

## Carleton College Campus Plan



November 2004  
*draft*



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*“From this day forward, you are a part of Carleton and Carleton is part of you.”*

-Laurence M. Gould  
Carleton President  
1945-1962



The Bald Spot, 1955

Carleton College is a highly selective liberal arts college located in Northfield, Minnesota striving to provide a progressive education of the highest quality. Founded in 1866 on a bluff overlooking the Cannon River, Carleton was part of a movement during the mid-nineteenth century during which new-world Congregationalists founded dozens of colleges across the country, promoting the advancement of literature, arts, and sciences. Charles M. Goodsell lead the founding of several of these institutions and was selected to lead the establishment of Northfield College, rechristened Carleton College in 1871.

Carleton College is a complex and unique place. The campus today encompasses nearly 1000 acres of floodplain and upland forest, oak savanna, agricultural land and restored prairie. The core of the campus borders a flourishing historic residential neighborhood and the vibrant downtown Northfield. The residential campus is embedded in quiet small city set within the greater regional agrarian landscape. This is place of distinct character and deep traditions, rooted in the people and the place. The Carleton community of students, faculty, staff and alumni is a diverse, eclectic and independent group that operate as a remarkably engaged and collegial group. The College is committed to a highly engaged learning and teaching experience with a concentrated focus on its students since its inception. It is an experience that is at once challenging, free-thinking and intellectual but with humor, care and personality. The intellectual challenge is balanced with a Midwestern character that reflects the regional values of friendliness,

*“The goal of such an education is to liberate individuals from the constraints imposed by ignorance or complacency and prepare them broadly to lead rewarding, creative, and useful lives.”*

Scott Bierman & Steve Kelly  
Carleton College, 2004



The Arboretum, 2004

fairness, hard work and respect for others. At the core of the College mission is a collaboration of faculty, students and staff seeking knowledge together. The number of alumni who have returned to Northfield to live and to the College is a testament to the special and intangible qualities of the Carleton experience.

The campus reflects the complexity of values in its complexity of landscape. The physical character of the campus has evolved with the growth of the college. Begun as a small college set in the prairie, the campus landscape, jointly with the emergence of the Carleton culture, has become entwined with the Midwestern culture and place. There is an order to the regional landscape that extends from the pragmatic organization of the Jeffersonian grid and is consistent with the democratic and egalitarian principles that the people share. The campus integrates spatial experiences both intimate and broad, garden and lawn, prairie and forest, lowland and upland, but it is the trees on the campus that give structure to the sense of Carleton as a place.

The concepts of community, sustainability and stewardship are integral to the culture of Carleton. This requires a commitment to participation, in both the College and in Northfield; acknowledgement of the inherent value of the regional landscape ,both native and agrarian; and in acknowledging a global view, and limiting consumption of nonrenewable resources.

This document, the Campus Plan, is a framework for the future of the campus that will guide planning, architectural and landscape decisions. It is a catalyst for thought; intended to inspire decisions that are rooted in the understanding of Carleton as a unique and special place, the regional landscape, the rich history of the place and contribute to a powerful vision for the future of the College. The Campus Plan is paired with a Campus Planning Work Book that provides a visual guide for implementing the Plan and illustrating the possible future of the campus.

The plan is the result of a close collaboration of Carleton leadership and campus advisors led by Civitas with periodic interaction with the Carleton community at large. The

planning process began by building a deep understanding of Carleton, its history, evolution, environs and the people that make it so special. In January of 2003, Civitas led a series of meetings at the college, engaging the entire Carleton community by inviting students, faculty, staff, administration, alumni, and neighbors into a dialogue about the place, its history, its values and its future. The timeline on this page outlines the process leading to the Campus Plan.

Our research was initially organized in four conceptual categories, to explore Carleton as a campus, its role in the city, its place in the larger landscape, and its culture. Merging these four parallel stories led to an understanding of the how the culture of Carleton emerged from its relationship to the land, how it has changed over time and how this important relationship is at the core of Carleton today. This discovery is central to the Campus Plan.

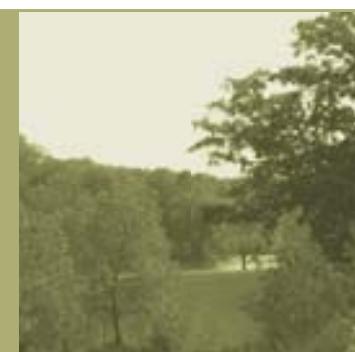
The timeline chart illustrates the progression of the Campus Plan development from December 2002 to April 2004, using a color-coded system to represent different phases of research and community engagement.

Date	Event/Activity	Color
Dec 2002	Civitas first visits Carleton- meets with President, Trustees, & Advisors	Red
Winter 2003		Red
Jan 2003	Civitas meets with president and Trustees, student groups, faculty, staff, & community members.	Red
Feb 2003	Civitas presents initial findings (campus history) to Carleton community and to neighborhood.	Red
Spring 2003		Yellow
Apr 2003	Civitas presents and discusses findings (place, city, campus, & culture presentation) to Carleton community and to neighborhood.	Yellow
Summer 2003		Green
Jun 2003	Work Session at Civitas with client and Advisor Group	Green
Jul 2003	Civitas presents and discusses studies to President Oden and the Trustees.	Green
Aug 2003	Civitas presents and discusses findings to Carleton community and to neighborhood.	Green
Fall 2003		Blue
Oct 2003	Civitas presents and discusses initial draft of Vision Plan to Carleton community and to Carleton community and to neighborhood.	Blue
Oct 2003	Civitas presents and discusses initial draft of Vision Plan to President Oden and the Trustees.	Blue
Winter 2004		Yellow
Jan 2004	Work Session at Civitas with client and Advisor Group.	Yellow
Feb 2004	Civitas presents and discusses Vision Plan to Carleton and	Yellow
Spring 2004		Blue
Apr 2004	Civitas presents final Vision Plan to Carleton and Community	Blue

**Note:**  
The "Carleton Community" includes alumni, faculty, staff, and student groups. Other direct Carleton participants include President Robert A. Odén, Jr. and the Trustee group. The "Advisor" group consists of Richard Strong, Tom Oslund, Herb Baldwin, & Gene Mackey. Meetings were also held that invited community members and consisted largely of residents of the neighborhood directly south of the







The Vision

*“Cautiously I slipped from under the buffalo hide, got up on my knees and peered over the side of the wagon. There seemed to be nothing to see; no fences, no creeks or trees, no hills or fields. If there was a road, I could not make it out in the faint starlight.*

*There was nothing but land: not a country at all, but the material out of which countries are made.”*

-Willa Cather, My Ántonia



McKnight Prairie, 1900's

So began the settlement of the great prairie. Individuals of strong back and stronger will, settlers laid down the seeds of a great enterprise, building a community from the prairie. Carleton -- the people, the place and the legacy -- is woven from this cloth. Founded by people of vision and enterprise, Carleton today rests squarely on these shoulders. Begun on a bluff above the Cannon River, overlooking the prairie mosaic and the emerging town of Northfield, the founders set out to build a community of learning and knowledge.

After 130 years their vision continues, embodied in the spirit of Northfield, in the minds of the campus community, in the hearts of alumnae, and significantly, in the physical legacy -- the buildings, walkways, trees, signs, symbols and spaces that we know as Carleton.

There is magic here, known to everyone that has invested enough of themselves in the institution to become part of it. Carleton's magic is not the kind that is elusive or mysterious, and it does not require special powers to call it forth. It requires nothing more than submitting one's self to the joy of belonging to a community committed to knowledge and the power of individuals to find, add to, shape and grow from it. These special powers saturate everything that is Carleton, to varied degrees, but more than any other college in America, Carleton's spirit is embodied in a unique culture of people, deeply rooted in a special place. They are one, inseparable, ever-growing and changing but always remaining the same, faithful to the dream that propels them:

*“...to liberate individuals from the constraints imposed by ignorance or complacency, and to prepare them broadly to lead rewarding, creative and useful lives.”*

-Scott Bierman & Steve Kelly,  
Carleton Faculty

*Each person who joins the Carleton community becomes part of this legacy. Each person who leaves expresses the culture in his thoughts and deeds. Each person that participates adds richness and color. Each person who contributes to the knowledge or quality of the place becomes part of it, taking some and leaving some behind. Anyone that contributes, in any way large, small, temporary or lasting, must embrace the ideals and leave themselves and the place richer.*

## **What We Found**

Civitas was invited to come to Carleton in late 2002 to begin the development of a new “Master Plan” for the physical parts of the campus - buildings, landscape, walks, roads, parking and other miscellaneous features. We came, eyes and ears open, observing the place, listening to faculty, students, administrators, staff, and the Northfield community. We reviewed all prior plans for the campus, scoured the archives and spent time getting to know the place. We found several Master Plans for the campus, but little evidence that they had much impact. Instead, we found that building has taken place from time to time, in eclectic fashion, sometimes for better and sometimes for worse.

It was clear from the first day on campus that there is an identity and self-concept that contributes to the success of the institution. Carleton is more than a collection of collegiate buildings where a teaching curriculum is delivered



The Arboretum

*“Excellence without pretense.”*

-Robert Oden, President



Lower Lyman Lake

to attentive students. It is not that. What we found instead is one of the most vibrant, inquisitive, collegial colleges that we have ever encountered. Clearly, the successes of Carleton come from the people, academic philosophy, and knowledge base combined with a clear purpose and a spirit of excellence.

Our investigations into the physical campus found something unexpected as well. Carleton is unusually eclectic in the physical patterns and architecture of the place, yet a strong sense of place is inescapable. Virtually every person that we interviewed, from community neighbors to alumni, focused much of their reflection onto the campus itself - the landscape, special places, occasionally a building, but above all, the sense of Carleton as a place was pre-eminent. Through these discussions two things kept recurring. First, that there are very special landscape places and spaces on campus that should never be harmed - the Arb, the Lyman Lakes, Mai Fete Island, among others - and second, that each of these places has suffered from harm within the reach of current memory.

We reviewed a handsome series of photographs that chronicle the patterns of change on campus over the past 80 years. We further mapped the time and location of every building added and removed from campus since the inception of the College. What we found was remarkable: *If the people of Carleton are right, Carleton has reached a tipping point, a moment in time when decisions must be made to re-direct the growth of the campus or valued elements of the campus may be lost.*



*Carleton College was built as a college on a hill overlooking the prairie. Virtually every building built on campus until the late fifties was respectful of this vision. Since roughly 1960, every new building except Language and Dining has defied and diminished this vision.*

It is not uncommon to find such a clear and radical shift in the physical vision of a campus, but here it has not gone so far that it cannot be retrieved. In the past forty years Carleton has set a new direction that will destroy the original vision and its legacy unless things change. The spatial qualities and the tie to the regional landscape that once defined the Carleton campus has been diminished. This plan proposes to make changes by making the legacy visible, by creating a Master Plan that supports the academic mission and by aligning the Plan and its Recommendations with the campus culture. With this approach the community will tend to make choices that contribute to and expand the best of Carleton rather than diminish it.

Why is the physical campus so compelling to the community in our interviews, and why do people feel that it has been diminished? The physical environment of Carleton, especially this unique, open prairie landscape has special meaning to the culture. The landscape, sky and sense of space of the prairie remain a powerful influence on people, just as they were on the founders. This place is home. To individuals, departments, families, campus organizations, alumni and others, the Northfield prairie is a home to personal learning, growth, friendships, hopes and memories. Carleton is indeed special because of this place.



"Twigonometry" by Patrick Dougherty, 2002



With roughly 130 years of history, Carleton has grown in cycles - from inception, to development into a complete liberal arts college, to the rapid growth and optimism of the postwar years, to the struggles of the years involving Vietnam, environmentalism, globalization and student empowerment - Carleton the institution has reached a level of maturity. This maturity, and the self-confidence that comes with it, are a backdrop to the academic excellence, inquisitive nature, and competitive collegiality that is ever-present in and out of the classroom. "Living and learning together", this community excels.

### ***Awakening***

Reading the stories of Carleton tells us of the richness of the culture and reminds us that this has been a culture of involvement in decision-making, a culture of discovery and discourse, and a culture of committed intellectuals seeking excellence together. We observed in our discussions and in the records of the past that decisions, at least those that affect the physical campus, are not made by an ordered hierarchy of people or processes. Carleton has become a fluid culture that makes decisions by the active and intense involvement of many strong individuals. A kind of "situational logic" is applied to each major change on campus, with voices from all sides heard in the discourse. Final decisions that lead to real change are routed through an intellectual gauntlet that deepens the debate around any idea. *But in observing what has been built on campus, we find that this process has not always respected the legacy of the campus, and at times, some of the best has been lost.*



Campus, 2004



Campus Aerial

When we compare this process to the prior Master Plans we find an answer as well. Each of the prior plans proposed to impose organization onto the campus. The plans called for enclosed quadrangles, an ordered arrangement of uses or spaces, and hierarchy in building placement and function. These attributes are contrary to the organization of the College itself. This new Campus Plan must resonate with how and why decisions are made at Carleton by aligning a vision of the future of the college with the future of the campus: *The Carleton campus is an eclectic mix of buildings and uses because the Carleton culture values an eclectic mix of disciplines engaged in learning and growing together.*

It is time to awaken the college community to the richness and importance of the campus as a home to a learning community. In our interviews, we found a reverence for many campus landscapes, but we also found that these add up more to a lore of the campus than to a clear understanding of the meaning and values that the campus itself embody. The college culture moves continually forward while depending on lore to protect its home. This is a formula for failure!

An awakening is occurring as a result of this plan. Carleton is finding that the roots of its future are deeply set in the past. Now is the time for a vision of the campus that aligns and resonates with the direction of the learning community.



The Bald Spot, 2004

## ***Carleton = People + Place***

This realization - that the time is right for serious reflection and new direction - caused us to look further into the relationship of the institution of Carleton with the place called Carleton. We made a finding that we believe is central to the future of the school.

*The people and the place of Carleton are one. Bringing the culture and the place into alignment with a vision of the long term could produce a Carleton campus of even greater value, deeper purpose, and more authenticity than any other campus in America.*

With this discovery we knew that the future of the Carleton campus must combine the best of the past with a vision that would engage and inspire the community to expand and deepen the connection of the cultural and learning environments together.



## ***Carleton in the next 100 Years***

Carleton has an opportunity that is unique in America. Situated at the juncture between a healthy, vibrant Northfield and overlooking a large expanse of diverse, restored prairie, Carleton one day could become the only liberal arts college that embodies all of its values both academically and physically. Carleton values a holistic view of education within a healthy campus culture and environment. The campus today retains strong elements that allow Carleton to pursue a course toward a sustainable campus, one that restores and enhances the sense of place - a joining of small town and prairie - that protects the value of the campus for generations.

This vision is built on a few simple but critical strengths that the campus has today:

*Handsome, small buildings that exude personality and human scale*

*Broad open landscape spaces that run together without boundaries*

*A seamless connection to vibrant Northfield neighborhoods and downtown*

*A relaxed, eclectic physical character that turns the eye to the horizon and opens the mind*

*The Arb, in all its parts, as setting, enclosure, foundation and relief valve for an intensive learning environment*



The Bald Spot, 2004

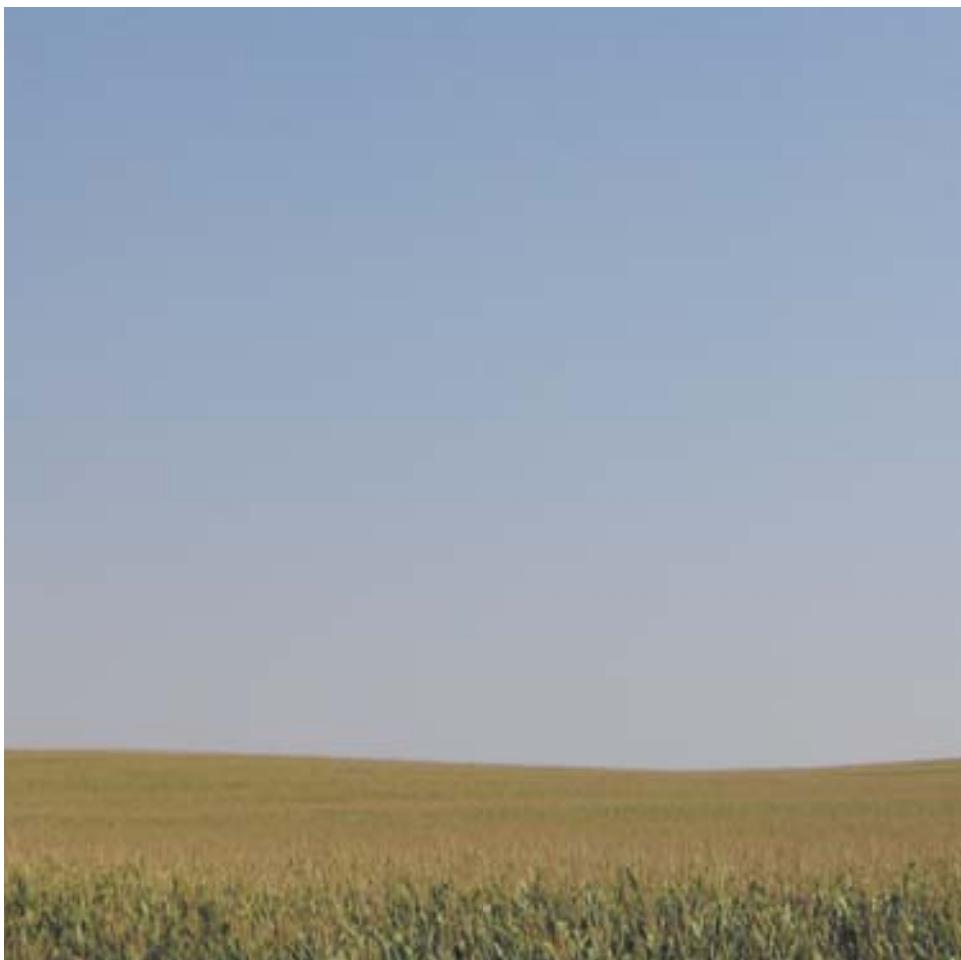
These are the key physical legacies of Carleton. If there were no other plan, these words should be considered in any future decisions that change the physical campus:

*Honor this place in its prairie, celebrate the campus and town together; do no harm that would diminish any one over the other.*

This Campus Plan is more a guide toward a long-term future than it is a specific plan for building. The decisions of building on campus will occur again and again, each with its own discourse and situation. No one can or should preclude the brilliance of the Carleton community from making the best decision for each change. But we can implore the community to understand, respect and advance the health of the prairie, the college and the town together at every turn.



