 9 with parts of Area 7.
- Most HC entrances are dependent on the automobile.

Individual Building Accessibility:

Building	Status of Building Entry	Primary or Secondary Entrance	Number of HCP Spaces	Parking	Drop-off Area	Distance from Parking/ Drop-off to Building	Accessibility from Drop-off, Parking Area, or Existing Pathways to Building Entrance.
Beebe Hall	Accessible	Secondary Entrance	0	Yes	yes	80 feet	
Shafer Hall	Accessible	Secondary Entrance	0	Shared with above	yes	80 feet	
Cazenove Hall	Accessible	Secondary Entrance	1	Yes	yes	60 feet	Front courtyard is not accessible.
Pomeroy Hall	Accessible	Secondary Entrance	Shared with above	Shared with above	yes	80 feet	Front courtyard is not accessible.
Munger Hall	Accessible	Primary Entrance	2	Yes	yes	30 feet	Rear courtyard is not accessible.

Area 10: Sports Center and Distribution Center

Overall Accessibility:
- All buildings are not accessible to each other. Curb cuts, entry alterations, HCP spaces increased, and pathway regrading would allow complete HC accessibility throughout this Area.
- Area 10 can be HC accessible to some parts of Area 7 and parts of Area 1 with some regrading of the existing pathways.
- Primary arrival to HC parking/ drop-off is by automobile.

Individual Building Accessibility:

Building	Status of Building Entry	Primary or Secondary Entrance	Number of HCP Spaces	Parking	Drop-off Area	Distance from Parking/ Drop-off to Building	Accessibility from Drop-off, Parking Area, or Existing Pathways to Building Entrance.
Keohane Sports Center	Accessible	Primary Entrance	4 (Not to Code) Need more HCP	Yes	Not Designated	Rear entrance-210 feet Front entrance- 150 feet	Slope from parking to Primary Entrance is too steep.
W.C.D.C.	Accessible	Primary Entrance	4	Yes	Not Designated	200 feet	
Alumnae Hall	Not Accessible		0	Yes	Yes	20 feet	Grades are acceptable, but risers at Primary Entries prohibit accessibility.
Ruth Nagel Jones Theater	Accessible	Secondary Entrance	1	Yes	Yes	130 feet	Accessible only by automobile.

Area 11: Wellesley College Residential Properties

Overall Accessibility:
- Buildings are not accessible within this area because of their spread out locations.
- Automobile is the only HC access to arrive at drop-off/ parking.

Individual Building Accessibility:

Building	Status of Building Entry	Primary or Secondary Entrance	Number of HCP Spaces	Parking	Drop-off Area	Distance from Parking/ Drop-off to Building	Accessibility from Drop-off, Parking Area, or Existing Pathways to Building Entrance.
French House	Accessible	Secondary Entrance	0	Yes	Yes	50 feet	Need HC parking designation.
Carriage House	Not accessible	Neither	0	Shared with above	Shared with above	60 feet	Secondary door is almost flush, needs adjustments and it will be accessible.
Cedar Lodge	Accessible	Primary Entrance	0	Yes	Yes	20 feet	Need HC parking designation.
Horton House	Not accessible	Neither	0	Yes	Yes	20-150 feet	All buildings have risers at entries.
Hallowell House	Not accessible	Neither	0	Shared with above	Shared with above		All buildings have risers at entries.
Shepard House	Not accessible	Neither	0	Shared with above	Shared with above		All buildings have risers at entries.
Ridgeway	Not accessible	Neither	0	Yes	No	40-70 feet	Slope is not acceptable for HC access.

Wellesley College 1998 Landscape Master Plan

Working Paper Two A:
Landscape Forms and Spaces as Records of College History

ON THE GROUNDS.

Written and Researched by Elizabeth Meyer

Michael Van Valkenburgh Associates, Inc., Landscape Architects
21 June 1998

Landscape Forms and Spaces as Records of College History

Campus as the Physical Embodiment of College's Academic Mission and Collective Memory

June 21, 1998

What is the role of history in the preparation of a landscape master plan?

Histories of institutions are recorded and remembered in several ways. They are recounted orally and passed on generation to generation. They are chronicled in print, reproduced, and distributed to insiders and interested outsiders. They are enacted through rituals and ceremonies shared by members of the institutional community. And, they are sometimes embodied in the ways the members of the institution decided to settle, and build on, the land.

Campuses, and especially American college campuses, afford planners and designers unparalleled opportunities to assist a client--the cross-generational community of faculty, students, staff, trustees, and alumnae--in the last form of history writing. Campuses are characterized by their landscape structure and form. American campuses adapted the monastic-based quadrangle type from Europe to New World circumstances. The North American ideology of landscape, such a key factor in the development of our cities, rural cemeteries, and suburbs,[1] also influenced the evolution of the campus. In the site plans of our campuses, we can often read the history of each institution, its periods of growth, its moments of pedagogical change, its responses to shifts in society, and its attempts to reconcile new technologies such as automobiles and mowing equipment. The site plan also offers a window into the particular college's relationships to the land, from the philosophical and symbolic to the pedagogical and functional. Given the short period of time that a student lives and works on a campus, an alumna's connection to an institution is strongly attached to the appearance of the campus landscape during her four years there. Thus, changes in, and on, the land engender strong reactions, pro and con, depending on whether or not alumnae sense those changes are intentional and in the spirit of the institutions on-going traditions, or ad hoc, unintentional and the result of a myriad of separate decisions and processes.

The campus typology plays a unique role in American cultural history as a register of relationships between a community's social structure and the land. Given the degree to which a campus is shaped by such lofty ideas and master plans as well as by a myriad of day to day maintenance and budget decisions, it is imperative that those two agents of change are untangled before asking a designer or planner for new ideas. Through a historical lens, one can uncover the intentions of earlier key figures (administrators, faculty, alumnae, trustees, and consultants), and the means by which those intentions were encoded in the building and landscape plans for the campus. One can also discover when and where those intentions were changed, forgotten, rejected, or re-interpreted. One can ascertain which changes in the land are significant, and which are incidental. One can then employ this knowledge in the process of assigning value to parts and places within the existing campus. This process of research and interpretation permits a larger group of the college community to understand the landscape as a palimpsest of the campus' history, and to value it as much more than a pretty amenity or an exploitable resource. This process assists an academic institution in building on its traditions, and in doing so in a way that is not facile and merely aesthetic, but guided by a knowledge of the patterns and principles upon which earlier changes were made.

Wellesley College's significance in the history of American colleges is well known.[2] In addition to playing a major role in defining women's education in the nineteenth century, Wellesley did so with the primary involvement of women in administrative and teaching roles from its earliest days. Furthermore, the College was founded on a set of principles that required a certain kind of landscape, and relationship to the land, to fulfill its social and pedagogical aims. Its founders built on a site of acknowledged beauty representative of the regional glaciated landscape that was quickly disappearing because of development pressures.[3] The college has sought the professional advice of respected architects and landscape architects who are historically significant in their own right. Faculty, administration, and staff have enriched and modified those designers' plans in their day to day interactions with the campus. Alumnae, and especially members of the trustees, have advised the College on design issues providing continuity, and internal criticism when necessary, during periods of administrative change or institutional crisis. For all these reasons, the Wellesley College campus is a landscape richly layered and densely woven. Its stories and histories define the canvas--already marked and figured--upon which future design projects will be projected.

Methodology for integrating landscape history into a contemporary design process

How does one begin to decipher the stories embedded in the marked and figured canvas we know as a college campus landscape? Since most campuses have developed by accretion, there is generally no one period of significance to "restore." Rather, there are specific periods of significance during which planning, design, and construction of notable historic character occurs. The physical appearance of the campus during each period of significance--its landforms, its building clusters, its drives and paths, its meadows, quads, groves, and glades, its vistas and prospects--can be discerned in the many marks made in the historic landscape over time. Through this lens, a contemporary landscape can be decoded as a series of historic layers, some thicker and richer than others, some partially erased, others totally obscured. The challenge for a designer and her client who are concerned with the campus as a "historic designed landscape"[4] is to discern whether or not the significant layers are intact. In other words, are those historic layers still legible in the contemporary landscape? If so, the campus has integrity and value as a historic artifact.

In order to ascertain the significance of the Wellesley College campus, we have reviewed: general histories of the College, historical accounts of the landscape in letters, reports, and journals; writings and drawings by the planners and designers; photographs and prints of the campus; treatises and other writings on designed landscapes of the late nineteenth and early twentieth centuries; and writings on the association of women and nature in the nineteenth century. Our review has been guided, in no small way, by both the primary research undertaken by Gretchen Schuyler

and Arleyn Levee in 1989 and the history of the campus' evolution written by Harriet B. Creighton in 1975. Our review has been enriched by the collective knowledge and assistance of Wellesley College archivists Wilma Slaight and Jean Berry in Clapp Library. Their efforts have created a remarkable collection of drawings and manuscripts that will well serve future students of Wellesley's remarkable social and design history. Finally, Professors Peter Fergusson and James O'Gorman introduced us to research undertaken by their students on the design history of the campus that proved invaluable to our understanding and interpretation of the campus landscape. While researching, reading and reviewing, we have transferred the spatial relationships and structuring principles described in various documents onto paper through diagrams and maps. This process of reading and drawing, and of comparing old photographs and drawings with the existing campus has enabled us to discern how much has changed, and how much has endured, of the significant Wellesley College landscape.

As the following sections on the history of the Wellesley College landscape will elucidate, the campus is significant in both the cultural history of American education as one of the first women's colleges, and the history of American landscape architecture given the stature of its planners and designers. Fortunately, the campus is relatively intact; at this time, the damage to the campus caused by ad hoc planning decisions, especially concerning maintenance, parking and service, is reversible. In the terminology of the U.S. Department of Interior, the federal agency which establishes design guidelines for working on significant historic landscapes and buildings, the next decade or so of planning and design might be best described as a period of "rehabilitation." The goal of rehabilitation is not to freeze or "pickle" a historic landscape, but to retain its character while accommodating contemporary need. Neither of the other three strategies for designing on an historic designed landscape--"stabilization," "preservation," nor "reconstruction"--are appropriate for a campus which is not a museum, but a living, growing, changing institution for learning and teaching.[5]

The federal guidelines discuss "rehabilitation" as a "treatment," one of four to be selected by a designer when they are asked to work on a historic landscape. For the purposes of this synopsis of the campus' history, and the implication of this for design, we share the goals of discerning and reinforcing the essential character and structure of the historic campus. But, we do not agree with the limited aspirations of the National Park Service methodologies. By labeling contemporary changes to the land as "treatments," one relegates the land and the designer to the roles of patient and physician accordingly, as if the land is ill and in need of repair. This study is guided by a more ambitious role for both the land and the designer. As our study of Wellesley's campus has revealed, the land is a text, a canvas, a record, and the designer a scribe who assists the college community in translating their stories and dreams into the forms and spaces of the campus landscape. To define the task today as "rehabilitation" is to limit current students, alumnae, trustees, faculty and staff to mere caretakers of some early community's vision. They are not. Wellesley College continues to be a vital educational community, and the current generation has the same ability to mcontribute to the beauty and integrity of the campus as did its predecessors.

Given these roles for the designers and clients, what are the tasks of historical analysis of the designed landscape? The narrative below attempts to do the following. It searches for clues and indications of the landscape elements and systems that are essential to the campus's historical character. In doing so, it identifies places that still possess, and perhaps, exemplify, that character, and those that no longer do. In the final section, these changes are discussed in the context of certain trends, some identified by members of the Wellesley community, such as the increased suburbanization of the campus noted by alumna and trustee Belle Sherwin in the 1930s, and the impact of parking by alumna Jane Loeffler in the 1990s.[6] Other trends, such as the increased size of new construction for both buildings and sites, as well as the loss of orienting devices in the campus--vistas and sightlines to the Lake and other quadrangles--were identified during this Master Planning process after comparing the various historical plans and drawings with the current campus. By situating the historic campus landscape in the context of contemporary design and development trends, one begins to understand the tension, and at times the

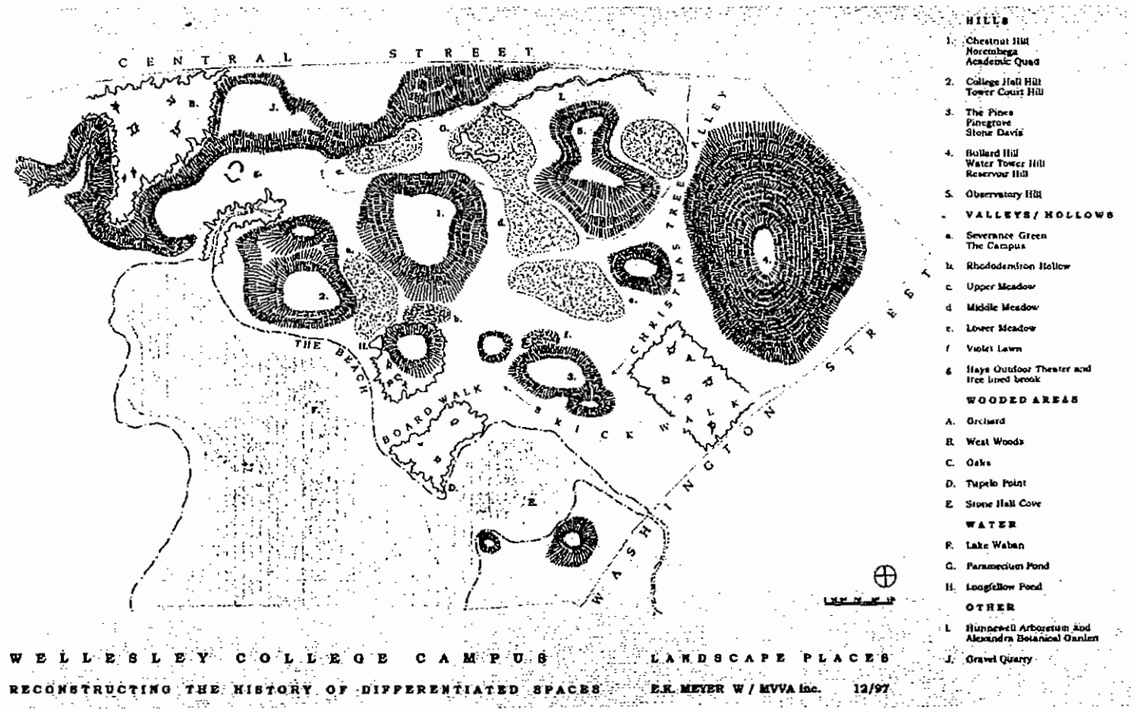


Figure 1: Landform structure and landscape place names. A graphic interpretation and summary of the named places on campus, found in various readings and manuscripts over the course of researching and writing this report. (Drawing by Elizabeth Meyer and Katie Towson).

contradictions, between the conservation of historic resources and contemporary needs. With both positions on the table for discussion--and later integrated with other key Master Plan working papers--Wellesley's community can collectively agree on their values, what is significant about the campus landscape, what they desire to perpetuate for the next generation of students, and what they will leave as their unique contributions. In this light, the Wellesley College campus might be envisioned as a palimpsest, a cherished landscape text written upon by others, at later times. Each writing supplements and interprets the original that remains legible and endures, even in its partially written-over state. This sensibility for designing, planning, and living in a historic place assumes a conversation between the past and the present, recognizing that this exchange will reveal continuities and divergences, both of which speak to the enduring values and specific generational concerns of Wellesley's community of students, faculty, staff, alumnae, administration, and trustees.

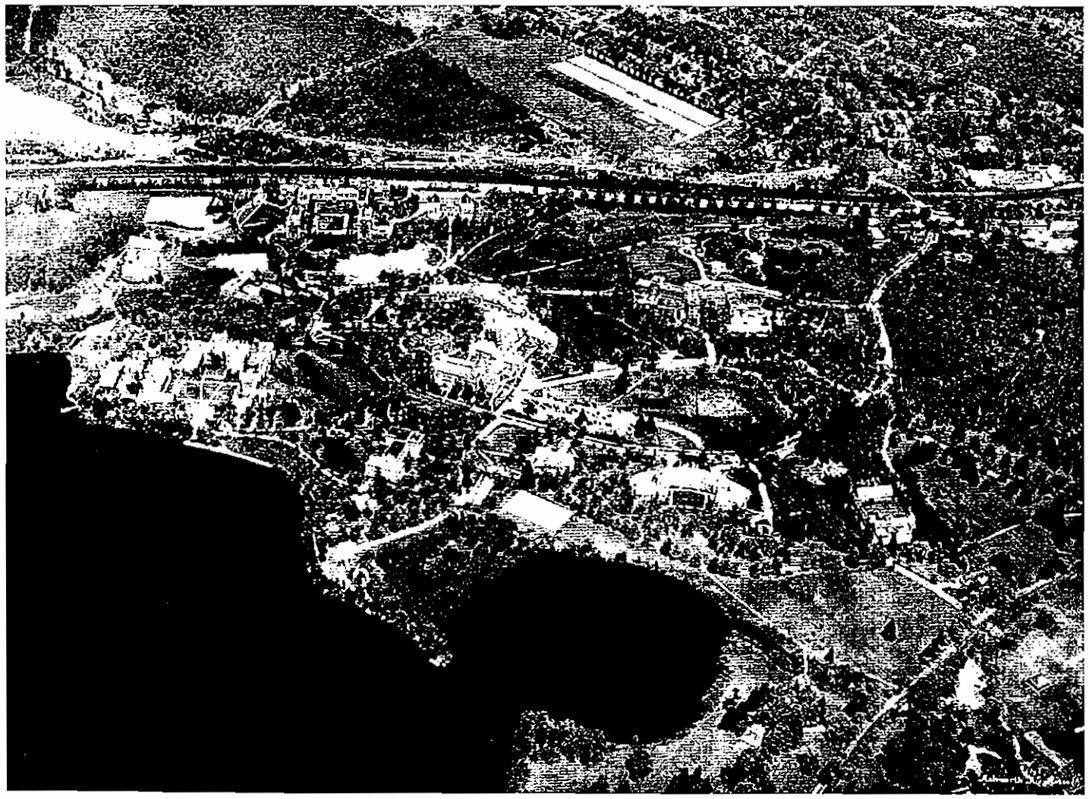


Figure 2: Aerial Photograph of Wellesley campus from the south, Ashworth Airphotos, 1935-38 (Clapp Library. Wellesley College Archives: Photographs File).

Wellesley College's Significance in Landscape History

A Campus which cultivates women's growth as individuals and as members of an academic community

In 1989, two historians hired by the College as consultants found "....that the significance of Wellesley College extends well beyond its significance in local and regional history to its role in the unfolding history of women's education. The campus ranks among the foremost in a select group of educational institutions with notable architectural and landscape heritages."[7] In recommending that the Campus be nominated to the National Register of Historic Places as a Historic District, Schuler and Levee made two key points. First, they recognized that the campus was as an ensemble of related buildings and spaces, that the character and distribution of its landscape was a critical part of its historic significance. Secondly, they acknowledged that the campus was a complex, layered landscape that grew over time according to the visions of insiders--the college founders, the Durants, its faculty, and its alumnae trustees--as well as the professional guidance of outsiders,--significant designers, such as Frederick Law Olmsted, Jr., Ralph Adams Cram, and Arthur Shurtleff (later known as Shurtcliff), as well as Fletcher Steele, Webel and Innocenti, Diane Kostial McGuire, and Carol Johnson. Both the Schuler and Levee study, and more recently the 1995 campus master plan by Carol Johnson and Associates closely tie the landscape's significance to its association with Frederick Law Olmsted, Jr. who consulted to two Wellesley Presidents, Hazard and Pendleton, in the first two decades of the twentieth century.[8]

While Olmsted's stature and contributions are not to be dismissed, the significance of the campus as a designed landscape is much richer than its debt to Olmsted. The following will attempt to establish a narrative in which the Wellesley campus is the product of not only thoughtful designers' decisions about how to build a college, but more importantly the result of a tension between those designers and a group of women, faculty, administrators, trustees, and alumnae, who were determined to construct a new type of campus. This vision sought to embody the values and aspirations of women's education in a unique form of settlement on the land. This settlement pattern was counter to the dominant early twentieth century development practices that were based on types and patterns that tended to dominate the land, to level it or to raze it. *(Figure 1)* Instead, the campus evolved as a series of encounters between the need to build and the desire to not only protect, but to find form and meaning in the land. The campus embodied the visions of the Durants who "saw beauty of nature and of man's handiwork as vital aids to the intellectual, moral, and spiritual aspirations they hoped to foster,"[9] and of the generations of women who gathered together at Wellesley to participate in this educational community. Hence the campus landscape was conceived to educate students about landscape aesthetics as well as horticulture and botany, to support recreational activities necessary for physical health, and to elevate the spirits as well as the minds of students, staff, and faculty. It was far more than background for buildings, buffers from unwanted views, or informal, open space (which in contemporary design and development practices is often a synonym for empty space in need of filling up).

The resulting campus plan is a complex mosaic of quadrangles clustered on ridges, of small buildings atop small hillocks, of wet meadows and wooded hills *(Figure 2)*. This non-hierarchical plan of multiple centers reflects an ideology of landscape that associated women's growth as individuals and as a community with their relationship to a type of domesticated nature--natural beauty, wild gardens, cultivated land--not found elsewhere. This notion, that life in a cultivated rural landscape was healthier than that elsewhere was prevalent in mid-nineteenth century popular culture, as evident in the following passage from Susan Cooper's influential writing, *Rural Hours*: "Country traditions in the old homestead--in touch with the seasons, the birds, and the trees--were inherently more moral than a life dominated by the artificial environment of the city."[10] Located between the image of the city and the suburb, the wilderness and the garden, this campus vision has few, if any comparables, in late nineteenth and early twentieth century American landscape design. It may be one of the first examples of an American designed landscape that challenged the notion that women's association with the land had to result in the invisibility, devaluation, or marginalization of both. Instead, Wellesley's campus plan was predicated on an alternative set of associations which ennobled both women and nature. This new association did not reject the association of women and the land, but saw it in a new, positive light, one that saw form, presence and meaning in the land, and in women's lives, independent of their relationships with the city, culture, and the masculine realm.

Most contemporary land use patterns that evolved from a gendering of nature had resulted in the devaluation of land as a resource to be exploited (grid the land, level it, and eliminate its form), or as a source to be protected (don't build here).[11] These two common nineteenth century attitudes towards nature, of exploitation and conservation, are far from the sensibility that underlies the Wellesley College campus. Before building occurred, the land was acknowledged, and its form and patterns noted. The land was visible, positive in form, and capable of shaping and guiding development. From Durant to Hazard, from Olmsted, Jr. to Cram, from the faculty and trustee committees of 1910-20s to the thesis projects of 1980s Wellesley students,[12] each valued the campus for its intrinsic natural beauty while suggesting how that nature was improved through cultivation and construction. The few debates and controversies about campus master plans that did take place, especially those in the 1910s and 1970s, arose in response to schemes that were perceived to be counter to the ideology of landscape upon which the College was predicated.

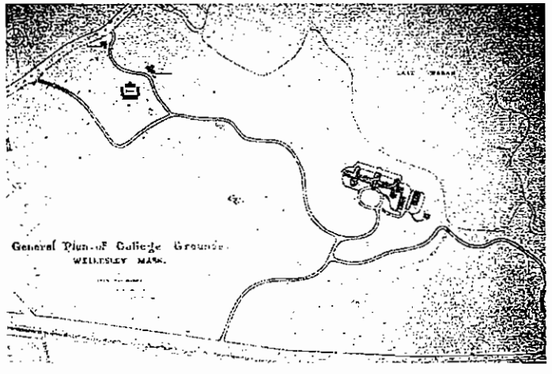


Figure 3: "General Plan of College Grounds," 1"=132', 1875 (Clapp Library. Wellesley College Archives: Plans and drawings File).

Two primary periods of significance for landscape design

The campus plan was shaped during two significant periods. The first, from 1870 through 1881, was a period during which Durant directed the evolution of his 300 acre country estate on Lake Waban into a college for some 300 students. During the second period, from 1900-1940, the College Presidents, trustees and faculty worked with professional designers to envision a long term plan for accommodating future growth. This second period was marked by a major tragedy, the 1914 destruction of the College's first building, College Hall (1869-75), which initiated a decade of fierce debate, followed by consensus building, planning, and construction. This master planning vision shaped the campus's growth until the 1940s when a number of landscape changes began to take place in response to the contingencies of traffic, safety, and maintenance concerns. The campus as a designed landscape that encodes the values of a women's academic community has suffered from the fifty year accumulation of these ad hoc decisions.

<u>First period of significance (1870-1881)</u>

<u>Durant's country estate (1854) as landscape armature for founding a women's college (1875)</u>

Wellesley College's landscape is more than the result of Olmsted, Jr.'s careful and sensitive reading of the natural landscape. For fifty years prior to his arrival on campus, the landscape had been planned, tended, and cultivated by Durant and, after his death, his crews *(Figure 3)*. Its character might best be described as a type of "landscape park," a consciously composed ensemble of varied spaces and scenery *(Figure 4)*.

This rural landscape, originally conceived as a family's country retreat from Boston, was comprised of wildflower meadows, orchards, fields, wooded hills, and shrub walks which clustered around the north shore of a lake, a large glacial kettle. The surrounding land was an undulating mass of small round hills and depressions, shaped somewhat like the surface of boiling water. This glaciated landscape of eskers (sinuous ridges), kames (small hills) and kettles (small depressions) is the landform upon which the various types of plantings and spatial types--the varied scenes--were composed by Durant. The importance of this topographic structure in defining campus character is noted in contemporary descriptions of the new campus, such as the following:

Figure 4: "Entrance to Wellesley Park." (Wellesley College Archives: Sketches and Etchings File)

"The grounds comprise about three hundred acres beautifully diversified. It does not seem as if the most accomplished landscape gardener, with fifty years of time and unlimited supplies of money, could have created the like out of any material. Nature, one

would think, must have anticipated the want, and striven by long and patient processes to meet it. The estate was kept as a gentleman's country seat for many years, and the old forest trees are carefully preserved. The surface rises occasionally into picturesque summits, and as often sinks away into wild and retired dells. Miniature forests dispute with carefully nourished lawns for the supremacy. Established evergreens and ancient oaks join with the flowering shrub and the young tree fresh from the nursery in contributing to the foliage that screens the soil."[13]

Figure 5: Engraving, "Wellesley near Boston," Residence of H.H. Hunnewell, Esq. in A.J. Downing, 444.

Landscape design context: Downing and the Landscape Park

Durant was interested in the landscape as an aesthetic experience, but he also valued it as a source of physical health and morality.[14] These multivalent associations were prevalent in writings about the landscape in the mid-nineteenth century. Many have attributed Durant's ideas to his familiarity with the writings of Andrew Jackson Downing, the American landscape gardener, theorist, and journalist.[15] This is not surprising given the popularity of his writings, especially his journal, *The Horticulturist*. More persuasive is the fact that the estate bordering the Wellesley campus, the 40 acre Hunnewell property, was published in Downing's treatise as an exemplar of country estate design *(Figure 5)*. Both local example and written source likely influenced Durant's landscape aesthetic. A close reading of Downing's major work, *A Treatise on the Theory and Practice of Landscape Gardening adapted to North America*, reveals many similarities between the Wellesley site with its unfolding landscape design, and the landscape design principles advocated by Downing. First, Downing defines a "landscape garden or park" as a designed space that does not replicate nature, but improves on it.

"By Landscape gardening we understand not only an imitation , in the grounds of a country residence, of the agreeable forms of nature, but *an expressive, harmonious, and refined imitation*."[16]

Figure 6: "General View of the College Building" in Harper's Weekly (August 1876), 323. The smooth lawn and small tree clumps of Severance Green, also known as the Campus, framed by denser woods exemplifies Downing's Pastoral or Beautiful scenery

This refined imitation was to be recognizable as art, not confused as nature itself--otherwise the landscape's aesthetic experience would be diminished.

Downing continues by differentiating types of landscape scenery from one another, and in doing so provides insights into Wellesley's mosaic-like landscape experienced while strolling along its numerous paths and drives. He focuses particularly on the "beautiful" or "pastoral" landscapes which are characterized by smooth surfaces and complete forms--pastures with regularly spaced clumps of trees which are framed by distant woods, and smooth lakes with curved shores lined with flowering trees and shrubs, for instance *(Figure 6)*. He mentions Americans predilection for another landscape, however, the "picturesque," which complements the "beautiful." *(Figure 7)*

"The Picturesque in Landscape Gardening aims at the production of outlines of a certain spirited irregularity, surfaces comparatively abrupt and broken, and growth of a somewhat wild and bold character. The shape of the ground sought after, has its occasional smoothness varied by sudden variations, and in parts runs into dingles, rock groups, and broken banks.....trees and shrubs are often planted close together; and intricacy and variety--thickets--glades--and underwood--as in wild nature, are indispensable."[17]

Given the undulating character of Wellesley's landforms and the smooth surface of its adjacent lake, it is not surprising that the woods, groves, rhododendron hollow, and textured meadows were developed as "picturesque" and "beautiful" (pastoral) tableaus.

Landscape design context: William Robinson and the Wild Garden

In addition to the Downing writings, those of British garden designer and theorist William Robinson also provide insight into the design traditions that surround, and contextualize, Wellesley's campus design. Robinson was a prolific writer whose two major books, *The Wild Garden* (1870) and *The English Flower Garden* (1883) were broadly read and highly influential. Like Downing and his British predecessor, John C. Loudon, Robinson had large following of women readers and gardeners. *The Wild Garden*, was an impassioned polemic for a new kind of garden

Figure 7: "On the Grounds" in Harper's Weekly (August 1876), 331. This view of a wooded exemplifies Downing's Picturesque scenery.landscape with undulating topography and a dense shrub masses

practice that would reject the expensive and labor-intensive reliance on the bedding-out of colorful, non-hardy annuals. In its place, Robinson argued for a type of garden not confined to beds adjacent to the house. Rather, the entire landscape--meadows, groves, and woods--could become gardens through the introduction of large masses of hardy perennials, bulbs and flowering shrubs which would naturalize over time *(Figure 8)*. By wild garden, Robinson did not mean wilderness.[18] Instead, he allowed the following passage to convey his intention.

"What it does mean is best explained by the winter aconite flowering under a grove of naked trees in February; by the Snowflake, tall and numerous by the Thames side; by the blue Lupine dyeing an islet with its purple in a Scotch river; and the blue Apennine Anemone staining an English wood blue before the coming of our blue bells...In country gardens, where, on the outer fringes of the lawn, in grove, park, copse, or by woodland walks and drives, there is often ample room, fair gardens and new and beautiful pictures may be formed by its means as the swift springs and summers pass."[19]

Robinson's evocations of a wild garden resonate with the descriptions of the Wellesley campus written by early students, and more recent chroniclers of Wellesley's landscape history *(Figure 9 and 10)*. Ruth Bordin's biography of Alice Freeman Palmer mentions that her arrival on campus to join the faculty in 1879 was marked by the installation of 1000 rhododendron in the hollow near Norembega Hill, and of some 7000 crocus in the surrounding lawns.[20] Norembega Hill itself was known as Chestnut Hill and was remembered as late as 1885 as a fragrant place, "more or less a wilderness of trees and wildflowers," close to College Hall Hill.[21] The violet lawn located at the northern base of The Pines (also known as Pinegrove, and now Stone Davis) which reached to the entrance drive, and Lupine Walk and Tanglewood Walk[22] (both yet to be located by my research) were other examples of this type of wild garden, which contributed to the late nineteenth century and early twentieth Wellesley campus' diversity of aesthetic experience.

