

Cover image: northward looking view of the University of Illinois at Urbana-Champaign Main Quad and Illini Union from the steps of Foellinger Auditorium (University Office for Facilities Planning and Programs, 2004).

University of Illinois at Urbana-Champaign Campus Master Plan Update March 2007

prepared by

Sasaki Associates, Inc. (Watertown, MA)

University Office for Facilities Planning and Programs

University of Illinois at Urbana-Champaign Facilities and Services

* planning input provided by additional stakeholders and professional services consultants participating in the campus master plan update process is credited in the corresponding sections

under the direction of

B. Joseph White, Ph.D., President of the University

Richard H. Herman, Ph.D., UIUC Chancellor

for the Board of Trustees of the University of Illinois

Governor Rod R. Blagojevich, ex officio

Devon C. Bruce, J.D.

Frances G. Carroll, Ed.D.

David V. Dorris, J.D.

Sarah M. Doyle, UIS Student Trustee

Lawrence C. Eppley, J.D., Chairman

Christopher A. Kantas, UIUC Student Trustee

Umair Mamsa, UIC Student Trustee

James D. Montgomery, J.D.

Kenneth D. Schmidt, M.D.

Niranjan S. Shah

Robert Y. Sperling, J.D.



Forward

The University of Illinois at Urbana-Champaign has a strong campus planning heritage of providing forward-looking vision for its physical development that began at the institution's founding in 1867 and continues today. Shortly after the turn of the twentieth century, the first plan to address future campus growth needs was advanced with the intention of creating a campus core by locating proposed buildings around a large, green quadrangle. Today that space, the *Main Quad* (seen on the cover of this report), not only functions as the heart of academic instruction but also serves as an institutional icon whose form is the foundation for all campus planning efforts that followed it.

Now, shortly after the turn of the twenty-first century, this campus master plan update continues the focus on future campus growth needs. As it builds upon the historic framework of existing patterns of land use, circulation, infrastructure, and open space established in earlier planning efforts, it also provides recommendations for making wise use of limited resources relevant to the campus today and into the foreseeable future. Some issues involved in this update include traditional academic campus growth and redistribution needs but many seek to better integrate the campus with its surrounding communities. Connecting the University and its neighbors (whether through public/private development, economic development, transportation, or the landscape) not only supports institutional goals that build community partnerships but also serves to enhance the quality of life on and around campus.

As has been noted in previous planning efforts, campus master plans are the visionary development guidelines that allow administrators to make informed, coordinated, and cost-effective decisions regarding the campus' physical environment. To accommodate the potential for changing needs and/or resources during the course of plan implementation, those guidelines must also be flexible. That flexibility must always be governed such that any modifications to the campus master plan take into consideration this institution's legacy and our responsibility to steward it to a brilliant future. To provide further definition to the master plan framework, campus is currently engaged in a long-term visioning charrette that will supplement these planning efforts.

B. Joseph White

President

University of Illinois

Richard H. Herman

Chancellor

Urbana-Champaign campus

Table of Contents

Section Page				
I.	Executive Summary			
II.	Background			
III.	Master Plan Update			
	A.	North Campus Land Use	36	
	В.	Campus Area Transportation	40	
	C.	Research Park Update	44	
	D.	Division of Intercollegiate Athletics	53	
	E.	Orchard Downs Redevelopment	58	
	F.	Campus Storage Facility	59	
	G.	Campus Commercial Areas	64	
	Н.	Open Space Enhancements	67	
	I.	Additional Planning Updates/Opportunities	87	
IV.	Design Guidelines Update10			
V.	Appendix 119			

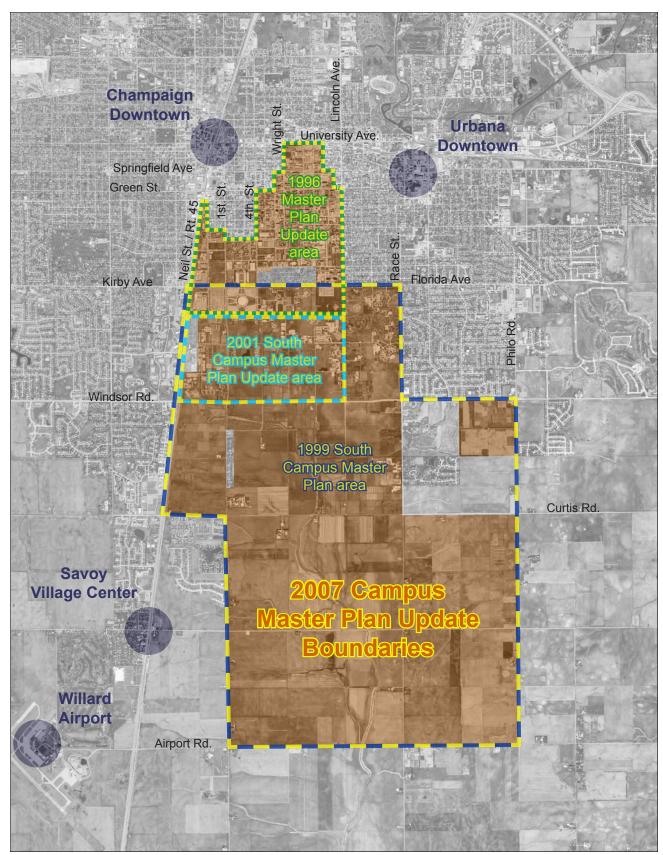


Figure I-1: Campus Context and Project Boundaries Map (Surdex Aerial Photography, 2002).

The University of Illinois at Urbana-Champaign Campus Master Plan Update area (denoted with orange highlight) encompasses the boundaries roughly defined within Neil St. to the west, University Ave. to the north, Philo Rd. to the east, and Airport Rd. to the south. Previous campus master plan project areas are shown with color-coded overlay outlines.

I. Executive Summary

Purpose

The existing University of Illinois at Urbana-Champaign (UIUC) Campus Master Plan is a composite of area plans and updates approved by the University of Illinois Board of Trustees since 1986. Of those area plans, the three most



Figure I-2: Oblique aerial view (Land Slides, 2000) of the Campus Master Plan Update project area from the northern edge of campus along University Ave. looking south to the horizon across the academic core and agricultural field research plots.

relevant to current UIUC campus planning issues are: the Master Plan Update (Academic Core area of campus) in October 1996; the South Campus Master Plan (area formerly known as the South Farms) in June 1999; and the South Campus Master Plan Update (north of Windsor Rd.) in July 2001. Each of these plans built upon the framework and core

objectives established by prior plans; however, the issues that ultimately shaped each of these subsequent plans were relevant to the time when each was developed.

This update addresses the prevalent campus facility program and land use needs through minor plan adjustments...

- Acknowledgement of recently constructed facilities
- Approved projects currently under construction
- Resolution to campus planning questions and issues that affect how program and land use are accommodated

... that resolve issues relevant to today's needs while being respectful of the basic framework and core objectives previously established. This planning effort also comprehensively combines all previous area plans into one project area inclusive of the entire campus master plan boundaries (shown on the map in Figure I-1).

The Planning Need

Given that projects currently either approved for or under construction technically become (through the University's Project Approval Process) a part of the current campus master plan, then the primary need for this planning effort is one of understanding pertinent program and land use questions/issues affecting the physical campus. Five different types of questions/issues dominate this effort to modify the existing University of Illinois at Urbana-Champaign Campus Master Plan:

- 1. Confirm or update program and/or land use accommodation in the following locations...
 - a. North Campus
 - b. Research Park (including State Surveys Campus)
 - c. Division of Intercollegiate Athletics Campus
 - d. Orchard Downs Redevelopment
- 2. Study the symptoms and causes of campus pedestrian and vehicular circulation conflicts via a review of Campus Area Transportation Study and determine strategies to make the campus environment safer.
- 3. Determine an appropriate location for a warehouse district or managed remote storage facility.
- 4. What is the viability of and what strategies are appropriate for integrating unmet commercial needs in the following campus and campus community locations?
 - a. North Campus Garage
 - b. Campus Town
 - c. East Campus Commercial Area
 - d. Research Park
 - e. Orchard Downs
- 5. Inventory the current landscape structure and determine strategies that enrich campus open spaces and provide more sustainable grounds management.

Additional planning updates and opportunities that emerged during the campus planning effort are also incorporated in this report.