Campus Aerial, 1929



Rice County, 2004

## ***Things We Cannot Change***

These elements summarize the foundation of what makes Carleton a special campus:

The landscape of Carleton is a diverse mosaic of geological and ecological systems, evolved over eons to produce an even richer composite when stewarded by people with a vision.

Carleton is situated - immovable and immutable in its location between town and prairie, field and stream, forest and plain.

The essence of the place comes from the underlying ecological mosaic, the layers of change brought by people, and the alignment of the institution - its values and culture with the place.

Northfield and Carleton are complementary. They need each other. Each is better because of the other.

Growth is approaching. The Twin Cities are already changing the social and economic character of Northfield and Carleton. Time is of the essence in establishing the long-term future that will protect the values that town and College embody. Capturing and sustaining the health of both is imperative.



Carleton College Wind Turbine, 2004

### ***What We Should Do***

Carleton has a unique opportunity to build a sustainable place, and one that embodies the values of the College and that enhances the best of Northfield could become the most holistic and sustainable College in America. To accomplish this depends on understanding the integrity and complexity of the continuum of landscape, campus and urban systems that together complete the whole.

Building the campus to become a continuum of prairie (in all its diversity), campus (with its complexity) and town (in a symbiotic relationship) is the goal. One hundred years from now, Carleton could be the one college that has applied its values and decisions toward the fulfillment and protection of its learning environment, its landscape, and its urban context.



## ***How to Build***

Adding to Carleton, whether by changing a road, repairing a landscape, or building a new structure, is just that -- an addition. With over 3,000 years of recorded human history and 130 years of Carleton, each project, or each person can do no more than to add. No one can complete Carleton, or any part of it. At best, we can add richness and diversities that expand knowledge and deepen the romance of the culture and this place. We can seek alignment of new with old, without being slaves to the past or to fashion. Goodness is embodied in what we already find at Carleton, and any keen observer, any student of design or any caring individual can make the distinctions between good and bad, better or worse. We need just to look, see, and to know that what we see has meaning.

If we build, does our building add? Is it neutral? Does it subtract? And, will people in 100 years agree with us today?



Nourse Hall, 2004



Laird Hall, 2004



## ***Building***

Each building should add to the legacy. Individual and eclectic, but deferential.

The landscape is more important than the buildings. Each building should stand proudly on its site, while acknowledging that the larger landscape dwarfs and subsumes buildings into one whole.

The landscape is horizontal. Buildings are not.

The built patterns of Carleton are seamless. Boundaries do not belong.

Each building should possess humanity - dignity and personality that will be visible and human for the life of the programs that the building houses.

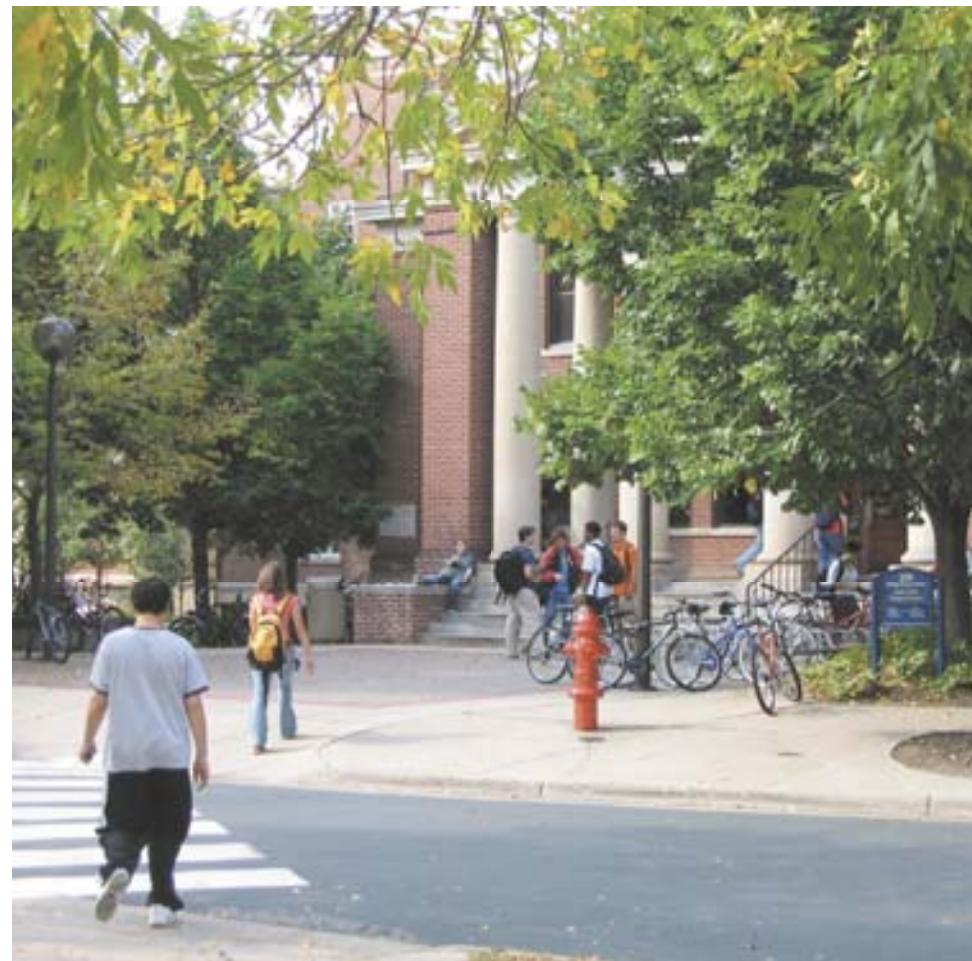
Carleton changes. Cultures change. Buildings change as well, The best buildings can adapt to change gracefully without losing their own integrity, and without requiring undue compromise from the users.



Buildings are internally organized by function and structure. The Carleton culture is organized by the social networks and complexities of knowledge. Buildings should be organized to stimulate the expression of a knowledge culture and should not be structured or bounded to suppress it. The orders of knowledge can only be separated for convenience and simplicity. In fact, all knowledge is related and mixed. Buildings should not create boundaries that constrain the real mixed nature of a knowledge culture.

People and buildings are ecology. Build to last, gracefully and with less effort.

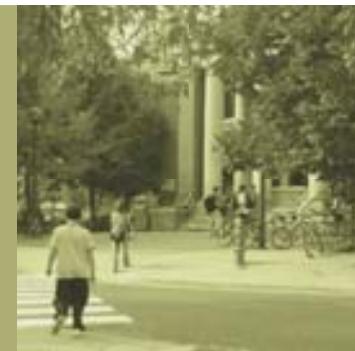
The campus and its landscape are a fabric. Buildings are part of that fabric, not embellishments.



Sayles Hill Campus Center, 2004



Discoveries express the knowledge and experience gained through the study and analysis of the place, city, campus, and the culture to understand how Carleton College has come to be the remarkable place it is today.



**Discoveries**



*“This really is one of the things that brought me to Carleton. I’d heard stories of watching the stars from an alum and toured the building (Goodsell Observatory) during Accepted Students Weekend.”*

-Student

Understanding the essence of Carleton emerged through many discussions and interactions with the people of Carleton and of Northfield, and through research of historical documents, maps, drawings, and photographs. We discovered that it is the regional landscape that Carleton sets uniquely within that defines this place. Buildings within this landscape fabric, act as components, not as defining elements. This is true for the first century of Carleton. Recent patterns of growth both on campus and in Northfield and changes to the agricultural landscape compromise Carleton College. The strong landscape fabric is threatened by a future of suburban growth, creating the potential for Carleton to become an enclave within the growing urban environment in the not too distant future.



Lyman Lakes and Goodsell Observatory, 1918

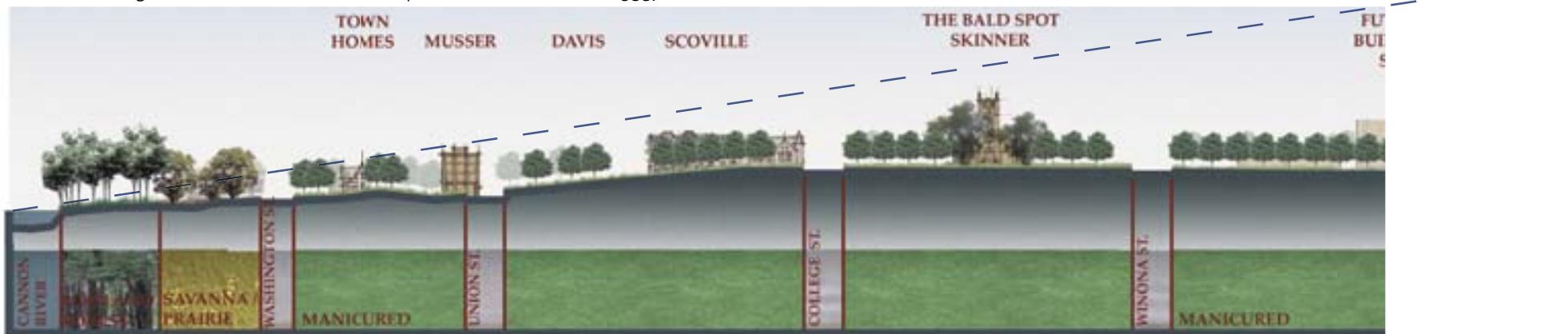


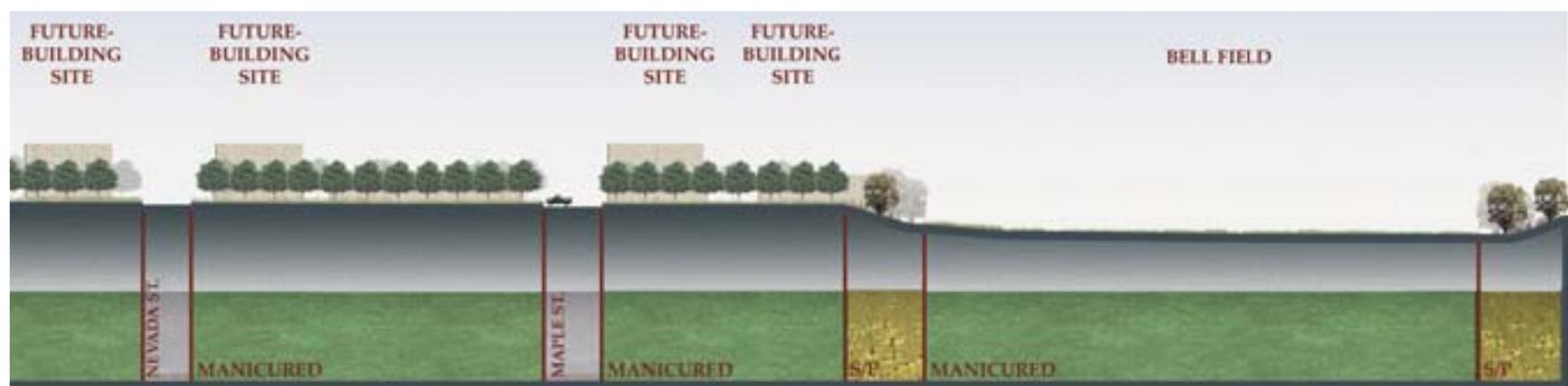
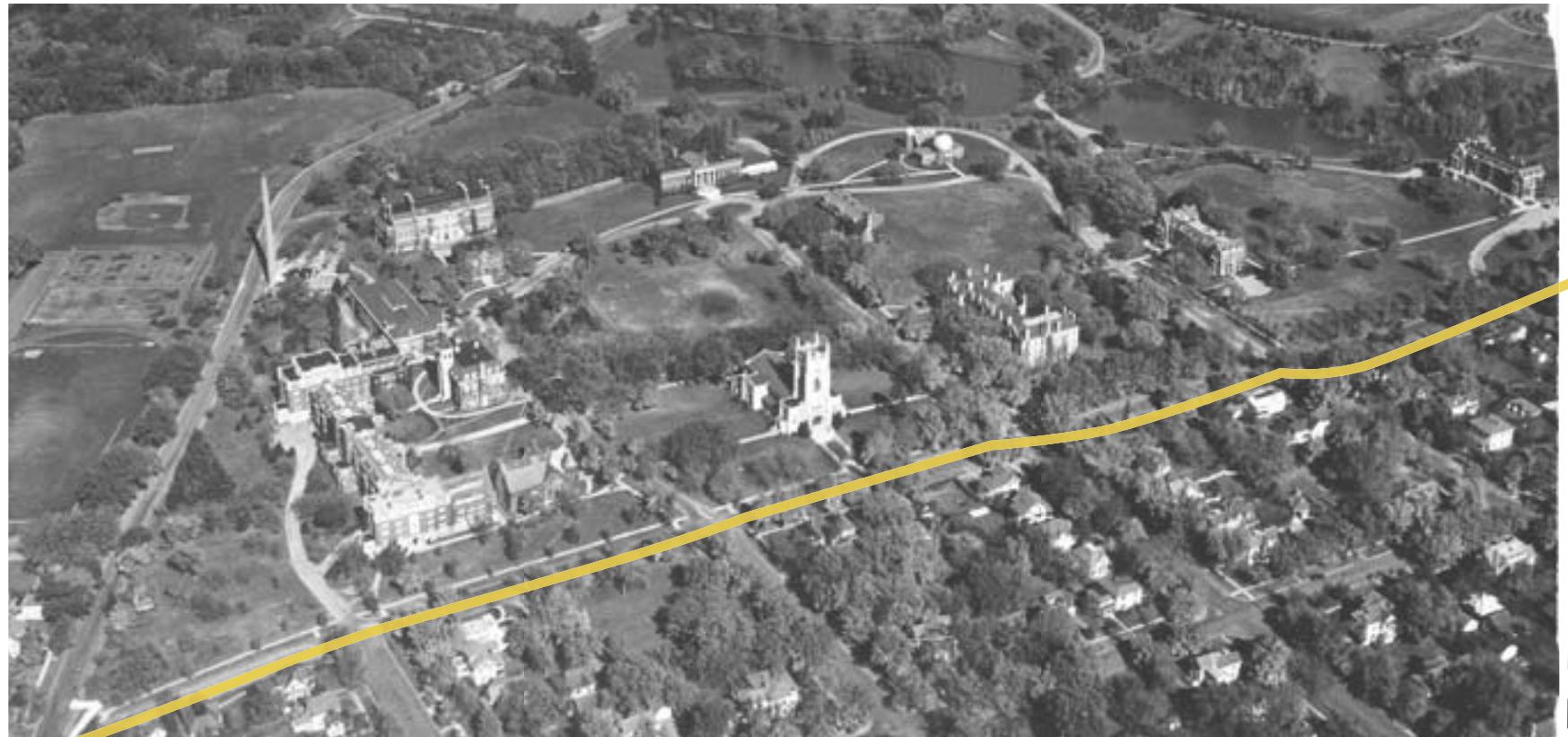
## Regional Landscape

The regional landscape is a continuum of urban forest to domestic garden; this includes parkland, recreation land, suburban landscapes, upland forests, floodplain forests, farm fields, meadows and prairies.