Figure 8: "Partion of field of POET'S NARCISSUS in bloom. Late variety, planted six years; soil stiff loam. Meadow mown every year; plants improving yearly. No preparation of the soil is ever given, or anything beyond turning up the sod, placing bulbs beneath and standing an the turf." William Robinson, The Wild Garden, 23. This view of a meadow with drifts of spring flowering bulbs is a type of wild garden .

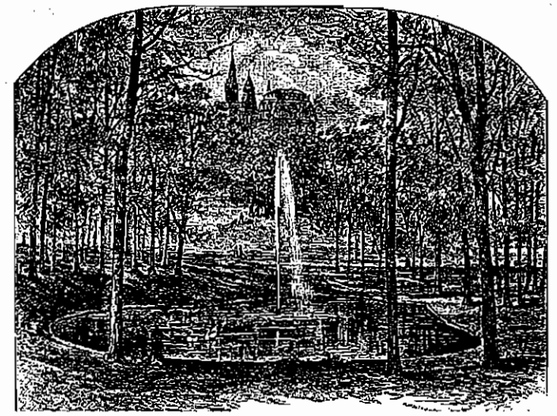


Figure 9: "Longfellow's Fountain" collection of Susan Maine, class of 1886. (Clapp Library. Wellesley College Archives: Sketches and Etchings File).

Landscape rituals and routines

This richly textured and differentiated campus provided the stage for particular, and sometimes peculiar, everyday routines and annual rituals. These events and activities connected the students and faculty to the landscape in a way that transcended the aesthetic. Immersion in, and frequent contact with, the landscape bonded them to their place, to this place. In her 1990 Wellesley honors thesis, Martha Folger writes of Durants' habit of walking regularly with students in the early years of the college, encouraging them, through example, to build their stamina and to cultivate their physical health through regular exercise and exertion.[23] The later introduction of sports fields, boating facilities, a golf course, and tennis courts is an extension of this type of routine activity. Barbara McCarthy and Martha Folger[24] write of the College's rituals, such as Flower Sunday in early September, Tree Day, Float Day, and May Day, the first three of which were already established by 1892.[25] At various times, Tree Day involved not only the planting of a tree on campus (usually around Severance Green), but the enactment of a masque complete with costumes for an entire class. This annual cerony took place on Severance Green, thus bestowing this small, low lawn nestled between Norembega Hill, Tower Court Hill, and the Lake with a symbolism and import far greater than it spatial location or aesthetic character warranted. According to McCarthy, this tradition, like many college traditions, ended in the late 1960s as students' interest in such activities waned. With that lapse, the meaning and imageability of the Severance Green landscape to the college community was also diminished. Routines and rituals reinforced and strengthened, the distinctions between places in the

landscape. They superimposed a hierarchy of importance that form alone does not communicat.

Severance Green's role as the "center" of campus was diminished 30 years ago with the demise of Tree Day. Consequently, it was perceived by recent master planners as one of many "open or green spaces, " not as a significant place.

Campus landscape as an embodiment of a Women's community

By the late nineteenth century, Wellesley College consisted of some two dozen buildings, classrooms, a botanical laboratory, a library, a church, residential cottages, an observatory, a boat house, and a few society houses distributed across its *campus (Figure 11 and 12)*. Its campus had evolved into a mature landscape park replete with sylvan groves and glades, spacious meadows, dense wildflower drifts, and lake edge walks. In 1898, a reporter with Scribner's remarked on the beauty of the campus landscape.

"But when one looks out on the three hundred and sixty acres of beautiful country which surrounds Wellesley, it seems rather a pity that one has anything to do but enjoy them. There are few places in Europe or America which for beauty of woodland, lake, and meadow can rival Wellesley.....I do not think the spring comes anywhere else quite so beautifully as at Wellesley, unless it is in the south of England...The lake seems to wake up and sparkle more than ever and turn the true "Wellesley blue," except where the lily pads spot it white and green. The long stretches of turf put on a mossy color and softness, starred with a thousand wild flowers, and the oaks and elms become masses of dense foliage that throw rich, velvety shadows on the turf, and one comes upon the Farnsworth Art Building, hiding its beautiful facade behind a rampart of great trees, like a Greek temple lost in the wood. The dormitories look like pretty county-places set in some big English park, and here and there one can see groups of students, with their arms about each other's waists, sauntering along the shaded paths, the sunshine sifting down through the tender green of the trembling leaves and making flickering white polka dots on their sombre black caps and gowns.[26]

The familiarity of this author with the campus' seasonal changes, and College class rituals leads one to wonder if she was an alumna of the College. Regardless, the description confirms the founders' hope that the campus' natural beauty would be an inspiring and supportive environment within which women could teach and learn. This natural beauty was understood as the result of design, of selective editing and supplementing. Horowitz claims that the faculty and students "understood it as an English pastoral landscape," a product of design, even if "Cambridge critics snobbishly criticized it as rural."[27] Horowitz attributes the faculty and students concern about campus growth and change to their

Figure 10: "Tupelo Point, Wellesley College, Wellesley, Mass., 1905 Rotograph postcard (Clapp Library. Wellesley College Archives: Postcord File)

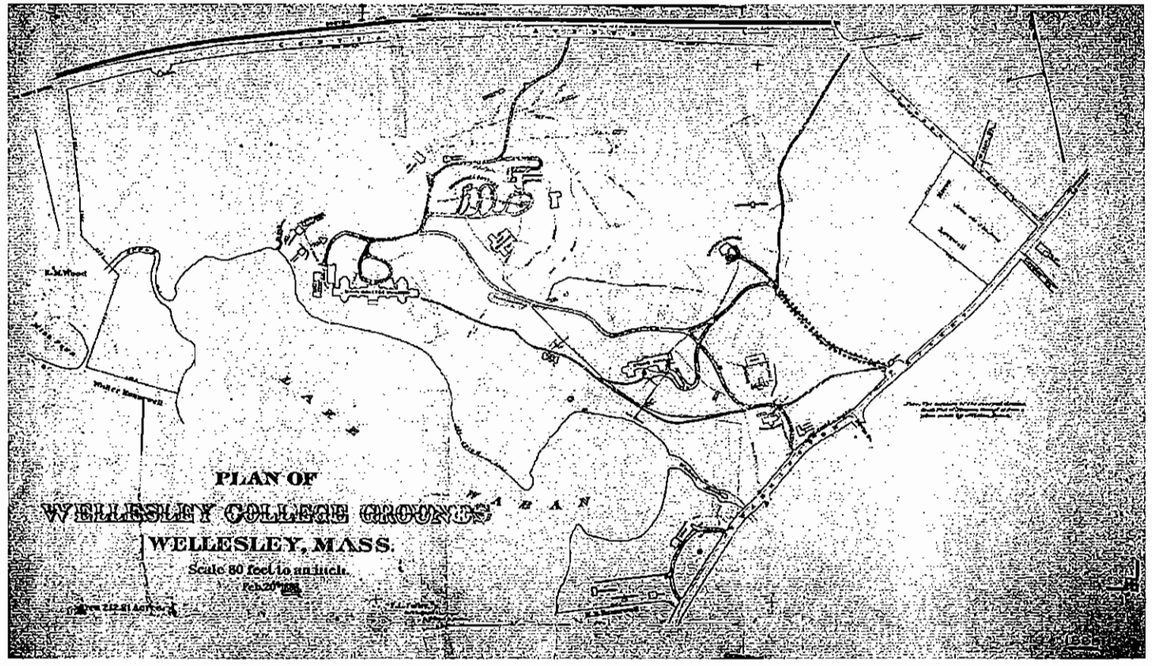


Figure 11: "Plan of Wellesley College Grounds," 1888, approximately 6' x 4', scale: 1"=80' F.L. Fuller, Engineer and Surveyor. (Clapp Library Wellesley College Archives: Plans and drawings, M12). This drawing of the existing conditions on campus includes all buildings, roads, select spot elevations, upper and lower edges of steep slopes, the rhododendron hollow, the ice house, gasometer, greenhouse, and one tree lined road.

appreciation of its aesthetic character. But she notes that the rationale for their concerns in the 1890s for preserving the unbuilt areas of campus, the woods and hills and meadows, had evolved by the time they debated the rebuilding of the campus after the fire. By 1915 "they linked their commitment to an English pastoral landscape to the hope for a symbolic expression of College's inner life."[28] Horowitz is not explicit about the meaning of this "inner life." I have interpreted her statement in its context to mean a life that saw parallels between the pioneering role women were playing as educators and scholars at Wellesley and the unique cultivated nature that surrounded them, a campus neither fully modeled on men's campuses, nor a retreat from those models. Both the social community and the physical campus depended on complex metaphors to describe their places between culture and nature, between the city, conventionally coded as civic/male, and the home, conventionally coded as domestic/female. When the time came to rebuild and expand, the faculty's and alumnae's vision was not cast in "conventionally feminine terms."[29] But it wasn't in conventionally male terms either, as two decades of design consultants came to find out.

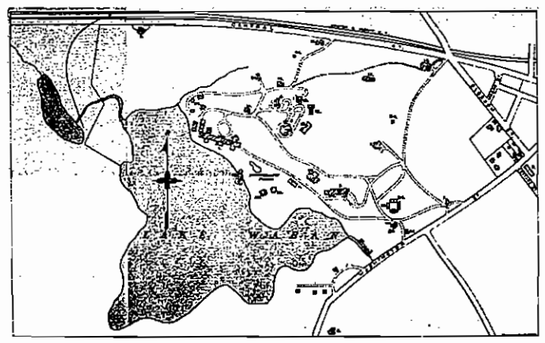


Figure 12. "Map of Wellesley College Grounds," 1899, approximotely 9" x 12." George Walker, delineator or engineer?. (Clapp Library. Wellesley College Archives: Plans and drawings).

Master planning for pre-eminence (1902-40)

Synopsis

The first decade of the twentieth century parallels Caroline Hazard's tenure as President of Wellesley College. Within the first five years of her term, she increased enrollment from 688 to 1051 students, and began the process of planning and design to accommodate such growth. These efforts culminated during Ellen Pendleton's presidency, after the Fire, in the 1921 General plan for the College *(Figure 13)*.[30] The best documentation of this remarkable period of visionary planning is a student thesis by Francis Gotkowitz, Class of 1980, which chronicles the period between 1902-1916 beginning with Olmsted Jr.'s consultation with President Hazard, and ending with Cram and Medary's site plan for Norembega Hill which was to be the site of the College's new academic and administrative center.[31] In between, numerous consultants presented ideas for new dormitory quadrangles on various sites throughout the campus. The disparity between the designers' ideas--frequently modeled after other academic commissions of the period, such as the McKim Mead and White quadrangles at Virginia and Columbia--and the faculty/alumnae/trustees perceptions of the campus is evident in the number of rejected schemes, such as those by Shepley Rutan Coolidge(1912), Coolidge Carson, Shurtleff (1914-15), and the twenty-one alternative General Development plans generated by Day and Klauder (1916), the last of which was almost adopted *(Figure 14)*. The concerns about most of these schemes centered on the impact of the site plans on the existing campus, especially its unbuilt meadows. Areas that appeared to be logical extensions of an orthogonal campus quadrangle on an architect's drawing board, were perceived by the College to be insensitive intrusions, lacking sufficient modification to accommodate the idiosyncrasies of Wellesley's landforms. The College's desire to sponsor a campus plan that was an alternative to the models prevalent across the country in other academic contexts speaks to their commitment to working with the land, and to expressing the uniqueness of women's academic life. Eventually, in 1921, the visions of design consultants and College personnel converged in the General Plan by landscape architect Arthur Shurtleff with landscape architect Frederick Law Olmsted, Jr., and architect Ralph Adams Cram, consulting.

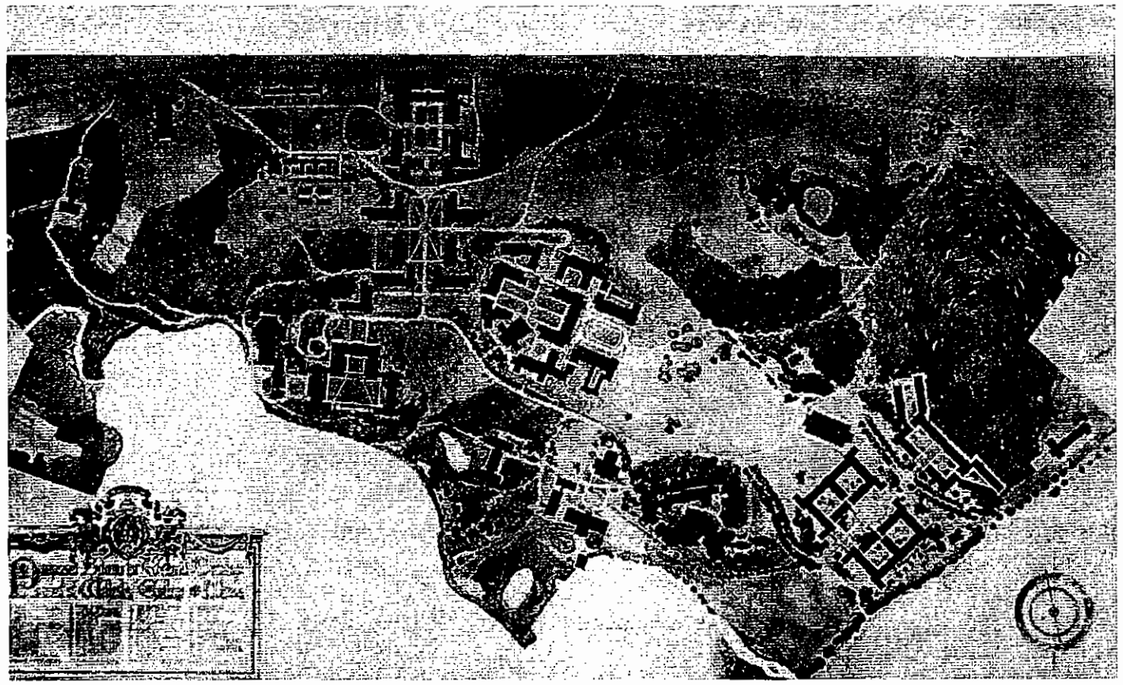


Figure 14:. "Proposed scheme for General Development of Wellesley College, Mass: Scheme 20 Perfected," 3/4/1916. photograph of a watercolor by Day and Klauder, Architects. (Clapp Library. Wellesley College Archives: Plans and drawings)

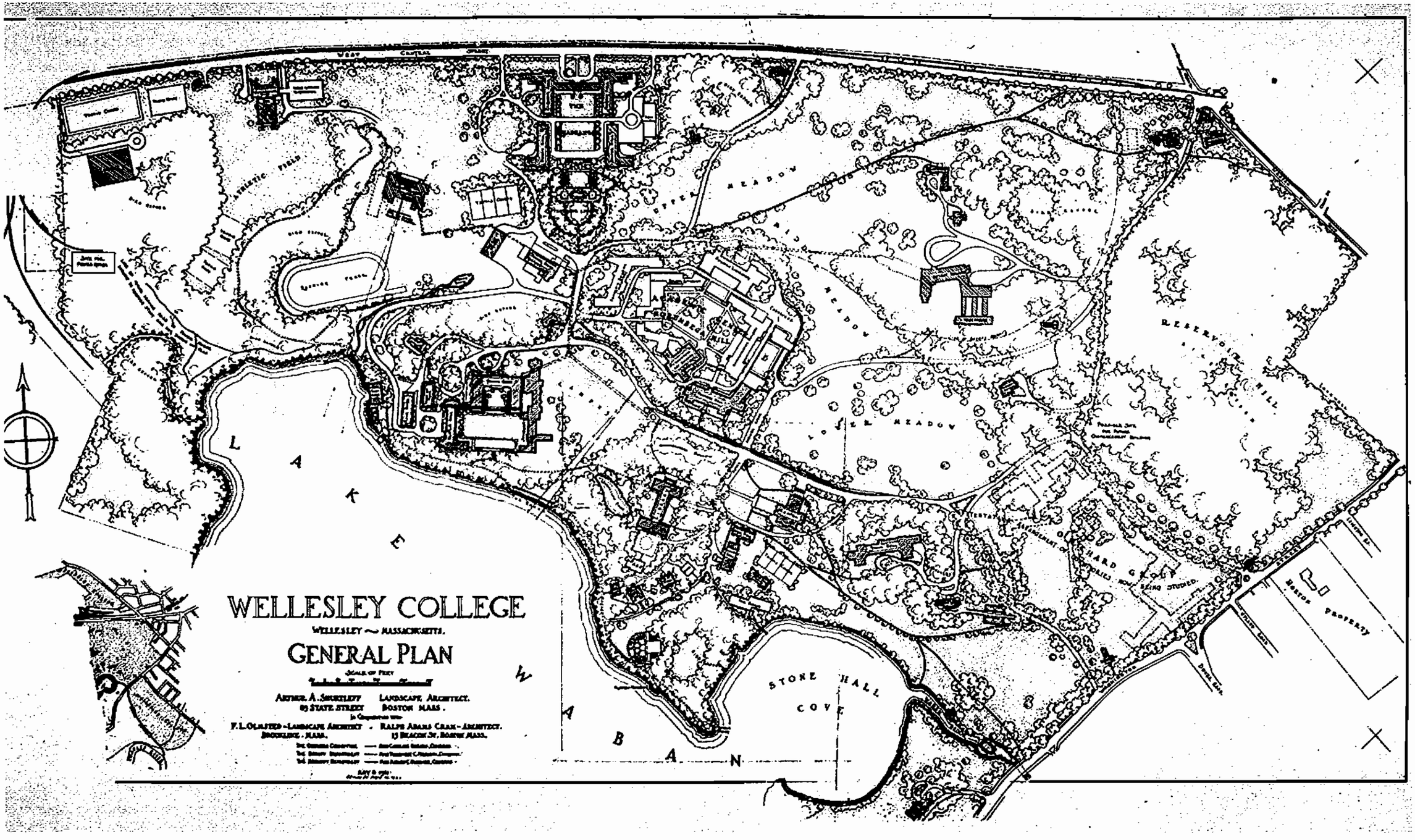


Figure 13: "Wellesley College General Plan." 1921, scale: 1"=100'. Arthur Shurtleff, Landscape Architect, in consultation with F.L. Olmsted, Landscape Architect, Ralph Adams Cram, Architect, and Caroline Hazard of The Grounds Committee, Margaret Ferguson of the Botany Department, and Marian Hubbard of the Zoology Department. (Clapp Library. Wellesley College Archives: Plans and drawings).

Hazard and Olmsted, Jr.

It seems surprising that it took twenty years for the ideas and principles laid out by Olmsted, Jr. in a 1902 letter to Caroline Hazard to reach physical form. His nineteen page letter responded to Hazard's invitation to suggest a direction for campus growth. His letter contained essential statements about the campus landscape which paralleled the sentiments of the faculty and the alumnae. The letter also stated the design and planning implications of those landscape sentiments. He began by describing the character and structure of the land, which he believed to be one of the few remaining examples of such an undulating glaciated landscape in the region. Furthermore, remarking on its unusual character, he favorably compared the Wellesley landscape to the other University campuses he knew.

> "Wellesley College has in its grounds a peculiar endowment, and with its endowment, it seems to me, a peculiar obligation to posterity. The endowment is the landscape beauty which often attaches itself to the type of glaciated topography there presented when it is fortunately accentuated by the distribution of trees. It is a landscape not only beautiful but with a marked individual character not represented so far as I know on the ground of any other college in the country. ...Scratches which are unimportant surface markings on a colossal torso would absolutely destroy a delicate and intricate bas-relief. And so this type of landscape with its peculiar kind of intricate beauty and its immensely significant expression of geological history must under normal human occupancy be a vanishing type. Am I not right in feeling that it is especially the duty of an institution of learning which is possessed of such an example to treasure it for future generations with the most sympathetic care for its scientific as well as for its aesthetic value? For both these ends it is important to alter the surface in the fewest possible locations and to avoid so far as possible placing any constructions in such a way as to separate integral parts of any well marked topographic unit. Indiscriminate scattering of buildings over the whole tract is in every way undesirable and the effort should be to concentrate the buildings and the roads and other constructions associated with them in a small number of compact groups.[32]

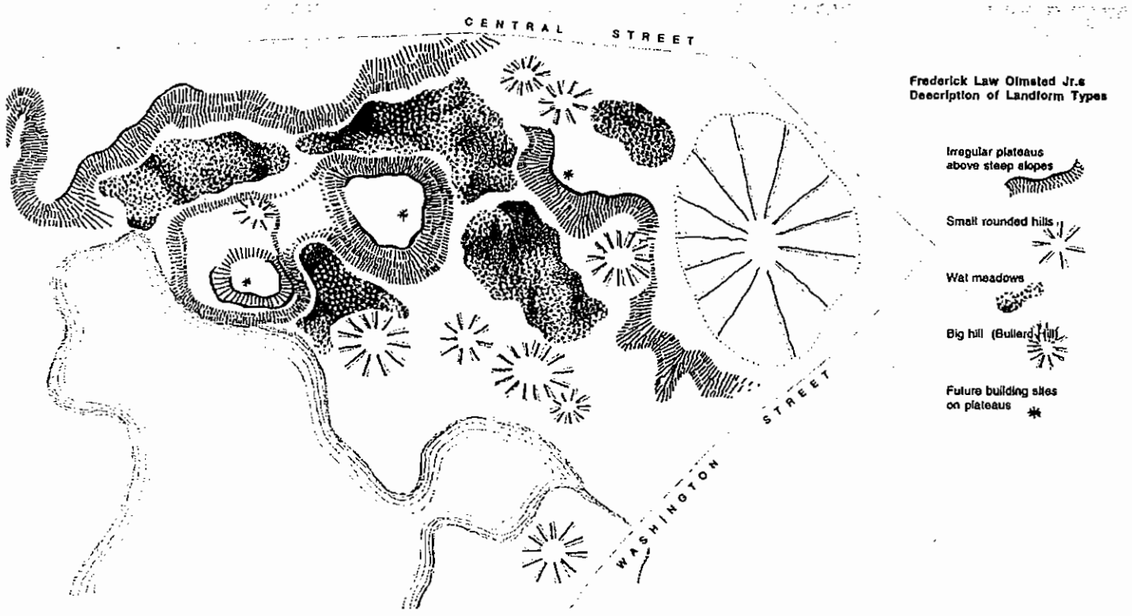


Figure 15: Diagram: Landform as Armature. A graphic interpretation of Olmsted, Jr.'s 1902 letter to Hazard. (Drawing by Elizabeth Meyer and Katie Towson).

Olmsted's enduring contribution to the master planning process was to be the development of a taxonomy for the campus landforms, and his suggestions for the appropriate type of building construction for each type of landform.[33] *(Figure 15)* He categorized the landforms into three types found west of the big hill (Given that the Big Hill, Reservoir Hill was not mentioned again in his letter, I assume it was not considered a building site). The first type, the flat, moist meadows, were not to be built upon--for practical and aesthetic reasons. The second type, the small rounded ridges and hummocks, were appropriate for small, single buildings but relying solely on them would result in a scattered form of development which was not conducive to the creation of a community. The best sites for development were the third type of landforms, irregular plateaus which sat above steep side slopes. Norembega and College Hall Hills were built on such landforms, but two others existed which Olmsted, Jr. recommended that the College consider. The first was north west of College Hall Hill and west of the ridge upon which Alumnae Hall was eventually built. Buildings along the edge of this plateau would create a frame around the wet meadow and tree-lined brook which opened up to the lake (this area is now a parking lot). The second was on the site where Sage was built. It, too, overlooked a wet meadow which separated it from Norembega Hill. By building between the flat ridge top, and the escarpment of these two ridges, one could bridge the steep slope between upper open quadrangle and lower meadow. With these constructed crests, one north west of College Hall Hill and the other north east of Norembega Hill, the future College would be oriented towards the historic center of the campus across the connecting landscape of meadows. The footprints of new buildings were to follow the shape of the hills, not some abstract geometric shape, and in doing so, create irregularly-shaped courts or quadrangles with framed vistas of the surrounds hills and meadows.

Olmsted's letter to Hazard was influential far beyond the actual period and scope of his employment by Wellesley. Within a year of writing the letter discussed above, Olmsted withdrew from his relationship with Wellesley over the College's decision to build its next residential quadrangle on Central Street (the site of the Hazard Quadrangle) instead of on the sites he recommended. [34] Still, his

early site reading and suggestions for planning were clearly valued long afterwards, as a number of future consultants were given the Olmsted letter to read.[35] Olmsted returned to work at Wellesley College as a consultant in the 1910s, after Hazard stepped down as President.

We have one final indication of how persuasive Olmsted's interpretation of the site was to the College administration. Early in Pendleton's tenure as President, she commissioned an engineer, Henry Bryant of Brookline, to make a topographic survey (every one foot contour) of the campus, and to record the location of its utilities, buildings, walks and drives, and trees.[36] The plans also note the building plans, paving materials of the walks, and the caliper and species of certain specimen trees *(Figure 16)*. This remarkable set of forty drawings at 1"=20' was continuously updated through 1923. The College's commitment to this level of site documentation underscores the significance of the existing site topography and vegetation as the essential armature upon which planning and building should be organized.

The decade between the first Olmsted consultation and the College Hall Fire was marked by considerable building (the four dormitories of the Hazard Quadrangle, Clapp Library, Child Study Center, the Gymnasium,[37] the Power House), but little integrated and cohesive landscape planning.[38] Granted, the College did employ its first landscape architect on staff, Henry Saxton Adams, in 1904. He spent a decade at Wellesley teaching botany, and designing and installing plantings on campus.[39] One of his students, Helen Davis (class of 1912) returned to Wellesley as a horticulture and landscape design instructor. She was responsible for the design of many of the dormitory courtyard plantings for the Academic Quad, Munger, and Stone-Davis as well as the Alexandra Botanical Garden in the 1920s. Both Adams and Davis had an impact on the campus' plantings, as they not only designed them for effect, but also for their pedagogical value. Old and new varieties of the same plant were planted. The same plant species would be planted in a courtyard and in the cultivated woodlands, so students could begin to identify them in two habitats, one ornamental and one in association with other native plants. Davis remained at Wellesley through 1947, and during her tenure continued to reinforce Durant's ideas of the campus as a form of domesticated nature, of cultivated wilds, of a rural landscape garden.[40]

Post-fire landscape planning and principles

The traumatic fire which razed the College's central academic and residential building initiated a seven year period of fierce debate about the future growth and character of Wellesley College. This period, from 1914-21, is arguably the most significant period for determining the essential character of Wellesley's landscape. During this time, the alumnae, trustees, and faculty became major voices in the debate. A half dozen design firms proposed schemes for accommodating the activities that previously had been housed under one roof of College Hall as well as new uses. The College, and especially the faculty, trustees, and alumnae, did not readily accept the advice of outside consultants who they criticized for submitting generic design strategies which did not recognize the unique landscape character and structure of Wellesley's campus. Many of these

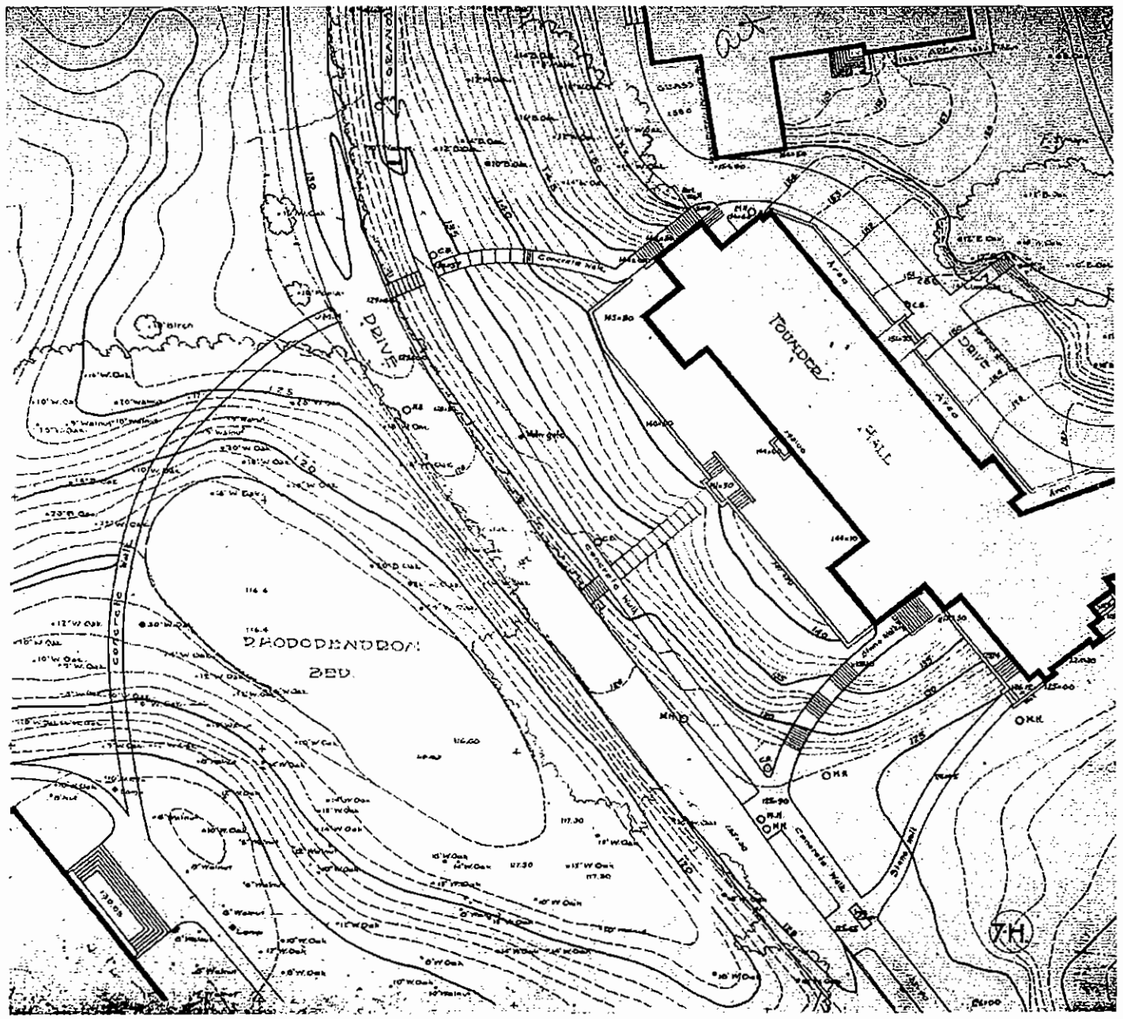


Figure 16: Detail, "Topographic Plan of the Grounds." 1912, scale: 1"=80' reduced from sectional set at 1"=20'. Henry Bryant, Surveyor for Shepley, Rutan and Coolidge, Architects. (Clapp Library. Wellesley College Archives: Plans and drawings, M34).

schemes were influenced by Ecole de Beaux Arts planning principles, that had been popularized by the Columbian Exposition of 1892 and that typified campus design of the early twentieth century. Such principles are heavily dependent on orthogonal planning, the gridding of space and buildings to form courtyards, and the connections of such courtyards to one another via geometry, center lines and axes. This form of geometric coordination has a tendency to level topographic differences, or at best, to render them secondary concerns accommodated by massive re-grading. The application of such ideas to the Wellesley campus lead consultants, such as Shepley Coolidge Rutan, Shurtleff, Olmsted, Jr., Coolidge and Carlson, and Day and Klauder, to propose new quadrangles in the meadows adjacent to Norembega Hill and College Hall Hill. This intrusion into spaces that had previously been considered "unbuildable" not only because of their damp soils, but more importantly because of their essential contributions to Wellesley's woodland and meadow landscape, motivated faculty and alumnae alike to become active in the campus planning debates as the advocates for the landscape.