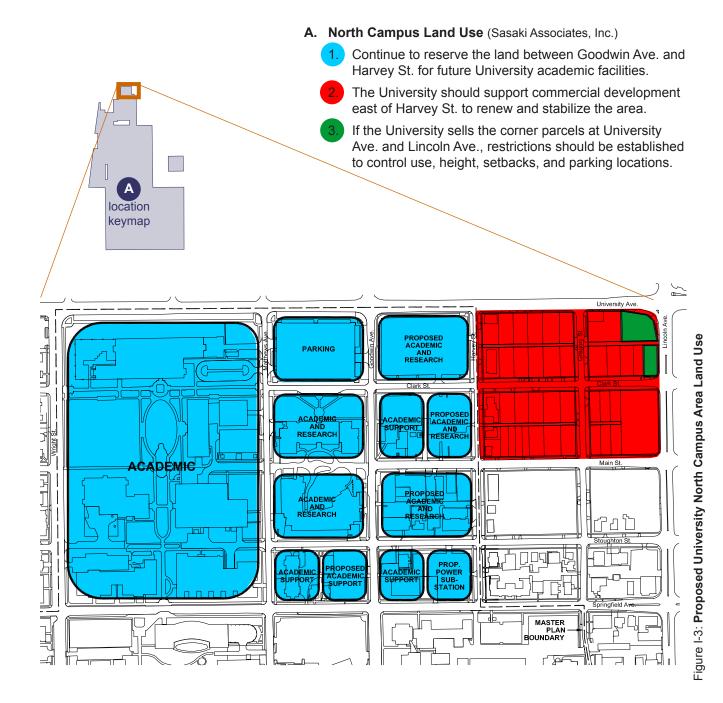
Planning Objectives

The following planning objectives descibe the intent of the Campus Master Plan Update:

- Provide planning analyses and recommendations to resolve identified questions and issues involving how program and land use needs are accommodated
- Coordinate the planning efforts being developed throughout campus by various stakeholders and professional services consultants into one cogent Campus Master Plan Update

Summary of Recommendations

The following summary of Campus Master Plan Update recommendations define the basic proposals for the plan. Adjacent to each set of recommendations is a "location keymap" graphic to illustrate where each of the proposal(s) is in context of the rest of campus. A composite illustrative of the entire Campus Master Plan Update follows this recommendations section.



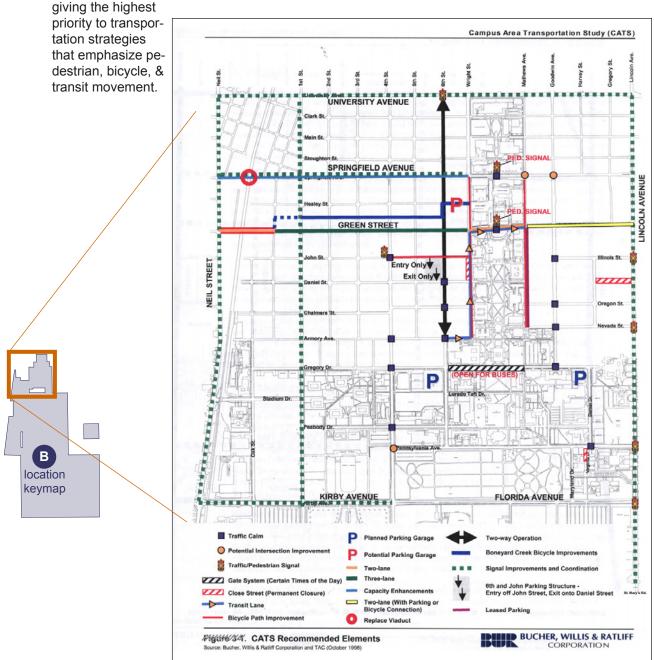
I. Executive Summary

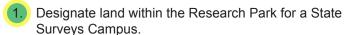
Master Plan Update Recommendations continued...

B. Campus Area Transportation (Sasaki Associates, Inc.)

- 1. Adopt, as part of the Campus Master Plan, the principles set forth in the 1999 Campus Area Transportation Study.
- 2. Establish a University District in which uniform transportation policy and design standards will apply.

3. De-emphasize automobile traffic and emphasize separation of vehicles, bicycles, & pedestrians within the district

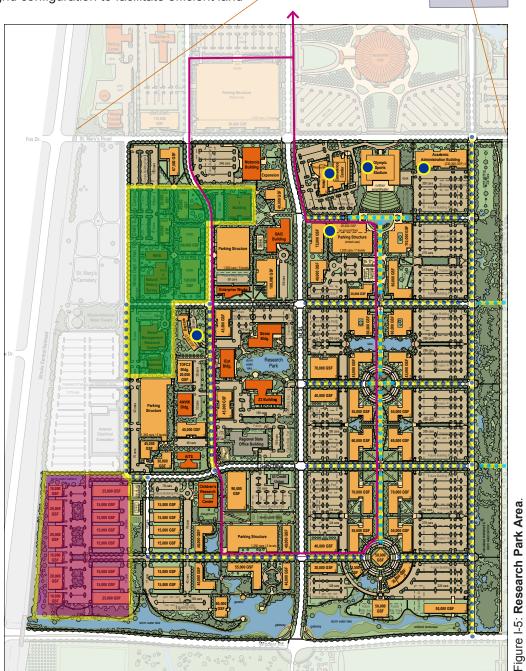




- 2. Relocate the entire Illinois Fire Service Institute operations from its current location in the Research Park to a remote South Campus location (see issue "I.k.").
- (3.) Adopt a street grid configuration to facilitate efficient land

use, compact infrastructure development, the ability to economically increase the density of the research park over time, and to create a stronger connection among the Research Park facilities.

- 4. Mixed uses (including hotel/conference facilities, childcare facility, retail, athletic facilities, and possible administrative office functions) should be developed within the Research Park.
- 5. Accommodate the potential for a Research Park / Main Campus connection via a fixed guideway 'tram' route.
- 6. Maintain plan flexibility for long-term building and roadway infill capabilities.



I. Executive Summary

location

keymap

Master Plan Update Recommendations continued...

D. Division of Intercollegiate Athletics Areas

- 1.) Adopt "Heritage Plan" (SmithGroup JJR) into the campus master plan.
- Integrate increased event parking capacity opportunities (University of Illinois).
- Maintain a golf training site (denoted by...) with the Demirjan Indoor Golf Facility along the south side of St. Mary's Rd. (University of Illinois).





I. Executive Summary

E. Orchard Downs Redevelopment (planning in-progress)

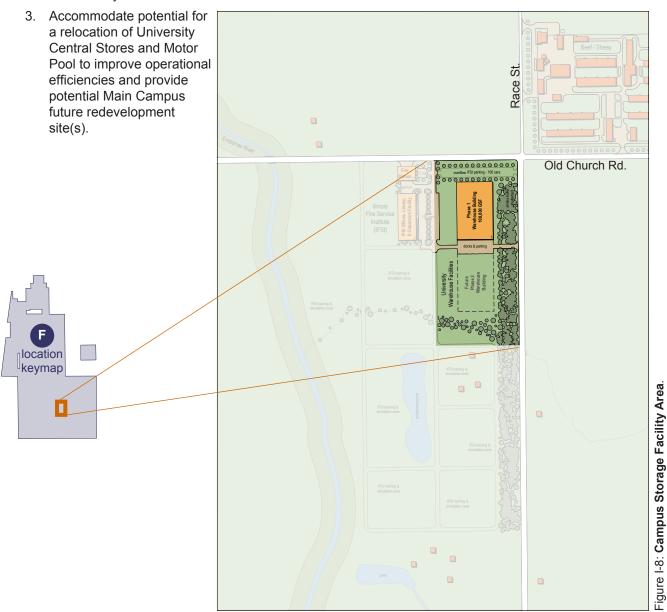
 Campus is working with land developer teams to interact with the community and generate plans on how to best develop the property.



Master Plan Update Recommendations continued...

F. Campus Storage Facility (Sasaki Associates, Inc.)

- Develop a managed, remote storage facility that would eliminate off-campus storage space leases, eliminate on-campus "out buildings," and free-up current storage areas in existing Main Campus buildings to become classrooms and/or offices.
- Colocate a remote storage facility with the relocated Illinois Fire Service Institute at the corner of Race St. and Old Church Rd. to minimize the short-term potential for relocation, decrease infrastructure costs, and increase site security.





- Commercial Uses should be encouraged in all five study locations to better serve the immediate University community and the larger Champaign-Urbana market area. Appropriate strategies for study areas include:
 - North Campus Garage: coffee shop, market and deli, UPS store, specialty bookstore
 - Campus Town: increase the number of national and regional tenants to improve variety and quality
 - East Campus Commercial Area: restaurant, deli, food market, coffee shop, art supply, novelty, jewelry stores
 - Research Park: distributed dining, personal services, and convenience retail, as well as, destination dining
 - Orchard Downs: office space and neighborhood retail such as small grocery, barber shop, restaurants, hardware store, etc.
- No other obvious locations were identified in the study but as new facilities are built and existing facilities are renovated, appropriate retail opportunities should be explored to enhance the

campus experience.