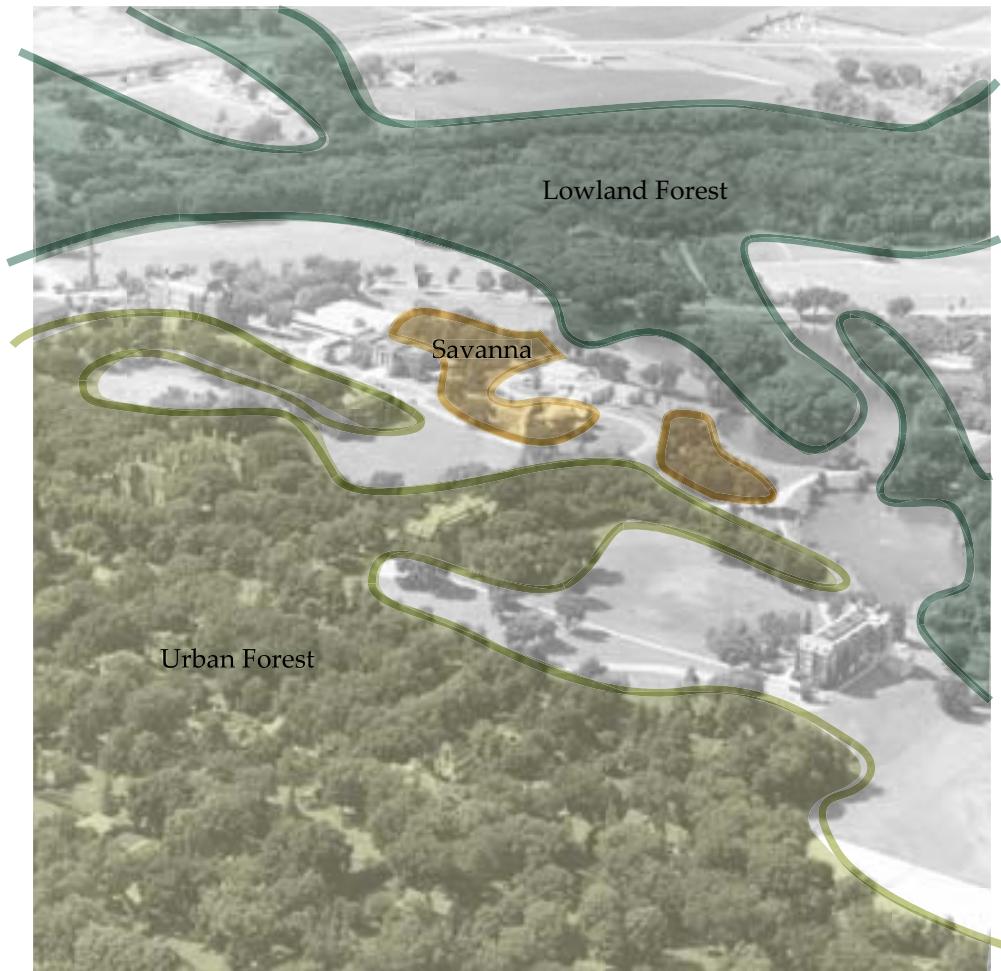
Carleton integrates all of these landscapes within its

The core Carleton campus sits at a highpoint in this continuum. From First Street looking into the campus, a dense canopy of street trees frames the space of the core campus and the Bald Spot. Along each edge of the campus, as the land begins to transition from high to low, the campus edges change from a manicured groundplane framed by this tree canopy, to the grasslands and oak trees of the savanna. Eventually, to the west, the landscape reaches the lowest areas filled with dense floodplain forest, while to the east, the savanna stretches as far as the eye can see.





A portion of floodplain forest still exists in some areas along the Cannon river following Lyman Lakes up into the campus. Small remnants of the savanna and prairie can still be found on campus near the observatory and behind the library. The deciduous "forest" weaves its way into the campus from the neighborhood, providing a low, shaded canopy in the summer which opens up to the sun in the winter.





refine herb's "layers of campus" sketch drawing

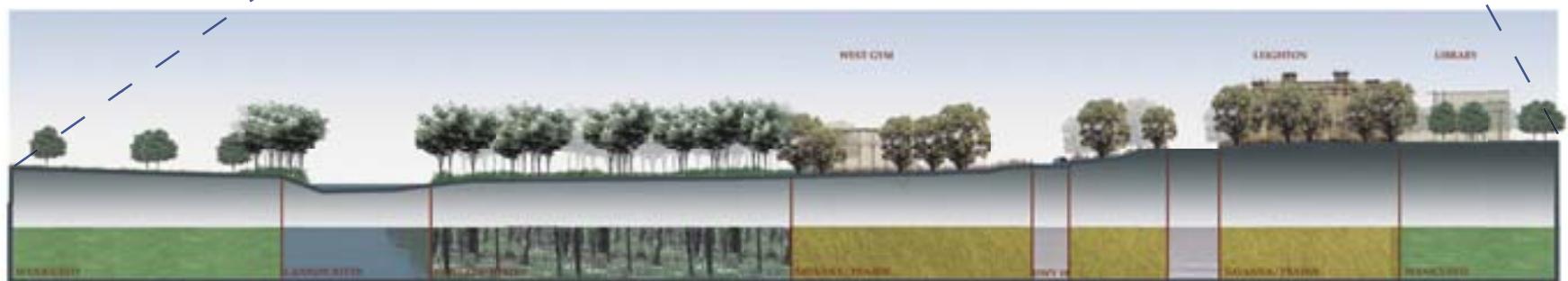
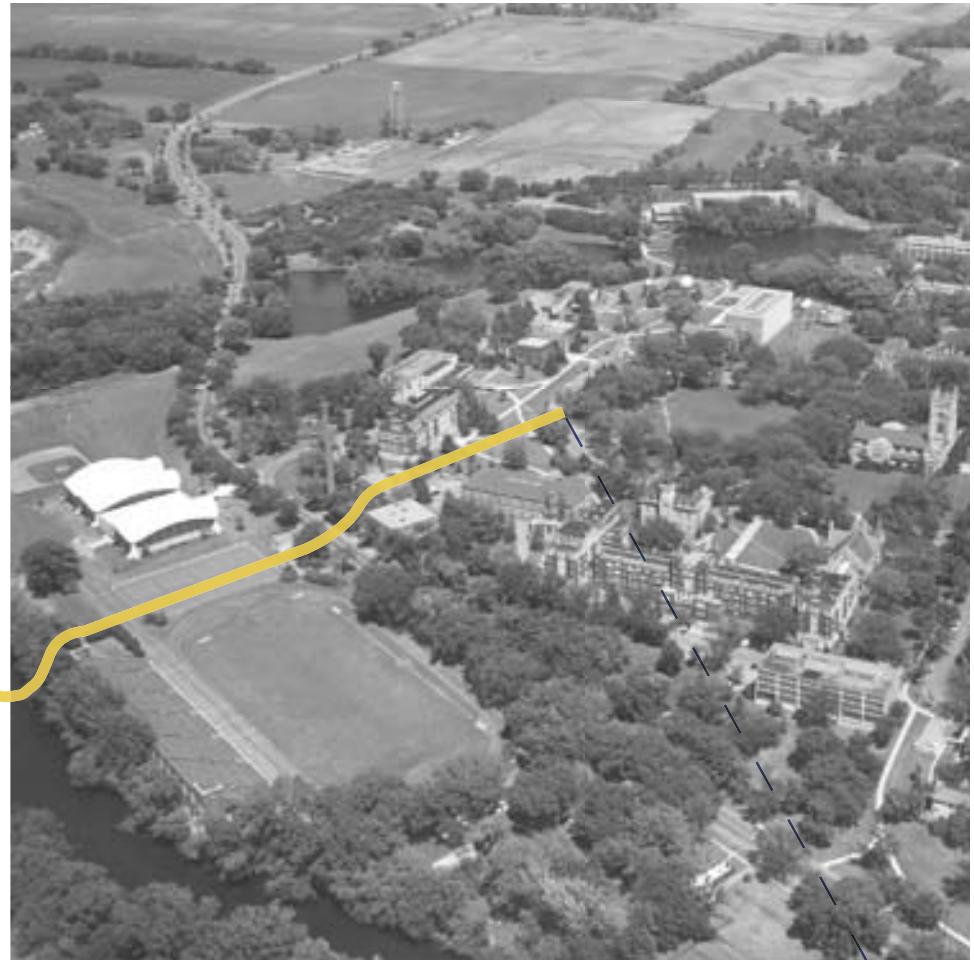
#### Recreation Center - Lakes - Campus Bluff Edge - Observatory

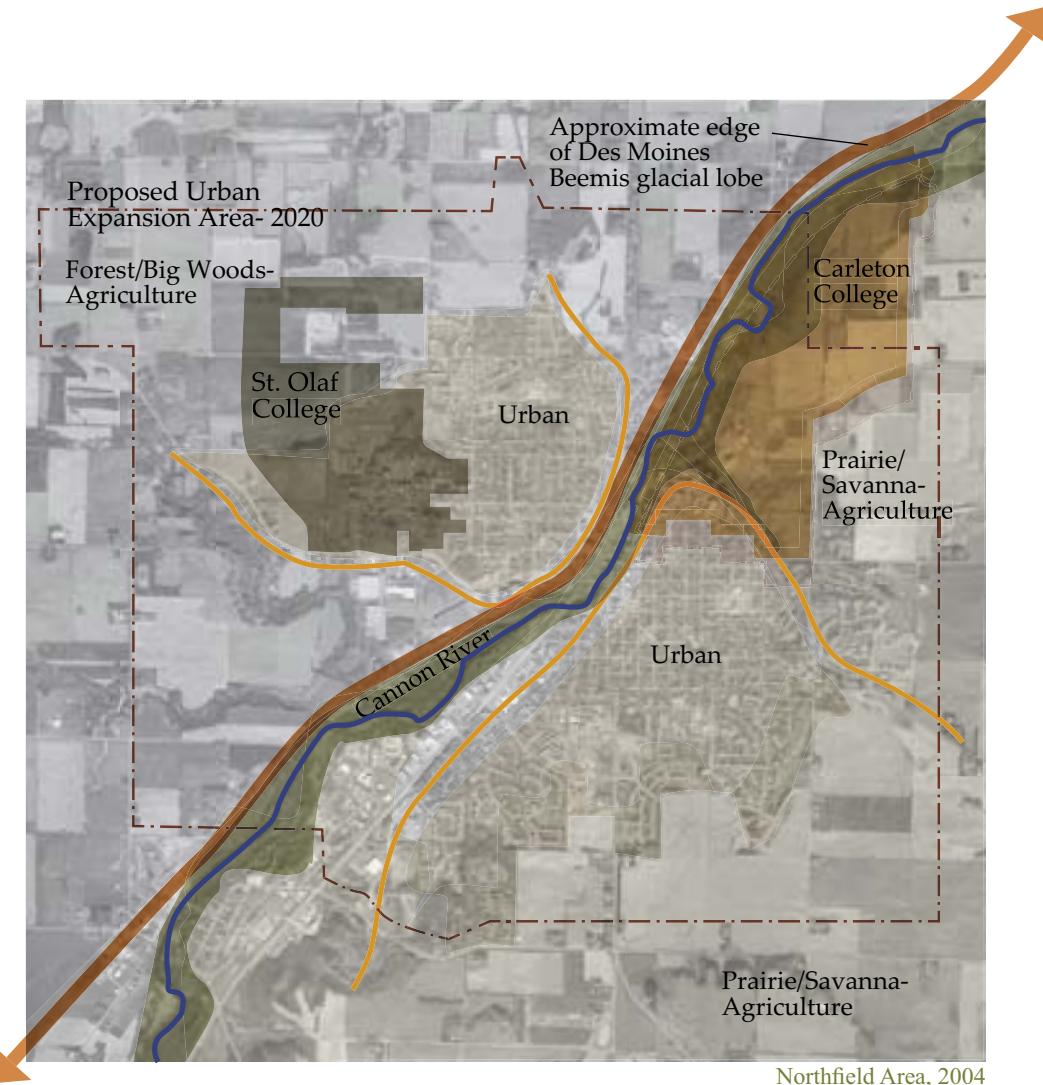
As the native savanna vegetation of the arboretum is restored, a continuum from should reach from the arboretum, across the lakes, and into the campus as far as the Observatory and its surroundings. As the low lying area of Lyman Lakes is restored to a healthy lake ecosystem, the dense canopy of floodplain forest will develop as a transition between savanna of the bluff edges.



Canon River - Laird Stadium - Campus Edge - Bald Spot

The landscape along the edges of the Canon River are dense lowland forest. As the Carleton College recreation fields are re-located to higher ground, the floodplain should be restored to this forest ecosystem. As the land transitions up to the central campus, this edge should be shifted back to the once native oak savanna landscape until reaching the high plateau of the core campus and the Bald Spot.

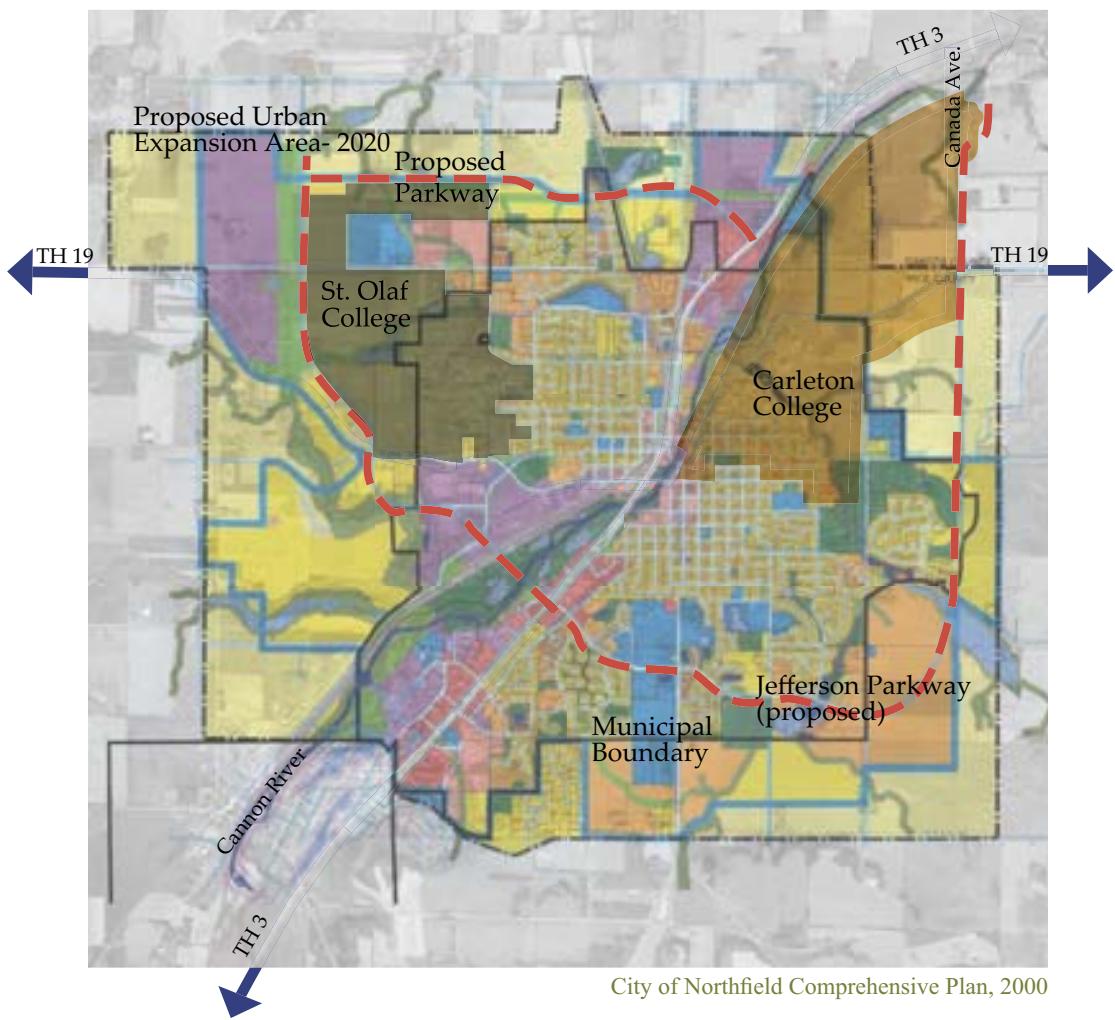




## The Northfield Landscape

The Northfield landscape is a diverse mosaic of geological and ecological systems that directly influence the region and the campus.