One of the first recorded signs of dissatisfaction with the direction of campus planning efforts occurred immediately after the 1914 fire. A group of Wellesley faculty, including Eliza Newkirk who was an architect, sent a letter to Pendleton and the Board of Trustees outlining design principles that demonstrated, among other things, how much they valued the Wellesley grounds. Their design principles consisted of:

> 1. Unity. The College Grounds should present a unified landscape-architectural scheme under one supervising mind.
>
> 2. Landscape Setting. The Wellesley Grounds ought to dominate the architecture which should be made to fit the land as if it grew out of it.
>
> 3. Woodlands. Certain bits should be set apart as a permanent wild woods. Certain parts should be cultivated wooded park. Certain parts as in time to cut down and built upon.[41]

In this document, the faculty made a key observation, one that criticized recent design decisions on campus, and established a new lens for reading the Wellesley landscape. They recognized that the College owned properties of varying value and potential use, and that all land on campus should not be considered "empty" and suitable for new construction. Instead, by categorizing the campus lands into three types--remnant woodland patches, cultivated landscape park, and future building sites--the faculty committee was imagining a planning process that would accommodate immediate growth, establish maintenance policies, and anticipate future development pressures. Some spaces of the campus would be designated already "full," not "open" because of their intrinsic landscape character, and protected in perpetuity from development threats.

The October 1916 issue of the *Wellesley Alumnae magazine* contains important articles documenting this ongoing debate over the campus landscape, an argument shaped by two years of campus planning proposals. The reservations that faculty and alumnae had about the various development plan proposals might be summarized by their critique of Day and Klauder's proposals. Their criticisms are not capricious, but based on a set of design principles which included the necessity of preserving the shape of the hills, the texture and extent of the woodlands, as well as perpetuating "the same regard for the trees, the hills, and the natural beauties of Wellesley which characterized Mr. and Mrs. Durant...."[42] In this light, the faculty committee rejected Day and Klauder's work because"...it would not conform to the natural slopes of the grounds. On the contrary they seem to crush the hills and slopes into an urban dead level."[43]

Cram as mediator and master planner

The impasse between the design consultants who relied on imported planning models, and the faculty and alumnae who called for what we would now call more "site-specific" designs was resolved when Ralph Adams Cram, the Head of the School of Architecture at MIT and the architect of many campus plans including those for Rice, Williams, Princeton, Sweet Briar, University of Richmond, Notre Dame and Bryn Mawr, was hired to review Day and Klauder's work.[44] Cram appears to have internalized the tenets initially implemented by the Durants, codified by Olmsted, Jr., and advocated by the faculty and alumnae.[45] Given his national stature, he was more successful than any other single voice in identifying, for once and for all, the beauty of Wellesley with its landscape setting and the inextricable relationship between its architecture and that undulating cultivated landscape park. In a May 1916 report to the trustees, Cram and his partner, Medary, wrote

> "We are so deeply impressed with the natural beauty of the entire tract, that we urge the most conservative policy in the matter of changing grades, removing trees, and altering the already fixed nature of the landscape. The essence of the territory is extreme and picturesque irregularity, with beautiful woods, groves and isolated trees. This quality should be preserved; nothing should be done towards attaining an artificial regularity either in grades or forestrying. As we have said before, we hold that the terrain should largely determine the placing and alignment of buildings, wherever the orientation shall permit, regardless of academic regularity, while every care should be taken to preserve good groves, clumps of trees, and even single trees when these are notably fine."[46]
>
> "We urge, however, on the Trustees, the wisdom of establishing the principle, and enforcing it as far as they are able on their successors, that the unique topographical and landscape qualities of the grounds must determine not only the general design but the disposition, alignment, and composition of the buildings; that formalized arrangements at the expense of the topography should scrupulously be avoided; and that the buildings and groups should grow out of their sites and environment, not impose themselves on them, and that the great and beautiful features of hills, valleys, meadows, groves, and winding roads should be preserved inviolate, and as a setting for architecture akin to them, not rebellious against them."[47]

Cram's written description of the principles upon which the campus plan should evolve is perhaps best illustrated in his December 1916 Site plan for the proposed plan for Norembega Hill, the site where the academic functions previously within College Hall

would be re-located. Cram and Ferguson's plan *(Figure 17)* adapted Day and Klauder's Plan # 21 for the hill in accordance with the principles outlined above. This trapezoidal cluster of interconnected courtyards and buildings gleaned its shape from the shape of Norembega Hill, and the location of existing trees. The flat upper plateau is preserved as the central courtyard and the enframing buildings are located at break between the flat plateau and the steep side slopes. Each perimeter courtyard is partially enclosed, thus providing orienting vistas out into the meadows and woodlands. Covered loggias connect the buildings while allowing for the passage of carriages, cars, and walkers[48].

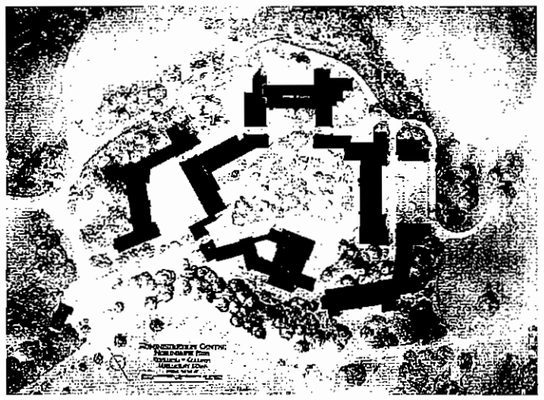


Figure 17: "Administration Centre, Norumbega Hill, Wellesley College, Wellesley Mass." 12/30/16, scale: 1/20"=1'=0". photograph of brown ink wash by Cram and Ferguson, consulting architects. approximately 11" x13" (Clapp Library. Wellesley College Archives: Plans and drawings)

The similarity between the design principles outlined by Olmsted, Jr. in March 1902 and Cram's December 1916 site plan for Norembega Hill is uncanny. It appears as if someone has given form and space to another's ideas. The fourteen years between the former and the latter, a period marked by construction necessary to support the expansion of Wellesley's student body, and a major disaster on campus, afforded the College community the opportunity to reflect on its forty year history of growth. The realization that, over time with the best of intentions, a series of isolated building decisions threatened to destroy the very thing that the campus was known for--its natural beauty--galvanized its thirty-some classes of alumnae, and its committed faculty and guided their actions. In Cram and Olmsted, the College community found the professional expertise to give form to the College's sense of identity and uniqueness. At last, there was a fit between the ideology of landscape upon which this women's college was founded and developed by its members, and the general plans created for the college by professionals.[49]

Shurtleff, Olmsted and Cram's General plan and report (1921)

With the completion of Founders Hall, the first building on Norembega Hill built by Day and Klauder following Cram and Ferguson's Academic Center general plan, the College committed itself to a more comprehensive process of planning the entire campus. Arthur Shurtleff was hired as the consulting landscape architect to the College, a role he filled until the late 1930s.[50] He coordinated the May 1921 General plan (revised in November) [51] in consultation with Frederick Law Olmsted, Jr., his former employer, and Ralph Adams Cram, both of whom lived in the Boston area. Not surprising given the involvement of the faculty on the debates about campus growth, three members of the Wellesley College community were listed on the title block as well: Miss Caroline Hazard, former College President, representing the trustees and the Grounds Committee, Miss Margaret Ferguson, representing the Botany Department, and Miss Marian C. Hubbard of the Zoology Department. This 1"=100' plan depicted the overall layout of existing and proposed buildings, and located a new northeast entrance drive connecting the corner of Blossum and Central to the new Academic Centre on Norembega Hill *(Figure 13)*. This connection passed between the Middle and Lower Meadows (a road location that only lasted a couple of decades). Woodlands were frequently depicted as "Bird Refuges." In fact, the entire landscape was comprised of named places: Lake Waban, Stone Hall Cove, Waban Creek, Campus (Severance Green), Rhododendron Hollow, Upper, Middle and Lower Meadow, Reservoir Hill, The Beach, Tupelo Point, the Outdoor Theater, The Turning Basin, the Shakespeare garden, the Athletic Fields, etc. By naming the meadows, in particular, the development plan removed them from consideration as future building sites. Two areas were identified for future growth, the Orchard adjacent to Washington Street, and the five remaining building sites from the Cram and Ferguson plan for the Academic Center. The buildings in the Orchard area were dashed, indicating that their form was not finalized. The Orchard plan that was drawn is strongly reminiscent of Cram's work at Princeton.

The combined plan and report of 1921 endures as the most comprehensive planning and design document for the Wellesley campus. It explained the rationale for the specific proposals depicted on the drawing, and differentiated between aspects of the plan that were essential and those that could be modified over time. It reinforced the earlier suggestions of Olmsted. Jr.'s and Cram's--for preserving the open meadows and Reservoir Hill, for protecting the slightly undulating shape of "the campus" (another name for Severance Green), for building semi-enclosed quadrangles or "closes" atop ridges and orienting them back to the lake whenever possible, and for limiting the extent of roads by relying on walking paths as the primary movement system. The report also made very specific and practical suggestions about replenishing the depleted woodland soils, replanting woodland understory shrubs, introducing new trees (mostly red and black oak, but also scarlet and pin oaks, elms, linden, ask, beech, hickory, rock maple, hemlock, white pine, cedar and arborvitae) to compensate for the loss of chestnuts and the usual decline of mature trees,[52] and re-establishing the wildflowers (wood bethany, columbine, anenome, hepatica, blood root and mandrake) in the meadows and lawns. [53] The General Plan was also useful as it anticipated future problems such as the demand for parking at the new Alumnae building by suggesting it be located north and above the building. The Plan prohibited parking below the Alumnae building where it would interfere with the vista towards Lake Waban.

Shurtleff worked with the College for another fifteen years as a supervising landscape architect, and in doing so carried out some aspects of the plan. According to his autobiography, he sited the Student Alumnae Building and designed the Hays Outdoor Theater to its south as well as the parking to the north, designed the President's stone bridge over Waban Brook (out of stones from the Paint Factory building), and "literally hundreds of minor matters

scattered throughout decades."[54] His General Plan anticipated the build-out of Norembega Hill with Jewett and Davis, as well as the construction of Freeman, Bates, and McAfee dormitories in the general vicinity of the Orchard Group. Over the seventy-five years, two projects in particular have been perceived to have been developed counter to the principles of the General Plan: the Science Center because of its encroachment on the Meadows, and the parking lots near the Power Building south of Alumnae Building because of their encroachment on the Lake vista. The impact of these two projects, as well as a myriad of smaller, and seemingly unconnected maintenance and policy decisions, will be discussed in the next section of this paper.

Landscape Elements that defined the essential character of Wellesley Campus, pre W.W.II (based on the above periods of significance)

From a review of the documents mentioned above, the campus landscape is characterized by its unique topographic form which its planners and designers identified as the primary structuring system for locating discrete building complexes. These complexes are usually partially enclosed courtyards, that open out to the landscape beyond. Within the undulating matrix of wooded slopes opening up to low meadows beyond, individual places were created with memorable plantings, often large masses of the same species (such as Rhododendron hollow or the Pines). Orientation and connection between the various building clusters located on their separate hills and ridges was made through vistas to the Lake, and across other important landscape places, such as the Meadows and Severance Green. Roads were not significant means of making connections through campus; rather walks were the more important system of organization and orientation.

Landform as spatial figure and armature for planning

> "The possibilities at Wellesley are almost unique because of the singular and individual beauty of the singular and individual beauty of the terrain. The landscape with its diversified contours, its lake and its wonderful foresting, is so individual in quality that it must control the architectural development..."[55]

The glaciated hills, valleys, and meadows that line Lake Waban are small in size and imbue the campus with an intricate texture of interconnected rises and depressions (*Figure 15*). Most design consultants, including Olmsted, Jr. Shurtleff, and Cram, and especially the faculty, trustees, and alumnae in the 1910-20s, recognized the importance of reinforcing the landform with building siting. Given the small scale of the landforms, they also noted that its uniqueness could be quickly destroyed by building too large, too high, or too low.

These geological landforms--kames, kettles, drumlins and eskers--were named by the early twentieth century. The naming, such as Pinegrove or the Pines, Chestnut Hill, Tupelo Point, and Rhododendron Hollow, indicates how inextricable the landscape's placefulness was from both topographic form and vegetation cover in the Durant/early Wellesley College history. Some of these prominent landforms were chosen as the sites for academic building complexes, so the early plans look "irregular" and "informal" in plan to commentators unfamiliar with the structure of glacial topography. If the building plans are seen with contour plans, the underlying

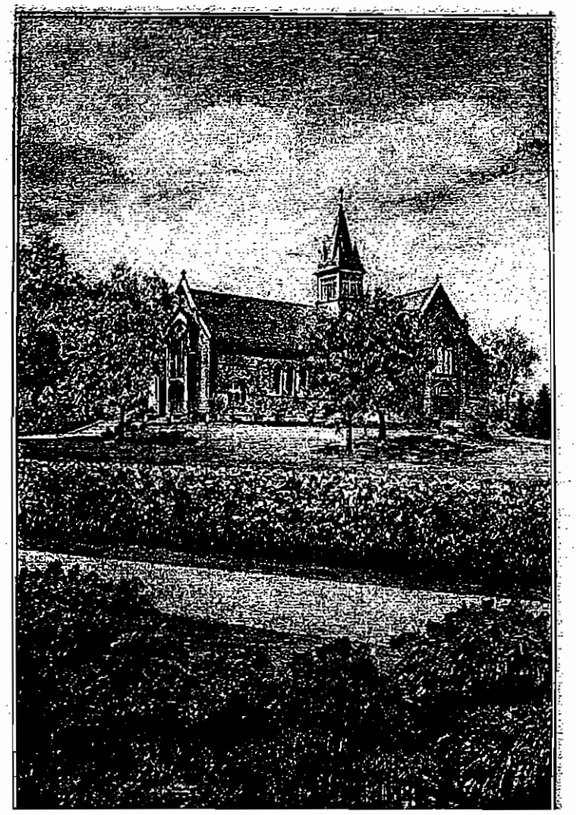


Figure 18: Shrub border along Pendleton Walk, looking towards Houghton Chapel, 5 x 7" one of a series by Russell Peirce. (Clapp Library. Wellesley College Archives: Sketches and Etchings).

order is quite apparent--as it was to the faculty and students who lived and worked in this landscape. Olmsted, Jr. described the landforms and their relationship to building, in three ways: flat, low meadows to remain free of buildings; small hillocks capable of supporting a single structure at most; and the upper plateaus atop long, irregular ridges which were appropriate for siting clusters of buildings, such as a residential group or academic group.

Diversity of vegetation and landscape types establishing named landscape places

> "In the early years, the campus grounds were always called 'the Park." [56]

Before the earliest construction occurred on the campus, the space was already full. Groves, wildflower meadows, orchards, coves, and woods created a mosaic of varied landscape forms and spaces. The campus was cultivated, not wild. Its landscape was the result of human activity on the land. Durant had raised the elevation of the wettest meadows and cleared them of trees. He planted broad swaths of wild flowers in the meadows and lined the walks with flowering shrubs and trees *(Figure 18 and 19)*. He differentiated walks with memorable plantings of trees--one edged with sugar maple and another lined by alternating trees species, elms and beech, continuing a technique he likely encountered at the nearby Hunnewell Estate *(Figure 20)*. [57] Plants were located in concentrations with others of their type to create recognizable places

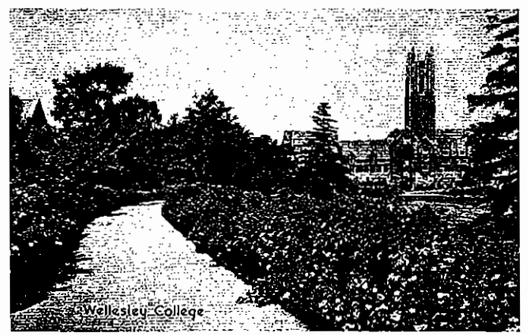


Figure 19: Shrub border along Pendleton Walk, looking towards Green Hall, postcard. (Clapp Library. Wellesley College Archives: Postcards, Campus: General Views).

within the campus, such as Rhododendron hollow *(Figure 21)*. Others who followed Durant, especially Helen Davis, continued this tradition of planting to create identifiable places.[58] She expanded the planting strategy to include pedagogical concerns (for instance, by planting two of each plant, one in an ornamental context and one "in the field" to teach how plants grow differently in varying contexts).

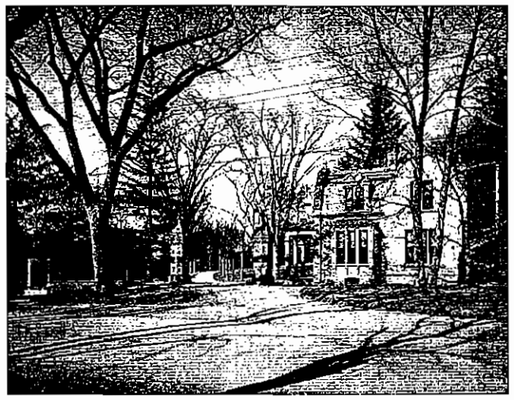


Figure 20: East Lodge and entrance allee, from Washington Street, 1909-1913. Photograph by Clifton Church of Brookline. (Clapp Library. Wellesely College Archives: Photographs. Clifton Church

The campus derived structure and form from the arrangement of plants on the land. Its plantings had a positive role to play in structuring space and experience. They were not intended to "soften" anything. The campus' spaces were full, not open. They were full of history and nature, they were cultivated and choreographed. The campus' spaces had names which reflected their individual character, and that differentiated one from another.

Given the extent of the woodlands, Shurtleff suggested that native trees be used as much as possible. Yet, he recognized the value and popularity of exotic plants, imported from other countries. Those exotics that were similar in character, shape, and texture to those native to New England were included in the campus plant palette. In the 1921 General Plan, Shurtleff wrote that he was in the process of drawing a map of the campus that would delineate woodlands to be preserved from woodlands to be cultivated with understory plantings, from meadows to be cultivated with wildflowers, from dense perimeter plantations of evergreen trees, from more ornamentally planted areas. While this plan has yet to be found, it does conjure up a means by which a campus with differentiated places (versus amorphous open spaces) could be managed and maintained.

Building siting and massing

"..the future buildings should be built along the edge of the escarpment, following its curve with their length by various breaks and angles, and forming an almost continuous line with but narrow intervals or even in actual contact."[59] --Frederick Law Olmsted, Jr. 1902 letter to Caroline Hazard

"Norembega is such a beautiful little hill that we could have a cluster of buildings there which would have the effect of an Italian citadel, with the advantage that our buildings would be open to the air and light on both sides."[60] --Caroline Hazard, 1906 Annual Report

"Buildings are to be grouped, according to these plans, around the brow of the hill (and in some instances fnd a footing upon the hill slopes) to form an interior slightly rolling, tree shaded quadrangle or "close"...That no building is to occupy the open space forming the central quadrangle or "close" is essential."[61]

--Arthur Shurtleff, 1921

From 1902 on, some faculty and consultants advocated for a type of building that was not the norm of its day. Rather than interconnected Beaux Arts quadrangles, all of the same grain and directionality spreading like wallpaper across the land, the Wellesley landscape was envisioned by Olmsted, Jr., Shurtleff, Cram, and the faculty as discrete clusters of buildings each wrapping around a hill to create a partially enclosed quadrangle on top. To say it another way, the buildings constructed the hills, working with their undulating slopes rather than clearing and leveling the land to provide a plinth for the building. The quads and clusters "figure" the landform, rather than reducing it to "ground." They reinforce the land's form, rather than level it. Architecture terraces, steps, deflects, and negotiates the sloping land providing ways both inside and outside to walk up and down (see Academic Quad on Norembega Hill, in particular). If based on these principles, architecture of a wide array of styles fits the Wellesley campus. When a building's relationship to the site is what establishes continuities on a campus, issues of architectural style become incidental. This has allowed the campus architecture to be "of its time," while "of its place." While this strategy for building preserves the small scale of the glaciated landforms, its does require thoughtful connections across the low meadows between hillocks. These vistas and paths weave together the discrete hilltop "citadels" (Tower Hill, Stone-Davis, Norembega, the Quad) across the wetter, lower vales.

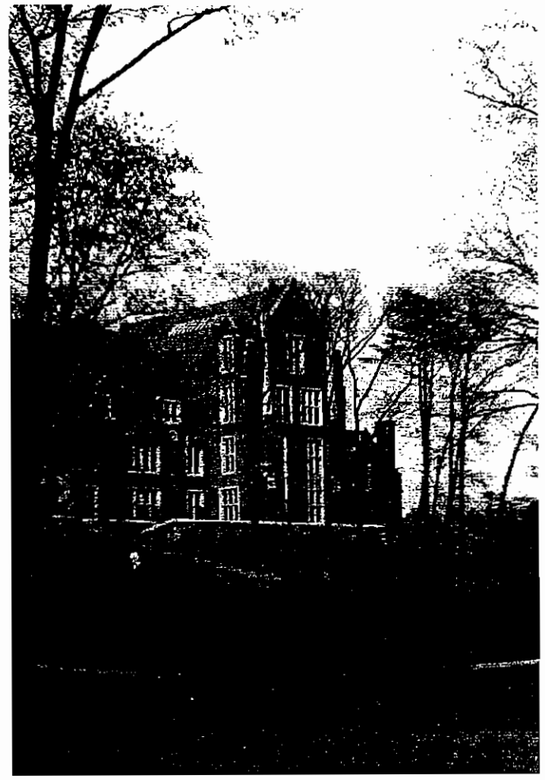


Figure 21: Rhododendron Hollow with Founders Hall in the background, 1921. One of a series of "Campus Views" photographs by Antoinette Hervey. (Clapp Library. Wellesley College Archives: Photographs. Antoinette Hervey portfolio).

Orientation devices: Vistas and sightlines; Paths and drives

"It is essential to the plan that the road system should always be an expression of the contour of the grounds and that radical cuts through ridges or hills or fills across valleys should be avoided. It is also essential that the road system be reduced to the smallest terms, both in length and area, commensurate with efficient and convenient service."[62]

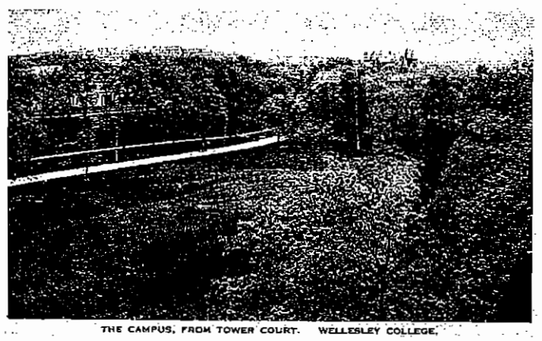


Figure 22: "The Campus from Tower Court." (Clapp Library. Wellesley College Archives: Postcards. Campus. General Views). This image depicts the original alignment of College Road through Severance Green. Note the tree-lined drive and parallel walk.

"The footpaths of the general plan have also been studied with an eye to convenience and directness and have been adjusted to the contour of the ground, having in mind the general principle described under roads. On the other hand, the path system is frankly carried into the recesses of the College grounds in order to permit foot passers to enjoy recreation and sightseeing without wearing out the turf into a shabby condition...Doubtless, as the development of the ground progresses, variations in the location of paths may be requisite."[63]

It is easy to become disoriented within the hills and vales of New England's glaciated landscape. Vistas are short and framed by flanking knolls. Orientation is not simple, and requires carefully located and maintained sight-lines back to major landmarks architectural or topographic. These were carefully noted in the 1921 plan between the Alumnae Student Building and the Lake, and Norembega and the Lake *(Figure 13)*. The report that accompanied the plan, also noted the importance of maintaining the vista from the Hazard Quad to the Lake through the gap between Tower Court Hill and Norembega Hill. These vistas operated at two scales. The largest is at the site planning scale where quadrangles have an open side which faces a significant landscape element or scene. At the smaller scale, the walks which lead from a quadrangle or building complex down hill and across the campus are frequently tightly framed by building walls, stairs, and loggias. These apertures, or thresholds, sometimes cut through buildings, and other times connect separate buildings. They frame the distant landscape providing orientation and connection at the smaller scale. They carry the conceptual site planning orientation devices down to the scale of human experience and movement.

Once oriented via vistas and sightlines framed by portals and thresholds, a circulation system is required to direct one's movement through a landscape. At Wellesley College, the primary movement system has been the walkways, not the drives or roads.[64] This was appropriate as campuses are designed for their residents, the majority of whom live on campus and walk from their dormitories to class. As noted in the previous section on "Diversity of vegetation and landscape types," at one time many of the walks had associated plantings, regularly spaced trees *(Figure 22, 23, and 24)*, or parallel flowering shrub borders (Fig 18 and 19). While many of the paths were common materials, some were identified by their surfaces, brick or boardwalks (to rise above the wet meadows) *(Figure 25 and 26)*. The walks did more than move one efficiently through the campus. They were also intended to allow for a walking experience that was comprised of a sequence of varied landscape spaces. Given Durant's early interest in immersing women students in the landscape so they could receive its many benefits--psychological, spiritual, moral, and physical--the experience of walking through the campus between classes, in the course of a day's routine, was a key aspect of Wellesley's landscape structure.

The drives or roads were to be efficient, and minimal. Designed to facilitate access to the center of campus for visitors and delivery services, the road system has changed more than any other part of the landscape as the roads and railroads surrounding the campus changed in importance and use. Initially, the primary roads were from the south, off Washington Street (the two northern roads were for service) passing through meadows and by wooded slopes, to the Campus (Severance Green) culminating in views of Lake Waban and the magnificent College Hall. Later in the 1920s, as the town of Wellesley grew, and students as well as faculty increasingly lived in cottages off campus, the north east road was emphasized. And eventually, as the intersection of

Figure 23: Oblique view of College Road towards Stone Hall, 1921. One of a series of "Campus Views" photographs by Antoinette Hervey. (Clapp Library. Wellesley College Archives: Photographs. Antoinette Hervey portfolio).

Figure 24: View of College Road towards the center of campus from the south, 1930s. (Clapp Library. Wellesley College Archives: Photographs.). Note how the parallel rows of large trees create a seporate space for the road giving the entrance drive a character of its own, distinct from that of the adjacent meadow and wooded hill.

Blossum and Central became busier and more dangerous,[65] the north entrance from Central Street grew in importance.

Regardless of the point of entrance, up through the 1940s the various designers and planners relegated the road and the automobile to a secondary role. Cars did not have total access through the campus. Many of the spaces were only reached by walks. The 16 to 18' roads that did exist were to "lay lightly on the land" in both plan and section.

Figure 25: "Main Avenue. Wellesley College." Oblique view. (Clapp Library. Wellesley College Archives: Postcards. Campus. General Views). Some of the earliest campus paths were elevated boardwalks which hovered above the wet meadows and muddy roads.

Summary

Wellesley College's identity, its campus form, spaces, and character, are more heavily dependent on the found and cultivated landscape than is the identity of many academic institutions. The landform guided and shaped the campus site plan. Buildings occupied the crest of hills defining central courtyards with prospects out into the landscape. The plantings created spaces and gave character, and sometimes names, to them. Spatial sequences and circulation systems oriented walkers through vistas and immersion in the landscape. The essential elements and systems of the Wellesley College landscape were defined and developed within the College's first fifty years. Through a series of prolonged debates about the campus's development, faculty, administrators, alumnae, trustees, and professional consultants reach consensus in the 1920s, and codified their ideas into principles and policies described in the 1921 General plan.

Threats to the integrity of the historic landscape, and the history thereof

"Adherence to a general plan is especially necessary at Wellesley, where ridges, knolls, and rolling hills, with comparatively small areas of level land, dominate the contour of the ground. Relatively little latitude is present for the arrangement of buildings and utilities, roads, recreation areas, woodlands, and lawn spaces. If these limits are overstepped, confusion, inconvenience and ugliness are sure to result. A dislocation of one element may produce a disastrous effect upon many closely related elements."[66]

Post 1920s changes

During the 1920s and 1930s, considerable energy was spent developing a few places on campus, in particular the Alexandra Botanical Garden and the Hunnewell Arboretum. Under the auspices of the Botany department and parallel with their expansion into Sage Hall with its extensive greenhouses, the twenty five acres of endowed Botanical Garden and Arboretum along Central Street were developed into a teaching and research landscape. Helen Davis had responsibility for the Botanical Garden as well as other spaces on campus, such as the courtyards between and adjacent to the new buildings, Tower Court, Hazard Quadrangle, and Norembega Hill.

Despite Architect, and the Grounds committee, alumnae and trustees began noting the changes in the campus landscape as early as 1932. With energies and attention focused on the spaces of new construction, the surrounding meadows and woodlands began to decline from lack of careful maintenance. Wellesley's College campus, like many significant American built landscapes of the period, began a gradual process of homogenization and standardization. As diversity and difference were eliminated because of maintenance procedures, budgetary concerns, safety issues, and aesthetic taste, the landscape evolved into a stripped down version of the pastoral, a type of collegiate suburbanization.

In addition to the general changes in campus landscape maintenance that evolved in response to new technologies and expectations, Wellesley's campus was dramatically altered by two natural disasters. In 1938, a hurricane damaged over 1700 trees on campus. And over the course of the mid-twentieth century, Dutch elm disease attacked the old allees and stands of elms on the grounds. The loss of the scale of these trees, and the age they connoted, reduced the diversity of the campus plantings.

In the mid 1950s, almost two decades after Shurtleff ended his consulting role to Wellesley, President Clapp hired the prominent, and by this time quite senior, landscape architect Fletcher Steele to advise the College. Steele was not only the designer of well-known city gardens in his hometown of Rochester, NY., but also country estates such as Naumkeag in Stockbridge, MA.[67]Furthermore, he frequently wrote articles on contemporary design issues in popular as well as professional journals, so he would have been well-known to horticulturally and landscape design minded members of the Wellesley community. His first correspondence to James Lawrence indicates that he has a sense of the dispersed, hill-centered nature of the campus plan. But his more insightful comments concern the state of the campus plantings.

Figure 26: "Main Avenue. Wellesley College." View from the boardwalk. (Clapp Library. Wellesley College Archives: Postcards. Campus. General Views). The eorliest campus paths were made of a variety of materiols including brick and wood, such os this boardwalk paralleling a road

"What harmony there is in the landscape comes largely from letting the original forest alone as much as possible. But need and fancy have brought about much cutting and replanting that tend more and more towards an anomalous state which is neither natural nor tended, but rather a chance repetition of native trees, shrubs and groundcover plants, with additions of exotic rhododendrons, azaleas, etc. Evidently any deliberate change in what is supposed to be the

natural picture is discouraged, but where necessary, it is carried out bit by bit. No attention was paid to the changing balance of nature under which the original picture came into being. And exotic plant material has been introduced. Here and there have been considerable plantings set in the woods and open land of rhododendrons and azaleas and other foreign plants which greatly reduce the original aspect of the place. However, it can be argued that such introductions, properly arranged, add to the beauty of the total picture. Nevertheless, when introduced hit or miss, they are apt to do harm."[68]

Some forty years ago, Steele observed the impact that a series of small decisions and acts can have on a landscape. Little by little, without intent, the "balance of nature" that was intrinsic to the landscape's integrity was being altered. Steele later consulted on planting and paving modifications to Tower Court, Fiske gate, College Road, the Chapel, and Stone Davis. He deferred making suggestions about how to handle the College's parking and road pattern problems,[69] leaving that task to a later consultant, Webel and Innocenti.