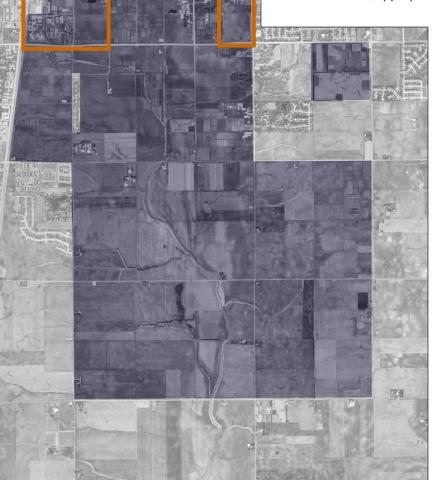


Figure I-9: **Campus Commercial Locations** overlayed on aerial photography Surdex Aerial Photography, 2002).

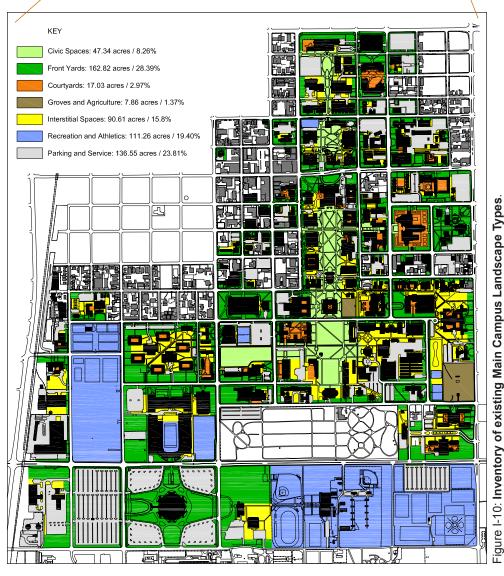
Master Plan Update Recommendations continued...

H. Open Spaces Enhancement (Sasaki Associates, Inc.)

- 1. Classify the campus landscape into types that help guide design appropriate to program, use, adjacencies, safety concerns, *etc*.
- Maintain the historic spaces consistent with their original design principles but utilize sustainable design practices in those spaces to the extent possible without compromising the space's integrity (for instance, as trees naturally die in the Main Quad, they will be replaced with a longer-lived, native tree species).
- 3. Advance sustainable landscape design practices throughout campus in all open spaces to increase informal gathering places, promote biodiversity, enhance

habitat, demonstrate native plant communities, and improve storm water infiltration.

4. Establish a Campus Art Committee of an appropriate composition to determine the types and placements of art on campus in order to ensure that a high quality collection is acquired and that those works are well integrated into the landscape.



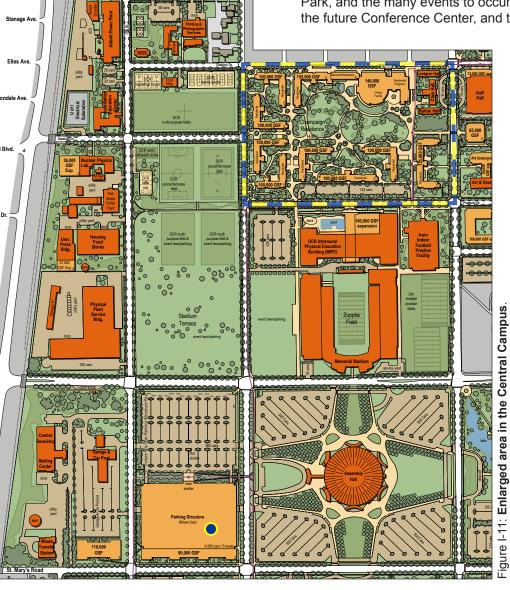
location

keymap

I. Additional Planning Updates/Opportunities

- a. Operations and Maintenance Zone Land Addition
 (University of Illinois): add properties along the west side
 of Oak St. north of Daniels St. and south of Chalmers
 St. that create a contiguous campus boundary and offer
 expandability of operations and mantenance facilities.

 (b) Champaign Residence Halls (Mackey Mitchell Assoc
- b. Champaign Residence Halls (Mackey Mitchell Assoc., original master plan; Booth Hansen, updated master plan): redevelop the "six-pack" block based on recent presentations of the phased development plan to the University of Illinois Board of Trustees.
 - Lot E14 Parking Structure (University of Illinois): develop a large parking facility in the south half of the E14 parking lot (west of Assembly Hall) to help ease the demands on parking from Main Campus, the Research Park, and the many events to occur in Assembly Hall, the future Conference Center, and the Athletics Campus.



Daniels S

Chalmers S



John St

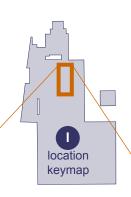
William St

Charles St

location keymap

Master Plan Update Recommendations continued...

- I. Additional Planning Updates/Opportunities
 - d. College of Veterinary Medicine Campus (CUH2A): expand facilities as shown to accommodate Vet Med program growth and easier access for public outreach.
 - Campus Recreation Facilities (University of Illinois): relocate playfields and courts, lost to academic program infill over the years, south of Vet Med along Lincoln Ave.



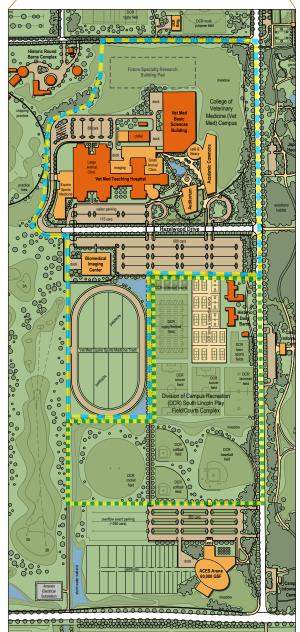
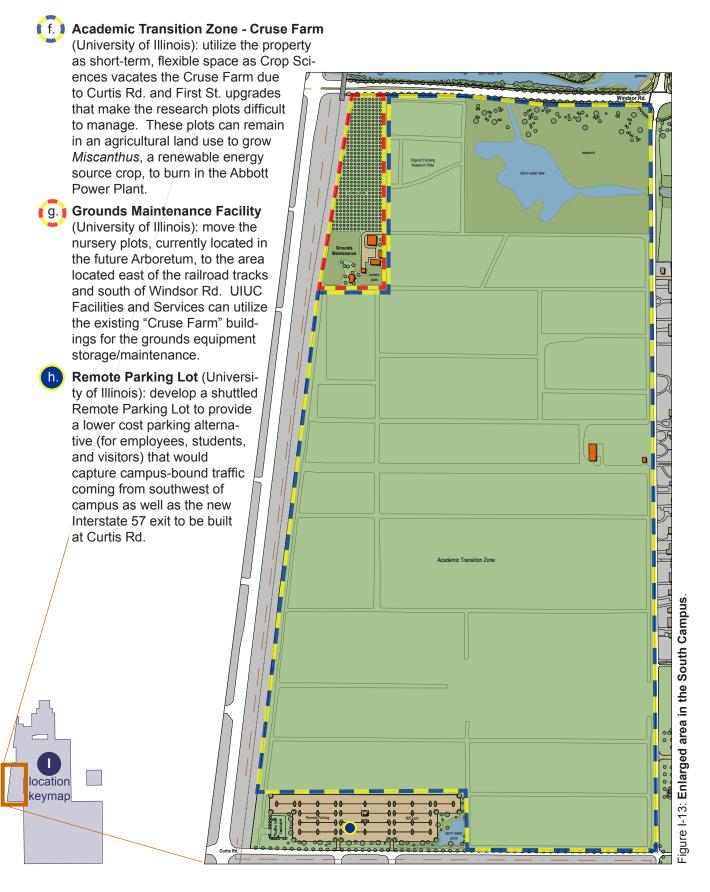


Figure I-12: Enlarged area in the South Campus.