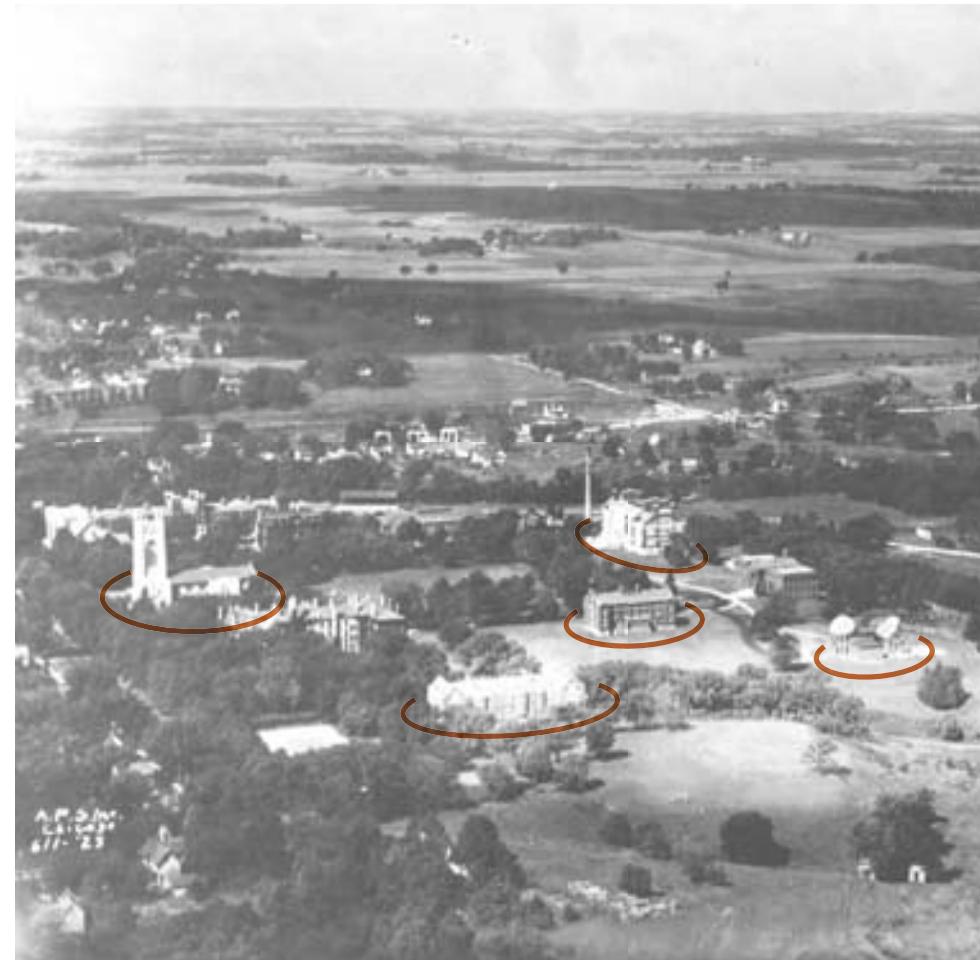
The Cannon River lies at the edge of the Des Moines Beemis glacial lobe, which now distinguishes where the landscape changes from the prairie that lies to the east and the Big Woods to the west. The city today spans across this edge. The geology to the west of the river, where the glacial movement stopped, resulted in deep glacial lakes. To the east are shallow, exposed layers of rich organic soils. Carleton College and the arboretum lie at this juncture between the urban town, agricultural farmland, the woods and the remnants of prairie. In essence, Carleton resides at a confluence of a well defined regional physiographic edge.



The projected growth of Northfield will subsequently cause the college to become an enclave surrounded by development within the next twenty years. The Northfield Comprehensive Plan from 2001 indicates the proposed extents of the urbanized area as it begins to surround Carleton College and the Arboretum. The proposed Jefferson Parkway will create a loop that will detach the college from the regional agricultural landscape.

*“Carleton is a special place on the prairie”*

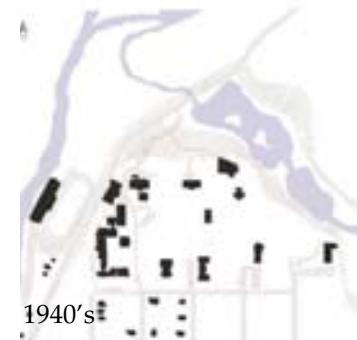
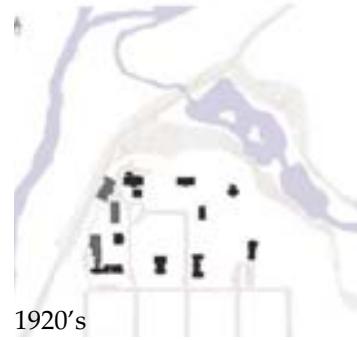
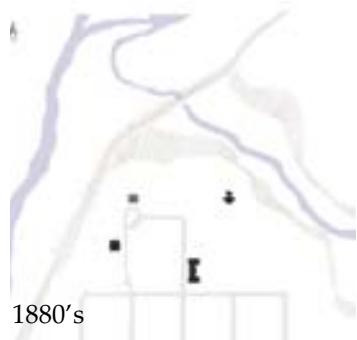
-Robert Edwards,  
Carleton President  
1977-1986



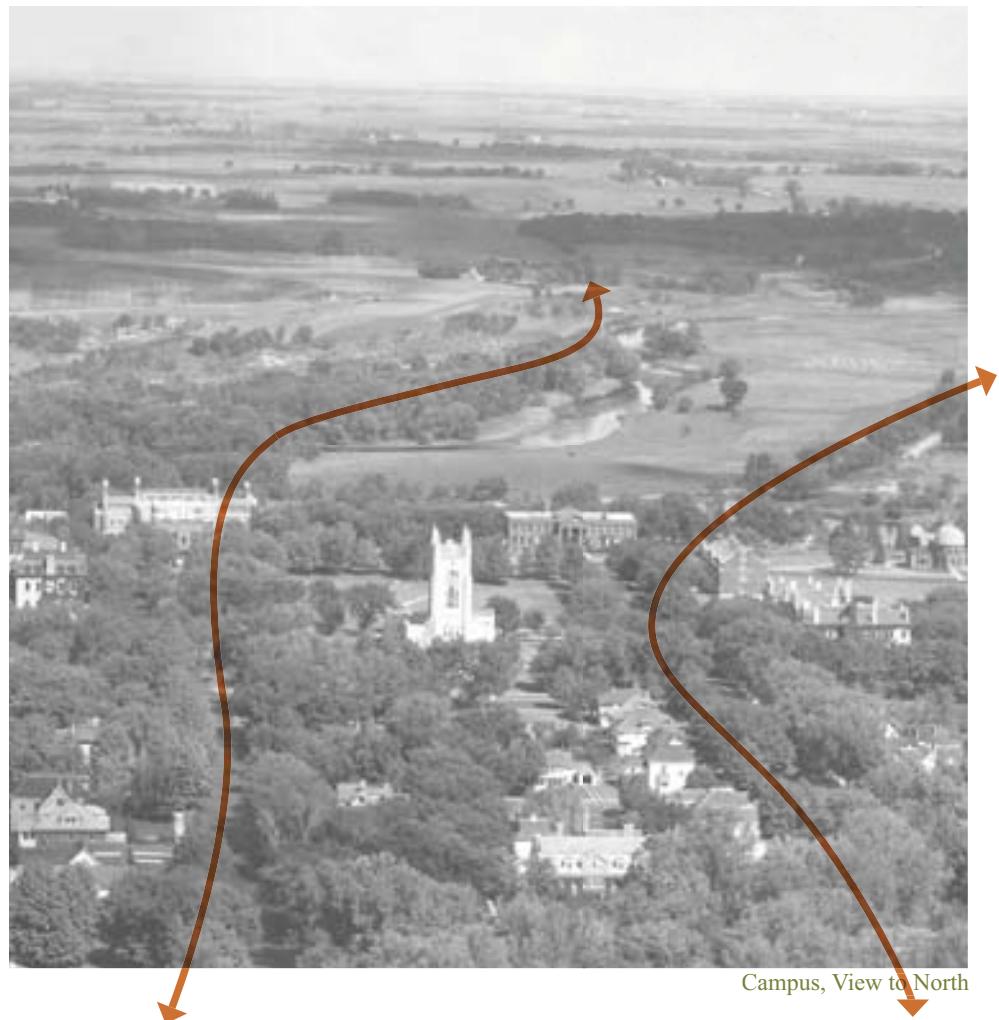
Campus, View to North, 1923

## The Carleton Landscape

The legacy of Carleton architecture is one of small, discreet, and highly articulated buildings with a sense of dignity, humanity and personality set within a landscape fabric.



Historically, buildings were placed widely, set within the landscape, to emphasize the horizontal nature of the Midwestern landscape and to create great porosity to the horizon.

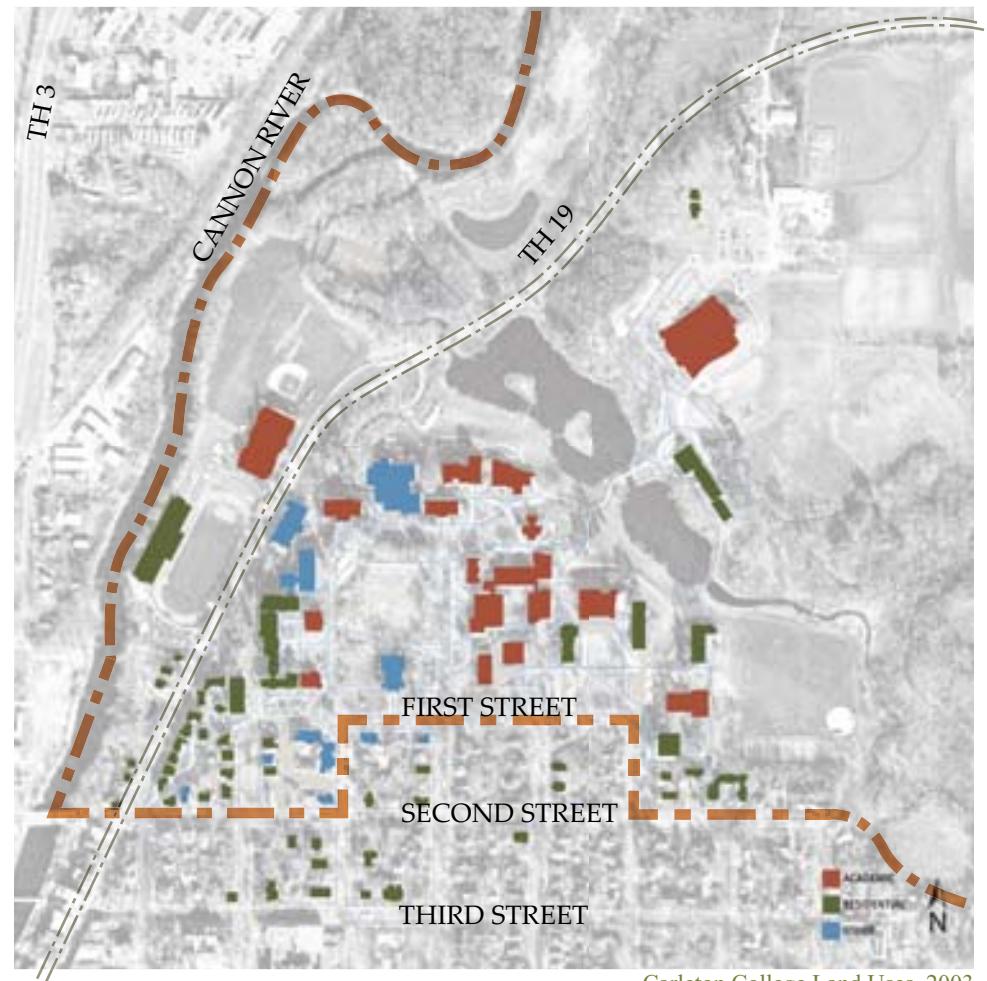


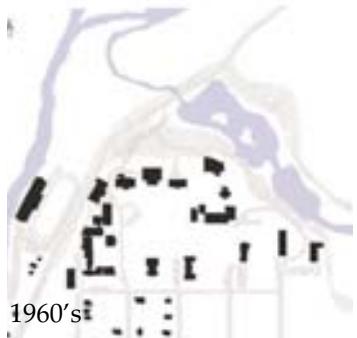
CARLETON COLLEGE CAMPUS PLAN  
DRAFT- November, 2004

Integrating buildings into the landscape maintained a seamless transition as the urban forest in the town flowed through the campus, into the floodplain forest of the river valley and finally into the prairie and farm fields.

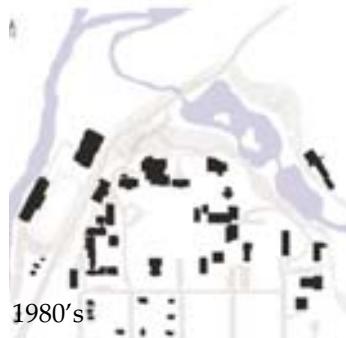
## The Carleton Campus

The physical college has grown and diversified with maturity, with new forms of knowledge, and with new technologies within a changing American culture. Some physical changes have reinforced the Carleton legacy and some have not.

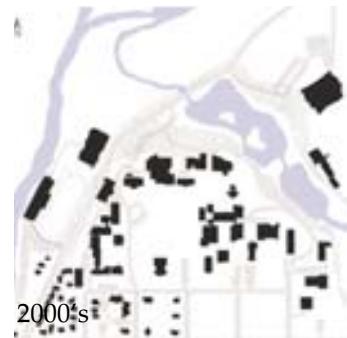




1960's



1980's



2000's



Most American colleges have responded to these changes by increasing their organization, segregating uses, increasing densities, enclosing spaces, and organizing infrastructure into large, efficient systems.

Since the late 1940's, Carleton has followed this pattern. Boliou and the Library were built, set back from neighboring buildings. Myers and Musser were placed mis-aligned from the street grid, blocking the views that previously extended to and from town. New paths became wider, curved, and less directed. By creating an undeniable architectural barrier, all of this contributed to a new sense of order overlaid on the historic campus pattern, ignoring the established context and place.

If Carleton continues to organize and enclose spaces in this manner, it will lose its unique relationship with the landscape.



*“Carleton is a very comfortable place. It’s easy to feel at home here, to be loved, and be a kid again sometimes. Carleton is also a place to enjoy the seasons-- all of them, even winter.”*

-student

The seasons of Carleton are extreme! From below zero and windchills in the heart of winter to the blazing heat in the summer, and everywhere in-between, the Minnesota climate is not for the weak. However, the people of Carleton thrive and enjoy their campus during all the seasons. As the ice rink on the Bald Spot exemplifies, outdoor activities do not even come to a halt in the cold winter time. The campus landscape and building placement should help provide comfort from the wind, the sun, and even the rain. The experience on campus changes as the seasons change, making it even more revered by the people who visit and live here.



*“Always design a thing by considering it in its next larger context-- a chair in a room, a room in a house, a house in an environment, and environment in a city plan.”*

- Eliel Saarinen.



Principles

Embracing a vision of landscape as the basis for decision making could make Carleton the most holistic, authentic and sustainable campus in America. The fundamental principles and frameworks of this vision will provide a source of guidance for the physical planning and building over the next hundred years.



The core values of Carleton will be embodied and expressed through this evolving process. This vision could be a powerful part of the identity of Carleton providing a liberal arts education which promotes lifelong learning experiences that will extend Carleton's success and impact throughout the coming years.





*“I can’t stress enough how important it is to preserve the quirky and unique spaces of the campus...”*

-Carleton professor



Principles

*“Carleton College recognizes that it exists as part of interconnected communities that are affected by personal and institutional choices. We are dedicated, therefore, to investigating and promoting awareness of the current and future impact of our actions in order to foster responsibility for these human and natural communities. Carleton strives to be a model of environmental stewardship by incorporating ideals of sustainability into the operations of the College and the daily life of individuals.”*

(Approved by the Environmental Advisory Committee, 12 April 2001; Endorsed by Board of Trustees, Buildings and Grounds Committee, 18 May 2001)



The Bald Spot, 2004

A core set of values emerged from discussions with students, faculty, staff, administration and alumni. It became clear that the identity and self concept of the institution is universally understood. These values lead to the development of a set of principles that guide the campus plan and create a framework for testing ideas and making decisions.

Carleton College understands the implicit value of its setting within the Midwestern region's ecological habitats and is committed to integrate the campus both intellectually and physically into this landscape. This means integrating the landscapes of the arboretum and core campus both physically and philosophically.

The mixed culture of Carleton College is eclectic, collaborative, and engaged. This should continue to be expressed in the physical campus, embodying campus life by strengthening relationships between the campus, city, and arboretum.

The people of Carleton recognize that they are part of interconnected communities that are affected by personal and institutional choices and strive to be a model of environmental stewardship. Ideals of sustainability are incorporated into the operations of the college and the daily life of the individuals. Along with this is a dedication to the investigation and the promotion of understanding of the current and future impact of our actions and the fostering of responsibility for all communities. The Carleton students and Trustees worked together to define the Carleton College Environmental Statement of Principles.

These five principles form the basis of the campus plan. All decisions that effect the campus- growth and expansion, new buildings, renovations, circulation and landscape should be tested against these principles and build upon the ideas and intents expressed within them.

*Natural systems are the foundation of the Carleton sense of place*

*Landscape is primary*

*Buildings sit within the landscape*

*Pedestrian movement is predominant*

*The campus will change over time*



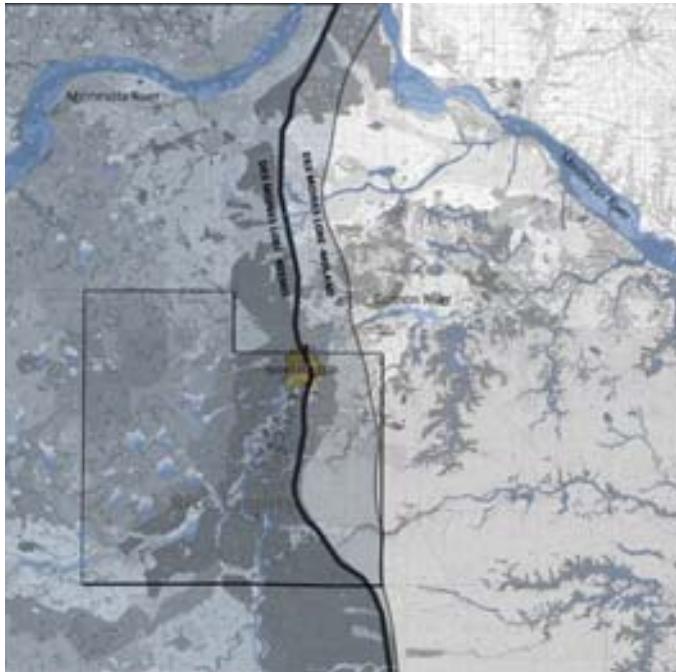
The Arboretum, 2004



Natural systems determine the form and character of the Minnesota landscape. The confluence of rich soil, a flowing river and available wood contributed to the settlement of Northfield in this location. Understanding the world from a perspective of natural, social and political systems and the human role and responsibility is at the core of the College's active participation in the preservation of native landscapes, using renewable energy sources, and participation in community activities. The college is rooted in the Midwestern landscape.