Wellesley did undertake a handful of significant building projects between W.W.II and the 1970s that radically changed the campus landscape: Jewett, the new Dorms, the Clapp library expansion, and Science Center as well as the realignment of College Road and the construction of a large parking lot in the valley between the Alumnae Building and the Lake. Discussions, debates, and planning the fate of College Road occupied a great deal of time during this period. Jewett's construction necessitated the reconfiguration of traffic patterns on Norembega Hill, through and around the Academic Quad. Numerous options for the road realignment were entertained: moving the old, historic road through Severance Green to the south, along the Lake, as well as north of the Quad. The later alignment eventually was selected by on the basis of safety and aesthetics.[70] This decision, to realign the College's historic road from Severance Green (the Campus) defined by the Lake, Tower Court (College Hall Hill), and the Academic Quad (Norembega Hill) to the back of the Academic Quad along the Meadows, was announced in the July 1961 issue of the *Wellesley Alumnae Magazine*.

For nine years, in the 1970s and early 1980s, Diane Kostial McGuire was the College's consulting Landscape Architect. She was renown for her work with historic landscapes, serving as the consulting landscape architect to Dumbarton Oaks garden in Georgetown and authoring two significant books, one on Beatrix Farrand and the other on the Dumbarton Oaks garden.[71] During her involvement with Wellesley which required two days work per month, McGuire researched the campus history with the assistance of Professor Harriet B. Creighton and archivist Wilma Slaight, wrote a parking study and a Class Trees report, designed numerous small projects including the Science Center landscape, and undertook a "Landscape character" study which documented various places in the campus with both photographs and written descriptions.[72] When McGuire accepted a faculty position and department Chair at the University of Arkansas in 1982, she resigned her position with Wellesley.

At this time, Carol Johnson, an alumna of Wellesley and a graduate of Harvard's Graduate School of Design, was asked to devise a new master plan, but apparently this master plan was never fully funded by the College.[73] The scope of this master plan was focused on solving parking and transportation problems, and developing strategies for reducing landscape maintenance costs. Since that master plan, the expansion of the Athletic center along Central Street and the opening of the Davis Art Museum on the west side of Norembega Hill have been the only major projects of any consequence except for the steady expansion of parking spaces throughout the campus. The following sections will attempt to summarize how some of the late twentieth century landscape changes have compromised the integrity of the historic character of the campus. These changes fall into four categories: the suburbanization of the landscape's character, the shift in emphasis from walking to driving and storing automobiles, the inappropriate siting or scale of buildings, and the loss of orienting devices (vistas and sightlines) due to inappropriate pruning and maintenance.

<u>Suburbanization of the landscape's character</u>

"We murmur that the distinguishing natural charm of Wellesley has given place to a suburban orderliness which has its own beauties, but they are only to be regretted when compared with the wildwoods, fields and tree studded slopes we remember."[74]

Belle Sherwin, a trustee from 1918-1952, wrote this passage in a 1932 article that recognized the startling changes to the campus since the fire of 1914. She also described the status of the landscape plans developed and reviewed by the College's Trustees and faculty in collaboration with Shurtleff. While noting accomplishments, she also mentions the neglect of the woodlands due to the necessary concentration on new construction, the lack of College appropriations for maintenance labor, and the inevitable loss of regional character given what we might now call modernization. In fact, Sherwin's comparison between changes to Wellesley and those occurring to typical American city/suburb is not only fascinating, it is instructive.

"It is true that something has been sacrificed. There was a loveliness in Wellesley in its early days that is gone and cannot be restored. Its loss is the price we have paid for growth...What has happened at Wellesley is what has happened in the last twenty years in town and country throughout the United States, rebuilding for an increased population, in accordance with recently acquired conceptions, new inventions and technical skills and larger incomes, on a scale and of a permanent character not previously realized as possible.

The landscape has changed as building has progressed. Smooth highways have replaced rutted roads, parks for the people and private estates extend through the countryside where only a few years ago were rough pastures and homely farms....We ought to be prepared to find the aspect of Wellesley altered as the college keeps step with the changing world."[75]

In her 1972 report to the Vice President for Business Administration, McGuire similarly summarized the College's landscape history. "Most notable in this

evolution of design and planting has been the imperceptible shift from a rural country-seat to a more suburban campus, reflected not only on the College grounds but in the development of the surrounding countryside."[76] Like the rural landscapes outside of most American cities, the Wellesley campus was gradually becoming a less diverse landscape. Lawns were replacing meadows and pastures. Allees or rows of trees lining country roads were removed as streets were widened. Clumps of shrubs and shrub walks were neglected, and foundation planting around buildings became the norm. Shrub species that previously characterized a historically significant place--Rhododendron Hollow--were used indiscriminately becoming "screening" for the Power Plant. Tree-lined brooks were culverted for the expansion of parking lots. Places differentiated from one another because of their unique and varied plantings blended together into one amorphous, smooth and generic open space or green space. The richness of a campus' layers of history, influenced by many figures inside and outside the College, was replaced by a generic historicism, where the entire grounds could be described by the adjective "Olmstedian."[77] This was a trend in campuses across the country as "Buildings and Grounds" care gave way to "Facilities Maintenance." As administrations tightened budgets and reduced the size of grounds and gardening crews, it was inevitable that landscape designs change gradually, and unintentionally, due to changes in maintenance routines and expectations. Wellesley's alumnae have noticed and commented on this for over 60 years because they notice the changes between when they were students and "now." But, the changes are less obvious to those who administer and maintain the campus because they see it every day.

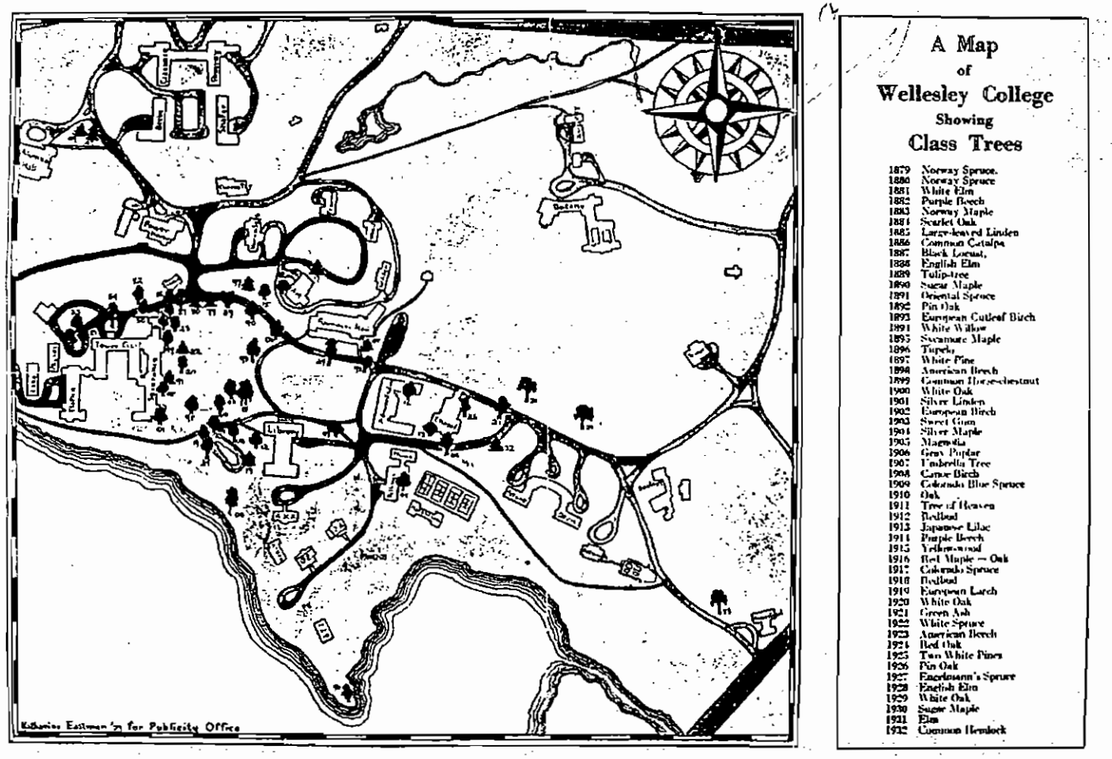


Figure 27: "A Map of Wellesley College showing Class Trees." 1929. By Katharine Eastman, '29, for the Publicity office. (Clapp Library. Wellesley College Archives: Maps, 1912-61). Note that College Road passes south of Faunders Hall and through Severance Green. Off of College Green, just north of the temporary Administration building which was constructed after the College Hall fire, is the only parking lot on campus, Founders parking lot.

Automobile focus. Scale and siting of parking

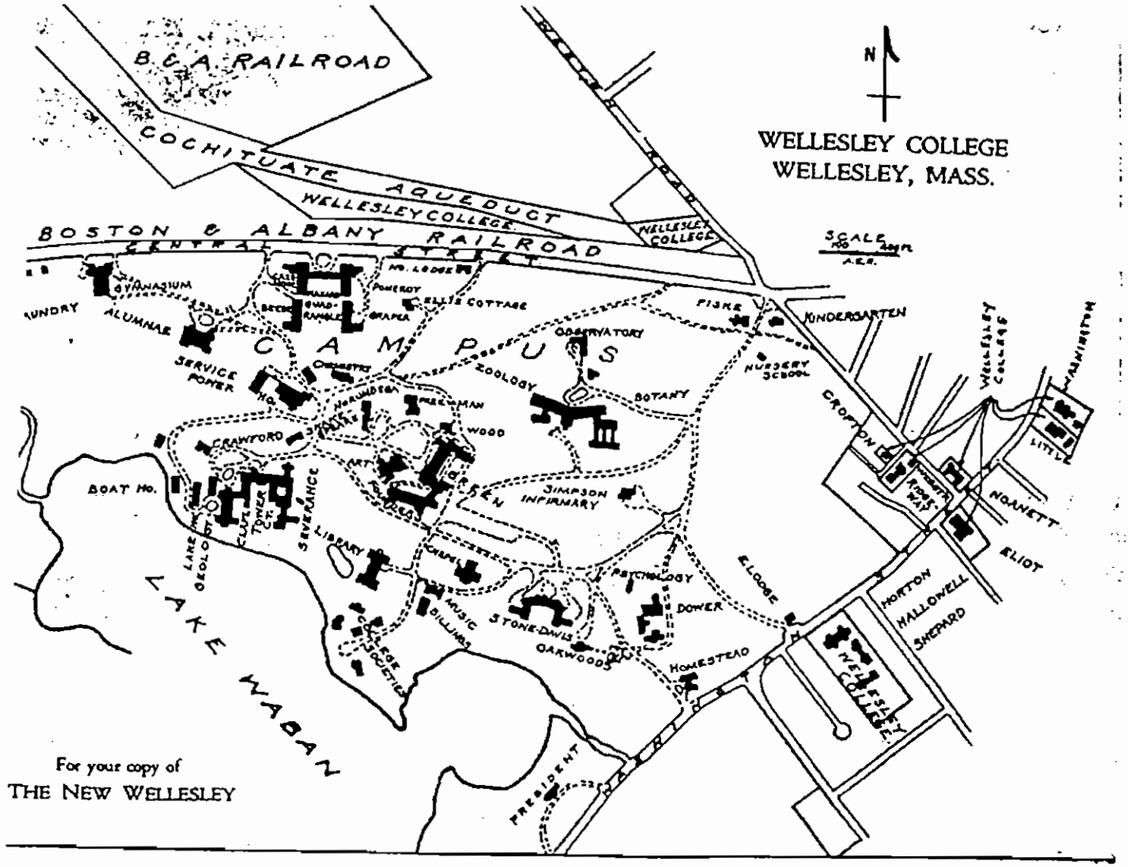
As early as 1907, President Hazard noted the need to begin planning for the automobile on campus,[78] but it wasn't until the 1921 General plan that a designated parking lot was depicted. Located close to the new Administrative Center, at the base of Norembega Hill, the parking lot provided access to the core of campus. The lot was an outdoor room, enclosed by dense hedges and canopied by trees, a strategy recommended by Olmsted, Jr. for all service areas. He wrote "provide ample and compact areas...enclose them all by a well-marked barrier...as a screen and a limit."[79] Significantly, Shurtleff's report banned cars from the very center, the top of the hill. He mentioned that some of the campus could, and should, only be experienced via walking. Within ten years, the General Plan's proposal to built a new entrance road, marked by the new Fiske gate at Blossum and Central, was realized. This new road intersected the old approach road from Washington Street and terminated in a larger parking lot, located slightly south of the first lot. This new road was paved, as are the new sidewalks. The old boardwalks paralleling the drives were replaced with concrete.[80]

The 1931 and 1942 Campus maps hint of changes in the perception and impact of cars at Wellesley. First, College Drive is separated from the Meadows by a new, large parallel parking lot, twice the size of the late 1920s Founder's Lot, and a new parallel road *(Figure 27 and 28)*. This stretch of drive was named the "speedway" in *Wellesley Alumnae Magazine* articles of this period. By the 1940s, the campus map contains warnings to visitors requesting that they yield to those walking, and drive 10-12 mph *(Figure 29)*. This warning comes as no surprise in light of the increase (again) in the size of the Founder's lot, the addition of a lot north of Alumnae Hall, and proliferation of roads and cul-de-sacs on campus.

Memos in the Wellesley College President's File during the 1950s chronicle the search for a solution to the automobile problem on campus. The Fiske Gate entrance was perceived to have created a traffic problem by encouraging townspeople to use it as a shortcut. Weekend traffic, especially in the evenings, created traffic jams as Wellesley students' dates returned them to campus by curfew. Additionally, the large number of roads and access drives resulted in high maintenance costs. Webel and Innocenti, Landscape Architects[81] were hired to implement a plan that appears to have been conceived by President Clapp and her Trustee advisers. Backed by funding from the Ford Foundation, Wellesley College eliminated over two miles of roads from the campus in 1961-62. In doing so, they re-oriented the entire campus's circulation system *(Figure 30)*. The campus

entrance from Fiske Gate was eliminated, thus diminishing the College's perceptual connection to the Village. Second, the Central Street entrance was realigned in order to become one of two major entrances to campus. The other entrance was off Washington Street, adjacent to the old Homestead. As this southern entrance approached Founder's Lot, it was realigned north of the lot, towards the Meadow, where it connected to the road behind Norembega Hill creating a new through road. This road has an awkward alignment, with a sharp curve at the notch by the Founder's Lot, so unlike the graceful curving drive of the old road that followed the lay of the land. Webel and Innocenti admitted to the awkwardness of the new alignment when they suggested planting some clumps of trees along the road to provide visual justification for some of its curves. The old main drive which, since 1875, had passed south of the Hill along the edge of Severance Green and within view of the Lake was eliminated. All traces of its historic alignment were smoothed away.

The impact of this road re-design project on the experience of the campus was three-fold. No longer did the roads lead one through a series of varied landscape experiences. Instead, College Road followed the southern edge of the Meadows throughout much of its entire length. During this stretch, many of the campus buildings turned their backs to the road, hence imbuing it with a sense of being a service road. The loss of elms lining this road has only contributed to this change in character. Finally, by removing College Road from Severance Green, the College's historic and symbolic "central place" lost one its roles--as front door and lobby to Tower Court Hill and the Academic Quadrangle.



HE NEW WELLESLEY contains camera studies and descriptive text of all the new college buildings as follows eading from left to right on the map):

Alumnae Hall
Tea Room, Alumnae Hall
Library, Alumnae Hall
Severance and Tower Court
Severance, Detail
Tau Zeta Epsilon House
Tupelo Path
Galen L. Stone Tower (by Moonlight)
Main Entrance, Hetty H. R. Green
Galen L. Stone Tower
Hetty H. R. Green, East Side
East Court, Hetty H. R. Green
East Drive, Hetty H. R. Green
Lobby, Hetty H. R. Green
Murals, Hetty H. R. Green
President's Office, Hetty H. R. Green
Academic Council Room, Hetty H. R. Green
Trustee's Room, Hetty H. R. Green
Detail of Panelling, Trustees' Room Hetty H. R. Green
Faculty Tea Room, Hetty H. R. Green
Office of the Dean of Freshmen and Sophomores, Hetty H. R. Green
Stone and Olive Davis Hall
Lake Side, Stone and Davis
Botany and Zoology Laboratories
Memorial Library, Zoology Laboratory
Aquarium, Zoology Laboratory
Botany and Zoology Laboratories
Library, Botany Laboratory
Palm Room, Botany Laboratory
Shepard House

Figure 28: Wellesley College." 1931 map. (Clapp Library. Wellesley College Archives: Maps, 1912-61). Note that the entrance from Fiske gate is connected to the center of campus via a new road passing between Sage Hall and Simpson Infirmary. At the intersection of this road and College Road is Founders parking lot, doubled in size and re-aligned east to west. The parking lot now separates the Chapel area and Pendletan walk from the Meadows.

When students decided to abandon certain School rituals a few years later, Severance Green's symbolic and functional roles in College life were diminished. Like many urban spaces that were stripped of their vehicular use during the 1960s, Severance Green lost, not gained, some of its vitality when cars and walkers were separated.

As the roads have been re-configured, added, and eliminated to accommodate the influx of student, staff, faculty, and visitor automobiles, so have the parking lots proliferated. From a single, small lot in the 1920s and 1930s, to two lots in the 1950s, to a campus map depicting twenty seven parking areas in 1973, the automobiles have incrementally gained more space, closer to individual buildings. This dispersal has reduced staff and faculty's walking experience of the campus and in doing so may have reduced their attachment to, and knowledge of, the larger landscape. This dispersal has taken the form of parking lots that are not enclosed rooms with clear limits and boundaries, as Olmsted, Jr. suggested. This has resulted in parking areas impinging on adjacent landscape places, such as the Meadows, and the vista to Lake Waban from Alumnae Hall and the Hays Outdoor Theater.

The shift from parking lots as small, discrete enclosed outdoor rooms to large, amorphous open surfaces did not occur unnoticed. In 1960, as Webel and Innocenti were realigning College Road, the Buildings and Grounds committee considered doubling the number of parking places in the Founders Lot again.[82] Curiously, at the same time that College Road is removed from Severance Green in order to" add to the quiet beauty of the central part of the campus,"

the adjacent parking lot is enlarged. The impact of the increase in size on Severance Green, the Chapel, and the Meadows is clearly understood. The 1960 Treasurer's Files memo describing "Road Proposals" ends its description of the roadway and parking lot improvements by saying, "Beautifying parking lots is desirable.."[83]

Diane McGuire completed a more in-depth study of parking in 1976.[84] McGuire identified the most stressed areas, made recommendations, and then outlined principles for future planning. She believed that lack of space for parking was not the problem. Rather, the primary problem was faculty and staff's perception of proximity, and their need for parking spaces adjacent to their offices. In 1976, faculty and staff required 1066 parking paces, too many of which were in the heart of campus. Accordingly, the area around Green Hall, the Library, and Schneider was "stressed." And yet, McGuire did not recommend increasing the size of the Founder's Lot. Instead, she recommended changing the procedures for making parking assignments, so that only those who needed access to their cars during the course of the day would receive passes for Founder's. McGuire made two other important recommendations. First, only 60% of the highest estimated parking demand should be provided, and second, all parking lots should be on the campus. McGuire did not approve of schemes for building a commuter lot on campus property north of Central Street.

After McGuire's departure for Arkansas in 1982, the next consulting landscape architect seems to have been hired with quite a different brief than McGuire's which was broad in scope--everything from the

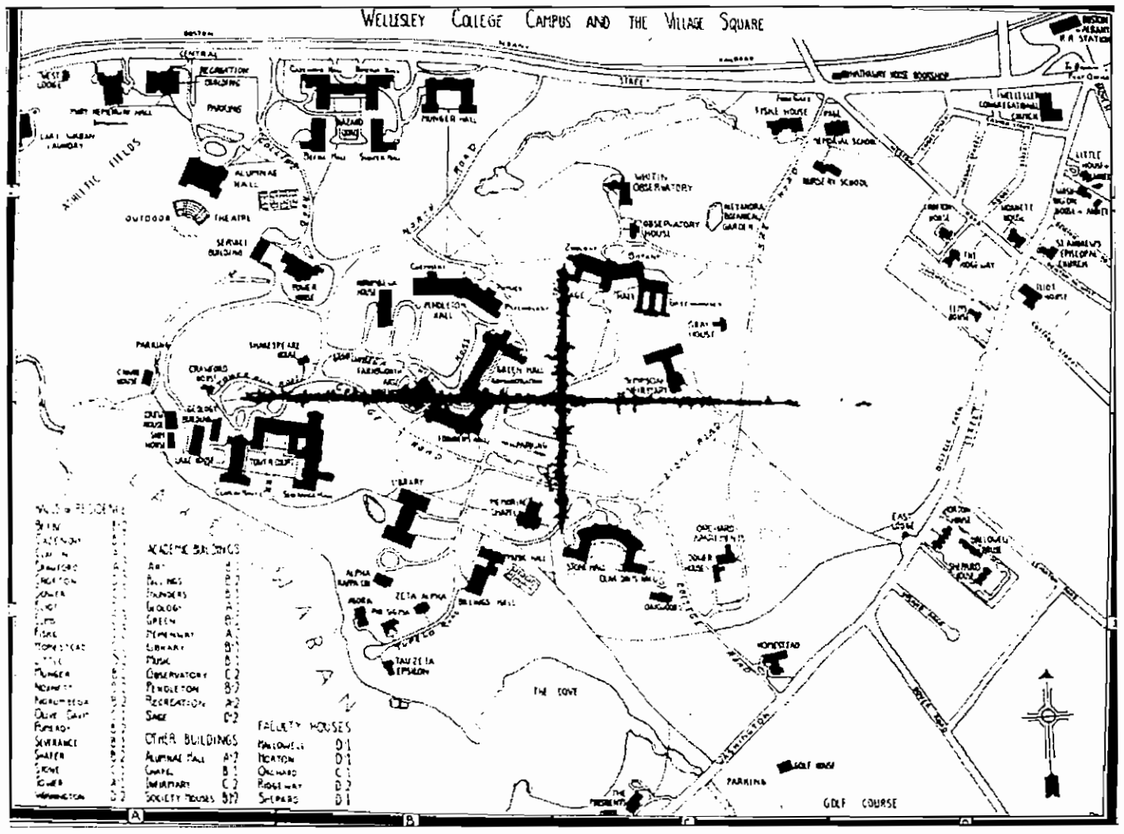


Figure 29: "Wellesley College Campus and the Village Square." 1942-47 map. (Clapp Library. Wellesley College Archives: Maps, 1912-61). Note the addition of a large parking lot north af Alumnae Hall and the expansian of the Founders parking lot. The back side of this map handout includes the safety natice to drivers on campus. Also, the road across the meadow connecting Fiske Gate to Founders parking lot, evident in the 1931 map, has been disconnected from Fiske Road and now functions to service Sage from the center of campus.

chronicling of landscape history to the identification of class tree policies. Carol Johnson and Associates had two Master Planning goals: to preserve and enhance the historic campus's character while accommodating new automobile traffic, parking, and pedestrian needs, and to simplify plantings in order to reduce maintenance costs.[85] The balance between a concern for historic integrity and contemporary convenience or efficiency was weighted, by the College administrators, towards present need. Statements such as, "Since improvement of the landscape at Wellesley College is influenced by a need for additional parking space,"[86] reinforce how far removed considerations of landscape aesthetics, pedagogy, and physical immersion were from these pragmatic demands on the campus.

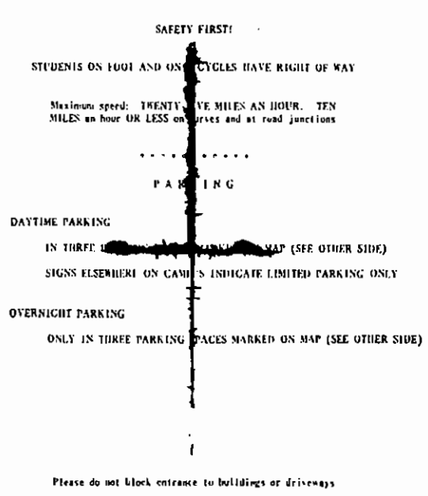


Figure 29b: Safety natices to drivers an compus.

While not the only issue that has contributed to the demise of the campus landscape's integrity, the

accommodation of parking is one of the most obvious. A recent article by alumna Jane Loeffler in the *Wellesley Alumnae Magazine* underscored the impact with statistics. "The magnitude of the parking problem is indicated by the fact that the College has 1911 registered vehicles and a current total of 1630 paved spaces." [87] This is an increase of 311 registered vehicles and 364 parking spaces in a decade.[88] Or in physical terms, the College traded approximately two and a half acres of woods or meadows for parking spaces. As the number of students bringing cars, and the size of lots increased, these large areas of campus were planned, but not designed. The daily experience of faculty and staff walking from parking lot to office was not given much attention. As such, the entire campus experience was devalued. At the same time, despite the increase in the numbers of parking spaces, no specific attention was given to visitors' experience of the campus beginning with their place of parking. Visitors spaces are few in numbers and not well marked. Neither prospective students nor museum visitors' can easily orient themselves on campus in light of the current parking system.

The campus, like many, has suffered from the ad hoc accommodation of automobiles. The problem is acute given Wellesley's suburban location and the number of cars owned by faculty, staff, and students. Currently, the roads seem disembodied from the Wellesley College landscape. They have become too wide; they are no longer lined with trees. They sever rather than connect spaces and places together. Parking lots are located, but not designed as the beautiful spaces that the Trustees' grounds committee envisioned in a *Wellesley Alumnae Magazine* article in 1922. At the same time, these large areas of pavement impact the quality of the ground water and lake. To date, the aesthetic and ecological design possibilities of these lots have not been considered. They might provide a contemporary opportunity to create a new type of campus landscape which would diversity, not homogenize, the campus landscape. Parking lots are an opportunity, not simply a problem.

<u>Scale and siting of new buildings and facilities (like athletic fields)</u>

From the 1910s through the 1950s, most buildings on the campus worked with the topographic structure in two ways: they were located along the crest of the hills, forming quads that allowed a central courtyard to occupy the high point, and they took advantage of the sloping topography by providing entrances on more than one level. They wrapped around the hills and occupied the edge of the hill crest. Buildings on the hills were relatively narrow, as if they were part retaining wall, part interior space.[89] In doing so, these buildings followed the general guidelines of the Shurtleff, Olmsted, Jr. and Cram General Plan.

The new dorms, Jewett, the Science Building, and Davis Art Museum each represent a slightly different variation on how to interpret the principles outlined above. In the 1950s, the first two of the three new dorms, Bates and Freeman, were sited near the Orchard site originally selected for dormitory development in the 1910-20s. The buildings act as terraces, or retaining walls to the slope at the base of Reservoir Hill. The W-shaped site plan creates an a upper courtyard that was not much more than vehicular access, and a lower courtyard with no direct access from inside the building. As such, their site plan does not foster the sort of social use of courtyards that the older dormitories, Hazard, Munger, or Tower Court, do. So while the buildings do sensitively "construct the site," the lack of interior-exterior spatial connections limits the social integration of the buildings to the landscape.

Jewett, Davis and Norembega Hill

The designers of Jewett Art Center (Paul Rudolph), constructed in the mid 1950s and Davis Art Museum (Rafael Moneo), completed in the 1990s, took on the most ambitious of site planning tasks, completing the construction of Norembega Hill begun by Day and Klauder in the 1920s. Jewett occupied the space between the flat upper quadrangle and the western slope of the Norembega Hill escarpment. Its south face framed the vista out to Lake Waban, a vista opened up when Farnsworth was demolished. Jewett's theatrical stair which passed under the second floor art gallery to the landscape beyond, carried out the design intentions of the 1921 General Plan at the smaller scale, by creating a smaller, more enclosed threshold or aperture to the west where an adjacent parking lot was unfortunately sited. This lot was replaced in the 1990s with a courtyard defined by the L-shaped plan of Davis museum. A narrow space between the Davis Museum and its cafe/theater aligns with the Jewett stair extending the connection from hilltop to the west. Less successful is the service bay for Davis which presents a back face to College Road, the main drive through campus, and the primary drive for many first time visitors.

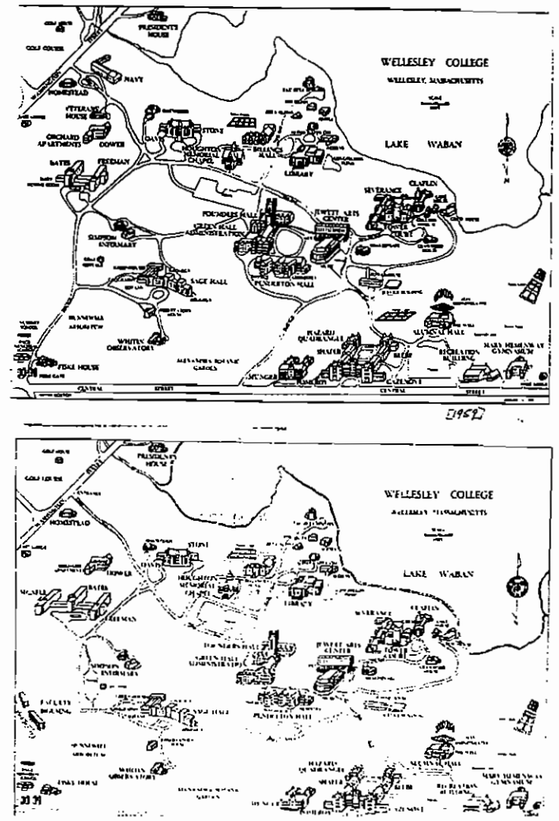


Figure 30: "Wellesley College." 1959 and 1962-63 maps. (Clapp Library. Wellesley College Archives: Maps, 1912-61, 1962-). A comparative study of these two plans reveals the road system changes completed under President Clapp's administration and by landscape architects Richard K. Webel and Umberto Innocenti. These include: the elimination of the northeastern entrance road at Fiske gate, the re-alignment of College Road from south to north of Norembega Hill (the Academic Quad), the removal of the service drive across the meadow to Sage, and the enlargement of Founders parking lot. Note the difference between the broad, sweeping alignment of the earlier College Road, and the tight curves and resulting discontinuity of the new College Road alignment, especially in front of Green and Founders Halls.

Science Center and the Meadows

The 1970s Science center occupies a prominent site on the north east edge of the Middle Meadow. Built as a large addition to Sage Hall, the architects for the Center

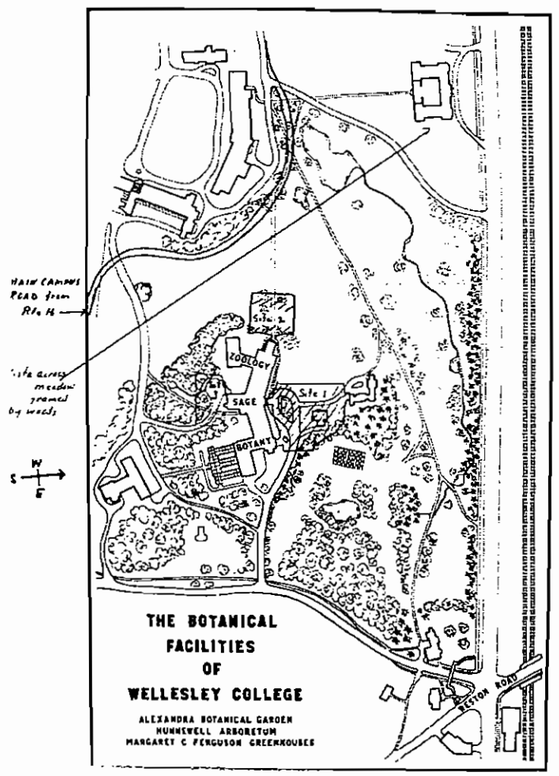


Figure 31. Study sketch depicting three options for the Science Center building location, drawn over a plan of The Botanical Facilities of Wellesley College, by Harriet Creighton. Attached to a 9/22/70 memo from Creighton to members of the Trustees Buildings and Grounds committee. (Clapp Library. Wellesley College Archives: President's office files, Science Center).