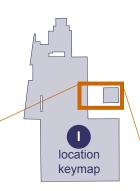


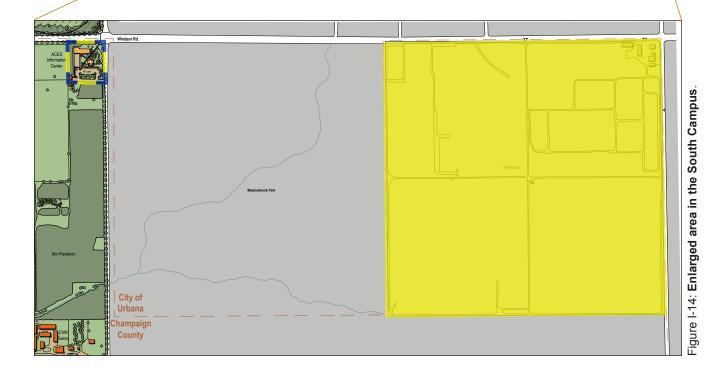
I. Executive Summary

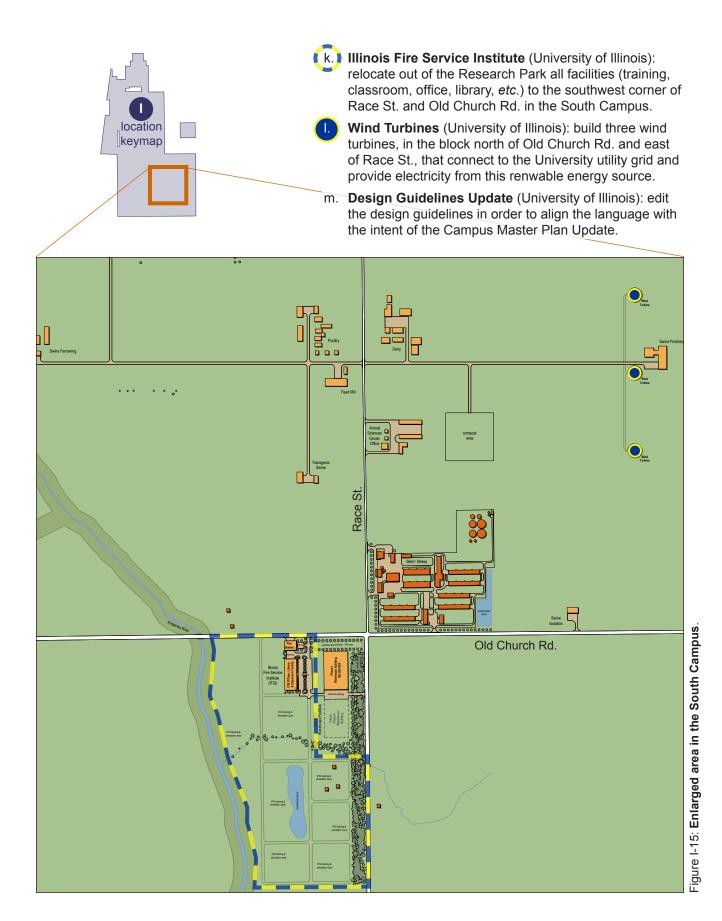
Master Plan Update Recommendations continued...

I. Additional Planning Updates/Opportunities

- i. College of ACES Welcome Center (University of Illinois): develop a campus gateway facility at the southwest corner of Windsor Rd. and Race St. to inform the public about research and activities at the College of Agricultural, Consumer, and Environmental Sciences.
- j. Pell Farms Land Transfer (University of Illinois): transfer the University-owned Pell (Pomology Research) Farm to the University of Illinois Foundation in exchange for like-valued, University of Illinois Foundation-owned properties in the South Campus and remove this parcel from the campus master plan boundaries.







I. Executive Summary

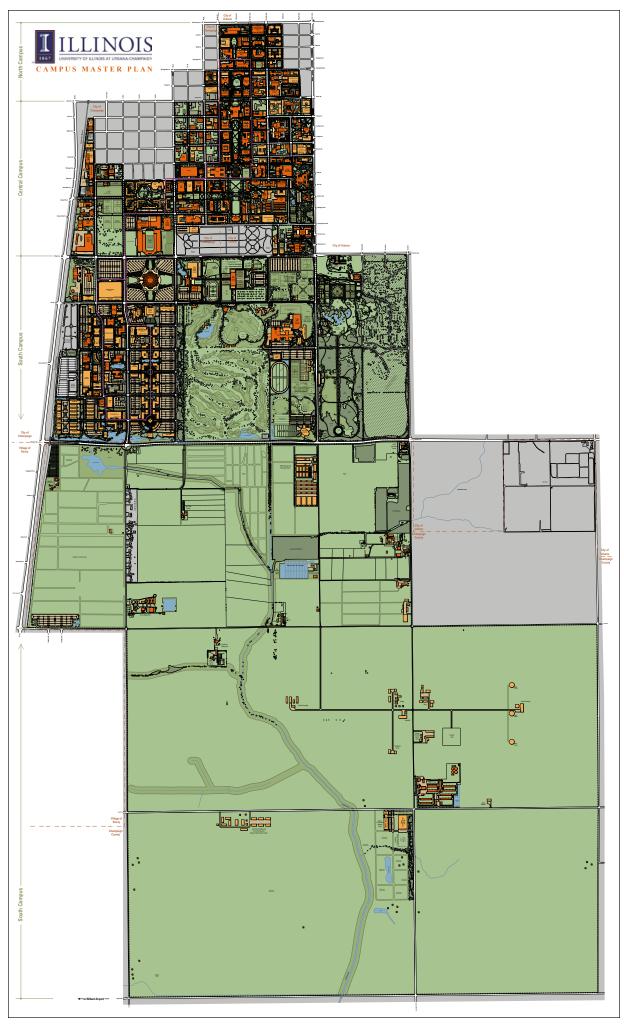


Figure I-16: Campus Master Plan Update illustrative plan.

II. Background

Intent

The Campus Master Plan Update for the University of Illinois at Urbana-Champaign (UIUC) is intended to provide a guide for physical development of the nearly 7,000-acre campus master plan boundaries into the foreseeable future of the next 20-25 years. This plan builds upon the framework established by previous plans dating back to 1986 with varying scopes to create a comprehensive update of the entire campus.

UIUC Master Plan Chronology

the University of Illinois at Urbana-Champaign Campus Master Plan is a composite and update of plans (since 1986) reviewed and approved by the University of Illinois Board of Trustees

North Campus Master Plan, April 1986 by Sasaki Assoc., Inc. (Watertown, MA) [University Ave. to Green St., 6th St. to Linclon Ave.]

South Campus Master Plan, Sept. 1986 by Sasaki Assoc., Inc. (Watertown, MA) [Nevada St. to St. Mary's Rd., Neil St. to Linclon Ave.] * this area is now part of the Central Campus in the current plan

Central Campus Master Plan, Oct. 1989 by Sasaki Assoc., Inc. (Watertown, MA) [Green St. to Gregory Dr., 4th St. to Linclon Ave.]

Arboretum Master Plan, July 1990 by Sasaki Assoc., Inc. (Watertown, MA) [Florida Ave. to Windsor Rd., Lincoln Ave. to Race St.]

South Farms Master Plan, Sept. 1990 by Sasaki Assoc., Inc. (Watertown, MA) [Kirby/Florida Ave. to Church St./Deers Rd., Neil St. to Philo Rd.] * this area is now the South Campus in the current plan

Core Campus Master Plan Update, Oct. 1996 by University Office for Capital Programs (now UOFP&P) [University Ave. to St. Mary's Rd., Neil St. to Linclon Ave.]

South Campus Master Plan, June 1999 by Sasaki Assoc., Inc. (Watertown, MA) [Kirby/Florida Ave. to Airport Rd., Neil St. to Philo Rd.] * this area was formerly known as the South Farms

Arboretum Master Plan Update, June 2001 by Sasaki Assoc., Inc. (Watertown, MA) [Florida Ave. to Windsor Rd., Lincoln Ave. to Race St.]

South Campus Master Plan Update, July 2001 by SmithGroup JJR (Chicago, IL) [St. Mary's Rd. to Windsor Rd., Neil St. to Lincoln Ave.]

Campus Master Plan Update, March 2007 by Sasaki Assoc., Inc. (Watertown, MA) et. al. [University Ave. to Airport Rd., Neil St. to Philo Rd.] * pending University of Illinois Board of Trustees approval at the March 13, 2007 meeting in Urbana, IL

Process

In January 2004, Sasaki Associates, Inc. was retained by the University of Illinois to assist in the preparation of a campus master plan update. Sasaki's role in the process was to provide planning analysis and recommendations to resolve specific questions and issues involving program and land use needs confronting the UIUC campus. Planners from Sasaki also provided review services of the other planning efforts being developed throughout campus by various stakeholders and professional services consultants in order to help the University coordinate a comprehensive update consistent with the established campus framework.

The University Office for Facilities Planning and Programs (UOFP&P), working collaboratively with UIUC Facilities and Services (F&S), coordinated the overall planning process, (re)developed and/or adapted planning schemes to integrate within the bigger plan, and provided final Campus Master Plan Update documentation for the University. The planning process completed as follows:

January 2004	.Contract consultant
February 2004	.Meet with stakeholders to collect data
March 2004	.Review alternative concepts/program
January 2005	.Review draft with stakeholders
January 2005	.Present draft to Board of Trustees
Feb. 2005 - Feb. 2007	.Coordinate planning & development
April 2006 - Feb. 2007	.Review update plan with stakeholders
June 2006 - Feb. 2007.	.Finalize update documentation
March 2007	Present final to Board of Trustees

Participants

Under the direction (initially of President James Stukel and Chancellor Nancy Cantor then) of President Joe White and Chancellor Richard Herman, the following participants contributed their time and input to the planning process:

Administration:

Jesse Delia, Jack Dempsey, Linda Katehi, Walter Knorr, Steve Rugg, and Lyle Wachtel

Core Committee:

Gene Barton, Dana Brenner, Clif Carey, Helen Coleman, Kevin Duff, Al Edmonson, April Getchius, Dianne Harris, Steve Hesselschwerdt, Mark Inglert, Dennis McConaha, Gene Pitcher, Jeff Poss, and Joe Vitosky