**Principle One:**  
*Natural systems are the foundation of the Carleton sense of place*

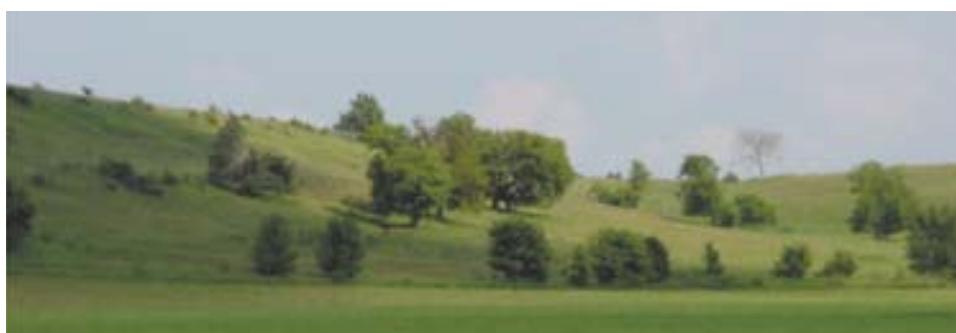




### Landform:

The underlying structure of the landscape expresses glacial movement and retreat, geology, soil structure, erosion and vegetation. The surface topography of this area today is a visible result of this. To the west of the glacial edge, the land is characterized by flat topped round hills of till and lakes resulting from melting ice. To the east, the topography is characterized by flat topped round hills of till and lakes resulting from melting ice. Subsequent erosion resulted in the dendritic pattern of rivers and streams we see today.

Carleton sits on the edge where the glacial movement halted.





## Watershed:

Originating as glacial melt water, the headwater of the Cannon River is in Rice County at Shields Lake. It passes through the heart of Northfield on its way to the Mississippi River north of Red Wing.

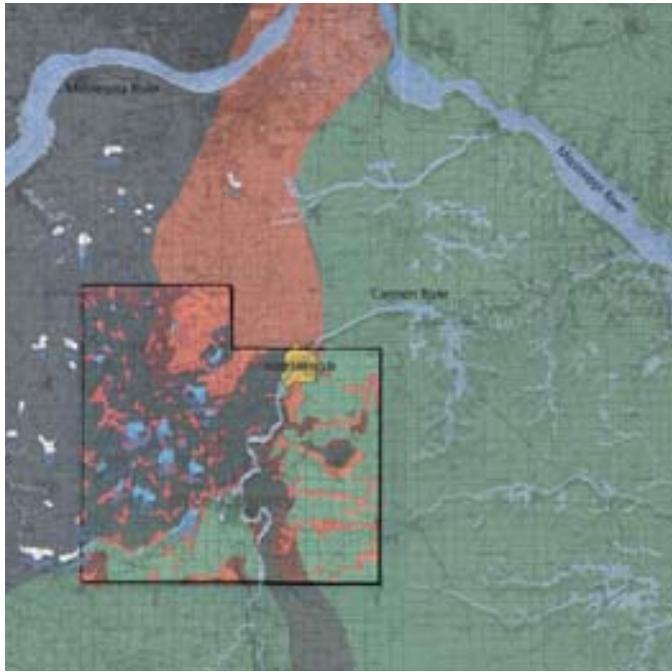
Encompassing nearly 1500 square miles, the watershed includes flow from the Straight River, which extends south to Freeborn County. Numerous creeks are tributaries to the Cannon River, including Prairie Creek and Chub Creek to the east, Wolf Creek to the south of Dundas, and Heath, Rice and Spring Creeks in Northfield. Rice Creek is also known as Spring Brook, and is notable as one of the last cold water native trout streams in Minnesota and the only one in Rice County. The spring fed stream provides habitat for the native Brook Trout.

Spring Creek was dammed and dredged in 1920 to create Lyman Lakes as a central feature of the campus, based in the English landscape tradition. Most Minnesota lakes are either pot holes left by retreating glaciers, as found west of Northfield, or oxbow lakes left by changing river patterns. Lyman Lakes are remain in the Spring



Creek stream channel, leading to increased deposition due slowing of stream flow, likely filling in the lakes over time. The deteriorating quality of the lakes and stream is due to increased run-off of pollutants from agriculture, development and environmental practices up stream. The manicured edge may also contribute to increased pollution of the lakes. Today the lakes are unhealthy and inconsistent with the Carleton cultural value of environmental stewardship. This is a condition that can only be resolved by understanding the issues on a watershed scale.

The Cannon River is included in Minnesota's Wild and Scenic Rivers Program, and has a management plan outlining rules and goals for the waterway.



## Landscape:

The Cannon River corridor is a distinct edge of two broad plant regimes. To the east, the pre settlement vegetation was primarily bur oak savanna, but also included significant stands of tallgrass prairie and pockets of maple-basswood forest. The tallgrass prairie was concentrated on the least dissected portions of the landscape and extended into Wisconsin. The Wisconsin prairie is unusual in having forest soils (udalfs) rather than prairie soils (udolls). Bur oak savanna was concentrated on the rolling moraine ridges or dissected ravines. Maple-basswood forests were restricted to minor portions of the landscape with the greatest fire protection, either in steep ravines or where stream orientation reduced fire frequency or severity.

To the immediate west of the Cannon, oak woodland and maple-basswood forest dominated the landscape, particularly on irregular ridges. Remnants of the pre-settlement vegetation can be found in pockets like the Nerstrand Woods and McKnight Prairie. The historic native landscape included the lowland forests of river and stream

corridors, upland hardwood forests, mid-grass prairies and oak-savanna. The campus offers the opportunity to experience all of these plant communities as a continuum from the prairie in the Arb to the lowland forest along the Cannon River and potentially along Spring Creek, to savanna on the valley slopes and on to an urban and domestic landscape of the campus core and the neighborhood.

As Northfield expands during the next two decades, urbanization will surround the campus/arboretum. In order to maintain the physical and conceptual impressions of the regional landscape, the college must acknowledge that in the future it will be an enclave within the (sub)urbanized environment, but has the opportunity to preserve the experience of seeing the prairie meet the sky by protecting and expanding the edges of the Arb.

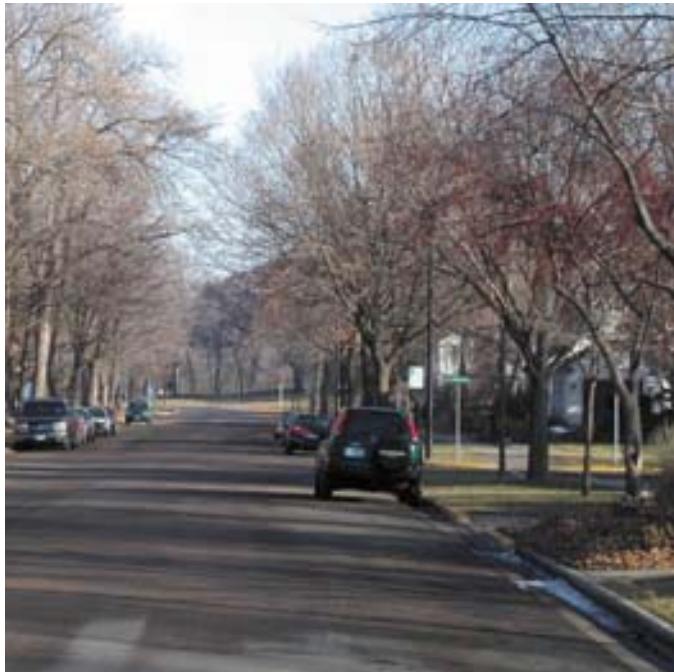




### **Climate:**

The climate and weather are an essential component of the Carleton experience. The seasons change dramatically, from an average mean temperature of 7 degrees F in January and to a mean minimum temperature of 87 degrees F in July. Cold winter winds from the northwest impact pedestrian movement and summer breezes from the southeast add comfort in the summer.





### ***Connection:***

Views to and from campus give context to the horizontal, expansive nature of the landscape the campus fits within. Views are often framed vertically by buildings and/or tree massings and horizontally by tree canopy. Topography also shapes view corridors.

A distinctive quality of Carleton is the horizon line where the groundplane meets the sky. It is sometimes landform, sometimes tree canopy, sometimes unique building features including the Willis tower, Skinner tower, the physical plant stack, the observatory domes, and in close proximity, the chimneys of Cowling era buildings- Leighton, Nourse, Evans, Burton, Severance. Views from Highway 19, from downtown and from the Arb are important signature views of Carleton and should be preserved. At night, the dark prairie sky is revealed and the views of it should be protected.



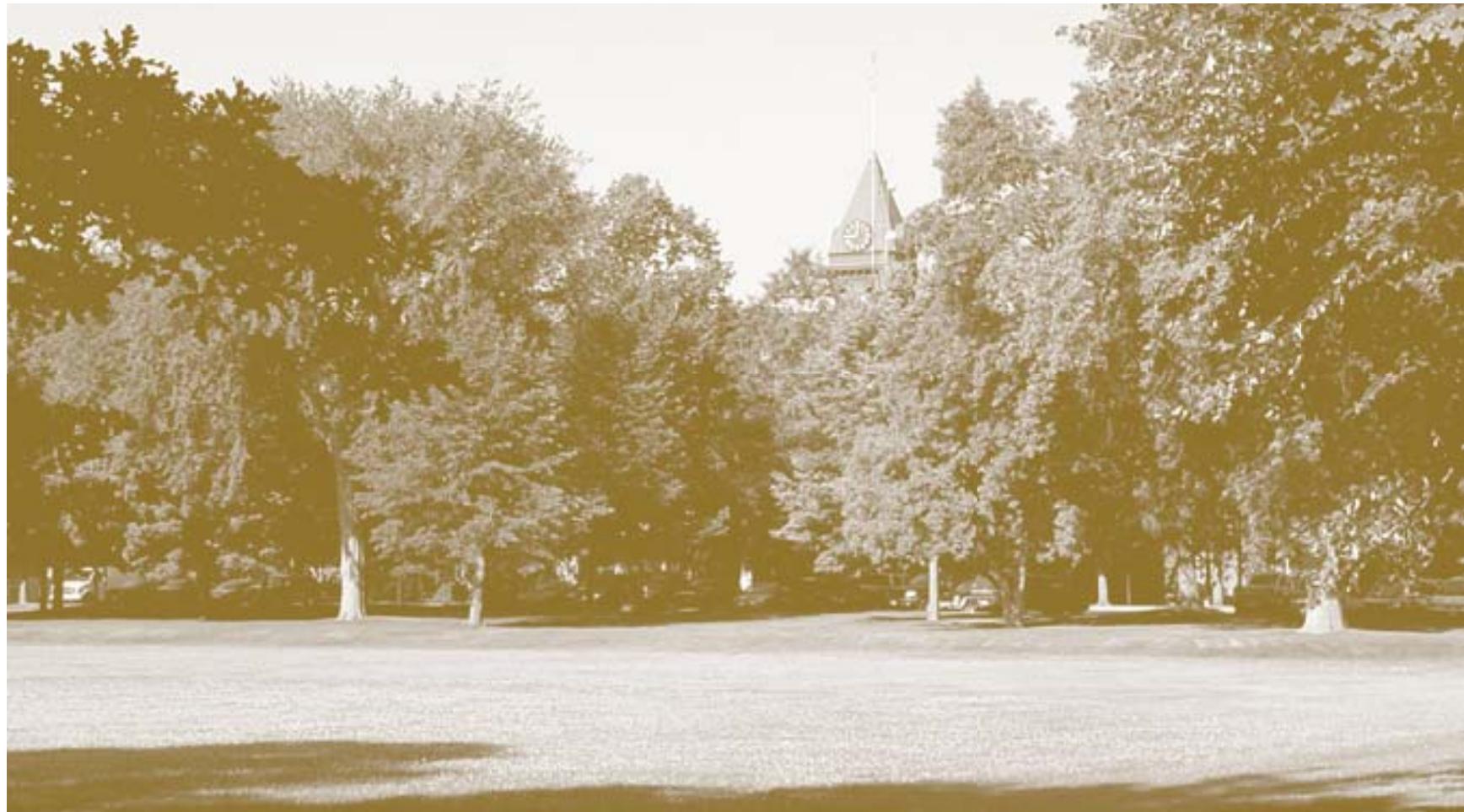




The landscape is the fabric of the campus. It is diverse but unified. Buildings are set within the landscape and do not dominate it. Neither landscape nor buildings are objective, but instead are part of a greater whole. Landscape includes groundplane, middle view, canopy, and horizon (sky) line.

The Midwestern landscape is characterized by the order of the Jeffersonian grid, by clearly defined edges between landscape types, by vernacular buildings (often clustered to create enclaves for function or protection) and by climatic extremes, that distinctly define the four seasons. The campus landscape should embody the culture, character, climate, patterns and materials of the Midwest and should unify by acting as a fabric that buildings are set within.

## **Principle Two:** *Landscape is Primary*





### ***Groundplane***

The groundplane is the surface topography and low plant cover or hardscape surface materials. The groundplane materials define the relative rusticity and urbanity of this area and of the campus. The groundplane character should become a continuum from the heart of the campus through the bluff, the valley and the upper arboretum. Change in ground plane material should change with elevation and slope changes.



### ***Mid-Plane***

The mid-plane landscape are the plantings that grow from waist to above eye level. At this time, this landscape tends to obscure views, be out of scale, is often decorative, tends to become overgrown, and decreases sense of security. It often fills the space between the ground plane and the tree canopy. The mid-plane elements should be carefully placed with clear intention and should be minimized as decorative utensils.



### ***Canopy***

The tree canopy tends to be low, framing pathways, building wall patterns and emphasizes building entries. This relatively narrow and horizontal space accentuates the human scale, and narrows the focus on people moving through the landscape. It also underscores the significance of the sky. Distant views when the canopy opens and reveals the broader landscape to the horizon.



## ***Spaces***

The Carleton landscape has historically included spaces that are both intimate and expansive, and many that are specific and memorable and steeped in lore such as Lilac Hill, Mai-Fete Island, Hill of Three Oaks and the Bald Spot. Over time new traditions have formed around many of these places. The experience of the legacy landscapes should be preserved and new experiences of a new landscape should be created, incorporating traditions of stewardship, native plant communities and a connection to the regional landscape.



## ***Places***

Outdoor spaces should accommodate a variety of changing activities depending upon season, time of day, and number of people. These places should be memorable and revered, but it should be anticipated that over time new places will come into being and values may change.



## ***Scale***

Landscape scale ranges from dense lowland forest that focuses on the ground plane to open prairie that orients to the sky. Within the campus core the experience ranges from small seating areas under trees, to outdoor classrooms, to the open and upward focus of the Bald Spot and should be upheld.



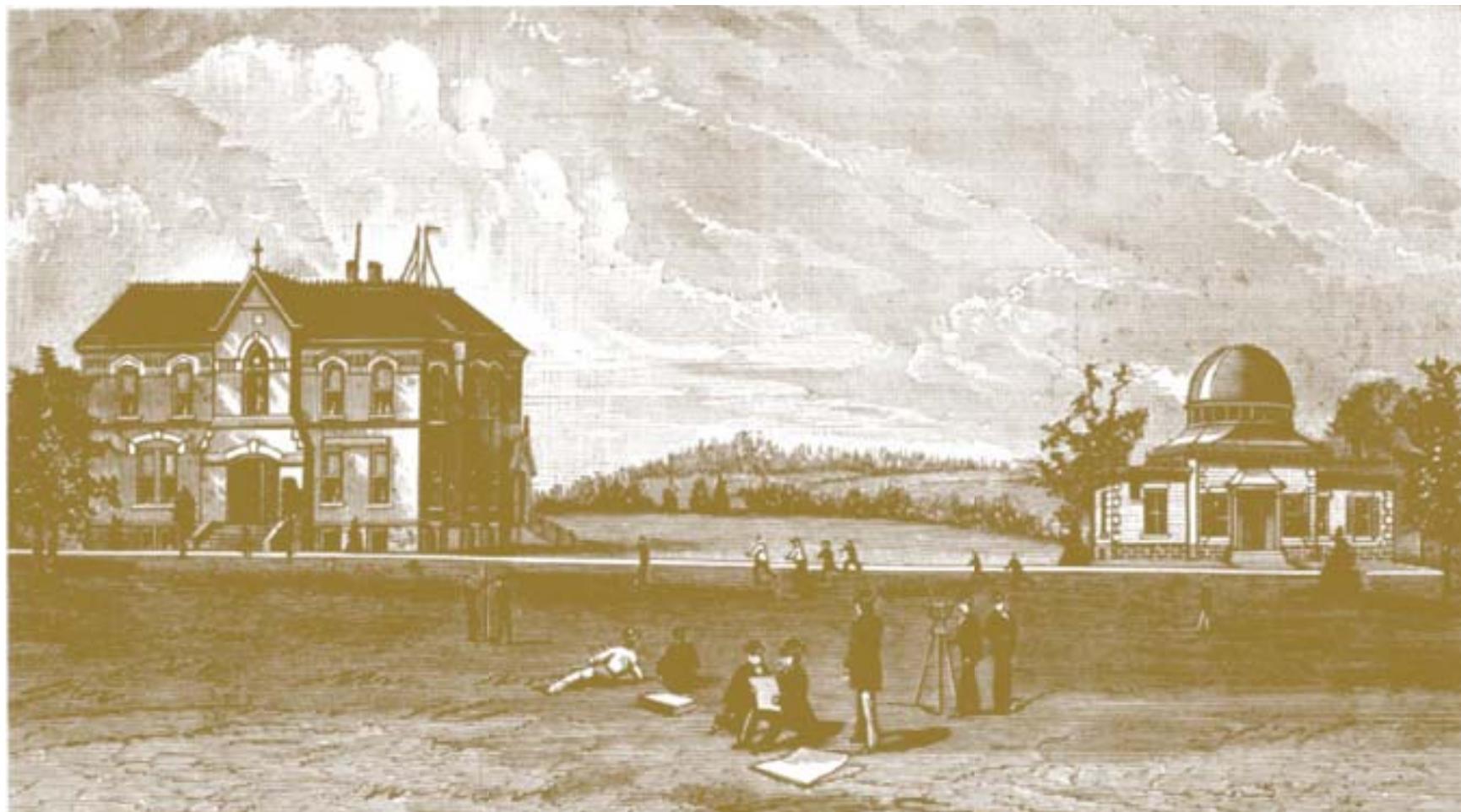
## ***Edges***

The character of edges should vary around the campus, from natural and native as the arboretum and core campus merge, to urbanized and refined as the campus merges with the neighborhood. Edges should not be abrupt, but share texture, color, pattern, materials, canopy and scale, forming a continuum from natural to urban.