"wanted to keep the building behind the treeline at the bottom of the hill and avoid encroaching on the flat meadow behind. The new building is therefore pushed back hard against the old, and fire escapes, which would have wasted space on the hill, have been pulled out over the meadow."[90]

The need to make this compromise, to hover over the meadow, a landscape place to be preserved according to all early twentieth century campus planning and design documents, raises questions about the initial siting. Why was this site selected if its massing might violate the meadow? The site of the 1970s Science Center, southwest of the Zoology building and Sage Hall, selected by the Architects Perry, Dean, and Stewart, was not the first choice of some faculty and staff, including Harriet B. Creighton, who had addressed this issue during the earlier programming efforts for the building. As the Science Center faculty committee was preparing its impressive report on the program and pedagogical goals for a consolidated, cross-disciplinary Science Center, a group of faculty, staff, trustees. and alumnae were exploring siting alternatives for the building addition to minimize its impact on the adjacent landscape.

This ad hoc effort was necessary because the College was operating without a guiding master plan. Apparently, the 1921 General Plan was not perceived to be current, perhaps due to the numerous infrastructure changes implemented by Webel and Innocenti in the 1960s. Regardless of the reasons, the architects were given the scope to determine the site for their building. In the absence of a guiding document that advocated for the larger landscape, and that outlined principles for expansion and addition, Creighton, Professor of Botany and author of "The Grounds" a chapter in *Wellesley College. A Century of Women* (1975), the single best summary of the history of the College landscape, wrote a provocative note to the Trustee committee on Buildings and Grounds.[91] In it she asked two rhetorical questions. "What are the objectives of the comprehensive master plan for the institution's physical growth? What subjective qualities are desired for the exterior environment?"[92] In an attached, earlier draft of this memo she answered these questions herself. There was no guiding plan for a College which was still undecided whether or not it was to grow in population, and whether or not is should become a co-educational institution. As for the subjective qualities of the landscape, Creighton had clear ideas that echoed the 1921 General Plan principles. That document still had currency as tradition, if not explicit policy. Creighton believed that new construction should avoid the meadows. Old forest growth such as that south of Sage should be preserved as a study area. This memo was accompanied by a plan diagram *(Figure 31)* suggesting three possible sites for the Science Center. Of the three, the northern site was ranked #1 as it would impact least on the site and would most easily create a "Center." The Trustees agreed with this site, according to Creighton's memo, but opted to leave the decision up to the architects as they would best understand the size needs of the new building. The third ranked site, the southern one that most impacted a wooded field study site and the meadow, was the one the architects selected.

The fact that the architects could select their own site, independent of a binding master plan, illustrates how interior building program needs were valued more than the collective, public landscape during the 1970s. The campus had devolved from a full space of named landscape places to a blank canvas, or empty space, for new buildings. The concern for the actual landscape was so small that a landscape architect for the Science Center wasn't hired until the architects had completed almost a year of design work. In other words, after most important decisions about building size, location, footprint, and massing were made, the architects requested that the College hire a technical landscape architect who would minimize the impact of their building on the site. At a 1972 Trustees for Buildings and Grounds meeting, architect Charles Perry

> "stated that the College might need someone to look at the whole campus and figure out what needs to be done in general terms but that is not what his company needs for this particular project. He explained that what is really wanted is a technician. He explained that his firm does not want to change anything but does want to have the new building emerge on the present hill."[93]

Within ten months, Wellesley hired landscape architect Diana McGuire, and a year and a half later, she had completed working drawings for the Science Center. The College may have hired her late in the process, but they did not hire the two firms suggested by Perry, Dean and Stewart. Perhaps McGuire's hire was in response to the growing recognition that the campus landscape lacked an advocate in the administration, especially as Creighton approached retirement (she retired in 1974). Barbara Newell succeeded Ruth Adams as

President in 1972, and this too may have altered the landscape's fate. In a 1971 Report to the Board of Trustees listing her priorities for fundraising, Adams explicitly noted that a book fund, a dance studio, and the landscape did not make her list of College endowment needs.[94] This difference in presidential priorities resonates with the manner in which the landscape was treated in the Science Center debates.

In summary, the location and section as well as the overall size of the College's building footprint should be understood and evaluated as landscape elements. How they face each adjacent landscape space, how service functions impact the realm of the walker and visitor, and where buildings open up to the site through doors and windows are all aspects that effect the College landscape. When architects have been sensitive and well-informed of the campus landscape history, structure and character, their work has contributed to the development of College without compromising its landscape. One suspects, however, the landscape structure became invisible to some design consultants, and perhaps to some of the College administrators, staff and faculty in the late twentieth century. Were they informed of the campus history? Why was it not part of the institutional memory? Did they understand the spatial armature already in place? Was their "context" too narrowly defined in their scope of work? If so informed, would the Davis Museum present its service back to College Road and the Meadow? Would the Science center hover so nervously over the Meadow?

Other large horizontal surfaces

The siting and construction of level landscape surfaces, such as parking lots and athletic fields, has impacted the Wellesley campus almost as much as building siting and construction. Lots and fields require large, relatively flat, dry surfaces which are not consistent with the finely scaled rolling topography of glaciated New England. In order to flatten such areas, one must fill valleys or cut hills creating steep slopes between the new artificial surface and the found terrain. Fortunately for Wellesley, most athletic facilities have been sited along its boundary with Central Street where a flat ridge top provides appropriate space for such terraces and fields. The areas of campus most impacted by parking surfaces are the lots east of the Science building, Founder's Lot, and especially, the valley south of Alumnae Building. There, the tennis courts join vast parking lots to flatten and harden this previously wet, textured threshold to Lake Waban. These changes in the landscape are perhaps the most insidious as they often occur without much overview, or they are seen as the unavoidable cost of growth.

Loss of orienting devices

Key vistas and sightlines that act as guides for orientation on campus are easily obscured as plantings mature in size, if pruning programs are not tied to a General Plan or Master Plan. The 1921 plan noted three major vistas, those between Alumnae Building, Norembega Hill, and the Hazard Quadrangle and Lake Waban (fig 13). Views to the Lake and the South determine the open side of the quadrangles, and locate one relative to other places on campus. All three of those vistas have been obscured because of overgrown plantings, and in the case of Alumnae Building, because of the location of parking lots in the foreground and middle ground. Without these few, clear orienting sightlines, the finely textured, undulating landforms can be very disorienting.

Summary

Comparatively speaking, Wellesley College has a beautiful campus still. But, it is increasingly like other campuses; it is in danger of losing its unique and "peculiar" picturesque beauty. The landscape needs to be redefined, for all members of its community, administrators, faculty, alumnae, trustees, students, and staff, so that each generation can continue to be good caretakers. Instead of relying on the generic vocabulary that has plagued the design and planning professions in the late twentieth century, this community must recover its language of landscape description, a language that denotes the campus' spatial structure, its phenomenal qualities, its historical characteristics, and its ideological affiliations. As the preceding passages have attempted to convey, Wellesley's landscape is not simply a background, is more than an open space, does more than buffer, and cannot be relegated to the role of nice amenity. To reduce the Wellesley landscape to these terms is to deny the long struggle to construct a campus that embodied the aspirations of a group of pioneering women scholars and students, and to provide for landscape places that instructed, inspired, challenged, cajoled, and consoled. Wellesley's landscape tells a partial history, in fragmentary scenes. Its forms and spaces embody memories.

The landscape played unique role in the formation of this college campus for women. It more than the location for the college. Rather, an ideology of landscape connected the ways the land was settled, how the campus was experienced, how one developed as a moral, intellectual and physical being, and the manner in which one built a community. Wellesley has a campus form that embodied the values of its founders, early faculty and students. It was neither a replica of male campus quads, nor an "informal" alternative. Rather, it was a new type of campus plan that gave form to the land, and reinforced the land with building clusters. The campus is comprised of programmed and cultivated landscape spaces that add up to a mosaic of varied places, not an amorphous open space system.

One of the challenges of this 1990s master planning process is to figure out how to address new concerns and simultaneously be a good caretaker of this extraordinary landscape legacy noted by outsiders like Olmsted, Jr. and Cram in early 1900s. In 1916, Cram presented the College community with the following challenge:

> "In conclusion I can only say that the opportunities at Wellesley are stimulating to a degree. Apart from West Point, I know of no college site which has greater possibilities from a pictorial standpoint. All that is necessary is a scrupulous regard for the natural conditions as they now exist, a clear determination that whatever is done from now on shall be done right, and finally the enthusiastic co-operation on the part of faculty, students, and alumnae that may make possible a steady and unbroken development, until at last Wellesley College stands, as it may, as the most beautiful institution in the United States."[95]

The College community has frequently rallied around its landscape, and the reasons for this were noted by President Clapp in her 1958 and 1959 reports to the Board of Trustees.

"Second only to the quality of the education it offers, Wellesley deserves renown for the natural beauty of its campus. This heritage should be held intact for future generations." [1]

"I confess to an unacademic ambition to join you in leaving to our successors healthy soil, flourishing and self-maintaining plants, a natural beauty made beautiful by art, and roads and parking which meet the needs with aminimum intrusion on contemplation...{I am} hoping that somewhere some one of us can find some one who cares about natural beauty and can afford to safeguard and develop it at Wellesley."[2]

As a review of the campus' history reveals, its beauty is anything but natural. It has been cultivated and tended. As such, it is a legacy easily lost, despite the best of individual intentions. A collective vision, institutional history and memory, and a set of commonly-held principles are the prerequisites for safeguarding a landscape legacy.

[1] Creighton, 284. Excerpt from Clapp' Annual report, 1956-58.

[2] Report of the President to the Board of Trustees (13 November 1959). *Trustee's Files*, Board of Trustees Notebook (1955-59), 374. Wellesley College Clapp Library, College Archives.

Select bibliography

Histories of Wellesley College and related topics

Blair, Eleanor. *Wellesley College and Community*. Worcester, MA: Commonwealth Press, 1974.

Bordin, Ruth. *Alice Freeman Palmer. The Evolution of the New Woman*. Ann Arbor: University of Michigan Press, 1993.

Folger, Martha Anne. "The Outward Sign of an Inward and Spiritual Green: The Landscape Development of Wellesley College, 1875-1920," Honors Thesis, Art Department, Wellesley College, May 1990.

Glasscock, Jean. *Wellesley College 1875-1975: A Century of Women. Wellesley, MA: Wellesley College, 1975* (especially chapter by Harriet Creighton "The Grounds," 265-294).

Gotkowitz, Frances. "The Development of A Master Plan for Wellesley College." Honors Thesis, Art Department, Wellesley College, May 1980.

Hackett, Alice Payne. *Wellesley Part of the American Story*. NY: Dutton, 1945.

Horowitz, Helen Lefkowitz. *Alma Mater. Design and Experience in the Women's Colleges from their Nineteenth Century Beginnings to the 1930s*. New York: Knopf, 1984.

Loeffler, Jane Cantar '68. "Wellesley's Vanishing Landscape. Preserving a Treasure of 'Intricate Beauty'," in *Wellesley* (Spring 1995), 20-25.

O'Gorman, James. "H. and J.E. Billings of Boston: From Classicism to the Picturesque," in *Journal of the Scoiety of Architectural Historians* 42:1 (March 1983), 54-73.

Poindexter, Jean and Louise Sanders. *The New Wellesley, with 20 Illustrations of the New Wellesley College*. Boston, MA: Private printing, 1931.

Schuyler, Gretchen and Arleyn Levee. "Development of the Wellesley College campus" in *Wellesley College Historic Resource Inventory of Buildings and Landscape* (April 1989).

Landscape Architecture design history, treatises and writings

AJ Downing. *A Treatise on the Theory and Practice of Landscape Gardening adapted to North America*,. NY: Putnam, 1850. Republished, Washington, DC: Dumbarton Oaks, 1991.

Robinson, William. *The English Flower Garden*. 1883. Reprinted NY: Amaryllis Press, 1984, esp chapter on "The Wild Garden."

Robinson, William. *The Wild Garden*. 1870, 1894 edition, reprinted Ikley, Yorkshire: Scolar Press, 1977.

Turner, Paul. *Campus. An American Planning Tradition*. Cambridge, MA: MIT Press, 1984.

Writings on association between women and nature in the 19th c

Cooper, Susan. *Rural Hours*. New York: George P. Putnam, 1850.

Merchant, Carolyn. *The Death of Nature*. San Francisco: Harper and Row, 1989.

Norwood, Vera. *Made from this Earth. American Women and Nature*. Chapel Hill: University of North Carolina, 1993.

Tuttle, Virginia. "Wild gardening and the Popular American Magazine, 1890-1918" in Joachim Wolschke-Bulmahn's *Nature and Ideology. Natural Garden Design in the Twentieth Century*. Washington, D.C.: Dumbarton Oaks Research Library, 1997.

Manuscripts

In addition to the plans and drawings, postcards, photographs and engravings that are in Wellesley College Clapp Library's College Archives, the Trustees files, President's files, Facilities Manamgent files, and files on individual designers contain significant information regarding the history of the campus landscape.

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[1] See Leo Marx, "The American Ideology of Space" in Stuart Wrede and William Howard Adams' *Denatured Visions* (New York: Museum of Modern Art, 1991) for a brief, but insightful, account of American's complex relationship to a nature that is both a source of national character and identity as well as a resource to be exploited.

[2] See Paul Turner, *Campus. An American Planning Tradition* (Cambridge, MA.: MIT Press, 1984), and Gretchen Schuler and Arleyn Levee, *Wellesley College Historic Resource Inventory of Buildings and Landscapes* (April 1989), Wellesley College Clapp Library, College Archives: "Based on this work it is clear that the importance of Wellesley College campus extends well beyond its significance in local and regional history to its role in the unfolding of women's education. The campus ranks among the foremost in a select group of educational institutions with notable architectural and landscape heritages."

[3] Olmsted Jr., Frederick Law, letter to Caroline Hazard (24 March 1902), 1-3. Copy from Library of Congress Olmsted Associates Office: Series B: Job Files #250, Correspondence 28 February - 13 November 1902. Wellesley College Clapp Library, College Archives.

[4] The term "historic designed landscape" is defined as "a landscape having historic significance as a design or work of art because it was consciously designed and laid out by a landscape architect, master gardener, architect, or horticulturist according to design principles, or by an a owner or other amateur using a recognizable style or tradition; has a historical association with a significant person or persons, trend, or event in landscape gardening or landscape architecture; or a significant relationship to the theory and practice of landscape architecture." See J. Timothy Keller and Genevieve Keller. *National Register Bulletin 18: How to Evaluate and Nominate Designed Historic Landscapes*. Washington, DC: National Park Service, Interagency Resources Division, 1987.

[5] See *Guidelines for the Treatment of Historic Landscapes*. (Washington, D.C.: National Park Service Technical Preservation Services branch, Preservation Assistance Division, May 1992).

[6] Jane Canter Loeffler '68, "Wellesley's Vanishing Landscape: Preserving a Treasure of Intricate Beauty" in *Wellesley Magazine* (Spring 1995), 20-25

[7] Schuler and Levee, 1.

[8] "Wellesley College is known for its historic campus landscape designed originally by the office of Frederick Law Olmsted. Olmsted identified a unique composition of landscape elements as the basis for an overall campus plan which has been used in the overall development of the college." Carol Johnson and Associates. "Summary Statement for the Open Space Diagram for Wellesley College" (22 March 1995). *Plans and drawings* ,Wellesley College Clapp Library College Archives.

[9] Jean Glasscock, editor, *Wellesley College 1875-1975: A Century of Women* (Wellesley, MA.: Wellesley College, 1975), 14.

[10] Vera Norwood, *Made From this Earth. American Women and Nature*,(Chapel Hill and London: University of North Carolina Press, 1993), 28.

[11] See Caroline Merchant,*The Death of Nature. Women, Ecology and the Scientific Revolution* (San Francisco: Harper Row, 1980).

[12] Martha Anne Folger, *The Outward Sign of an Inward and Spiritual Green: The Landscape Devlopment of Wellesley College, 1875-1920*, Wellesley College Honors Thesis (1990), Wellesley College Clapp Library, College Archives. This is a fascinating document that chronicles the ways students and faculty interacted with the campus landscape through their daily routines and their annual rituals.

[13] Edward Abbott, "Wellesley College," *Harper's New Monthly Magazine* (August 1976), 321-332.

[14] Folger, 10.

[15] See Harriet Creighton's informative chapter, "The Grounds," in Glasscock. Also Peter Fergusson, "The Wellesley College Landscape," Exhibition notes for *Viewing Olmsted*, Wellesley College Davis Art Museum, (Fall 1997), as well as Schuler and Levee (1989).

[16] A.J. Downing, *A Treatise on the Theory and Practice of Landscape Gardening as adapted to North America* (NY: Putnam's, 1849, sixth edition, reprinted by Dumbarton Oaks, 1990), 66.

[17] Ibid, 74.

[18] William Robinson, *The Wild Garden*, (London: Scolar Press, 1894, reprint 1977), xxix.

[19] Robinson, Ibid, xxix-xxx.

[20] Ruth Bordin, *Alice Freeman Palmer. The Evolution of the New Woman* (Ann Arbor: University of Michigan Press, 1993), 91.

[21] Eleanor Blair, *Wellesley College and Community* (Worcester, MA: Commonwealth Press, 1974), 42.

[22] Folger, 14.

[23] Folger, 10.

[24] See Barbara McCarthy, "Anniversary Celebrations" in Glasscock, 235-258, and Folger, 16.

[25] McCarthy, 235.

[26] Abbe Carter Goodloe, "Undergraduate Life At Wellesley,"*Scribner's Magazine* 23:5 (May 1898), 530, 534.

[27] Helen Lefkowitz Horowitz, *Alma Mater. Design and Experience in Women's Colleges from their Nineteenth-Century Beginnings to the 1930s* (Boston, MA.: Beacon Press, 1986), 208.

[28] Ibid, 268.

[29] Ibid, 268.

[30] The term general plan was used to describe what we would now call a master plan. The term master plan was introduced by Thomas Vint of the National Park Service in the 1930s.

[31] See Francis Gotkowitz, "The Development of a Master Plan for Wellesley College" Wellesley College Honors Thesis, Department of Art, (1980), Wellesley College Clapp Library, College Archives.

[32] Olmsted Jr., (1902),1-3.

[33] Olmsted Jr., (1902), p.3.

[34] Olmsted, Jr., Letter to Hazard, 8 June 1903. "I should prefer to have no further professional responsibilities in the matter. I have taken much pleasure in studying the conditions at Wellesley, on the whole so charming, and I am sorry to withdraw from the matter now, but I find my efforts so much more productive of results elsewhere that I do not feel it worthwhile to continue such fruitless labor." Copy from Library of Congress Olmsted Associates Office: Series B: Job Files #250, Correspondence 10 February-16 July 1903. Wellesley College Clapp Library, College Archives,1-3.

[35] Gotkowitz notes that Heinz and LaFarge, Day and Klauder, and Cram were all given copies of the 1902 Olmsted letter to Hazard, 33.

[36] This is a remarkable document that depicts all utilities (water, gas, sewer, steam, electrical, drains), notes not only the building footprints but also their finished floor elevation, lists walks and drives by paving surface, and mentions the caliper and species of important specimen trees. The 2 May 1921 version of the campus development plan was drawn as an overlay on an updated version of this document. Topographic Plan of the Grounds (1912, with changes through 1923). Surveyed by Henry F. Bryant, Brookline, MA 1"=80' photo reduction of entire campus from sector maps at a scale of 1"=20'. *Plans and Drawings*, #M34.Wellesley College Clapp Library, College Archives.

[37] Gotkowitz mentions the Gymnasium construction, but Schuler doesn't.

[38] See Gotkowitz, "Orderly Expansion, 1902-10," for a review of design and planning documents related to the Hazard presidency.

[39] Creighton, 285.

[40] Creighton is the primary source for this information about Adams and Davis. Both of these figures warrant further research to ascertain their regional significance as landscape designers.

[41] Brown, Abbot, Walten, Newkirk, Avery, letter to President of the College and the Executive Committee of the Board of trustees (27 October 1914). Copy from Library of Congress Olmsted Associates Office: Series B: Job Files #250, Correspondence 1914. Wellesley College Clapp Library, College Archives.

[42] "Reports given to the meeting of the Alumnae Association" *Wellesley Alumnae Quarterly* 1:1 (10/16), 65.

[43] Ibid

[44] Douglass Shand Tucci, *Ralph Adams Cram. American Medievalist* (Boston, Boston Public Library, 1975), 6. For additional insight into Cram's career, see Robert Muccigrosso, *American Gothic: The Mind and Art of Ralph Adams Cram*, (Washington, D.C., University Press of America, 1980) and Sarah Drummond Lanford, *Ralph Adams Cram as College Architect: A Historicist's Approach*. (University of Virginia, M.A. Architectural History thesis, 1981).

[45] Gotkowitz, 80, notes that Cram received a copy of the Olmsted report in June 1916.

[46] Cram, Ralph Adams and Medary, letter to Trustees (May 1916), excerpt reprinted in Jenkin's "Reports Given at Meeting of the Alumnae Association in *Wellesley Alumnae Quarterly* 1:1 (October 1916), 67.

[47] Cram, Ralph Adams and Medary, letter to Trustees (May 1916), excerpt reprinted in Jenkin's "Reports Given at Meeting of the Alumnae Association in *Wellesley Alumnae Quarterly* 1:1 (October 1916), 68.

[48] The correlation between this plan and Cram's advocacy of walled towns as a model for community design merits future research. See Ralph Adams Cram Walled Towns (Boston: Marshall Jones, 1919).

[49] Perhaps one of the most interesting and persuasive documents written by a faculty member arguing against building in the meadows was a 1921 report written by Professor Elizabeth Fischer, "Geologic and Geographic Conditions of the Wellesley Campus." In this seven page document, she describes the geological conditions of

various landfroms, the surface water conditions, and summarizes the opinions of engineering and geological experts from Harvard and elsewhere regarding the inadvisability of building in the meadows for both technical and financial reasons. Fischer also mentions that Durant filled the meadows with five feet of sand and gravel in order to make them less swampy! *President's Office Files*, Grounds: 1902-1966. Wellesley College Clapp Library, College Archives.

[50] Shurtleff is a major figure in early twentieth century landscape architectural history. After working for the Olmsted, Olmsted and Eliot office for ten years, during which time he taught part-time at the new Landscape Architecture program at Harvard, Shurtleff opened his own office in 1905. His private practice including prestigious commissions such as the Charles River esplanade, Paul Revere Mall in the North End of Boston, Sturbridge Village and Colonial Williamsburg. See Melanie Simo, editor,*An Interview with Arthur Shurcliff. Hubbard Educational Trust Careers in Landscape Architecture*, 1980). The Shurcliff papers, Harvard University Loeb Library Special Collections, contain his unpublished papers from 1906-1981 which include an informative photographic file on Wellesey campus through the 1931. A descriptive inventory is available. Mary Daniels, the Loeb Library Special Collections Librarian and Archivist is aknowledgeable guide to this colelction's holdings. See also the entry for Arthur Shurcliff (Shurtleff changed his name to Shurcliff in 1930) in Charles Birnbaum, *Pioneers of American Landscape Design. An Annotated Bibliography* (Washington, D.C.: US Department of Interior, National Park Services Cultural Resources, Preservation Assistance Division, 1993), 110-111.

[51] The plan has two parts, a twenty five page written report and a drawing. See Arthur Shurtleff and Frederick Law Olmsted, Jr. *Wellesley College Report to Accompany General Plan dated May 2, 1921* (11 June 1921). Copy from Library of Congress Olmsted Associates Office: Series B: Job Files #250, Correspondence 1921-22; and Wellesley College General Plan (5/21/21), 1"=100' plan, blueprint. AR#1. *Plans and Drawings*, Wellesley College Clapp Library, College Archives.

[52] Ibid, 21.

[53] Ibid, 22.

[54] Arthur A. Shurtleff *Autobiography of Arthur A. Shurtleff 1870-1957. Written winters of 1943-44 with additions in the summer 1946*, 60-62. Shurtleff Collection, Harvard University Loeb Library Special Collections.

[55] "Architecture at Wellesley" *Wellesley Alumnae Quarterly* 1:1 (10/16), 2.

[56] Bordin, 91.

[57] Ann Leighton, *American Gardens of the Nineteenth Century. For Comfort and Affluence*, (Amherst, University of Massachusetts Press, 1987), 261. Hunnewell lined his entrance drives with alternating white pine and larch, and pinus excelsa and magnolia tripelata.

[58] Creighton is the best source for Davis's work on the campus.

[59] Olmsted, Jr. letter to Hazard, (1902), 8.

[60] Gotkowtiz, 36.

[61] Shurtleff, (1921), 3.

[62] Shurtleff (1921), 23.

[63] Ibid, 24.

[64] Creighton, 272.

[65] Apparently, a tragic automobile accident that occurred near Fiske gate gave opponents to this awkard intersection strong arguments for re-orienting the campus to a entrance drive further west along Central Street. Conversation with Sally Coyle of Michael Van Valkenburgh Associates, December 1997.

[66] Shurtleff (1921), 2.

[67] See Robin Karson, *Fletcher Steele, Landscape Architect* (New York: Harry Abrams/SagaPress, 1989) for an overview of Steele's significance in the history of modern landscape archtiecture. Karson mentions that Steele suffered from a stroke in 1951, at the age of 66, and that much of his work in the 1950s was done as on-site consultations without the benefit of detailed drawings, 270-273.

[68] Fletcher Steele to James Lawrence (a trustee?), 10June 1954, 1-2. *President's Office Files, Grounds* , 1902-1966. Wellesley College Clapp Library, College Archives. Given the dates on other correspondence in this file, it seems as if the letter should be dated 1955 not 1954. Robin Karson lists a Mr. and Mrs. James LAwrence of Brookline, MA. as a 1952 client of Fletcher Steele's.

[69] Memo from Kreinheder to Clapp, Steele, Forbes, Creighton, Scheufle (23 June 1955). *President's Office Files*, Grounds, 1902-1966.Wellesley College Clapp Library, College Archives.

[70] "To the Buildings and Grounds Committee," no author (2 May 1960) *Treasurer's Files*: Building and Grounds Wellesley College Clapp Library, College Archives.

[71] McGuire's books are *Beatrix Farrand's American Landscapes. Her Gardens and Campuses*, co-written with Diana Balmori and Eleanor McPeck (1985), and Beatrix Farrand's *Plant Book for Dumbarton Oaks* (1980).

[72] McGuire's activities are documented in *Trustees' Files*: Building and Grounds committee files (Notebook 11/69-5/74 and 10/74-5/77), Parking Files (1975), and Diane Kostial McGuire File. Wellesley College Clapp Library, College Archives.

[73] Loeffler, 23.

[74] Belle Sherwin "Our inheritance–The Wellesley Grounds" in *Wellesley Magazine* (April 1932), 283.

[75] Ibid

[76] McGuire, Diane, memo to Mr. Joseph Kiebala, Jr."Wellesley College Landscape Report" (1 October 1973). *Trustees Files*, Buildings and Grounds committee, filed with Minutes of 10 January 1974. Wellesley College Clapp Library, College Archives.

[77] See the Carol Johnson And Associates Master Plan update, 1995. Wellesley College Clapp Library, College Archives.

[78] Creighton, 271.

[79] Olmsted , Jr. to Hazard, (1902), 6.

[80] "Clippings from Campus: New Speedway and Parking Space," *Wellesley Alumnae Magazine* 14:2 (12/29), and "Clippings on Campus: New Roads and Buildings,"*Wellesley Alumnae Magazine* 15:2 (12/30).

[81] For background on the design practice of Innocenti and Webel, see Gary Hilderbrand. *Making A Landscape of Continuity. The Practice of Innocenti and Webel* (Cambridge, MA.: Princeton Architectural Press, 1997).

[82] No author. "To the Buildings and Grounds Committee. Road Proposals" (May 2, 1960) in *Treasurer's Files*, Buildings and Grounds. Wellesley College Clapp Library, College Archives.

[83] Ibid, 2.

[84] Diane Kostial McGuire,. "Wellesley College Automobile Traffic and Parking. Its Effect on the landscape" (11/75 draft and 5/76 final) in *Parking file* (1975), Wellesley College Clapp Library, College Archives.

[85] Carol Johnson Associates memo, (1 January 1984), *Landscape and Grounds subcommittee file* in unprocessed records of WC Facilities Planning Department, 1981-1985. Wellesley College Clapp Library, College Archives.

[86] Memo (8 February 1984), *Trustees files, Landscape and Grounds subcommittee* , in unprocessed records of Wellesley College Facilities Planning Department, 1981-1985. Wellesley College Clapp Library, College Archives.

[87] Loeffler, 20.

[88] Monahan, Barry, memo to Trustees, Landscape and Grounds subcommittee (27 March 1985). *Trustees' files, Landscape and Grounds subcommittee*, in unprocessed records of Wellesley College Facilities Planning Department, 1981-1985. Wellesley College Clapp Library, College Archives.

[89] See Gina Ford's Wellesley College, Department of Art, Thesis project (1997) in which she developed a remarkable graphic record of the historical evolution of the campus. Her plans record the physical location of structures on campus, every twenty five years since the College's founding. Note: Its focus is on the built architecture and not the landscape spaces in-between. The drawings were done with CADD, are archived in Clapp, and available through Wellesley College Facilities Management staff, Pam Gentile.

[90] Stephanie Williams, "Wellesley College, Massachusetts," *Architectural Review* (1977), 148.

[91] Creighton, Harriet B., memo to the Trustee Committee on Buildings and Grounds, "Science Center faculty Committee" (22 September 1970). *President's Files*,Science Center, 1/2. Wellesley College Clapp Library, College Archives.

[92] Ibid, 1.

[93] Trustee Building and Grounds Committee Meeting minutes, (26 September 1972). *Trustees' Files*, Building and Grounds Committee. Board of Trustees Notebook 11/1969-5/1974.Wellesley College Clapp Library, College Archives.

[94] Trustee Building and Grounds Committee Meeting minutes, (3 June 1971). *Trustees'sFiles* Building and Grounds Committee. Board of Trustees Notebook 11/1969-5/1974. Wellesley College Clapp Library, College Archives.

[95] Cram (1916), 4.

Wellesley College 1998 Landscape Master Plan

Working Paper Three:
The Campus Landscape: Utility and Environmental Systems

Michael Van Valkenburgh Associates, Inc., Landscape Architects
21 January 1998

Wellesley College Master Plan
Working Paper 3
The Campus Landscape: Utility and Environmental Systems
30 January 1998

1.0 Introduction

The utility systems of the Wellesley campus, although less visible than the roadway system or the vegetation layer, are a determining factor in the structure, functioning, diversity, and continuity of the campus landscape. They also play a critical role in assuring the ecological health of the Wellesley environment.

Providing for telecommunications hookups, the delivery of water, heat, and electricity, and the removal of waste from the dispersed layout of buildings presents problems similar to the challenges posed by vehicular circulation, which necessitates an extensive road network for the proper functioning of the campus. The dispersed nature of the campus requires a high proportion of length-of-linkages relative to the number of buildings served. Therefore the potential cost of maintaining and expanding the utility systems calls for careful review of how the college can take advantage of existing systems as it plans for future needs.

2.0 The Impact of Utility Systems on the Landscape

From a landscape perspective, the visual evidence of utilities at Wellesley is not immediately obvious, but utilities have a significant impact on planting, grading, and the richness and diversity of the landscape.

2.1 Planting

The presence of tunnels and underground connections determines the type of plantings that are possible over these utilities, and may even preclude planting altogether in some areas. For instance, the addition of plantings to screen the service area of the Davis Museum from College Road has been hampered by the presence of a large underground tunnel in that area.