Stakeholders and Professional Services Consultants:

Bill Adams, Richard Aks, Jim Anderson, Michael Andrechak, Pat Askew, Gary Biehl, Rita-Morocoima Black, Larry Booth, Paul Brailsford, Doug Brown, Eliana Brown, Clark Bullard, Meg Calkins, Patrick Chapman, David Chicoine, Brad Clark, Tony Clements, Susan Cohen, Jack Collins, Mary Ann Cronin, Tom Delanty, Sylvia Delgado, John Dimit, Bob Easter, Matt Edmonson, Tony Endress, Randy Ervin, George Fahey, Pat Fitzgerald, Peter Fox, John-David Franklin, Laura Frerichs, John Garner, Varkki George, Liz Gillespie, Jerry Glogowski, Bill Gray, Ron Guenther, Fred Guyton, Bruce Hannon, Josef Helfenstein, Ana Hernandez, Joe Hibbard, David Hirzel, Douglas Hoerr, Cynthia Hoyle, April Hughes, Brian Jack, Dick Jaehne, Gale Jamison, Wes Jarrell, Nicholas Jones, Tom Kamm, Ron Karr, Barbara Kendrick, Gary Kesler, Bruce Knight, David Lange, Laura Lawson, Jay Lenhardt, Michael Little, Sara Lovell, Lawrence Mann, Rick Marley, John Marlin, Christiane Martens, Dick McFarland, Ron McGinley, Don McKay, Gary D Miller, Gary L Miller, Ralf Möller, Kristin Mueller, Tony Ortiz, John Parks, Martha Pedersen, Scott Pickard, John Poston, Grace Rappe, Dave Rausch, Sean Reeder, Rod Reid, Frank Rentschler, Renee Romano, Mike Ross, John Rossi, Andrea Ruedi, Sarunas Rumsa, Terry Ruprecht, Myron Salamon, Schuyler Sanborn, Jeffrey Sands, Richard Schacht, David Schejbal, Steve Schomberg, Ed Scopel, Bill Shilts, Kathe Munz Shinham, Tom Skaggs, Sandy Stevenson, Bill Stewart, Bill Sullivan, Emily Talen, David Thomas, Jason Thompson, Jeff Turner, Libby Tyler, Kevin Ullestad, George Vander Velde, Pam Voitik, Bill Volk, Bruce Waldon, Pam Warsaw, Florrie Wescoat, Aaron Wilken, David Wilson, Derek Winstanley, Clark Wise, Jason Zawila, and Chip Zukoski

What is a Campus Master Plan?

This section of the report was included as a primer to provide both context to the current planning effort and a historic overview of how the University of Illinois at Urbana-Champaign (UIUC) Campus Master Plan developed to its current state.

Campus Growth: New Building GSF by Decade at UIUC

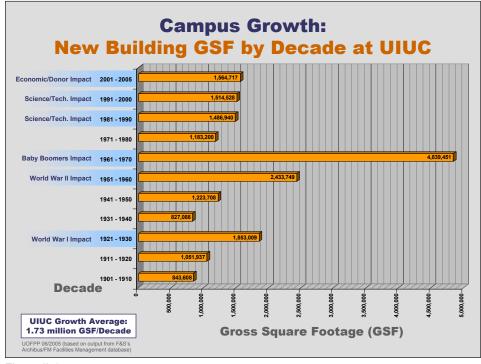


Figure II-1.

To get a sense of the challenge, Figure II-1 illustrates the required growth the UIUC Campus Master Plan has accommodated – an average of 1.73 million gross square feet (GSF) per decade.

Most people might believe that the 1990s (with state economic incentives and increased donor funding) would be the greatest building period in UIUC history. But, in reality, the 1990s ranked only fourth last century in building gross square

footage constructed. The largest spikes of campus growth occurred...

- First, to accommodate the Baby Boomers' population explosion of the late 1950s through the entire 1960s
- Second & Third, as post World Wars I and II spikes
- Fourth & Fifth, due to science and technology initiatives as well as donor funds of the 1980s & 1990s

... but only a half decade into the new century (graphic accounts for campus development halfway through 2005), UIUC has already surpassed the growth of the 1990s.

Campus Growth: Expansion & Infill Development

The four maps in Figure II-2 illustrate the expansion patterns and directions for building development through the past ~140 years. Campus gradually developed more of an urban character in the last half of the twentieth century as nearby, available expansion land became scarce and student populations increased.

The existing buildings (shown in solid black) and campus boundaries (depicted in light green) use the same representative area of campus (bounded to the north by University Ave., Florida Ave. to the south, 4th St. to the west, and Lincoln Ave. to the east) in each map to provide insight into how/why the Main Campus developed over time:

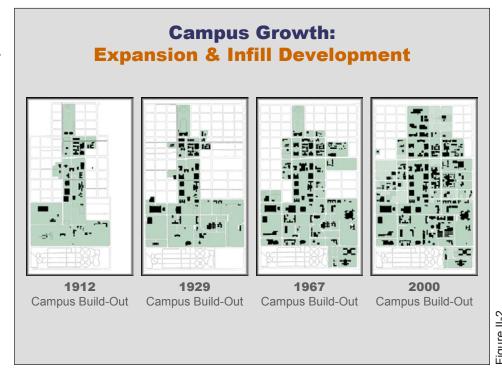
- 1912 early north-south campus development
- 1929 the building boon following World War I and southward campus expansion
- 1967 the building boon following World War II & Baby Boomers and some east-west expansion
- 2000 more east-west expansion and building infill

These maps also help to explain that even though planning assumptions apply to proposed development within a 20-25 year time horizon, conditions (strategies, goals, laws,

demand, and similar factors that affect the campus plan) can and will change. Therefore, master plans require flexibility and a comprehensive review of the planning assumptions whenever significant change does occur (or roughly every 8-10 years).

UIUC Campus Statistics

- In 1867, the original land grant for the campus was 1,000 acres (560 of those acres area inside current boundaries).
- Current Campus Master Plan boundaries (excluding Willard Airport and Allerton Park) include about 7,000 acres (~625 acres north and ~6,375 acres south of Kirby/Florida Ave.).
- Campus north of St. Mary's Rd. currently includes over 16,000,000 GSF of space in about 300 major buildings.
- At an average growth rate of 1,730,000 GSF per decade, the current master plan can accommodate 30 years of build-out in the Main Campus (north of Kirby/Florida Ave.); however, if aggressive strategies are employed, that timeframe could double.



II. Background

Planning

"Planning" is essentially an anticipatory decision-making process that can be seen as making critical and well-reasoned decisions in advance of any required action. Fundamentally there are two different methodologies in the field of planning for determining future outcomes: *long-range planning* (projecting expected outcomes based on historical data) and *strategic planning* (charting a path based on organizational vision). Campus Master Planning at the University of Illinois is, for the most part, a mix of those methodologies; it is a strategic planning process that takes into account the forecasts of historical expectations.

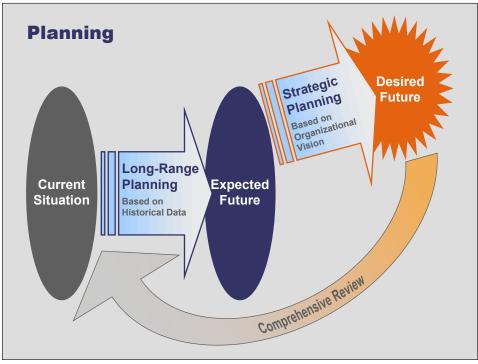


Figure II-3.

Simply put, an expected future is derived from historical data, which led to the current situation. The expected future is then redirected toward a desired future with the guidance of the University's vision. Then, as appropriate, planning assumptions are periodically reviewed to ensure their relevance to the current situation.

For instance, historic campus trends might suggest a need to construct ever-increasing amounts of parking

spaces to accommodate ever-increasing demand created by students, faculty/staff, visitors, new economic development, and campus events. Therefore, the expected future would portray a campus with many more parking surface lots and structures to meet that demand. The organizational vision might reorient that expected future to a desired future by proposing change in various ways. The desired future may incorporate transit-oriented developments served by a fixed guideway system, there could be a push to encourage ridership on various other alternate forms of transportation, and/or a change in policy might restrict on-campus parking for some segments of the campus population.

Strategic Planning

In any organization, strategic planning is a collaborative and on-going process of asking and answering questions about itself. Answers get structured into formalized "guiding principles" which allow an organization to focus its implementation efforts toward the desired results. The three basic questions an organization answers in the strategic planning process are:

- Where are we going? helping to clarify...
 - Direction
 - Operational and Programmatic Needs
 - Goals and Objectives
- What is the environment? helping to understand...
 - Competition
 - Threats
 - Opportunities
 - -Etc.
- How do we get there? helping to identify...
 - Required Activities
 - Allocation of Resources
 - Alternative Approaches

Why Plan?