Buildings at Carleton do not dominate the landscape. Architecture is eclectic and varying. The upright nature of the architecture suggests the buildings as individuals standing calmly within the landscape. Buildings that define the architectural tradition vary in style, but are small in scale, with carefully articulated entries, corners and roof lines. The rhythm of window and wall varies, and windows are typically vertically proportioned. The experience of architecture when trees are in leaf is primarily of building entry, building foundation and rhythm of ground floor wall. Buildings are only revealed during winter when leaves drop and buildings are visible through a veil of deciduous branches. The vertical layering of mature deciduous tree canopy offers clues to appropriate layering of architecture, set within the trees.

**Principle Three:**  
*Buildings sit within (and are part of) the landscape.*





## *Develop an Architectural Attitude*

Architectural design and character of buildings should reflect the place while honestly expressing function and the buildings' role in the academic community. New buildings and the landscape should seek conceptual connections with surrounding buildings and landscapes through careful placement and consideration of mass, scale, articulation and materials. All new buildings on campus have a context to relate to and references to draw upon. The classic touchstones of Vitruvius establish sound guidelines and include firmness, commodity, and delight as a measure of excellence. The buildings here are places for people to live, work, and study and these values should be expressed in terms of appropriate scale and proportion, rhythm and texture, daylight and form.



### **Expression**

- dignity
- identity
- celebration
- humor
- community
- seriousness
- repose
- comfort
- memorability
- charm
- socially engagement
- color
- cultural identify



### **Bases**

Buildings should have a distinct base that connects them solidly to the groundplane. Often, the building base should also lift the main floor off the ground, letting it sit proudly in the landscape.



## Corners

Building corners are often visible against the sky and should be well articulated. Corners are often associated with gaps between buildings and serve as framing elements for views to the surrounding landscape.



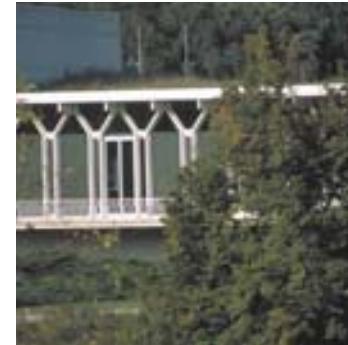
## Entrances

Building entrances should be human scaled, highly articulated, well detailed, well proportioned, and of high quality materials. Entrances are typically emphasized by tree canopy, but should still be unique. Arriving at Boliou within its courtyard formed by burning bush is a unique experience and is different than approaching Music beneath the low canopy of overhanging branches and plantings that obscure the building to either side of the entrance.



## Roofs

Buildings typically meet the sky with an interesting and detailed profile. The 'horizon line' of new buildings should respect their elders and other buildings of significance, acknowledging the role of each new building in the campus context.



## Scale

Large buildings should be composed of smaller, discrete volumes and elements that relate to Carleton's legacy buildings. Large inarticulate wall expanses should be avoided.



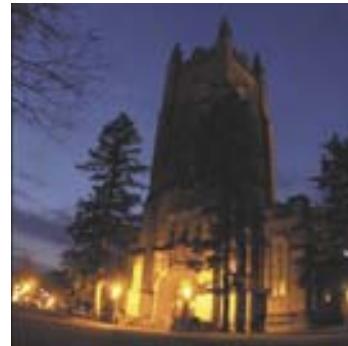
## Interior/Exterior Connections

Buildings should engage the landscape by providing views to it. These should include views of both enclosed intimate spaces and distant views to the regional landscape where appropriate.



## Service Access

Most buildings on the campus do not have a simple back side for service. Buildings are typically visible from many perspectives. Entrances for service to buildings should be oriented to the edges of the campus and obscured from view. Service areas of buildings should be treated architecturally with care consistent with other sides of the buildings. Optimal delivery conditions should not dictate the size and configuration of service docks and access. Impacts of deliveries should be diminished by scheduled deliveries in the early morning or late in the day to avoid conflicts with pedestrians.



## Lighting

Building entrances and paths should be lit to accentuate entrances without glare or escaped light while providing a safe entrance environment. Entrance lighting should primarily illuminate the groundplane with minimal building wash. The light source should not be visible when approaching the entrance.



## Context of neighborhood and the larger campus

Until the 1950's buildings were loosely placed along the edge of the bluff overlooking Spring Creek valley and Lyman Lakes. The resulting porosity maintained a visual and physical connection from the core academic campus to the regional agricultural landscape. Similarly, the city street grids' north south alignment extended view corridors deep into the campus from the neighborhood and reinforced the connection of city to rural countryside through the campus.



## Bluff Edge

Buildings should not enclose the edge of the bluff. No new buildings or building expansions should occur between existing buildings. Porosity of the bluff edge should be preserved and increased, including the pruning and/or removal of plant materials where appropriate.



## Grid

The urban grid should help organize space and building location along the neighborhood edge, but should dissolve as the campus stretches out into the rural landscape. Campus buildings within the neighborhood should be oriented outward, respecting setbacks, variations of the setbacks, alignment with the city grid and an informality consistent with the residential neighborhood.



## Building Programming & Uses

The eclectic nature of the way buildings are used should be maintained and built upon. Zoning of uses by campus precinct or by building is not typical of Carleton. New buildings should seek opportunities to be mixed use, and blend activities in unexpected combinations. Language and Dining is a recent example.



## Indoor/Outdoor Uses

Create usable spaces articulated by building relationships and landscape elements. Keep buildings from blocking views and interrupting outdoor spaces.



Organize campus to improve safety, pedestrian movement, climatic comfort, and an outdoor learning environment. Pedestrians and vehicles do not need to be separated entirely, but circulation, sidewalk scale, parking locations, and building orientation should be evaluated and refined to improve the pedestrian character of the campus.

## **Principle Four:** *Pedestrian movement is dominant.*





### ***Scale***

Walkways should be wide enough to provide comfortable and safe pedestrian circulation and to share with bicyclists.



### ***Service***

Service should be located at the rear of buildings whenever possible. Deliveries should be scheduled during class times in order to minimize conflicts with pedestrians.



### ***Connections***

Sidewalks should make direct physical connections between high traffic areas.



### ***Parking***

Parking should be re-distributed to remove lots from the core campus and placed around the campus perimeter to minimize vehicle/pedestrian conflicts.



## ***Emergency***

Emergency vehicles should be accommodated on existing sidewalks with soft paving systems to provide the necessary width for the vehicles or on roads.



## ***Climate***

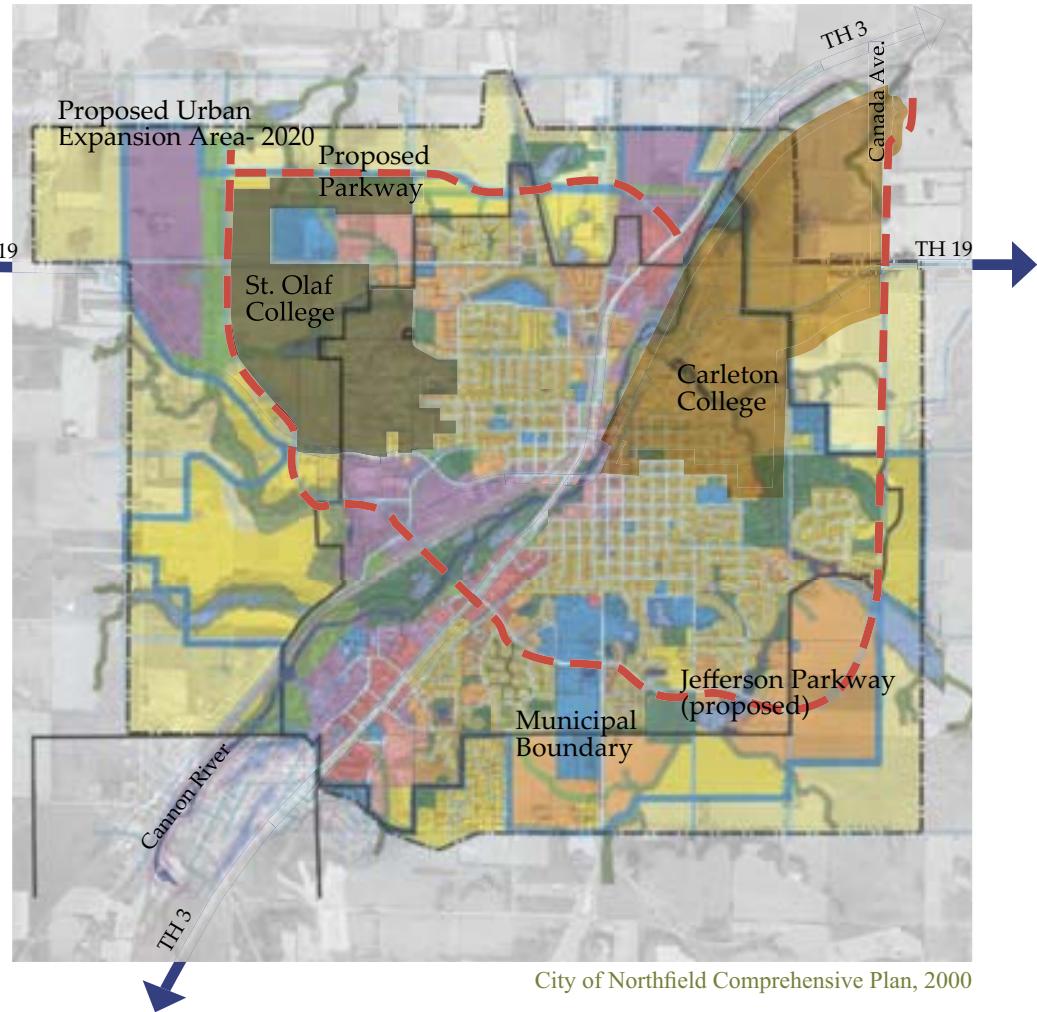
Landscaping should enhance environmental comfort by providing seasonally appropriate sun exposure and wind protection in winter, and shade in summer.



The perimeter of the campus is threatened by the future growth of Northfield. Land adjacent to the arboretum, in the neighborhood south of campus, and in downtown Northfield should be considered for acquisition if it is made available to the college or when it is important in implementing the campus plan. In some circumstances, controlling or influencing the land use and condition is adequate to preserve quality and character of the place.

## **Principle Five:** *The campus will change.*





### ***Regional growth:***

The city will continue to grow and develop around the campus, eventually making the campus an enclave within the urban area. The potential for transit between Northfield and the Twin Cities will make it more desirable as a satellite to the Twin Cities and increase growth expectations beyond that anticipated today.



### ***Physical growth of the college:***

The physical campus will grow. New facilities will be required to replace outdated ones and/or to provide for new college requirements (new programs, housing needs, etc.)



### ***Evolving landscape:***

The landscape today is far different than in Stewsie's period (1920's-1970's). It has evolved from a traditional arboreta and English garden approach toward a more naturalistic landscape based in stewardship. The arching vase-shaped branching of the American Elms has given way to low, horizontal branching of maples and lindens. The campus of the future must accommodate both change and tradition. The next generation of canopy trees should be under consideration now, or in the very near future. It may be a canopy of burr oak on the bluff edge of the campus core.



### ***Evolving processes and ecology:***

As time goes along, the arboretum should be returned to naturalized habitats of floodplain forest, upland forest, savanna, and prairie. Through this evolution, the arboretum and the campus become physically and conceptually linked, expanding the arboretum as an educational asset to the college.

Volunteer efforts/class participation should be encouraged to re-vegetate and maintain and evolve the landscape over time in the context of the regional landscape. (This may include re-locating ball fields, removal of exotic species, re-defining lake edges). Changes should be made methodically and strategically, bulldozing existing landscape to replace exotic species with native plants should be avoided.



### ***New traditions (short and long term):***

New places and spaces should be created that are interesting and unique. They should accommodate a variety of interpretations and uses. Some spaces may be very flexible, others distinct and named, where new traditions may find a home. Places like the Bald Spot provide tradition (ice skating in the winter) while also providing opportunity for spontaneity (students playing in a drum circle). The way people will use these spaces should be integral to thinking about how the campus may change in the future.



*“Always design a thing by considering it in its next larger context-- a chair in a room, a room in a house, a house in an environment, and environment in a city plan.”*

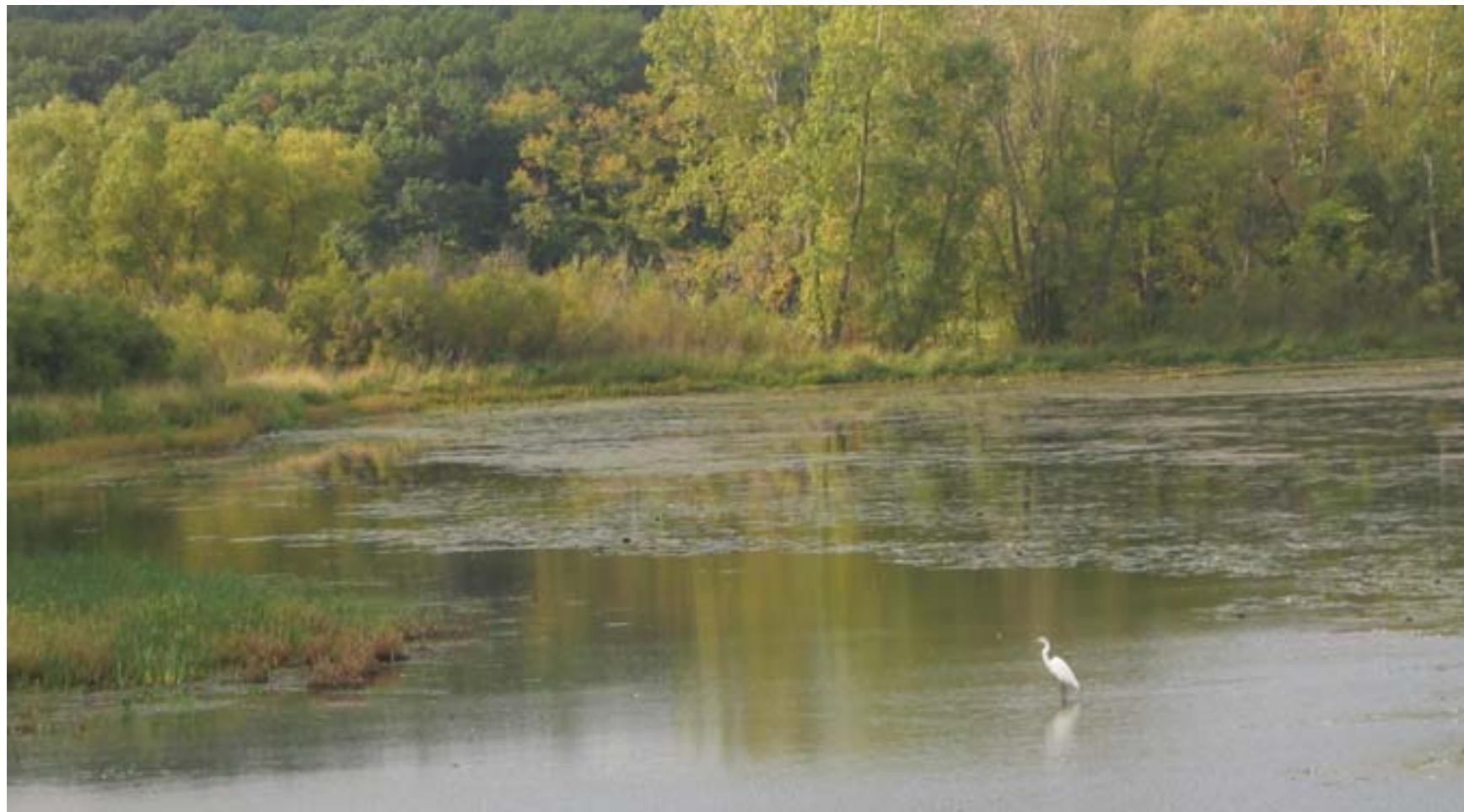
- Eliel Saarinen.