2.2 Grading

Utilities are expensive, and their construction is usually tied to one-time capital projects such as new buildings. As a result, major utilities are unlikely to relocate once placed. This can have a significant impact on any later earthwork or regrading of the land above them: additional fill over utilities may bury utilities at depths not easily accessed by normal excavation and service equipment; conversely, unanticipated cutting of the ground over underground utilities may remove the depth of soil needed for temperature insulation or for protection from the surface operation of vehicles and maintenance machinery.

2.3 Diversity and Richness

In some cases, the functioning of utility systems can actually augment landscape diversity. For instance, the Lake Pump System for heating and cooling of Clapp Library and the Wellesley College Club uses water drawn from the depths of Lake Waban and releases that water into the marsh adjacent to Tupelo Point, supplying that area with fresh water and adding to the extent of the marsh.

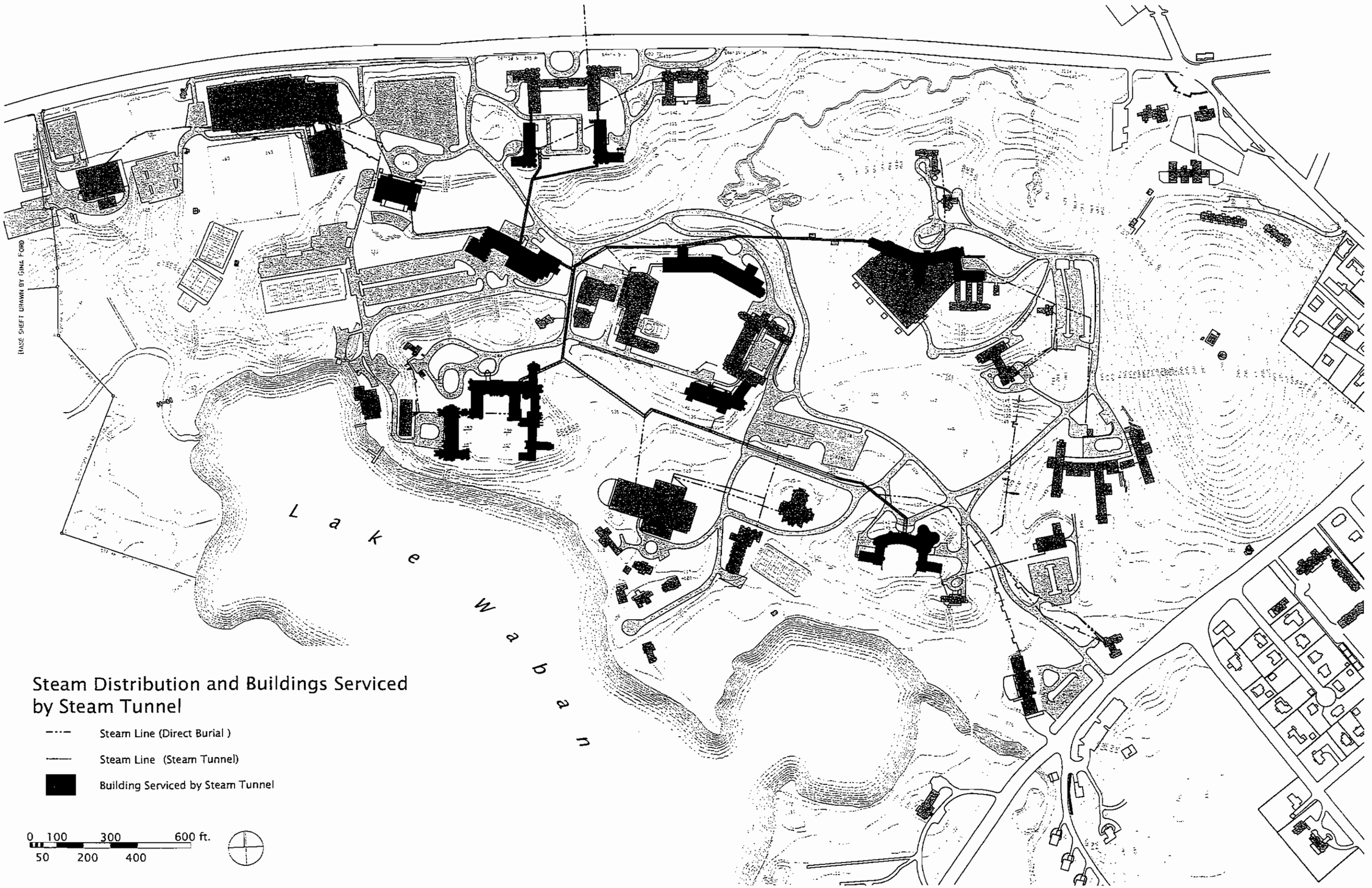
On the other hand, utilities can inadvertently reduce landscape diversity. Significant examples of such unwanted landscape simplification are the draining of the wet meadows at the Science Center and the filling of the stream channel in the area south of Alumnae Hall. These areas are discussed in more depth in later sections of this paper. The financial necessity to install utilities in straight lines may also break the continuity of the land forms and plantings that give coherence to the overall structure of the landscape. Many utility corridors require ongoing access for service that prevents the restoration of planting within their alignments; examples include the access road to the water tower and the aforementioned lack of trees over the tunnel north of the Davis Museum.

3.0 Utility Systems of the Campus

The utilities that serve the Wellesley campus can be divided into six groups, each with a different degree and type of impact on the campus landscape. These systems are: steam heating, Lake Waban heating and cooling system, electrical system including high-and low-tension, telecommunications, potable water and sewage, and storm water.

3.1 Steam Heating

The most significant underground infrastructure system is the 2.5-mile steam tunnel that delivers heat to campus buildings. This tunnel system, large enough in cross section for a person to walk through, connects many of the key buildings. Of all the utility systems, the steam tunnel is the most immutable; it could be thought of as a thin, linear, underground



Steam Distribution and Buildings Serviced by Steam Tunnel

Steam Line (Direct Burial)

Steam Line (Steam Tunnel)

Building Serviced by Steam Tunnel

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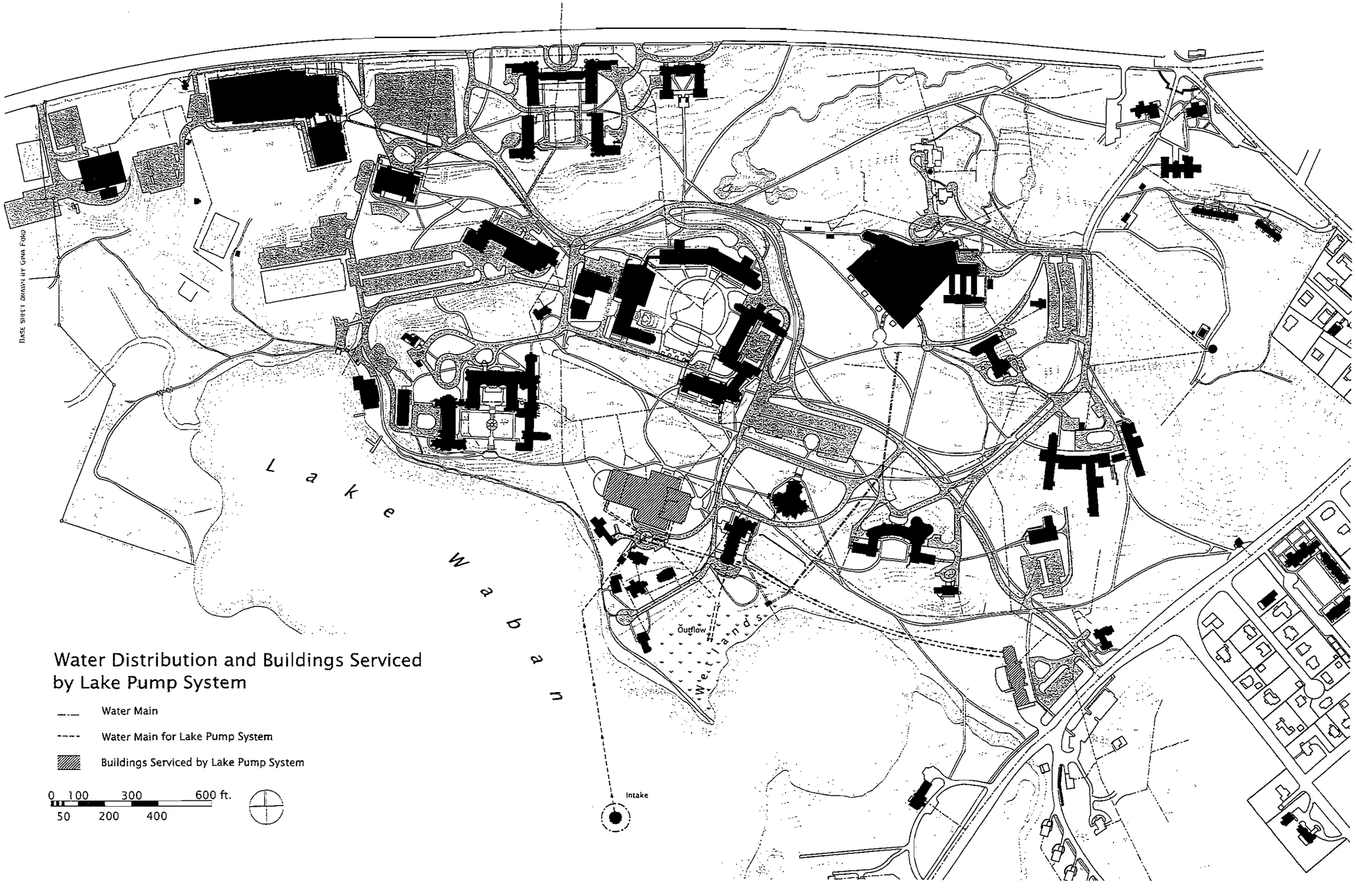


Water Distribution and Buildings Serviced by Lake Pump System

Water Main

Water Main for Lake Pump System

Buildings Serviced by Lake Pump System

0 100 300 600 ft.
50 200 400

building. Replacing or relocating any significant portions of the tunnel could be prohibitively expensive.

The permanence of the tunnel system is important from several perspectives: from a planner's outlook, future building sites should anticipate the location of the tunnel and the directions in which it could be expanded; from the viewpoint of the operators of the utility system, connection of the tunnel system to buildings not presently serviced would be desirable, but these new connections would probably need to be associated with individual building renovation projects. Any plans that might require the relocation of a portion of the tunnel need to be carefully considered.

The primary utilities that are carried with the steam tunnel steam heating, chilled water, high- and low-tension electric, and telecommunications.

The remaining utility systems on campus are primarily direct-buried lines, which from time to time will need to be repaired, inspected, or replaced. Although the related excavation can be temporarily disruptive, most of these lines are in places that do not greatly affect the landscape. With the exception of storm water drainage, the proper functioning of these systems has no significant interaction with the surface landscape and its appearance, because their primary purpose is to serve the buildings and the functions that take place within them.

3.2 Utility Easements and Other Utility-Related Restrictions on Development

3.2.1 Sanitary Sewer and Water Systems

Although this master plan does not assess the capacity of existing utilities to support additional development, several general observations can be made: the utilities that are most limiting in areas of highly permeable soils are sanitary sewer service and potable water. Any type of septic system designed to address additional sewer needs would probably not be advisable and may in fact be impossible due to the close presence of the aquifer and the high percolation rate of the soil. Therefore, the College will probably need to consider the connection of new facilities to the Town of Wellesley's sanitary sewer system. Yet in various conversations with people around campus, we have learned that these lines may be at or near capacity. The Town of Wellesley also has an easement on the sanitary sewer line that restricts construction within fifteen feet. It appears that no other third-party utility easements exist on the core campus.

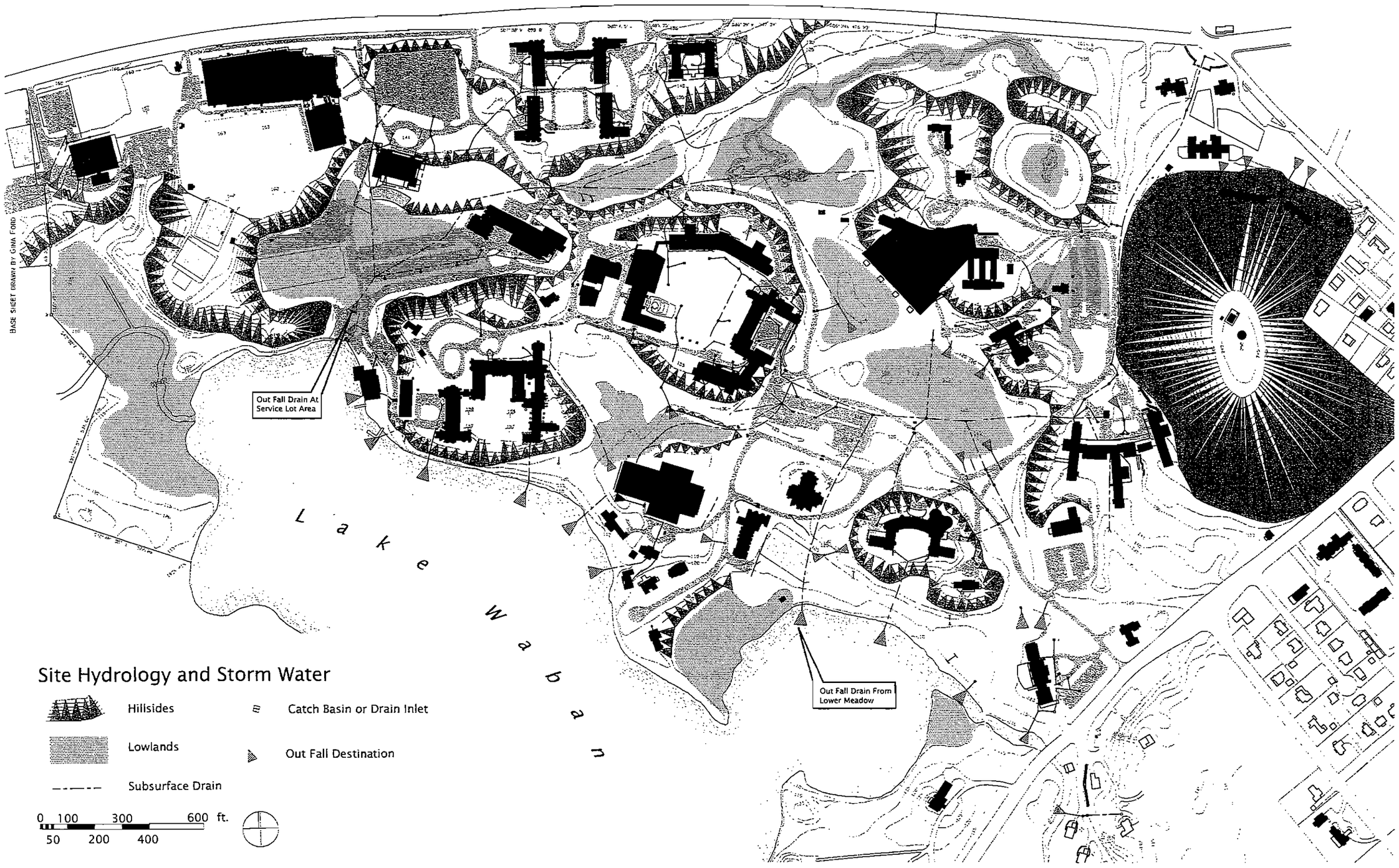
4.0 Storm Water Drainage

The storm water drainage system, unlike the aforementioned systems, has a direct role in the function, appearance, and health of the visible landscape and ecological systems. This system is intimately meshed with the hydrologic system, or, how rainwater moves over and through the landscape. The storm drainage system is separate from the sanitary sewer system, which carries waste water from plumbing systems in the buildings and is connected directly to the Town of Wellesley's high-pressure sanitary sewer system. To understand how the storm water system affects the landscape, one must consider how water moves through the natural landscape: rainwater, which falls equally on all areas of the campus, eventually finds its way to the aquifer (of which Lake Waban is a surface expression) or is evaporated—either directly or through evapo-transpiration by plants—back into the atmosphere.

Various components of the natural hydrologic chain slow the transfer and filtration of storm water as it moves through the landscape from higher elevations, over and through the ground, to the groundwater. This replenishing of the groundwater with filtered rainwater and snowmelt is essential for the long-term viability of the landscape. As a landscape is developed with roadways, buildings, playing fields, etc., three major changes in the natural hydrologic system occur. First, the permeability of the surface of the land is decreased, creating, at least during rainstorms, a temporary concentration of artificially fast-moving water. Second, development tends to foster flatter areas that acquire standing water, and this water needs to be removed. This removal is usually accomplished by the introduction of surface drains that collect water and shuttle it to underground pipes. Finally, there has often been a desire to drain natural landscape areas that are wet or damp such as the wet meadows in front of the Science Center. In short, the storm water drainage system creates bridges over and short cuts around development to provide expedient ways for the migration of water in the landscape from high ground to the groundwater level. The ecological consequences of these systems can be benign but most often are quite destructive.

4.1 Suburbanization of the Campus Landscape

Much of the storm water system is inarguably necessary: puddle-free paths and roadways are essential, for instance, as are well-drained playing fields and quad areas. On the other hand, there has been a tendency at Wellesley to extend drainage to areas where it may not be required for the proper functioning of the campus or where more ecologically sound solutions might be possible. Wet areas that were poorly managed may have been perceived as unhealthy or unattractive, and these low-lying areas were filled to be used for parking or other purposes. These types of changes vary in degree and extent, and are almost always carried out little by little over a long period of time, altering and simplifying the landscape incrementally. The resulting accrual of these decisions, which individually seemed quite benign, eventually conspires to significantly change the feeling of the campus landscape.


BASE SHEET DRAWN BY GINA FORD
Out Fall Drain At Service Lot Area
Lake Waban
Out Fall Drain From Lower Meadow
Site Hydrology and Storm Water
Hillsides
Lowlands
Subsurface Drain
Catch Basin or Drain Inlet
Out Fall Destination
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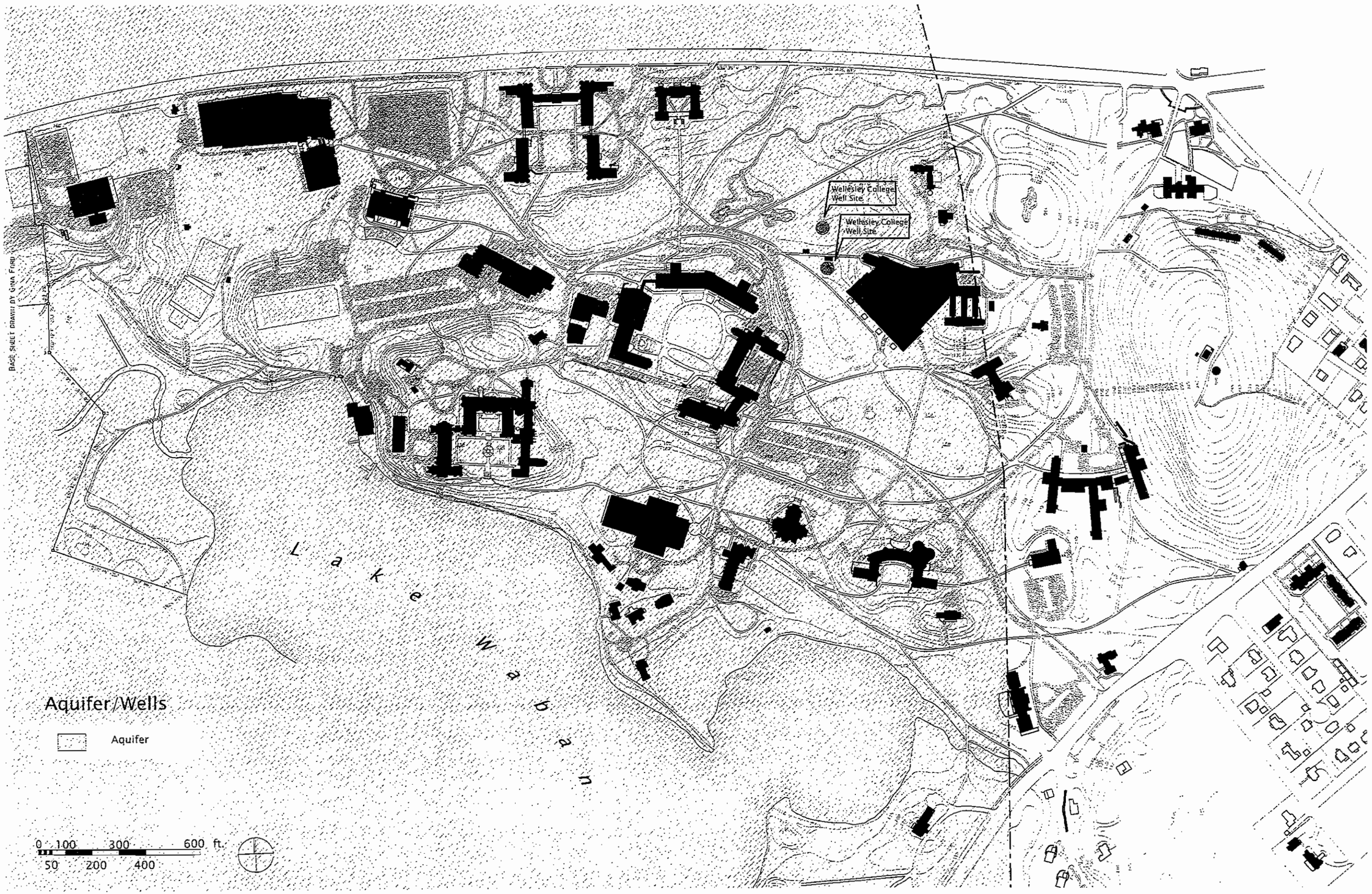
Wellesley College Well Site
Wellesley College Well Site
Lake Waban
Aquifer/Wells
Aquifer
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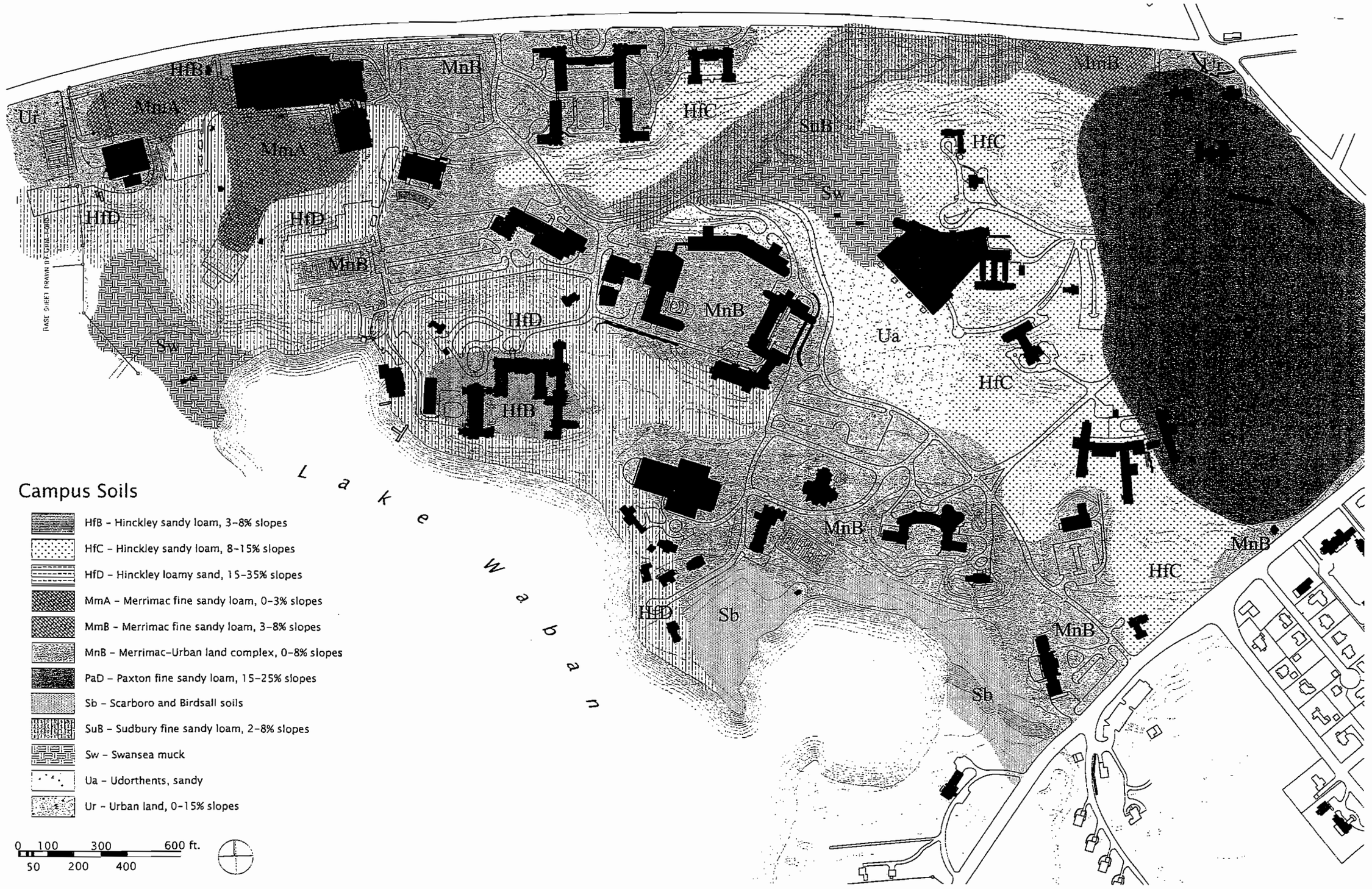
HfB
MnB
Ur
MmA
HfC
SuB
HfD
Sw
Ua
Sb
Lake Waban
Campus Soils
HfB - Hinckley sandy loam, 3-8% slopes
HfC - Hinckley sandy loam, 8-15% slopes
HfD - Hinckley loamy sand, 15-35% slopes
MmA - Merrimac fine sandy loam, 0-3% slopes
MmB - Merrimac fine sandy loam, 3-8% slopes
MnB - Merrimac-Urban land complex, 0-8% slopes
PaD - Paxton fine sandy loam, 15-25% slopes
Sb - Scarboro and Birdsall soils
SuB - Sudbury fine sandy loam, 2-8% slopes
Sw - Swansea muck
Ua - Udorthents, sandy
Ur - Urban land, 0-15% slopes
0 100 300 600 ft.
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This tyranny of small decisions may not be felt in any striking way by people who regularly use the campus unless they are particularly sensitive or have excellent visual memories. Most often these minor changes go unchallenged. At the same time, this is precisely the taming or simplification of the Wellesley landscape that people sense when they distinguish between a dull suburban normality and a stimulating rural quirkiness, or a bland suburban smoothness and a natural complexity. There are places on the Wellesley campus where carefully designed interpretations of natural systems could be introduced without any deleterious effects on the infrastructure functioning of the landscape. In fact, the reintroduction of self-sustaining natural systems could both simplify some infrastructure systems and reconstruct or add a layer of texture, beauty, and natural diversity that has been lost on campus. Two areas of the campus that should be studied in this way are the wet meadow areas north of Founders Lot and the vestigial stream that drains the Service Lot into Lake Waban.

4.2 Wet Meadows

All of the open, low-lying meadow areas identified by Frederick Law Olmsted, Jr. in his 1902 letter to President Hazard originally functioned as part of the cohesive and natural hydrologic system of the native landscape. These areas include: The Lower, Middle, and Upper (Munger) Meadows; Severance Green (originally known as The Campus); the dell area of the Arboretum; and the areas presently occupied by Gray and Service Lots. These areas temporarily held rainwater and snowmelt that drained from the hills, where it then either evaporated or filtered down through the soil to replenish the large aquifer that underlies most of the campus. This process supplies water to several wells on campus and provides the main water supply for the Town of Wellesley. Most of the Wellesley campus is underlain with coarse, well-drained soils that will transmit surface water directly to the aquifer.

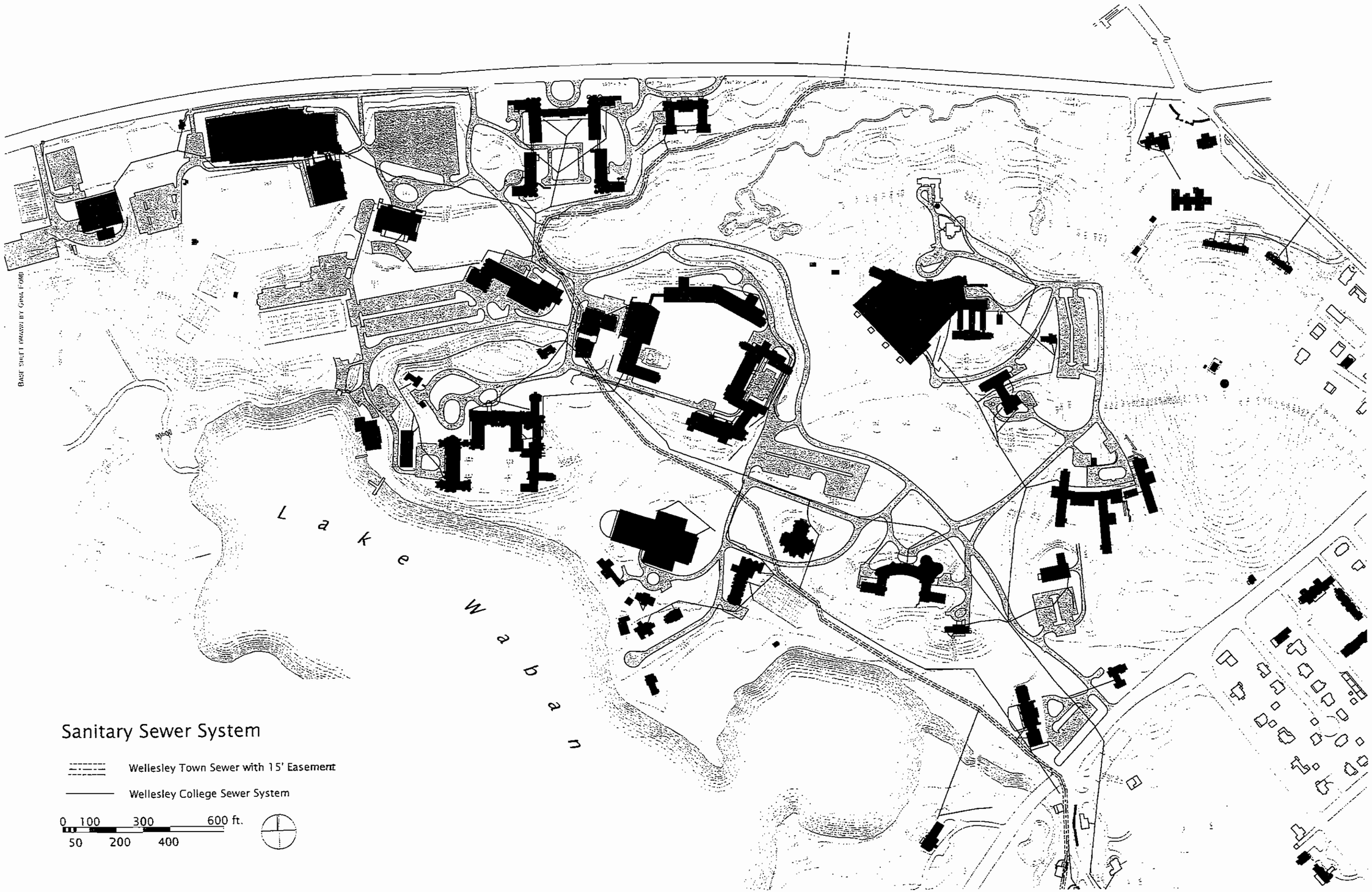
The low-lying meadow areas also support a particular collection of plants known to naturalists as the wet meadow plant community. The wet meadow is an herbaceous plant community consisting predominantly of grass species that are adapted to the fluctuating water level and seasonal moisture differences that characterize these landscapes. A wet meadow is distinguished from a swamp in that it is a dryer landscape that features no woody plants like trees or shrubs. It is different than a marsh in that it is generally dryer, especially in the warmer months, and does not contain typical marsh plants like cattail or rushes. A wet meadow most closely resembles what most people would call a wildflower meadow, and in fact a group of wildflowers is typically associated with this community, including fringed gentian, common ladies' tresses, Canada lily, and cardinal flower, as well as some rare orchids and several fern species. Of course none of these wet meadows remains intact on the Wellesley campus. Several areas that once featured them in the past have acquired new uses in the life of the college that are critical to the structure and functioning of the campus: Severence Green, Munger Meadow, and the dell of the Arboretum.