In asking those questions, it is also reasonable to ask, "Why is planning important at all?" In a general sense, planning helps to protect against the often expensive and inflexible results of ad hoc, reactionary, or even politically-motivated decision making.

More specifically, though, it is often all of the following reasons that answers the "Why plan?" question because planning helps an organization:

- Coordinate Complex, Overlapping Decisions in both Space and Time
- Respond to Impending Change
- Establish a Vision for the Future

And, this rationale holds true for Campus Master Planning.

Guiding **Principles**

Campus Master Plan Purpose

Master Plans intend to achieve three basic purposes:

1. Serve and Express the University Mission in a Tangible Physical Form

University Mission

- Education
- Research
- Public Outreach
- Economic Development

University Strategic Plan

- Pedagogy
- Programs
- Initiatives
- Affiliations
- -Etc.

Campus Master Plan

- Facilities
- Connections
- Community

There is no more powerful single part of a university that expresses what it is and what it stands for than its physical campus. In fact, since the Campus Master Plan is an aggregation of places (buildings & sites) that set the stage for on-campus University business and functions, the campus plan must reflect its institutional mission. Therefore, every decision concerning the campus master plan or any of its specific locations must be held accountable to the mission and the strategic plan. These decisions are ongoing with the construction of every new facility and site as well as any renovation of the older ones.



Define the Overall

Scope and Pattern of Growth

(Direction, Location, Size, Shape, Adjacencies, etc.)





2. Define the Overall Scope and Pattern of Growth (via a Guiding Framework)

Planning for the past century has built from the same framework originally set in 1905. This framework guides the overall composition of open space, buildings, and circulation.

Figure II-4.

II. Background

3. Define the Character of Campus

Design Guidelines have directed the use of materials and style for over three generations.



Figure II-5.

Master Plan Importance

Some of the most important outcomes of creating and

maintaining a safe, functional, and attractive campus environment are evident in how it:

- Helps in recruiting of students and faculty
- Enhances the learning environment reflective of the University Mission & Vision
- Generates positive attitudes among parents, alumni, donors, and visitors
- Contributes to the quality of the greater community



II. Background

Master Plan Principles

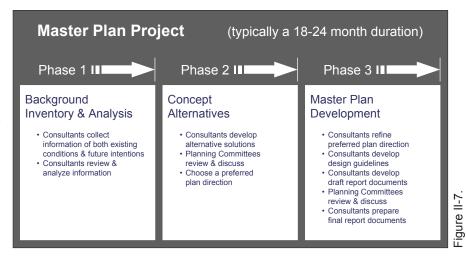
Just as the strategic plan works from a set of guiding principles, so does the Campus Master Plan. These principles direct the evolution of the campus master plan as it provides the framework for fitting program expansion into the fabric of campus. This long-term guide for campus growth builds upon existing patterns of land use, circulation, infrastructure, and open space, while making wise use of limited land resources that allow administrators to make informed, coordinated, and cost-effective decisions.

These principles are:

- To Improve Campus Quality of Life
 - A confluence of health, safety, convenience, and similar concerns in attractive surroundings
- To Establish a Positive, Unified Campus Identity
 - The universal and personal connection to place (that fosters recruiting, experience, and remembrance)
- To Simplify and Enhance Physical Campus Organization
 - Carefully separating the right mix of elements (e.g. automobile-free zones, such as the Main Quad)
- To Identify Flexible Strategies for Accommodating Required Growth due to...
 - Current Deficiencies in Existing Programs or Program Consolidations (e.g. College of ACES relocations)
 - Emerging Research Initiatives (e.g. micro/nano technologies and homeland security)
 - Operational Technology Changes (e.g. smart class-rooms and video conference rooms)
 - New Missions or Goals (e.g. indoor practice facilities to increased athletics' competitiveness)
- To Improve Operational Efficiency
 - Economies of Scale (e.g. multiple parcel storm water management storage vs. individual parcel control)
 - Best Management Practices (e.g. compact/infill development and surface parking lots as future building sites)

Master Plan Process

The process of challenging previous planning assumptions occurs throughout the three working phases of master plan or master plan update shown in Figure II-7.



Master Plan Issues & Objectives

During each phase of the Master Plan but most prominently during Inventory and Analysis (Phase 1), decisions affecting institutional objectives take into consideration seven universal campus planning issues:

• Character

 Campus should create a sense of place via buildings, landscape, and art while accommodating program.

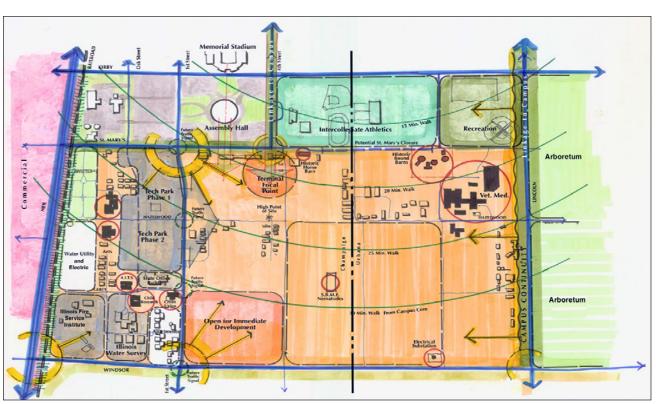


Figure II-8: **2001 South Campus Master Plan Update Area Analysis** (Smith Group JJR) illustrates some of the project's issues & objectives.

II. Background

• Connections

 The campus physical and functional systems must accommodate various modes of circulation and storage needs for people, resources, services, and utilities.

• History

 The plan must preserve traditions by adapting valued places and integrate new facilities using similar materials, style, massing, and other connective means.

• Opportunities

 The campus environment provides a forum to advance the benefits that reinforce community partnerships and offers facilities that promote healthy living.

• Relationships

 Campus functions and adjacent uses should integrate in a way that the institutional environment and surrounding community dissolve into one another.

• Stewardship

The plan should preserve natural resources and reinforce sustainable design/maintenance practices in the built environment to protect our natural heritage for future generations.

• Security

 The physical design of campus should foster a safe environment by creating democratic spaces that deter criminal activities, provide universal accessibility, and promote education in and out of the classroom.

Master Plan Components

Within every master plan are components that, when graphically illustrated, show the interrelationships of how different elements of the campus master plan are accommodated and/or connected. The four components (vehicular circulation, parking accommodation, landscape structure, and bicycle & pedestrian circulation) shown on the next page in Figure II-9 are excerpts from a 1986 plan developed by Sasaki Associates, Inc. that focused on the southern part of Main Campus. It is evident that much of the basic framework of this plan is still intact today with only minor details changing from this plan's inception to the implementation that has occurred to date

II. Background

These four components are not the only ones contemplated during the course of a master plan study; others include...

- Program
 Accommodation
- Utility Systems
- Gateways
- Service Access
- Building/Land Use
- · Building Setbacks
- Development Density
- Phasing

... and many more as might be relevant. In analyzing these smaller components of the whole, there is a better understanding of how and why one plan might be

Waster Plan Components

Vehicular Circulation

Parking Accommodation

Landscape Structure

Bicycle & Pedestrian Circulation

superior to another in rational terms. Therefore, the consequences of *ad-hoc* or piecemeal campus development can be avoided.

For instance, when a facility is built on a site away from the main part of campus merely because of land availability, the results can be higher costs for the facility because there is no existing infrastructure available to connect to; inefficient operations because there are no other buildings around it making deliveries and maintenance more difficult; and less-than-optimal functioning because it is beyond walking distance for students and faculty.

Site Criteria examples...

- Parcel Size is the site large enough to accommodate the proposed facility?
- Facility Expansion is there facility expansion space available on site?
- User Access does the site have adequate user access (various modal linkages) to the campus?
- **Utility Access** are the required main utility lines available at this site?
- Land Use Compatibility does the proposed land use relate to surrounding land uses and priorities?

Program Criteria examples...

- Program Dislocation will locating the proposed facility at this site dislocate another program?
- Program Relationship will locating the proposed facility at this site enhance the program?
- Urban Impact will locating the proposed facility at this site have an impact on adjacent facilities?

Site Selections

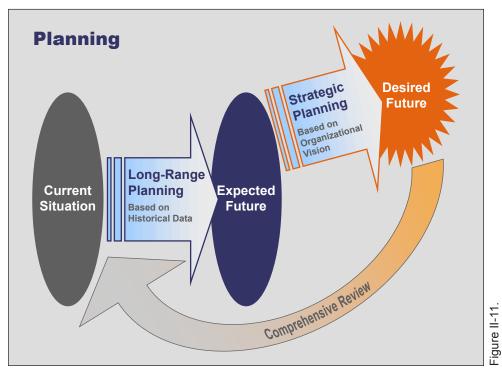
A campus planning activity that largely affects the physical layout of campus is determining appropriate locations for future program needs (the program accommodation component). During the Site Selection process, many considerations affect the viability of potential locations and are divided into two sets of criteria (see examples at left). *Program Criteria* evaluate a given location's impact on the program while *Site Criteria* evaluate the impact of the proposed facility on a proposed site. Yellow dots on the map in Figure II-10 represent potential locations that might be considered in a site selection.