**Recommendations**



*Natural systems are the foundation of the Carleton sense of place.*



## *Prepare a study of Lyman Lakes.*

The study should include the Spring Creek watershed to determine the hydrologic and ecologic health of the system, generally identify source and type of pollution and runoff. Identify regional stakeholders and strategies for improving water quality.

The valley within the campus should preserve the lakes and islands and re-establish the stream corridor of Spring Creek in a more naturalized, ecologically healthy and sustainable condition for both.

- In the short term, modify maintenance practices in the valley to improve water quality by ceasing to mow lake edges, ceasing to fertilize in the valley, and removing unhealthy exotic tree and shrub species.
- Reconfigure the lakes to distinguish the creek corridor. Terrace the lake edges to provide a variety of depths and re-introduce native wetland and canopy species on the lake and island edges to shade and cool the water, and contribute to improving water quality, wildlife connectivity and habitat.
- Connect the Spring Creek valley and the lakes with the floodplain forest of the Cannon River to strengthen the physical, visual and habitat links between the river and the creek.
- Improve pedestrian access and connectivity within and across the valley.
- Improve character of walkways and quality of existing open spaces such as the labyrinth on Stewsie Island and the seating area on Mai Fete island, and create new gathering spaces for people offering a variety of size, character and experience.
- Accommodate historic uses of the lakes and islands, such as Mai Fete.
- Improve views to and across the valley to the arboretum and the horizon.
- Develop a plant list to guide new and replacement plantings on the core campus. This should consist largely of native plants and be organized as communities. Identify a select list of non-native plants acceptable for use in special display/educational areas to further fulfill the arboretum concept.



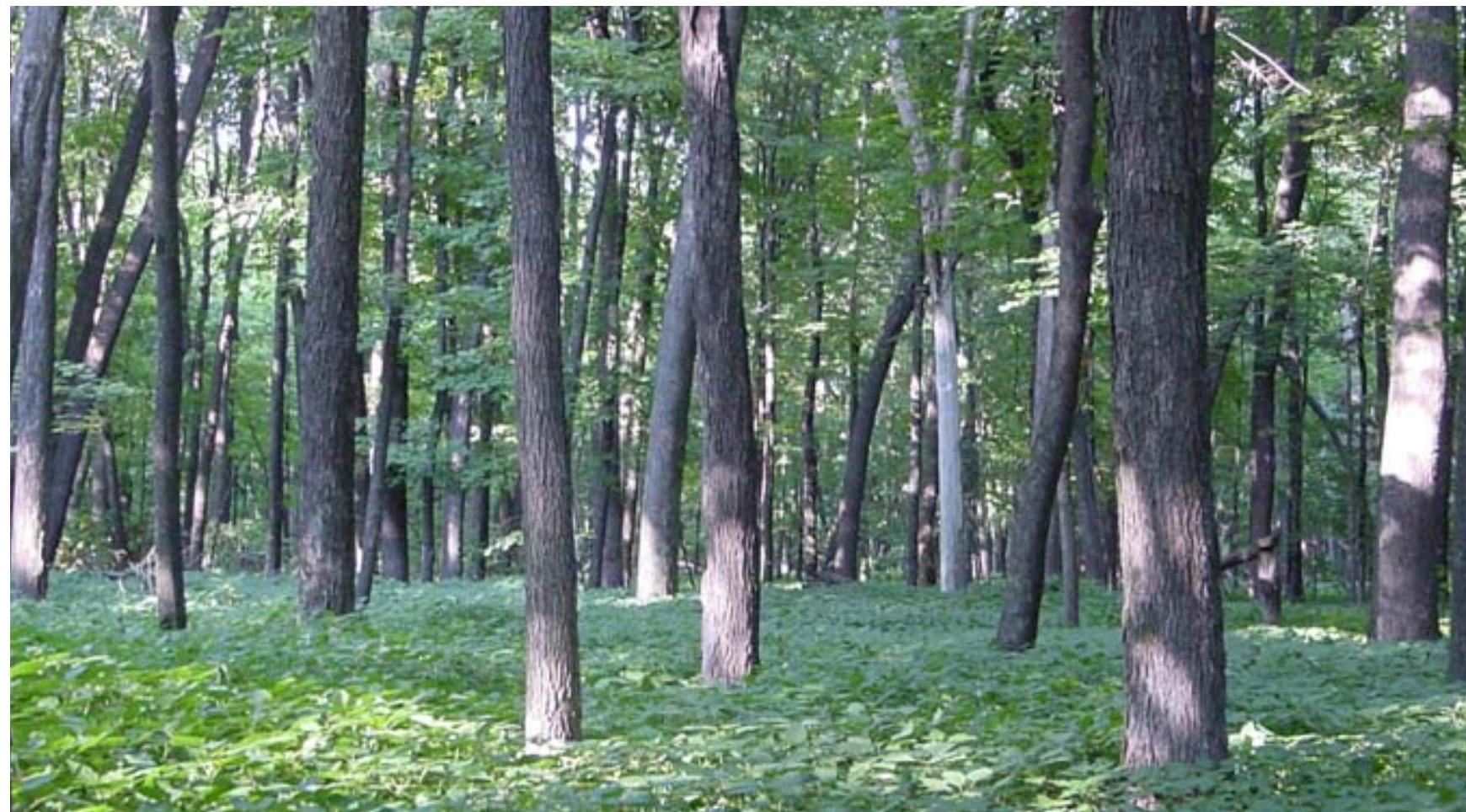


***Preserve and improve views to the horizon.***

Every opportunity to observe the edge where the landscape meets the sky is important. Refer to Landscape and Arboretum planning in the Landscape section.



*Landscape is primary*



## ***Prepare a Landscape Concept Plan.***

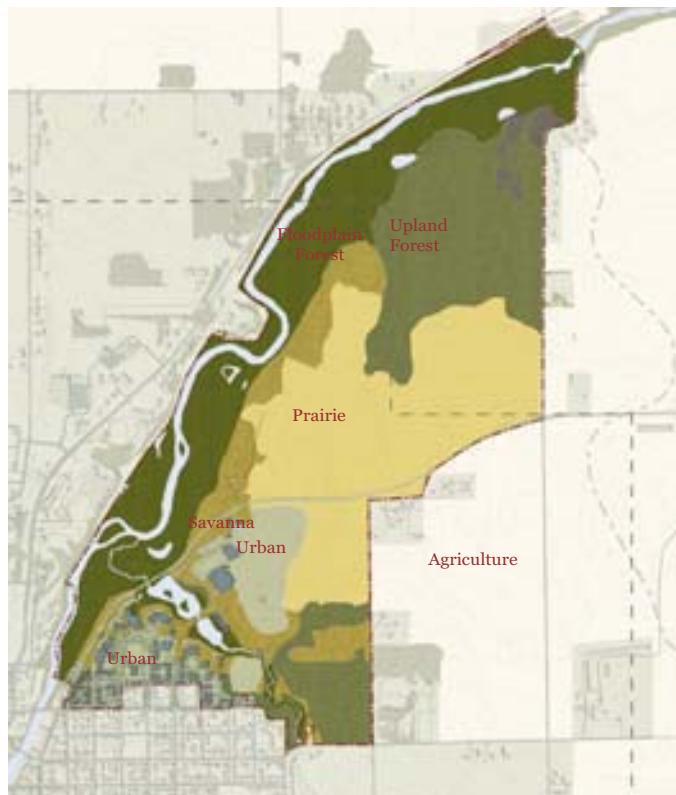
The landscape spaces within the campus should visually link to the regional landscape at every appropriate opportunity. Create and maintain visual openings and continuity of landscape materials along the bluff edge overlooking Lyman Lakes.



- Identify campus edges and points of arrival through landscape character and quality. Subtle character and material changes should envelop areas where college and neighborhood uses are intertwined. A single point of arrival or gateway is inconsistent with the character of Carleton.
- Remove exotic species from the bluff edge and re-establish oak savanna. In particular, remove unhealthy blue spruce that interrupt views and continuity of native plantings.
- Integrate systems of native and naturalized plants into the campus plant palette.
- Design plantings and buildings to provide environmental influence. Consider winter winds and solar orientation in the placement, pattern, and density of landscape plantings. Maintain sun pockets and create human scale wind protection because these are important in winter. Also, provide shade and exposure to breezes which is important in summer.

## *Prepare a long term plan for the Arboretum.*

The landscape should form a continuum from the regional scale of the Arboretum through the campus to the neighborhood and into downtown Northfield. The planning area for the Arb and should be inclusive of the core campus be coordinated with the preparation of the core campus landscape concept plan. The plan should identify the long term evolution of the Arb toward a model of native plant communities. It should also determine the location and extent of lowland deciduous forest, upland deciduous forest, savanna and prairie ecosystems as well as define the role of the urban/domestic landscape of the core campus as a component of the Arboretum.



- Re-establish the floodplain forest along the Cannon River, extending the Arboretum to Second Street and downtown Northfield. Create an entrance and trail access from downtown, and encourage passive recreational use by Carleton and citizens.
- Collaborate with the City to explore feasibility of creating an interpretive center near a downtown Arboretum entrance.
- Consider views into and from the Arboretum as well as the need to screen existing and future development where necessary.
- Develop a subtle interpretive signage system that expands upon the existing system and relates to the Campus system. Include interpretation of natural systems, native and agricultural landscapes, regional history and Carleton history.
- Recommend methods of establishment. Implementation priorities and phasing and long term management strategies should be identified.
- Develop programs that support a goal of establishing the arboretum as a nationally recognized research and educational facility focusing on the native mid-western landscape. Seek opportunities to develop joint programs with other regional colleges to share the arboretum as an educational resource. Seek opportunities to utilize the arboretum as a teaching tool on campus with an emphasis on natural systems and sustainable concepts. The rehabilitation and restoration of native plant communities is an opportunity to engage students with the Arboretum and the Arb in the geology, biology and ecology curriculums.
- Engage the Carleton and Northfield communities in joint efforts to maintain and evolve the Arboretum and to use it as a recreational resource. This may include Earth Day programs, trail maintenance, prairie burns, weed removal and native planting efforts. Establish a "Friends of the Arb" committee of Carleton and Northfield people to organize citizen support for Arboretum management.

## Create a landscape continuum from downtown Northfield to the Arboretum.

Build a continuum between the urban and naturalized environments, reinforcing Carleton as a special place set within the Minnesota natural and agrarian landscape by re-establishing the floodplain forest along the Cannon River to connect the arboretum with downtown Northfield.



- Extend the arboretum to Second Street, with trail access from downtown. Encourage passive recreational use by Carleton and by the citizens of Northfield.
- Initiate efforts with the city to explore the feasibility of creating an informational and interpretive center near downtown.
- Explore options to minimize use of Highway 19 as a thoroughfare by understanding the impact on Northfield of creating a bypass north of the city.
- Study the potential to re-define Highway 19 as a city street. Create the opportunity to add crosswalks, reduce speed and develop an urban streetscape character.



- Create a gateway to Carleton College and to Northfield by extending the native prairie and oak savanna landscape along Highway 19 to span both sides of the road.
- Identify arrival to campus through landscape character and quality. Subtle character and material changes should envelop the areas where both neighborhood and college uses exist. A single entry point that designates arrival to the college is not the intent.

## Prepare a Campus Lighting Plan.

Today the campus has inconsistent lighting that sometimes reduces safety and negatively affects the well-regarded "Night Sky" visibility. Determine an overall approach to illuminating the campus that balances safety and security with nighttime visibility and function. Work with a lighting consultant to prepare an implementation strategy and a phasing plan.



- Consider mesotopic vision (night vision) and emphasize reflected light rather than incidental. Minimize light pollution ("sky-glow") and light trespass. Establish a high degree of uniformity, with a subtle emphasis on building entrances. Areas with varying intensities of light should be avoided. Reduce light levels around walks or building entrances that are too brightly lit. Minimize light in the arboretum to only illuminate areas where students are likely to travel; dorms, recreation center, etcetera.
- Determine light source color: Metal halide is recommended for its true color rendering. Reaction time and color recognition are considerably higher under low light levels with white light sources. The negative effect of an incremental transition from the existing high pressure sodium to metal halide should be considered in the implementation of the plan.



- Select standard high-performance light fixtures: Standard fixture types should be selected for each application need that are directional and that minimize light leakage. Round fixtures and round poles are recommended for their relative unobtrusiveness in daylight.
- Consistent mounting heights should be determined for each application.
- Specific fixtures should be selected for:
  - Parking lots and campus drives
  - Pedestrian walks
  - Service entrances
  - Special walk conditions, i.e. surface lights
  - Emergency telephones
  - Building entrances.
- Select a variety of fixtures for campus wide applications from a "family" of related character. Where appropriate, select fixtures consistent with the diverse architectural styles of the buildings.
- Select luminaires: Choose luminaires that the Illuminating Engineering Society of North America (IESNA) rated full cut-off or cut-off to control glare, spill light and "sky-glow". Select luminary reflectors that are faceted rather than hydro-formed, to ensure high reflectivity and high performance control of light distribution patterns. The use of high performance luminaires will result in the need for fewer fixtures and less energy use overall.



*Buildings sit within (and are part of) the landscape.*





## ***Architectural Character***

- Establish guidelines for materials, scale and placement of buildings.
- New buildings proposed at the edges of the existing campus should respect the sense of openness and porosity to the larger region from the campus. Placement should consider the issues of city circulation patterns and vistas to a building or, perhaps, through it.
- Respect the orthogonal relationship to the street grid. Buildings should be organized to create usable outdoor spaces while providing protection from the climate.



## ***Programming and Use***

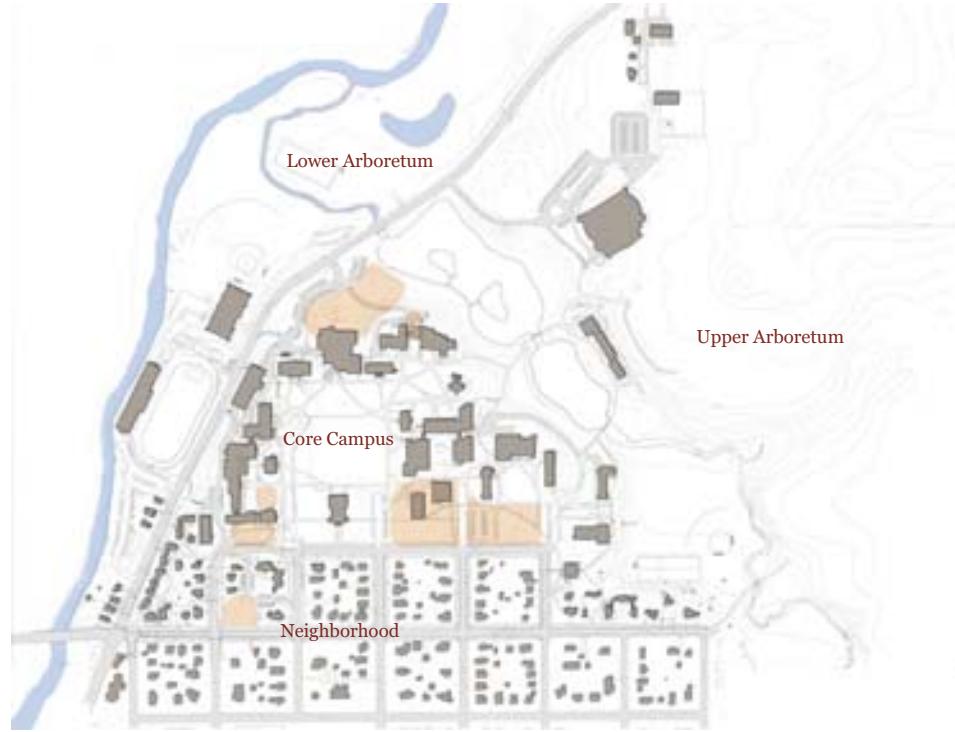
- Engage building programmers to establish the role of new buildings on campus during the design phase.
- Transfer uses of outdated buildings to appropriate locations



Possible Campus Building Plan, 2104

### *Campus Plan Components*

As the college needs to develop new facilities in the future, there are logical places that can accommodate new buildings; significant open spaces that should never be developed, places that are appropriate only for very unique buildings, areas that can develop but should do so only with careful planning and control, and there are several buildings that should be considered for removal rather than reinvestment. Of these, there are sites that should be preserved as open space to better integrate the core campus with the Arboretum, with the city grid, and that will open new building sites.