Other sites on campus, though perhaps no longer appropriate for wet meadows, seem to be wasted in their present uses as parking areas. The Service Lot and Gray Lot both could be put to better use as open landscapes with athletic fields, given a suitable relocation of the parking that currently takes place there. Other former wet meadow areas that could be considered for some sort of additional ecological restoration are the Middle Meadow (Paramecium Pond area) and the Lower Meadow (so-called Science Center Meadow). At present these areas are used for temporary parking and are mown once or twice a year. The plants that grow there are compromised in several ways: First, the mowing regime is based on when the meadows need to be used for parking, leaving the meadow areas bare and stubbly through the winter, when the presence of ripening foliage and flower seed heads would normally obscure the standing water that collects over the winter. Second, the meadows have been incrementally filled over time to remove puddles in the winter. Finally, drains and underground pipes shuttle water from the meadow areas, under Founders Lot, to Lake Waban. These pipes remove the periodic water necessary to support the wet meadow community. Furthermore, these pipes are a continual maintenance problem because the meadows are so close in elevation to the lake that the pipes cannot be laid with enough slope to allow rushing water to scour sediment from their length.

In our report on the history of the Wellesley College campus landscape, we have identified a practice, dating back to the time of the Durants, of managing the various natural features of the landscape to augment, accentuate, or build on their natural beauty and diversity. The result is the creation of areas with distinct qualities, what is referred to in the landscape history portion of Working Paper 2 as a kind of cultivated nature. Restoring the meadow areas, or portions of these areas, to authentic wet meadows with carefully designed plantings that take their important location into consideration would offer many benefits: the reintroduction of a layer of diversity and natural beauty to the landscape that has been lost; the provision of a rich plant community that would draw wildlife; the creation of a pedagogic resource for botany, ecology, and entomology classes; the return of these areas to functioning and sustainable links in the hydrologic system of the campus, thereby reducing the need for drainage systems using pipes that require costly maintenance. For these reasons the meadow areas need to be studied further as part of the planning process.

4.3 Stream Channel

There exists at the extreme southwest corner of the Service Lot area the vestigial remains of a formally important stream channel that once visibly connected with riparian areas of the campus as far east as the Munger Meadow, delivering water to Lake Waban (see historic map). The significance of this stream channel was acknowledged by Ralph Adams Cram, the architect of Alumnae Hall who placed the hall and its outdoor terrace and amphitheater on axis with the center-line of where the stream enters the lake. The filling in of this stream channel and the replacement of the surrounding wetland area it once occupied with parking was a typical practice in the middle of the twentieth century. It is surprising, in a way, that any sign of the stream exists at all, given the destruction of these types of areas that accompanied the need for more places to park cars. This channel is extremely polluted because runoff from the entire Service Lot area drains directly to it, without any intermediate filtration, on its way into Lake Waban. Although this stream is a sad place at present, it is possible to imagine that it has the great potential to become a feature of beauty and interest. The revitalization of the stream channel should be considered as part of the planning of this area.


Base sheet drawn by Gina Ford
Lake Waban
Sanitary Sewer System
Wellesley Town Sewer with 15' Easement
Wellesley College Sewer System
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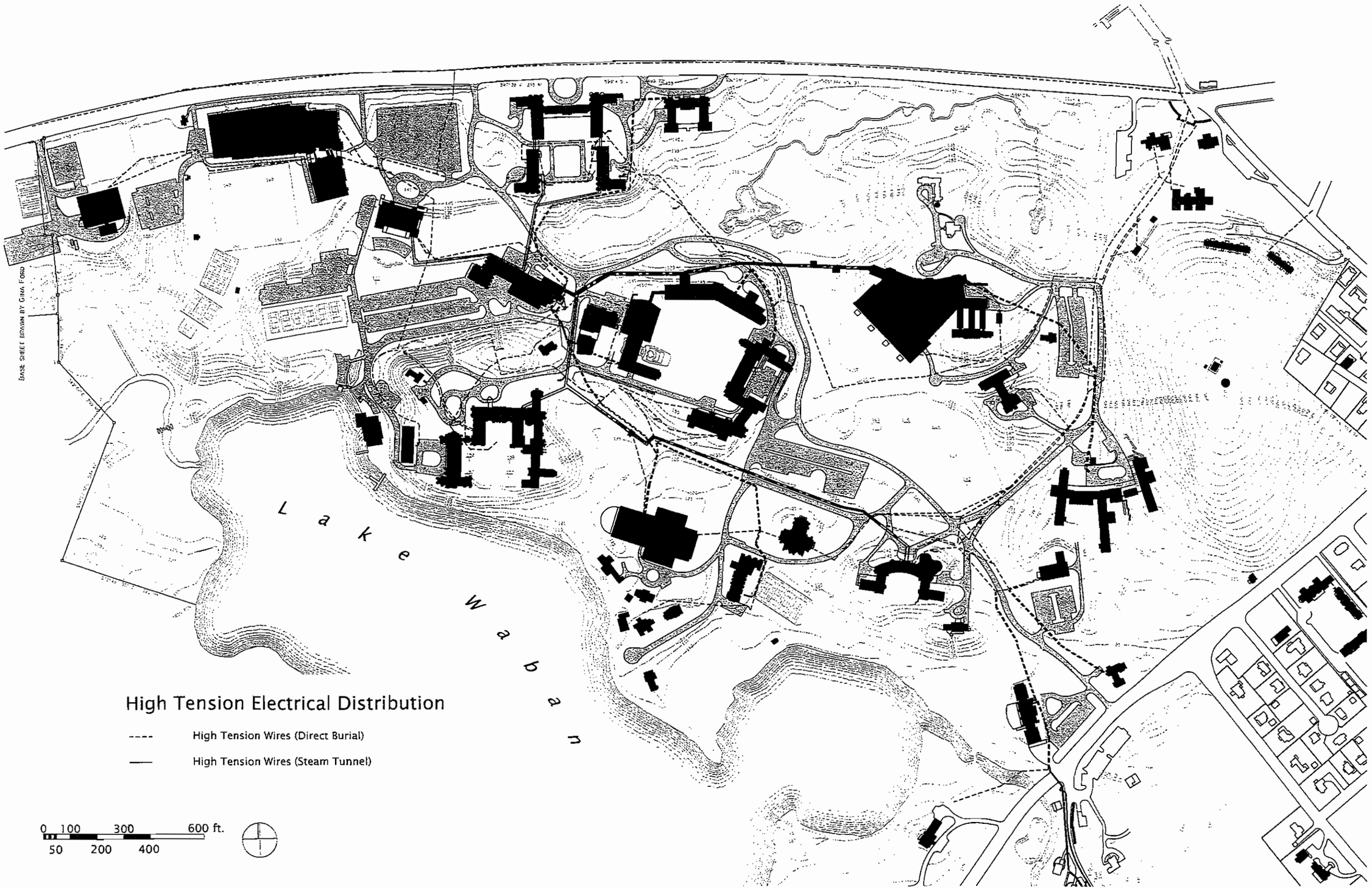
BASE SHEET DRAWN BY GINA FORD
Lake Waban
High Tension Electrical Distribution
---- High Tension Wires (Direct Burial)
—— High Tension Wires (Steam Tunnel)
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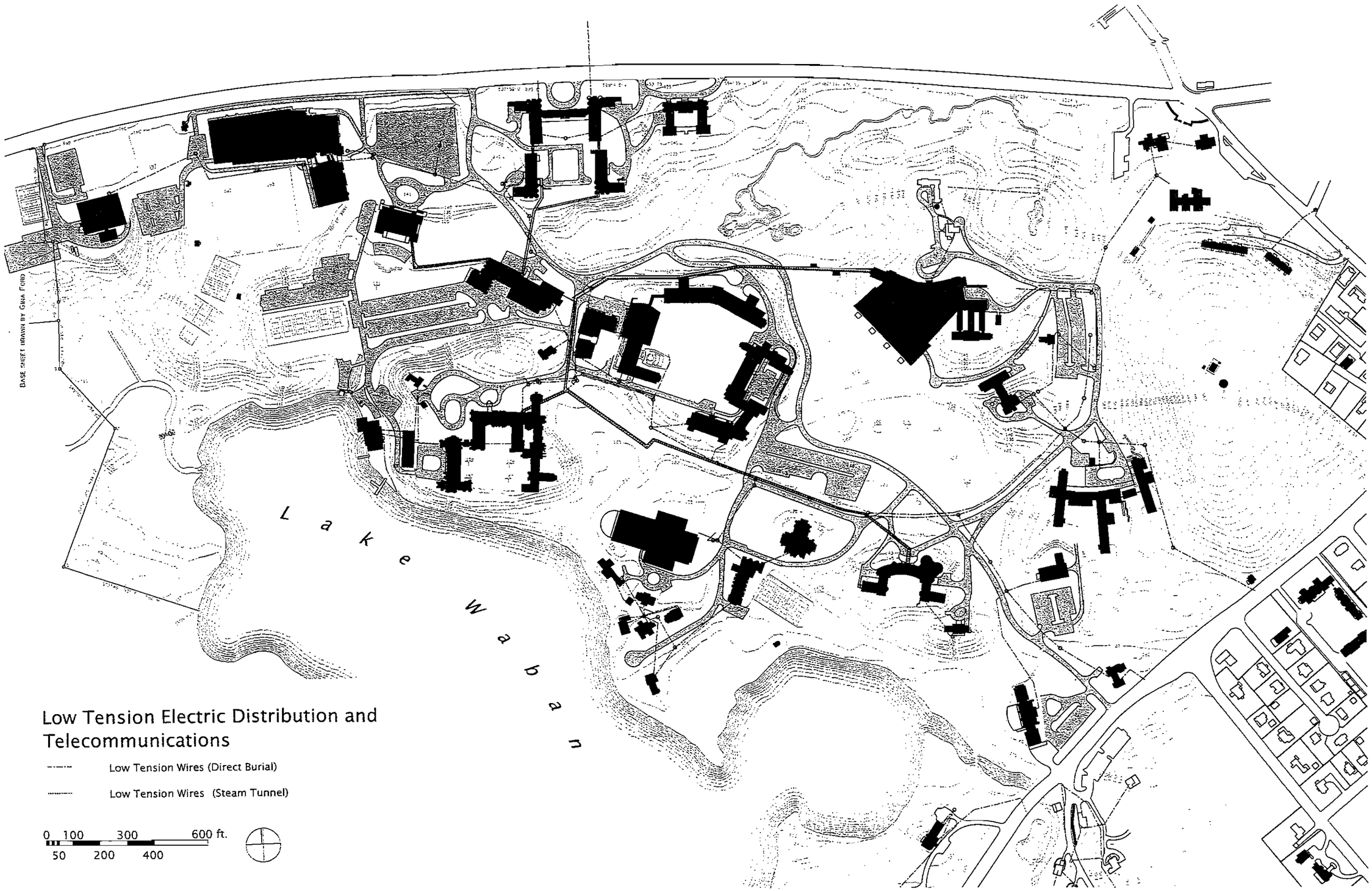

Low Tension Electric Distribution and Telecommunications

Low Tension Wires (Direct Burial)

Low Tension Wires (Steam Tunnel)

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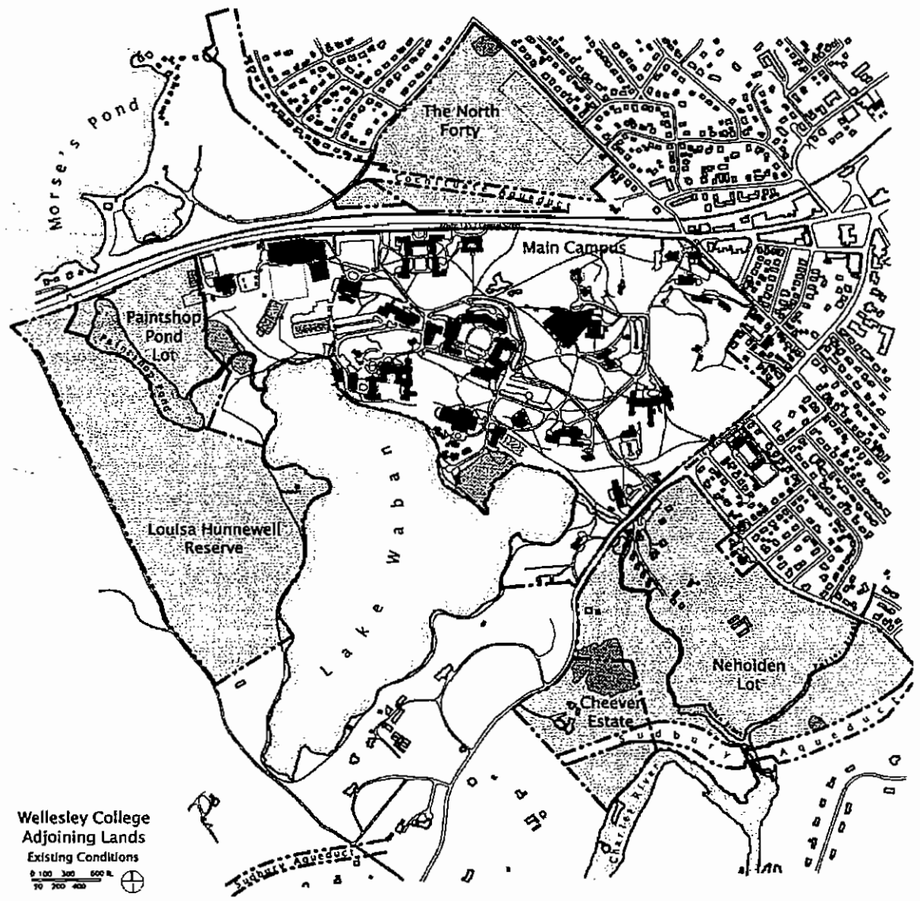
Wellesley College 1998 Landscape Master Plan

Working Paper Three A:
Wellesley's Adjoining Lands: Preserving an Idyllic Surrounding



Michael Van Valkenburgh Associates, Inc., Landscape Architects
10 August 1998

WORKING PAPER THREE A: WELLESLEY'S ADJOINING LANDS – PRESERVING AN IDYLLIC SURROUNDING

12 August 1998

Introduction: The Structure of the Greater Wellesley Landscape

Thanks to the generosity and foresight of its founder Henry F. Durant and that of the Hunnewell family Wellesley College owns nearly 300 acres of undeveloped adjoining land. From the beginning Durant recognized the importance of acquiring these surrounding five parcels as a means of preserving and extending the idyllic campus setting while allowing for the possibility of future expansion of the College. The first three parcels, now known as the Paintshop Pond Lot, the North Forty, and the Nehoiden Lot, were included with the initial Durant gift of the Main Campus.

With the acquisition of the Louisa Hunnewell Lot in 1964, the College expanded to include the majority of the western shore of Lake Waban, toward which the historic core of the campus is oriented. The last major parcel, the Cheever Estate, was given to the College in 1970, thereby extending the College boundaries west along the Charles River (figure 3A.1).

Description of the Adjoining Lands

Each of the five adjoining parcels is distinguished by its function, natural systems, physical connection to the main campus, and legal constraints. With the exception of Nehoiden Golf Course, most of this land remains largely undeveloped. Several land-use studies explored development options within the complex legal restrictions for each parcel. The most comprehensive of these studies is the Niles Report, completed in 1979. This working paper will include summarized and updated information from the findings presented in the Niles Report.

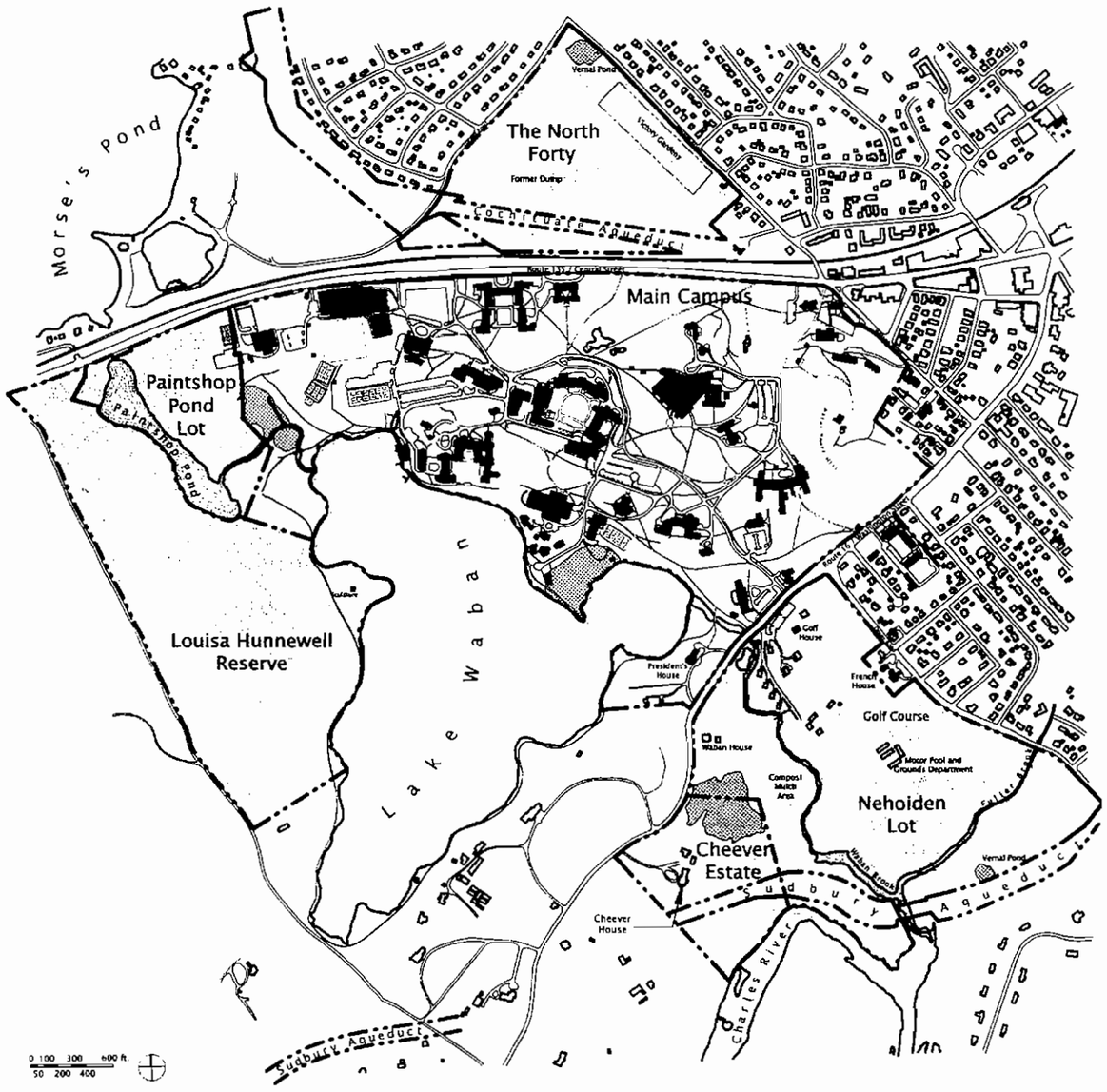


Figure 3A.1 Wellesley College, existing conditions

The North Forty

The North Forty is located north of the main campus between Central Street, Weston Road, and Turner Road. The MBTA commuter rail and the Cochituate Aqueduct isolate the majority of the parcel from Central Street. Presently, vehicular access to the site is from the south side of Weston Road through the community gardens. The College maintains footpaths throughout the parcel (figure 3A.1).

Aerial photos and archival records indicate that most of the forty-acre site was cultivated from the time of its acquisition through the 1950s. Since that time the perimeter of the site has been used in various ways, while the interior has remained largely undisturbed. During the 1950s the College used the southwest corner of the site as a dump, while the eastern side bordering Weston Road was developed as victory gardens by neighboring residents during World War II. Today residents of Weston Road maintain this area as community garden plots (figure 3A.2).

Most of the site is covered with a dense understory of old field community species dominated by pine, sumac, red cedar, birch, poplar, scrub oak, and some exotic species including crabapple and honeysuckle. The site of the former dump is significantly more disturbed with remnant piles of debris covered in a layer of herbaceous/shrub growth along Central Street.

The entire parcel is relatively flat, particularly in the northeastern quadrant, with gentle slopes down toward the southeast.

The only significant topographic feature is a vernal pond in the northern corner. Soils are well-drained sandy loam or loamy sand (figure 3A.3).

Figure 3A.2 : Community garden plots

Campus Soils

CaC - Canton fine sandy loam, 3-8% slopes
CaD - Canton fine sandy loam, 15-35% slopes
CbB - Canton fine sandy loam, 3-8% slopes, extremely stony
ChD - Charlton-Hollis-Rock outcrop complex, 15-25% slopes
CuC - Charlton-Hollis-Urban land complex, 3-15% slopes
HfB - Hinckley sandy loam, 3-8% slopes
HfC - Hinckley sandy loam, 8-15% slopes
HfD - Hinckley loamy sand, 15-35% slopes
HrC - Hollis-Rock-outcrop-Charlton complex, 3-15% slopes
HrD - Hollis-Rock-outcrop-Charlton complex, 3-15% slopes
MmA - Merrimac fine sandy loam, 0-3% slopes
MmB - Merrimac fine sandy loam, 3-8% slopes
MnB - Merrimac-Urban land complex, 0-8% slopes
PaD - Paxton fine sandy loam, 15-25% slopes
PbD - Paxton fine sandy loam, 15-25% slopes, extremely stony
Ps - Pits, sand and gravel
RgB - Ridgebury fine sandy loam, 2-8% slopes, extremely stony
Rm - Rippowam silt loam
Sa - Saco silt loam
Sb - Scarboro and Birdsall soils
SuB - Sudbury fine sandy loam, 2-8% slopes
Sw - Swansea muck
Ua - Udorthents, sandy
Ue - Udorthents, wet substratum
Ur - Urban land, 0-15% slopes
WaA - Walpole sandy loam, 0-5% slopes
WsB - Woodbridge fine sandy loam, 3-8% slopes, extremely stony

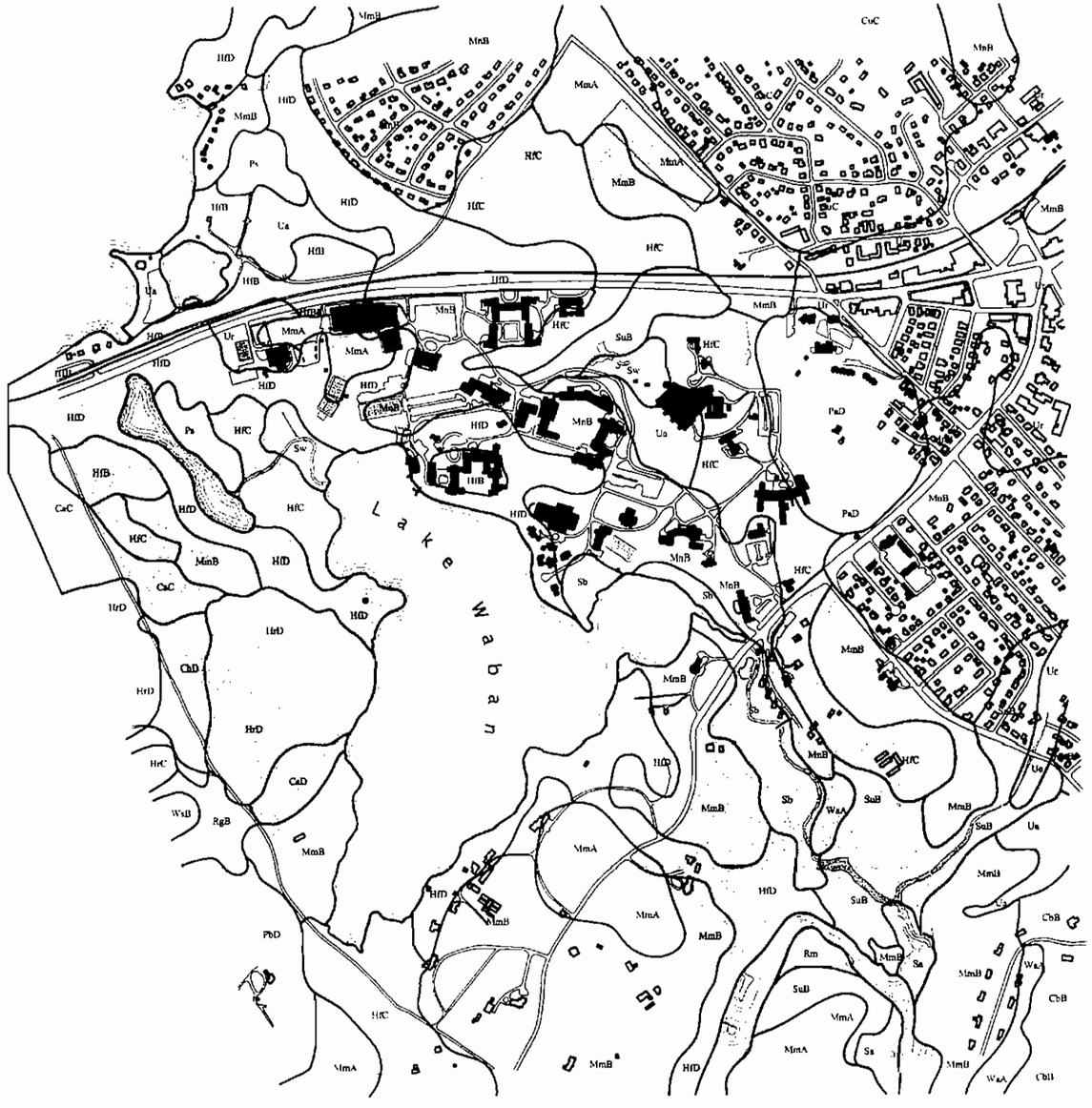


Figure 3A.3 Wellesley College soils map

Nehoiden Lot

Nehoiden Lot is a 90-acre parcel located between Route 16 (Washington Street), Dover Road, and the Charles River. Land uses on this parcel include: the Nehoiden Golf Course, faculty housing, and the Waban House.

In 1900 the Wellesley College Golf Club built the nine-hole Nehoiden Golf Course on a 60-acre site between Washington Street and Dover Road. In 1906 the College reclaimed possession of the course and the responsibility for its maintenance and management. Today the golf course is operated by the College as a private club, with membership limited to employees of the College and to the residents of the town.

Several other facilities are located on this parcel including: the Motor Pool and Grounds Department (figure 3A.4), a large compost and mulch operation, a large frame house leased to a faculty member, thirteen single-family faculty housing units, overflow parking for the College Club, and the Waban House. Located in the main house are the National Institute on Out-of-School Time and the Center for Research on Women. There is also one outbuilding and an unpaved parking area with space for twenty cars.

Figure 3A.4 Motor Pool and Grounds Department

Figure 3A.5 Pine allée through golf course

Waban Brook and Fuller Brook gracefully meander through the Golf Course and converge in the southern portion of the site, where they empty into the Charles River. Both waterways have healthy stands of riparian vegetation along their banks that extend on their southern edges to the Charles River. Several wooden bridges visually link the golf course with surrounding natural areas. A beautiful allée of mature evergreens extends southeast toward the aqueduct from the Motor Pool and Grounds Department. The allée bisects the golf course with a path for golfers and those wishing to traverse the golf course to get to the Charles River (figure 3A.5). The elevated Sudbury Aqueduct visually dominates the southern portion of the site. In the winter the aqueduct is visible from the golf course and it forms a beautiful backdrop to the rolling greens, thereby creating the romantic aura of an English landscape (figure 3A.6)

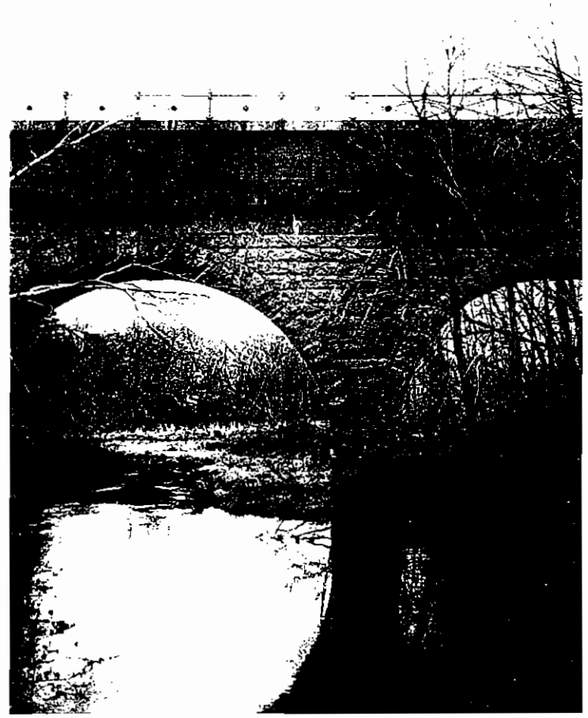


Figure 3A.6 Sudbury Aqueduct crossing Waban Brook

The high point of the site is a hill in the northeast corner, with steep slopes toward Route 16 and Waban Brook. The remainder of the site is relatively flat except where the aqueduct is enclosed by a large berm. There are six types of sandy loam soils within this site (figure 3A.3).

Cheever Estate

This 30-acre site is located between Route 16 and the Golf Course. The elevated Sudbury Aqueduct bisects the southeastern corner of the site, which adjoins the Charles River (figure 3A.1).

The Cheever Estate is set back from Route 16 and is nestled in a grove of mature trees and shrubs. The estate is comprised of two outbuildings and a large residence, which houses the Wellesley Research Center. A paved parking area with space for thirty cars is discreetly hidden on the west side of the house; however, parked cars clutter the front entrance, indicating that parking is insufficient. The structures and remains of formal gardens indicate several years of deferred maintenance (figure 3A.7).

The parcel is dominated by forested uplands with the exception of a large wetland area in the northern sector. Footpaths meander through the woods, along the aqueduct, wetlands, and Waban Brook. A band of loamy sand runs through the center of the site, with the remainder consisting of fine sandy loam (figure 3A.3).

Louisa Hunnewell Lot

The Louisa Hunnewell Lot is an 80-acre tract of land located between scenic Pond Road, the western shore of Lake Waban, and Route 135. Vehicular access to the parcel is from Pond Road and is restricted to College service vehicles. Footpaths meander through the site, connecting the lakeshore path with Pond Road.

Most of the parcel has thirty- to fifty-year-old upland forest cover consisting of mixed oaks with white pine. Two large forested rock outcrops dominate the southern portion of the parcel, with moderately steep hillsides falling toward the lake. Hinckley and Canton sandy loams cover the remainder of the site to the north (figure 3A.3).

Figure 3A.7 Cheever House

Paintshop Pond Lot

Paintshop Pond Lot is a 20-acre site located between the western side of the main campus, Route 135, the Hunnewell Reserve, and Lake Waban (see figure 3A.1). "The site is comprised of forested and non-forested uplands, nearly eight acres of wetlands, Waban Brook, and Paintshop Pond"[2] (figure 3A.8).