II. Background

Long-Range Planning

Returning to the "Planning" diagram, Long-Range Planning offers many different types of historic data (e.g. vehicular parking, utility loads, storm water run-off, etc.) that can be analyzed to forecast future expectations. But rather than focus on the types/details of data trends, it is more useful in this overview to examine the major milestones that provide an understanding of how the UIUC campus plan has evolved to where it is today.



Historic Overview: 1867-1874

The original land grant campus (\sim 1,000 acres) included a former Seminary Building at Wright St. and University Ave. (approximately where the Beckman Institute is). The left-hand photo shows a northward view up Burrill Ave. to the Seminary Building with the Drill Hall Building (opened in 1873) to the right. This building was shared by Mechanical Engineering, Architecture, and Military Science before it was destroyed by fire in 1900.

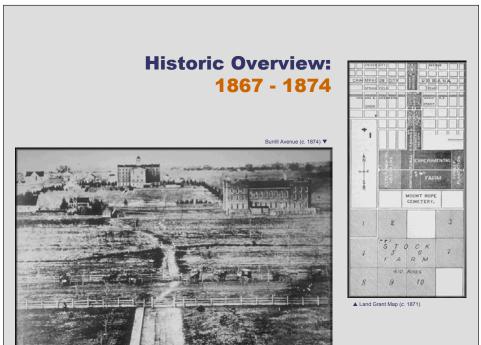


Figure II-

II. Background

Historic Overview: 1867-1881

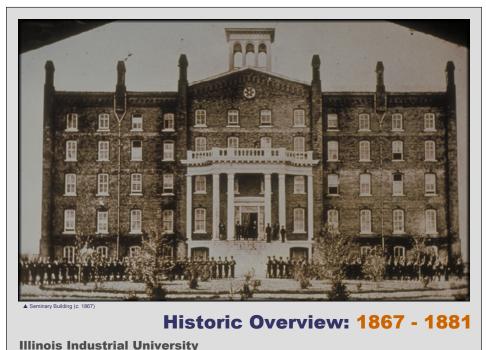


Figure II-13.

The former seminary building, fondly known as the *Elephant Building* (because of its shape... bookend "ears" and a big head in the middle), was opened in 1868 to the University's first 50 students. At the time, campus was known as the "Illinois Industrial University." The Elephant Building served as a dormitory, classroom, and library to these students and their faculty.

All classes were held in this building until late 1873, when University Hall opened. The El-

ephant Building was thereafter used for student housing. A wind storm destroyed part of this building in 1880 and due to a lack of funds to repair it, the University razed the building in 1881.

Historic Overview: 1906

During the first few decades of the University, many development plans were formulated but 1906 was very important to current campus development. President James and the Board of Trustees retained the professional services of architect Clarence Blackall and landscape architect John Olmsted (son of noted landscape architect Fredrick Law Olmsted) to create a campus plan with the purpose of siting a proposed new auditorium (Foellinger Auditorium) and accommodating future campus building growth.

This was the first evidence of visionary master planning at the University looking out 20 or more years in time.

Being knowledgeable about Thomas Jefferson's campus plan for the University of Virginia that organized multiple buildings formally around a large green quadrangle space, Blackall and Olmsted took a similar framework approach.

Their plan proposed existing and future buildings uniformly placed along the eastern and western edges of a large rectangular green space south of Green Street. In the process, Burrill Ave. was removed and converted into a "broadwalk" for pedestrians. The plan terminated the quadrangle on the south end with the proposed auditorium on a prominent, existing knoll. The result is the Main Quad, the most memorable outdoor space on campus.

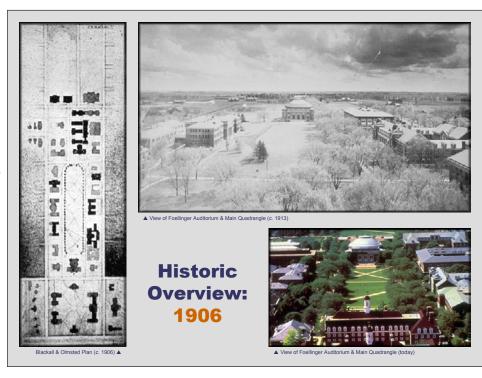


Figure II-14.

Historic Overview: 1929

The next significant planning period to affect campus was in the late 1920s when President David Kinley and the Board of Trustees retained the professional services of architect Charles Platt and landscape architect Ferruccio Vitale (the two along with the University Campus Architect, James White) prepared, what they called, the "Ultimate Development Plan" for campus.

The team built upon the qualities of the Blackall & Olmsted plan as they

Historic Overview: 1929

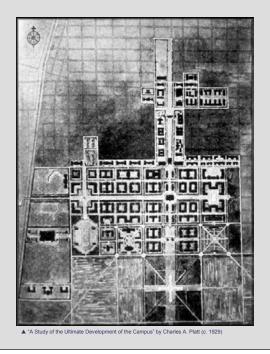


Figure II-15.

II. Background

extended campus both southward to Florida Ave. (and beyond) as well as eastward and westward of the north-south axis. In fact, they were aggressive planners who not only proposed elimination of the cemeteries along Florida Ave. but also the creation of an east-west green corridor be extended west 2½ miles and terminate at the Champaign Country Club. This east-west green corridor is now known as the Military Axis. When developed, this east-west axis will actually only span from the ACES library westward to the Champaign Residence Halls, which is a few miles short of the Champaign Country Club.

In addition, Platt and White firmly established the Georgian style of architecture on campus. Their first Georgian buildings were the Main Library, the Commerce Building, and Mumford Hall. Each of these buildings were horizontally massed with strong roof lines and building bases; constructed of red brick with limestone accents; utilized punched windows; and were highly detailed at the entrances.

When Mr. Platt saw the first Georgian buildings completed, he was surprised by the enormous scale. So to help minimize the scale of these large structures, Vitale was asked to develop a landscape plan for campus. When completed, this plan established (1) Low Evergreen Hedges to emphasize strong architectural lines and provide an edge along the





Historic Overview: 1929 malls and avenues; (2) Flowering Trees appropriately located between the hedges and the buildings to help soften and accent these large buildings; and (3) Shade Trees along broadwalks and streets to help reduce the imposing scale of these buildings on campus.

This simple landscape framework was reinforced in a 1960 update by landscape architect Hideo Sasaki, a former UIUC Alum and founder of Sasaki Associates, Inc.

Figure II-16.

II. Background

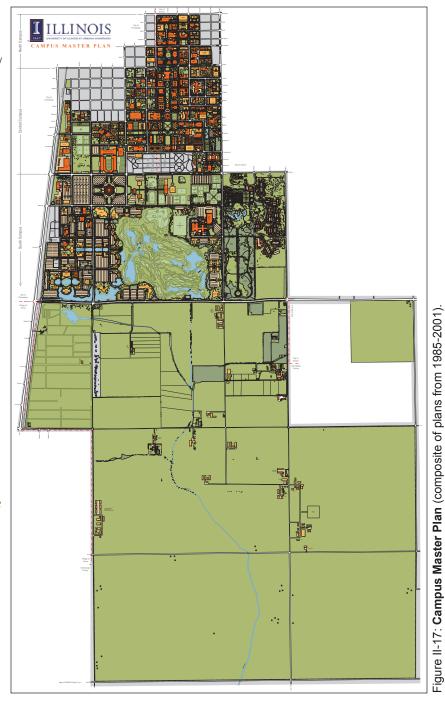
Historic Overview: 1985-2001

The framework for the existing Campus Master Plan was initiated in 1985 to appropriately locate a site for the Beckman Institute. President Ikenberry and the Board of Trustees retained the professional services of Sasaki Associates, Inc. lead by landscape architects Stu Dawson and Joe Hibbard (both former alumni of the University of Illinois).

The Sasaki plan built upon the strengths and qualities of the historic development plans that preceded them by embracing Platt/ White's Georgian Architecture building guidelines and Vitale's campus landscape structure. The most notable features of this comprehensive campus master plan was that it boldly proposed future development through the extension of the north-south and eastwest axes as well as through infill development. Much of this plan's vision still guides UIUC program needs/locations decisions.

UIUC Master Plan Assumptions:

- The Main Quad is (and will continue to be) the center of undergraduate instruction
- Growth in the sciences will continue, interrelationships among the traditionally-defined programs will become stronger, and the lines of demarcation between disciplines will become less defined
- There will be continuing interest in the University/ corporate relationships with technology
- Our historic structures are an important memory of who we were and what UIUC has become



II. Background

III. Master Plan Update

Recommendations Reports

The following set of Campus Master Plan Update reports detail the issues/questions and planning rationale behind the recommendations proposed.