## Building Site Selection

- Consider the scale of sites for new buildings in an effort to encourage buildings to act as individuals set within a unified landscape. Begin by removing links between buildings, like Hulings, that inhibit the space around them and circulation on campus.
- Determine a schedule for building replacement on campus. This should assess cost of maintenance, accessibility, functional and architectural improvements, and space and program needs, along with the opportunity for increasing campus porosity. This study should identify those buildings that are essential to the Carleton legacy and will always be invested in, those that contribute, and those that detract from the quality of the campus.
- Select future building sites based on their potential for connectivity with adjacent programs, ability to accommodate service requirements, possibilities to create usable outdoor spaces, and to enhance views to the campus and beyond.



## Preserve Existing Open Spaces

- The Bald Spot, Goodsell Observatory open space, Lyman Lakes / Spring Creek Valley, the Nourse and Language & Dining quadrangle, and the Upper and Lower Arboretum are landscapes that are essential to the identity of Carleton and should be preserved in perpetuity. These spaces enrich the character of the campus, providing space to recreate and connect the campus and the city to the greater regional landscape and should be maintained as open space.
- Place buildings to aid in the creation of high quality and purposeful outdoor spaces without enclosing or blocking important connections to the larger landscape.



## Special Building Sites

Several sites can be considered for only unique and special buildings. Each of these sites creates particular demands to carefully integrate architecture, landscape, and context. These sites also suggest a unique program and architecture that is articulate, small in scale, and expressive.

- The Holmes and Flinn plan of 1929 proposed an expansion of Skinner Hall with formal flanking wings. Such a highly ordered and massive approach is inconsistent with the idiosyncratic nature of Carleton. However, these sites may be appropriate for very small scale and unique buildings that defer to Skinner in scale, mass, and character.
- The site at the north end of the Bald Spot demands a building that relates to Leighton, the Library, and Laird, but also faces the Bald Spot. The building should also have a porosity that allows for visual and physical connections through it, linking the Bald Spot to the Library.

- There is a building site that could be created between Evans and Myers by the removal of Myers. This is a unique opportunity for a small, special use building to have a powerful relationship with the landscape of the lakes and the upper arboretum. This siting of this building would need to allow the savanna landscape of the valley to flow around it, encompassing the building, integrating it with the landscape.
- There is a small site near the banks of Lyman Lakes that a small building could be nestled, and would be able to engage the landscape of the floodplain forest.



## Special Planning Areas

There are four areas that could be built upon with careful master planning. If the campus grows, requiring expansion into these areas, specific plans should study the program, scale, and design of these sites to ensure a sense of connection to the existing campus and appropriateness to these uses.

- The college owns several houses scattered throughout the neighborhood between First and Third Streets. At a policy level, an intent regarding ownership in the neighborhood should be confirmed. If ownership or acquisition of additional properties continues, a specific plan should be developed to maintain the quality, scale, and integrity of the neighborhood.
- Bell Field offers the potential for multiple buildings. Development here should consider the grades, the isolated location, and the impact on the visual connection to the upper arboretum.



- The land adjacent to Lyman Lakes could accommodate carefully placed and scaled buildings set within the lowland forest landscape. However, development in this area would significantly impact the landscape character of the lakes and have unique access and service issues.
- The area near the recreation center is somewhat isolated from the core campus, presenting the potential for a second core if it is developed for academic use. However, it is a logical location to re-locate the stadium and gymnasium out of the floodplain.



## Building Removal and Replacement

- Begin removing the buildings noted on this framework plan as they reach the end of their life cycles. Generally, building life span is 80 years.
- As buildings reach the end of their life cycles, to reinforce the importance of the landscape, their uses should be re-located or structures should be built in new locations to accommodate those uses and those buildings removed.
- The floodplain along the Cannon River, if restored to lowland forest, would provide a physical connection between the Arboretum, the campus, and downtown Northfield. To do this, Laird stadium and West Gym will eventually need to be relocated out of the floodplain.
- There are at least four buildings on campus that are recommended for removal:

Myers and Musser are poor quality living environments, are not favored by students, and are poorly sited, interrupting the street grid and blocking views. The removal of Myers opens up a unique site for a special building visually reconnects Evans with



the campus. The removal of Musser makes land available for additional townhouses.

While Laird is a loved and special building, it is in need of significant investment to improve accessibility and function. The recent math building created an odd and congested cluster of buildings in this area. Eventual removal of Laird creates the opportunity to relieve this congestion and reconnect the core campus to the larger landscape beyond.

A portion of the physical plant may be removed when the time comes. By leaving the powerplant portion of the building and re-locating the other uses, a connection may be re-made between the Bald Spot and the forest along the Cannon River.



## Context of neighborhood and the larger campus

- New buildings along First Street near the neighborhood community should be designed and placed at an appropriate scale and character to relate to the neighborhood. Vistas, setbacks, and sidewalk alignments between the neighborhood and the campus should be maintained.
- Establish purpose and vision for college owned properties in the neighborhood and downtown.
- Develop a policy regarding the college owned houses in the neighborhood and the acquisition of new properties. The intended uses for these properties must be determined, i.e. housing, administrative use, or special campus uses. A diversity of housing types for students for all four years and housing opportunities for staff and faculty should be provided. Demolish no more houses until a policy decision is made. Develop a funding policy for purchasing and maintenance of these properties.
- Define a relationship and/or involvement of the college with downtown businesses and properties.

- Develop a diverse color palette for houses. Research historic precedence from the surrounding neighborhood and of the specific houses as a guide.
- Develop landscape guidelines for regenerating the neighborhood streetscape while increasing landscape diversity.
- Plant shrubs/perennials that are consistent with privately owned houses in the area.
- Encourage a personal sense of ownership by assigning a specific person as the lead coordinator of maintenance for each property.
- Partner with the city to establish streetscape and lighting standards. Develop street lighting and campus lighting standards. Encourage front porch lighting to improve a sense of safety and security and improve nighttime visibility.



*Pedestrian movement is predominant*





## ***Prepare a Pedestrian Plan***

- Prepare a pedestrian circulation plan that analyzes pedestrian and bicycle traffic volume, desire lines, principal destinations and frequency of travel. Coordinate with Arb trail system and City of Northfield bicycle and trail system and planning efforts.
- Establish a hierarchy of walk widths. No walk should exceed 10' in width. Identify a standard typical width and wider walks only as necessary and following primary bicycle routes. Build new sidewalks only as needed to accommodate high traffic and remove inappropriately located walks. Accommodate pedestrian traffic and bike traffic on the same path system.
- Develop specific walk design (i.e. structured turf systems) to accommodate emergency and college service vehicles within the pedestrian system. Remove wide (20') walks throughout campus with this design. Provide structured turf pull-out areas where appropriate to allow service vehicles to move out of traffic to allow pedestrians to pass and at typical service access locations.
- Incorporate micro-climate conditions when planning paths by developing a relationship to structures and landscape to provide wind protection in the winter and shade in the summer.



## ***Prepare a Parking and Circulation Plan***

- Prepare a plan to identify and address current and future vehicle parking needs, service vehicle circulation and emergency vehicle circulation. The plan should assess parking volume and proximity to destination, review current parking management regulations and recommend revisions if appropriate. The plan should also address parking on neighborhood streets and explore the appropriateness of management solutions such as permitting to ensure adequate parking for neighborhood residents, college faculty and staff. For example, time restricted permitting could allow day use for commuting college staff and reserve evening use for residents.
- In general, parking should be dispersed in small lots and on streets at the perimeter of the campus to improve and enhance the pedestrian character of the core campus. Sites for new small parking lots should be distributed around the perimeter of the campus, and should include limited parking close in to the core campus area for reserved handicap accessible parking. Consider temporary civic events such as alumni weekend, performances, festivals or markets in the design and location of new parking lots and walk ways.
- Remove College Street and parking north of First Street to the north end of Sayles-Hill Campus Center. Replace with landscape and a pedestrian sidewalk that aligns with the sidewalk on the west side of College Street.
- Remove parking lots at the end of Winona Street and Nevada Street distribute parking in new lots.
- Provide access on walk ways to service pull-outs for students during arrival and departure periods.

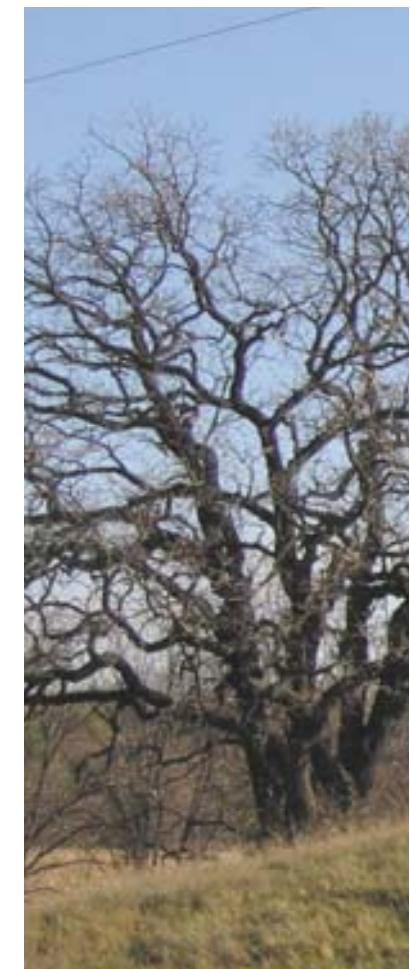


## Service Circulation

- Provide service access at the backs of buildings. This should be reached from circulation roads around the perimeter of campus to the degree possible.
- Manage service to minimize the presence of service vehicles on campus sidewalks by scheduling these activities to occur during classes or during low activity times of day to reduce conflicts with pedestrians. Provide pull-outs for parking vehicles off of walks.
- Carefully consider the location of service access when planning for new buildings. Coordinate new service access with existing service routes and limit the addition of new service access drives.

## Emergency Circulation

- Identify emergency vehicle access routes and review with local fire department.
- Develop an acceptable alternative to full width concrete paths for the campus, such as structured turf systems (grass pavers, grass rings), gravel fines, or other soft systems to reduce the perceived width of emergency vehicle access routes.
- Accommodate emergency vehicles on roads where possible and minimize shared access on pedestrian ways.



*The Campus will change over time*



## *Anticipate Regional Growth*

Continue to develop a close working relationship with the City of Northfield, Rice and Dakota Counties, St. Olaf College and other entities to understand and influence local and regional growth planning. Where feasible and appropriate, participate in studies that affect the campus but of greater scale, such as watershed scale planning of Spring Creek and the Cannon River. Seek opportunities to invite the community to the campus. Collaborate with the City on issues that influence the campus, including:

- Partner with the City to relocate the proposed alignment of Jefferson Parkway. As currently planned it will impact the Arboretum by interrupting the views to the horizon, increasing traffic noise, encouraging development adjacent to the Arboretum.
- Enhance access to the Arboretum as a public asset.
- Establish a policy for college ownership of downtown and neighborhood real estate.
- Partner with the City to continue to develop a Carleton presence in the downtown such as the bookstore.

## *Prepare a Physical Growth Study*

Preserve and enhance the heritage of Carleton by carefully defining locations for future facilities and for future open spaces.

- Explore a range of scenarios and consider both a static and a growing student population.
- Explore various alternatives of where growth may occur.
- The study should include 2 or 3 future campus population scenarios and perhaps 2 alternatives for campus growth based on each population scenario.



### **Enhance edges between the campus and the neighborhood that are seamless, boundless, and effortless.**

- Allow campus uses to transition across First Street into the neighborhood, by keeping landscape edges soft and by respecting vistas to and from the campus to create a sense of boundlessness.
- Expansion south of First Street into the neighborhood: Confirm college policy for property ownership in the neighborhood. Initiate a neighborhood planning study and purchase properties offered to the college and integrate them into the neighborhood plan.



## *Evolving landscape*

The development of the college should integrate the arboretum as a significant physical and cultural component of the campus. Efforts to include educational activities, re-vegetation efforts, recreational opportunities, and re-organization of uses and possibly land acquisition will be essential.

### **Integrate the arboretum into campus culture.**

- Expand the use of the arboretum as a research and educational facility.
- Integrate the rehabilitation process in the arboretum into the curriculum at every opportunity.
- Seek new opportunities to utilize the arboretum to embody sustainable concepts. Include natural systems, ie. geology, limnology, ecology existing in the arboretum as hands-on aids in teaching agendas on campus.
- Expand upon subtle interpretive signage to reveal the history and core of the arboretum, agriculture and native landscapes.



- Engage the Carleton and the Northfield communities in joint efforts to maintain, evolve, and use the Arboretum as a recreational resource. This may include Earth Day programs, trail maintenance, re-vegetation efforts or other activities. Establish a "Friends of the Arb" committee of Carleton and Northfield people to organize citizen support for Arboretum management.
- Expand the arboretum land holdings to include the ridgeline east of Canada Road to preserve views from the arboretum, particularly to protect a prairie grass horizon to the sky. This sense of space is essential to the experience of the Midwestern landscape.
- Re-locate recreation fields (near the Cannon River) upland, near the existing recreation center, as they reach the end of their life spans. Re-construct the existing parking and housing elsewhere on campus.
- Building no more parking lots along the river. Develop a plan to move the existing parking and the housing out of the floodplain to new sites elsewhere on campus.



- Integrate native landscape into the core campus along the bluff edges by removing unhealthy trees and replacing them with native savanna species. Allow prairie landscape to rupture the core and encompass campus buildings that sit at this edge.
- Allow the campus edge to dissolve into the neighborhood by integrating plant species, lighting concepts, and facilities on both the campus and the neighborhood sides.



### ***Evolving processes and ecology:***

Carleton College recognizes a deep seated value in community and the integrity of the local and regional ecological systems of which the campus is a participant. That Carleton is at the forefront of acting upon its values is exemplified by the construction of the wind turbine east of the campus in 2004. The turbine will generate the equivalent of 40% of the campus energy needs. Earth Day has been a recognized annual celebration at Carleton since its inception in 1970. In April of 2001, The Environmental Advisory Committee approved the following statement of stewardship that was subsequently endorsed by the Board of Trustees Building and Grounds Committee:

*Carleton College recognizes that it exists as part of interconnected communities that are affected by personal and institutional choices. We are dedicated, therefore, to investigating and promoting awareness of the current and future impact of our actions in order to foster responsibility for these human and natural communities. Carleton strives to be a model of environmental stewardship by incorporating ideals of sustainability into the operations of the College and the daily life of individuals.*

The acknowledged value of stewardship and sustainable planning and development is integrated into the principles and recommendations of this Campus Plan. The intent is to support institutional practices that increase energy efficiency, encourage the use of renewable resources, decrease production of waste and hazardous materials, improve the health and diversity of campus ecosystems and increase the presence of native species, and support and participate in improving the health and diversity of ecosystems on a watershed and regional scale. Each campus decision should consider its impact on the greater community and the physical environment over the long term. Such thinking should extend to the application of planning tools that enable comparative analysis of sustainability in the consideration of long-term economic, environmental, social, academic and cultural decision-making. These tools include:

- Minnesota Sustainable Design Guide. The Design Guide recommendations should be integrated into all campus planning, landscape, architecture and maintenance projects. The Guide addresses the six environmental topics: site, water, energy, indoor environment, materials, and waste.
- Continue to explore opportunities to expand upon the use of alternative energy sources and plan towards increased efficiency power generation.
- Integrate the concepts of stewardship, sustainability and environmental systems into the academic process by continuing and expanding upon programs such as the environmental energy housing project.
- Continue to implement ecological restoration projects in the Arboretum and on the campus and seek opportunities to build multi-benefit environments that improve water quality, wildlife habitat, and provide for both learning and recreation. For example, the restoration of the floodplain along the Cannon River will make direct connection between the Arboretum and downtown Northfield, with the potential to expand the riparian river edge and lowland forest, with trails, interpretation and removal of impervious parking lots and buildings from the floodplain.



The Bald Spot



### ***New traditions (short and long term)***

Carleton College is rich in traditions that are identified with special campus places. Some traditions have evolved over time and some have faded through the generations of students and the changing times. Some, such as the May Fete pageant on the shores of Lyman Lakes began nearly a century ago and live on in the name of the island. Over the years, other rituals have developed around unique landscapes, like camp fires on the Hill of Three Oaks; mysterious ceremonies in the Druids Den; the annual Rotblatt softball game on Reunion Weekend; broomball on the Bald Spot. Some places and activities now have meaning only to particular generations of alumni, and in cases such as Lilac Hill, the landscape has faded along with the loss of the tradition.

Consideration must be given to create identifiable and nameable places on the campus. These will become the homes of new traditions and events, growing out of the evolving community and culture of the Carleton people.



### ***Form a Design Advisory Committee***

At intervals throughout the preparation of the Campus Plan, a small group of consultants to the college were engaged to respond to the ideas emerging in the plan. These discussions were invaluable to the success of the plan. By testing the discoveries and principles with the years of experience on the campus offered by the consultants.

The consultants should have an integral and continuing role in every campus planning, building, and design project. This committee will act as the conscience of Carleton College's aesthetic and experience with the cause to uphold the integrity of the plan. This mechanism should be established as an integral part of the planning process. In addition to project related involvement, the design advisory committee should periodically review the plan periodically to assess its progress and success and present its findings to the College Trustees annually.



The Hill of Three Oaks



Grant Wood- *Stone City, Iowa* 1930

This plan has been prepared by Civitas, Inc. for use by Carleton College in Northfield, Minnesota.

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**Michael Dregni-** *Minnesota Days, Our Heritage in Stories, Art, and Photos* , 1999

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Northfield, Minnesota  
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