As a result of the discharge of industrial waste from a former paint factory, the entire site is contaminated with metal-latent soils.

Figure 3A.8 Paintshop Pond

Lake Waban

As the centerpiece of Wellesley College, Lake Waban is integral to nearly all aspects of campus life including recreation, athletics, and social and academic life. It is the quintessential place on Wellesley's campus where students can find stimulation for mind, spirit, and body.

Lake Waban is a 108-acre "great pond," as designated by the Commonwealth of Massachusetts. Under the Wetlands Protection Act, the College is required to provide public access to the lake and its shoreline.

Figure 3A.9 Lake Waban edge: Note contrast in maintenance between Hunnewell Reserve (foreground) and Main Campus.

Much of the shoreline along the lake walk is in excellent condition, with vigorous stands of swamp azalea, clethra, highbush blueberry, and alder. At several points along the path compaction of the soil and the root zones of adjacent wetland vegetation have caused erosion. Also, because there are no designated points of water access along the western and southern shorelines, occasional breaks in the riparian edge have resulted in pockets of erosion (figure 3A.10).

Figure 3A.10 Lake Waban: Eroded edge

[1] Christine R. LeBlanc, Fact Sheet: Former Henry Woods Paint Factory Site, East Coast Engineering, Inc., 2 July 1997.

[2] Ibid.

The water quality of the lake meets federal standards for fishing and swimming. However, metal-latent sediments are present along the northern and north-eastern shorelines. In 1996, 600 tons of sand were added to designated swim areas to minimize contact with and the migration of contaminated sediments

Physical Connectivity to the Main Campus

The North Forty

Of all the adjoining lands, the North Forty presents the greatest variety of possibilities for future College use. Overcoming the barriers to connection, however, will present the greatest challenge.

The Niles Report explored two options for connecting the North Forty with the main campus by way of a pedestrian/vehicular bridge across Central Street and the railroad. These options will be explored further in this working paper. A below-grade connection is not advised because of safety issues related to the length of the underground passage.

Nehoiden Lot and Cheever Estate

Access between the main campus and the Golf Course will remain the same. However, should the Motor Pool and Grounds Department expand to include more campus services, a more direct connection to the College Club entrance may be desirable.

Because Cheever Estate is not adjacent to the main campus and its use is unlikely to change in the future, access will remain from Route 16. Even in the event that the College should acquire additional land south of the President's House, these properties would likely operate independently, much the same way the Cheever Estate operates today.

Louisa Hunnewell and Paintshop Pond Lots

As long as the Louisa Hunnewell Lot is maintained as a natural reserve, a vehicular connection to the main campus is not necessary. Existing footpaths that link the reserve with Lake Waban should, however, be maintained and their use encouraged.

Paintshop Pond Lot is the only parcel that lies immediately adjacent to the Main Campus Lot. Although its location makes it the most desirable site for future expansion, environmental constraints (to be discussed in greater detail) will severely restrict the way in which this parcel can be developed.

Existing Campus Utilities

The following is an overview of the existing utility systems on the main campus.

The College supplies its own domestic water through campus wells. The water quality of the potable water supply meets the Massachusetts Drinking Water Standards (except for sodium) and monitoring of this water supply is conducted semi-annually.[2] In the event of a problem, a two-way valve allows for import/export between the town and campus water supplies. Future upgrades should include plans for the elimination of dead-end lines that presently encourage stagnation.

The College began supplying its own electrical power in the 1950s with a turbine system. In 1993 a gas-powered cogeneration steam plant was built. Since then the College saves $1 million annually on utility costs, and the plant is designed to sell excess power to the town of Wellesley when needed. Likewise, when the campus system is down, the town provides backup power.

[1] Ibid.

[2] LeBlanc.

Infrastructural Connectivity to the Main Campus

The availability of utilities to each parcel varies. All have reasonable access to water, gas, and sewer, although some are more easily served than others. The following is an update of the availability of utilities to each parcel. Refer to the Wellesley College Land Use Study, also known as the Niles Report, for a detailed discussion of utilities.

The Niles Report, issued in 1979, noted that the metropolitan sanitary sewer system was inadequate, thereby preventing major new hookups. Since then, major upgrades to the metropolitan sanitary sewer were completed along Route 135 and Route 9 (SC to verify with Town). The increased capacity of the system makes conditions favorable for hookups from any of the parcels; however, projects would need to be evaluated on an individual basis.

The College potable water system is at capacity now, and expansion of the water production and storage system would be required for new hookups.[1] "With a system upgrade, all of the parcels could be serviced from the supply; however, in some cases initial hookup would be more expensive due to longer main extensions than for the town system."[2]

Natural gas is available to all parcels from town lines located in Turner Street, Weston Street, the Cochituate Aqueduct right-of-way, and Washington Street. In some cases a lengthy extension of the main line would be required at considerable cost to the owner.

As stated in the Niles Report, the considerable expense of steam line extensions and the capacity of the present plant would argue against connecting the parcels to the central steam plant.[3]

Regulatory Constraints: Main Campus

The Main Campus Lot came to Wellesley as part of the gift and will of Henry F. Durant in 1872 and 1881. Under these deeds the land may not be sold or leased for longer than seven years, or used for other than College purposes.[4]

Under the town bylaws, the Main Campus is zoned as an Educational District (ED 20). This classification allows for single-family residences with a minimum lot size of 20,000 square feet, major educational buildings, dormitories, and multifamily faculty housing (figure 3A.11). Setbacks allowed in an ED 20 district are as follows: 60 foot minimum frontage, 60 foot minimum front yard width; 30 foot minimum front yard depth; 20 foot minimum side yard width; and 20 foot minimum rear yard depth.[5]

Several wetland areas on campus are under the purview of the State Inland Wetlands Act. These include a 100-foot zone along Lake Waban and Paramecium Pond.[6] Riparian vegetation and low-lying elevations indicate wetlands in the Tupelo Point area and the back of Schneider Center, although to date these sites have not been delineated as wetland areas (Figure 3A.12).

Several areas on the Main Campus have been identified for environmental evaluation and/or remediation due to the use of contaminated fill. These include: the field hockey field west of the gymnasium, the "oval" tennis court area, the east and west sides of Alumnae Hall, and the Service Lot[7] (see figure 3A.12). Studies conducted in these areas indicate the presence of elevated concentrations of lead and chromium in the surface and subsurface soil.[8]

In addition to the above sites, tests indicate that the area south of the Greenhouse is contaminated with lead paint. Further testing is required to determine the extent of contamination and recommended remediation (see figure 3A.12).

[1] Ibid.

[2] Land Use Study, Wellesley College ("The Niles Report"), Niles Company Inc., 1979, p. 18.

[3] Ibid.

[4] Ropes and Gray Memorandum, 25 July 1979.

[5] Town of Wellesley Zoning Bylaw, Table 1.

[6] Land Use Study, Wellesley College.

[7] LeBlanc.

[8] LeBlanc.

The Impact of Private Deed Restrictions on Land Development

The restrictions under each of the deeds governing these parcels, although different, prevent or discourage the sale or lease of the land, require College-affiliated development, and generally encourage land conservation. Portions of the North Forty, Nehoiden Lot, Cheever Estate, and Louisa Hunnewell Lot all have private deed restrictions (figure 3A.13).

As part of the original Durant gift and will, the North Forty and Nehoiden parcels may not be sold, may not be leased for longer than seven years, and may only be used for College purposes. Two parcels on the North Forty are exempt from these restrictions: a 7.4-acre parcel along Turner Road and a 2.2-acre lot between the aqueduct and the railroad. Also, two large sections of the Nehoiden Lot are exempt from these restrictions.

The Cheever Estate, conveyed to the College from the Hunnewell Land Trust in 1970, stipulates that for each dwelling constructed, a 2-acre contiguous parcel of land must be set aside. Single-family houses are allowed on the site except within 50 feet of the Charles River.

Under the 1964 gift of the Hunnewell Lot, the deed prohibits the sale or lease of the property for fifty years. Although not intended to be legally binding, the deed expresses the hopes of Louisa Hunnewell that "the College will always respect the beauty of the land but also express the understanding that the College might some day have a use for the lands different from any intended use at the time of the gift."

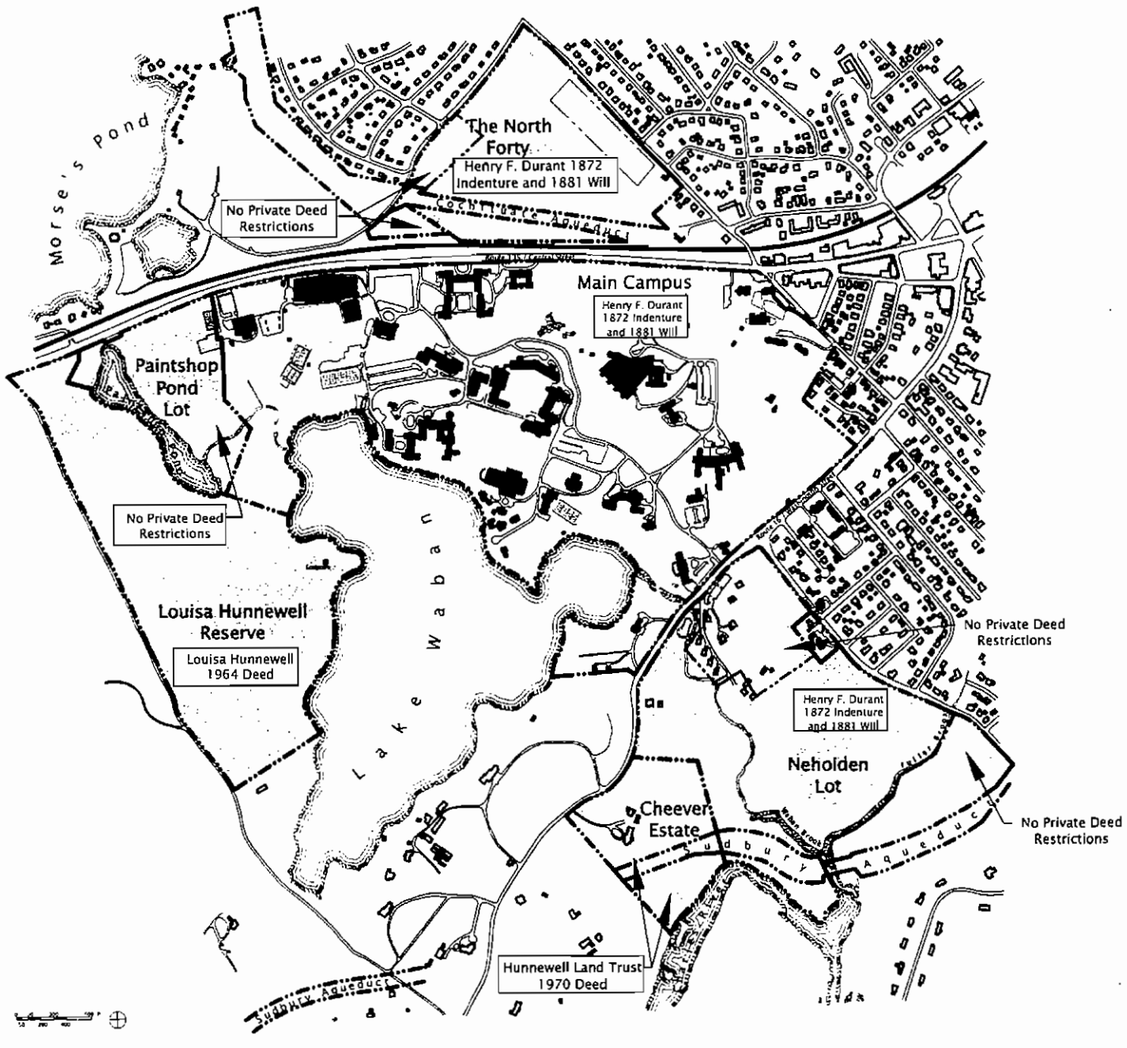


Figure 3A.13 Wellesley College deed restrictions

The Impact of Zoning and Environmental Restrictions on the Future of Wellesley's Lands

North Forty

The North Forty is zoned Single Residential, with a minimum lot size of 15,000 square feet. Under this classification town bylaws allow: churches, educational buildings, public parking lots, clubs, and agriculture. In addition, two-thirds-majority approval is required at town meetings for a noneducational use of site (figure 3A.11).

There are two known environmental concerns on the North Forty. In the northern corner of the site there is a vernal pool that has been certified by the Massachusetts Natural Heritage and Endangered Species Program under the Division of Fisheries and Wildlife.[1] Also, the southwest corner of the site was used as a landfill between 1955 and 1960. Environmental evaluation is required to determine whether any remediation is necessary (Figure 3A.12

Nehoiden Lot and Cheever Estate

The Nehoiden Lot is zoned for educational use, with a minimum lot size of 40,000 square feet. The Cheever Estate is zoned for Single Residential with a minimum 40,000 square-foot lot (figure 3A.11). Allowable uses are the same as outlined for the main campus.

The area south of the Sudbury Aqueduct where Waban and Fuller Brooks empty into the Charles River has been designated an Inland Wetlands Act Restricted Area. Any proposed alteration within this zone is subject to review by the Wellesley Conservation Commission. Specific aspects of this legislation and its effects on designated wetland areas located on Wellesley College property are covered in the Niles Report. A 1,000-foot zone along the banks of Waban and Fuller Brooks is governed under the Inland Wetlands Protection Act and the Federal Flood Insurance Act.

Louisa Hunnewell Lot

This lot is zoned Single Residential, with a minimum 40,000 square-foot lot. Allowable uses are the same as mentioned for the North Forty. Six acres within this parcel are zoned Educational (figure 3A.11).

The only portion of this parcel subject to environmental restrictions is the 100-foot buffer zone along the shore of Lake Waban, which is under the Purview of the Inland Wetlands Protection Act (figure 3A.12).

Paintshop Pond Lot

Except for a 6-acre area between Paintshop Pond and Lake Waban, which is zoned Educational, this lot is zoned for Single Family with a minimum lot size of 40,000 square feet. The same uses are allowed as outlined under the North Forty (figure 3A.11).

The environmental liabilities and regulatory constraints on this parcel are extensive (figure 3A.11). The regulatory constraints include a 100-foot-wide wetland resource area defined by the bank of Paintshop Pond. This area is protected under the Inland Wetlands Protection Act.

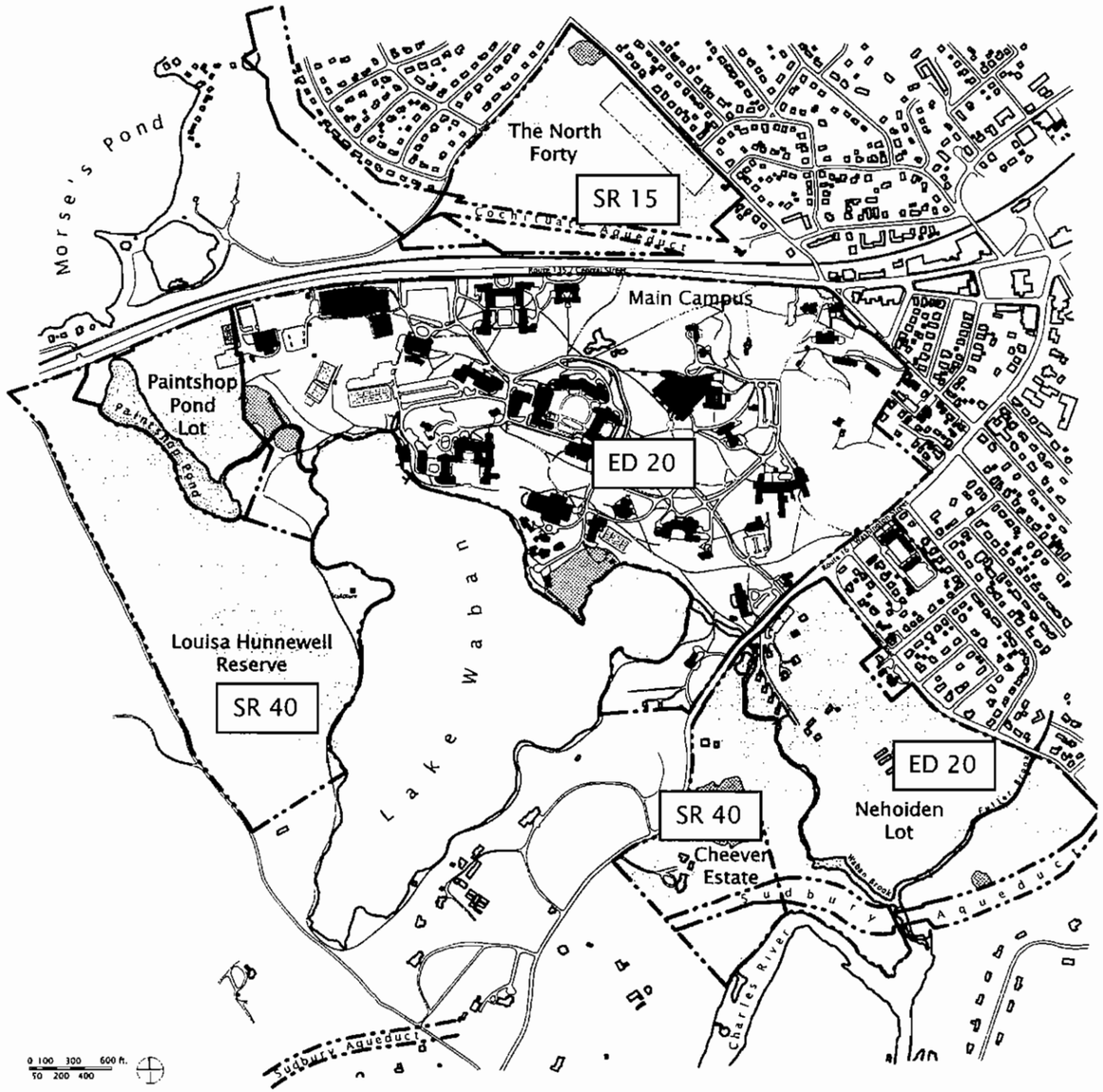


Figure 3A.12 Wellesley College zoning map

[1] Massachusetts Natural Heritage Program, letter, dated 15 November 1989.

Two areas on the Paintshop Pond site are designated as flood-prone districts and are affected by federal and town legislation. The area southeast of Paintshop Pond is designated as a Special Flood Hazard Area under the Federal Flood Insurance Act. Within this area, "filling or other activity which would act to retard the flow of flood waters or raise their elevation is prohibited." [1]

A 60-foot-wide corridor along the brook connecting Paintshop Pond to Lake Waban is affected only by the town's legislation governing flood plain protection districts. The same restrictions apply as under the Federal Flood Insurance Act outlined above. An additional restriction prohibits damage or alteration of the water table and water recharge areas. The uses allowed under both federal and town legislation are restricted to agriculture or recreational open space, including athletic fields.[2]

The entire site including the pond, wetlands, and adjacent shores of Lake Waban, as determined by numerous environmental studies, is contaminated from the discharge of industrial waste (figure 3A.12). From 1848 through 1920, the Henry Woods Paint Factory operated along the eastern border of Paintshop Pond. The factory produced various fine-colored pigments using lead arsenates, lead chromates, and several other heavy metals, which "resulted in the discharge of industrial waste onto the ground surface and adjoining water bodies." [3]

"The highest concentrations of metals and cyanide in the soils are found north and south of Waban Brook and along the eastern and southeastern side of the Pond. The wetland soils contain some of the highest concentrations of metals on the site with concentrations of lead up to 15% and 11% chromium. The contamination exists primarily in the upper four feet of soil; however in several areas south and southeast of the Pond, the pigment is present to depths of up to twelve feet."[4]

Extensive environmental assessment and remediation has been completed since 1977. This included: groundwater and surface water monitoring, wildlife studies, excavation and removal of contaminated soils, capping, placement of clean soils and a synthetic liner, and fencing off contaminated areas. In 1991, 3,600 tons of pigment were removed from two on-site waste piles and a surface impoundment. These areas were subsequently capped with low-permeability soil and loam and seeded.[5]

Further environmental testing and remediation is required. At present the College is discussing the possibility of combining remediation efforts with state plans for flood control along Route 9.

[1] Land Use Study, Wellesley College.

[2] Ibid.

[3] LeBlanc.

[4] Ibid.

[5] Ibid.

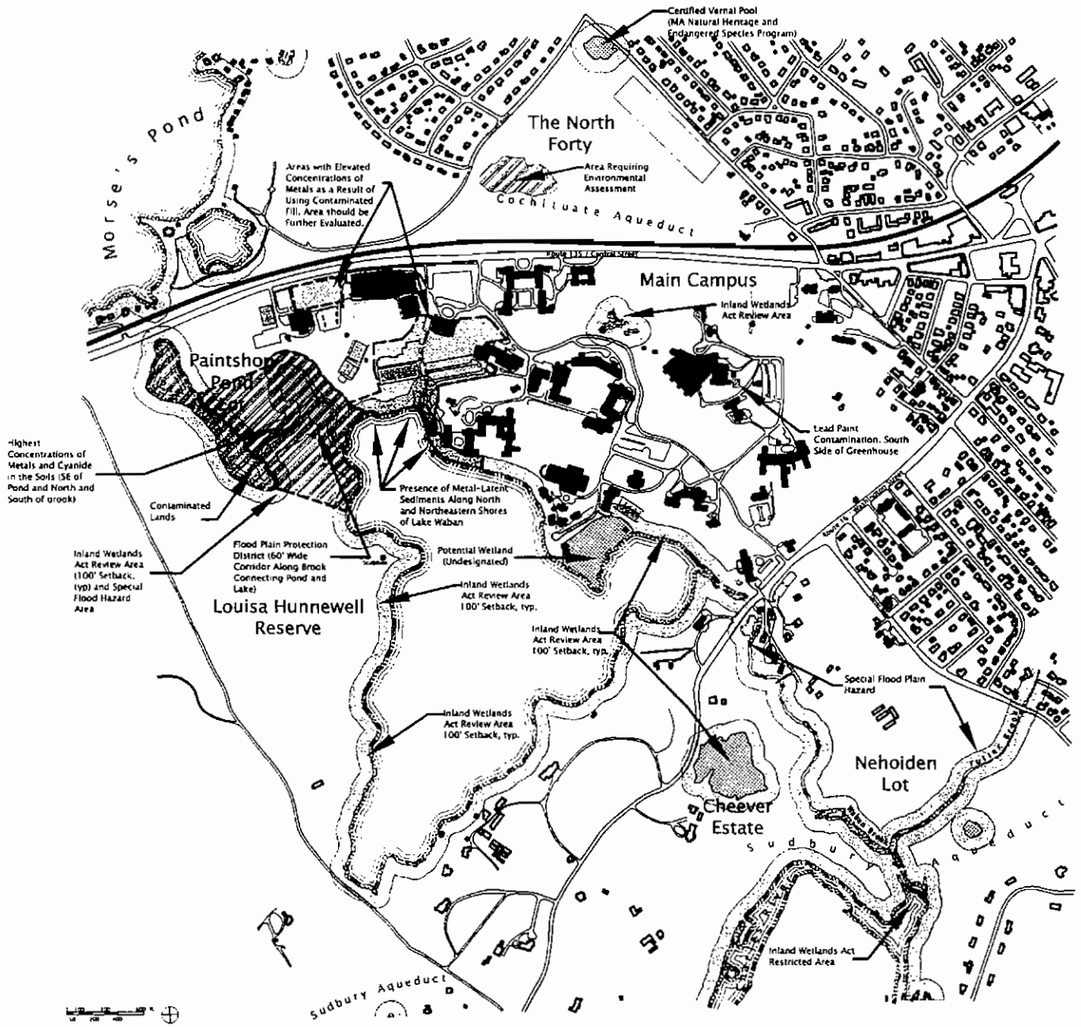


Figure 3A.12 Wellesley College environmental constraints

Previously Considered Uses

Of all the parcels, the North Forty has been the most intensively studied for development. Previously considered uses include: revenue enhancement opportunities such as a continuing care retirement community and single-family faculty housing adjacent to Turner Road. The College has also considered developing the site for athletic fields, some of which could be shared with the town. The town has expressed interest in using the for parking given its proximity to the village, and the MBTA is interested in relocating the "T" station and a commuter parking garage on the site.

Nehoiden Golf Course/Cheever Estate

There has been no consideration beyond their present uses for either of these parcels.

Louisa Hunnewell Lot

The College has honored the donor's request to hold this parcel as a natural reserve while allowing for the possibility of future College expansion if the need or opportunity arises.

Paintshop Pond Lot

With the completion of extensive environmental evaluation and some remediation in recent years, the College has begun to consider possible uses for this site. Development that does not require deep foundations is preferred given the prohibitive cost of removing deep contaminated soils in some areas. Athletic fields are a likely use of this land, because their construction is compatible with capping contaminated areas and there is inadequate land available on the main campus for needed field expansion.

Alternative Plans for the North Forty

Two plans explore development possibilities of the North Forty with and without a physical connection to the main campus.

Plans for developing any facilities integrally linked to the main campus or requiring extensive vehicular access need to include a bridge across Route 135. Several bridge options were explored in the Niles Report. The most favorable location for a bridge is directly across from the current entrance to the campus on Route 135, where there is a signaled crossing. In this scenario the North Forty could be developed to include faculty housing, a book storage facility, and athletic fields (figure 3A.15).

An alternative scenario for developing the North Forty without a bridge would be to limit development to faculty housing and the book storage facility. Both would be low-intensity uses that could utilize existing roads (figure 3A.14).

Conclusion

Many studies have been undertaken in an attempt to understand how these lands could serve the immediate and long-term needs of the College without any negative impact on the town. Pressure from both grantors and the Town to retain significant portions of these lands as open space has contributed to keeping them undeveloped to date. Possible future uses will be discussed in the campus master plan summary.

[1] Christine R. LeBlanc, Fact Sheet: Former Henry Woods Paint Factory Site, East Coast Engineering, Inc., 2 July 1997.
[2] Ibid.
[3] Ibid.
[4] Ibid.
[5] Ibid.
[6] Land Use Study, Wellesley College ("The Niles Report"), Niles Company Inc., 1979, p. 18.
[7] Ibid.
[8] Ropes and Gray Memorandum, 25 July 1979.
[9] Town of Wellesley Zoning Bylaw, Table 1.
[10] Land Use Study, Wellesley College
[11] LeBlanc.
[12] LeBlanc.
[13] Massachusetts Natural Heritage Program Letter, 15 November 1989.
[14] Land Use Study, Wellesley College
[15] Ibid.
[16] LeBlanc.
[17] Ibid.
[18] Ibid.

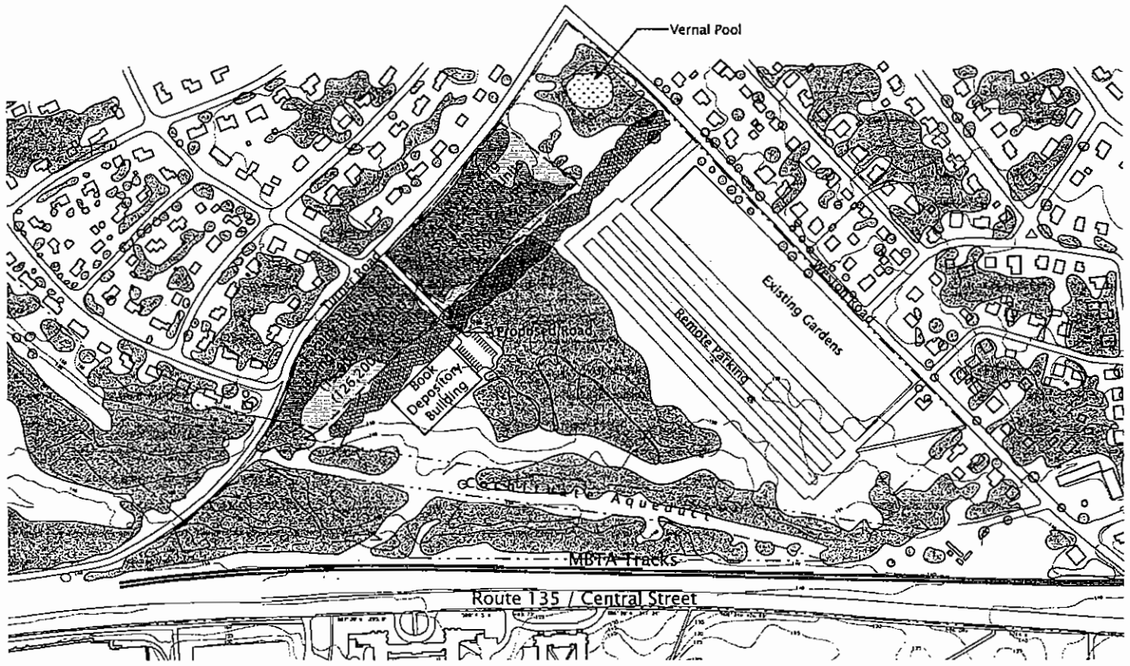


Figure 3A.14 Alternative Plans for the North Forty: Event grass parking field, book depository, faculty housing

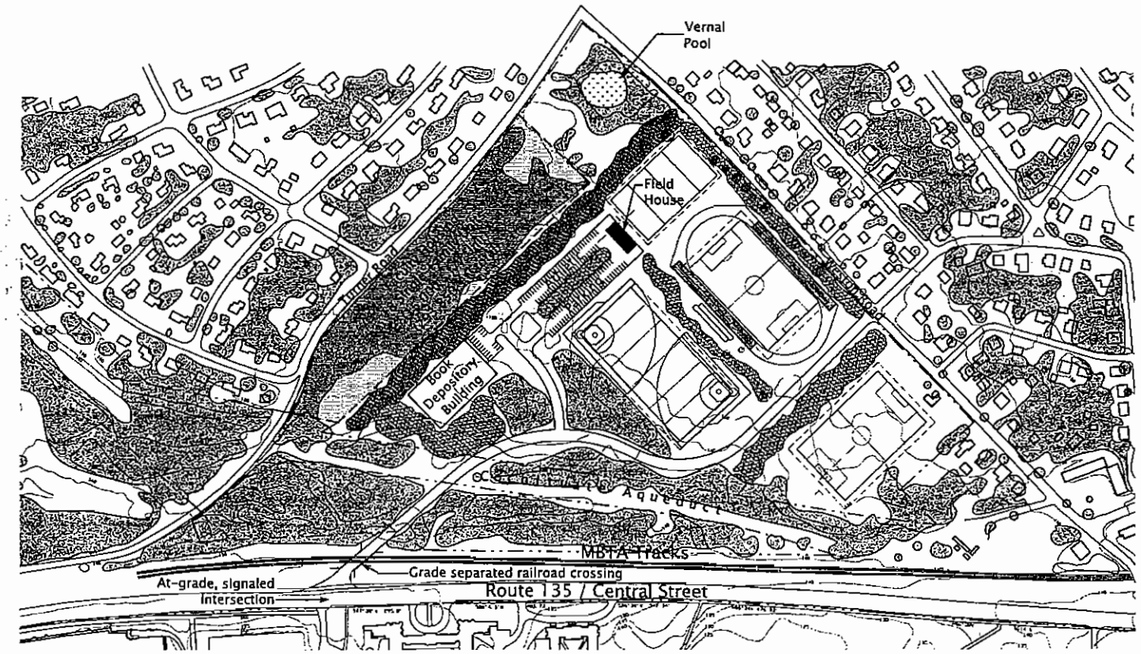


Figure 3A.15 Alternative Plans for the North Forty: Direct access to campus with athletic fields, book depository, faculty housing