Figure III-1: Campus Master Plan Update (2007).

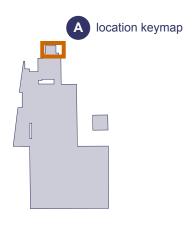
Contents:

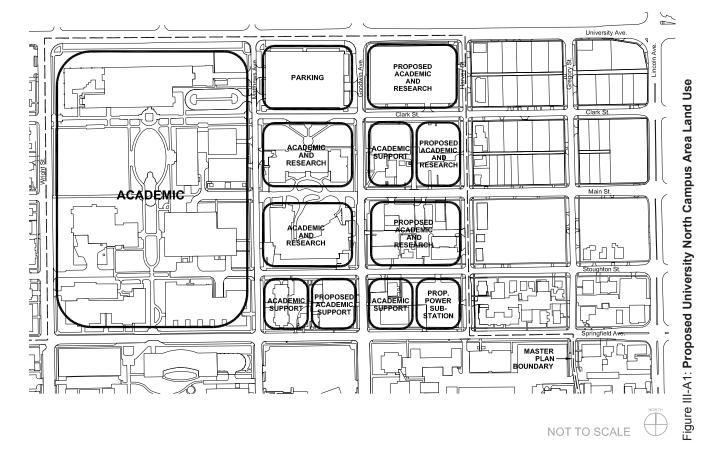
- A. North Campus Land Use
- B. Campus Area Transportation
- C. Research Park Update
- D. Division of Intercollegiate Athletics
- E. Orchard Downs Redevelopment
- F. Campus Storage Facility
- G. Campus Commercial Areas
- H. Open Space Enhancements
- I. Additional Planning Updates/Opportunities

A. North Campus Land Use

Prepared July 2004 by Sasaki Associates, Inc.

The 1986 North Campus Master Plan proposed that land uses in the area east of Harvey St. and north of Springfield Ave. be compatible with the North Campus. The plan recommended that new mixed-use commercial, office, and research uses be encouraged along University Ave., and that mixed uses emphasizing medium-density housing be encouraged along the western side of Lincoln Ave. with the possibility of spin-off research uses that take advantage of the enterprise zone incentives offered in this area. Since the North Campus Master Plan was adopted, the area defined by University Ave., Lincoln Ave., Springfield Ave. and Harvey St. has been the subject of several planning studies, many of which have focused on the idea of developing technology transfer and business incubation uses in a North Campus Research Park. Recently, the University decided to focus its research park efforts on the South Campus and not develop a North Campus Research





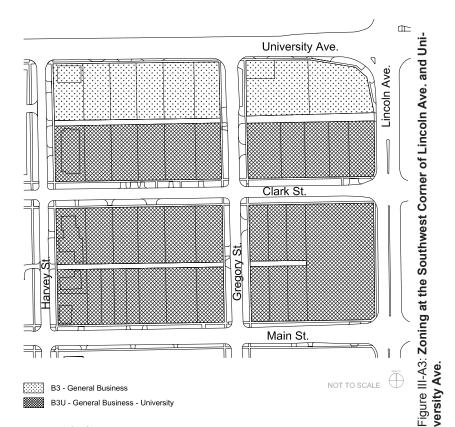
III. Master Plan Update



Park. In light of this decision and in response to the city of Urbana's interest in confirming the University's intentions in the northeast corner of the campus, this report defines the University's land use policy for the area bounded by University Ave., Lincoln Ave., Springfield Ave. and Harvey St.

Sasaki Associates, Inc. recommends that the area between University Ave., Harvey St., Springfield Ave. and Goodwin Ave. be reserved for future yet-to-be-defined University academic facilities (see Figure III-A1). There are no plans for future University facilities in the area between Harvey St. and Lincoln Ave.; however, the University supports commercial development in this area as part of the area's renewal and stabilization.

The University of Illinois owns the parcel on the Southwest corner of Lincoln Ave. and University Ave., as well as the two parcels directly south of the corner lot (see Figure III-A2). Because this corner serves as the northeast gateway to the campus, the University purchased these lots to guard against their development in a way that would detract from the character and quality of the campus. We recommend that the University maintain ownership of these three parcels until a developer can be found who is capable of



assembling a large enough parcel for accommodating a high quality, large structure that will anchor the corner and contribute to the stability and urban quality of the northeast corner of the campus.

To guide the proper future development of the corner parcels we further recommend that the University sell the land with restrictions on its use and design. Currently the land is zoned as B-3 General Business and B-3U General Business-University (see Figure III-A3). We recommended that uses be restricted to those permitted in the B-3 and B-3U Districts in the following categories: Residential, preferably hotel or apartments; Retail Trade; and Retail Business. It is in the University's best interest to exclude all other business uses allowed in the B-3 or B-3U Districts from any portion of the block. In addition, the restrictions should require the proposed building to undergo design review by the University to ensure that it is in keeping with the intention of the corner as a 'signature' or 'gateway' building. The University should establish minimum design requirements at the time of sale, including a height of three to five stories, a maximum setback of thirty feet, and the prohibition of parking lots in front of the building.

In 2003, the University of Illinois at Urbana-Champaign Facilities and Services developed concept plans showing easements at the corners of University Ave. and Lincoln Ave., including plaza designs and signage. We recommend that the University not encourage the development of the plazas and signs shown in the 2003 concept plans. These plazas would diminish the land available for building construction and would be inappropriate to the vehicular dominated character and size of the University Ave. and Lincoln Ave. intersection (see Figure III-A4). University signage



Figure III-A4: View of the Southwest Corner of Lincoln Ave. and University Ave.

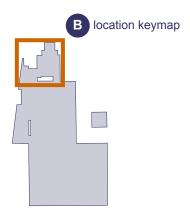
should be avoided because such signs would not be on University land nor be immediately associated with a University facility. Rather than develop plazas at the corners, the University would benefit from promoting a unified streetscape of walks, lighting and trees along University Ave. as an extension of the Presidents Walk.

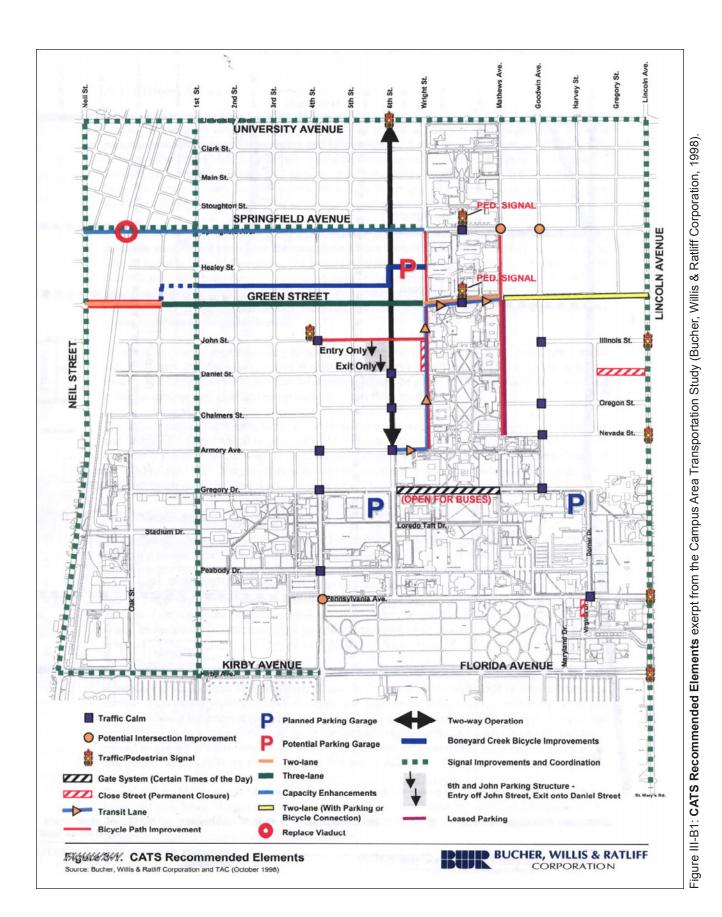
Until the University finds an appropriate developer to whom it can sell the property, we recommend that an interim landscape treatment be developed for the site. The simplest and most effective design would be a bosque of flowering or shade trees, with a temporary University of Illinois corner sign similar to that found on the corner of Lincoln Ave. and Green St. Since the University has no urgent need to sell the parcels, such a landscape treatment is a low maintenance design that will improve over time with little effort. If the parcels are sold before the trees are mature, they can be transplanted elsewhere on campus.

B. Campus Area Transportation

Prepared July 2004 by Sasaki Associates, Inc.

The June 1999 Campus Area Transportation Study (CATS) was conducted by the Cities of Champaign and Urbana and the University of Illinois in order to address and resolve conflicts between vehicles, cyclists, and pedestrians on the UIUC campus. The CATS study was a comprehensive investigation of issues affecting all types of traffic through campus, including pedestrians, cyclists, automobiles, public transit, and freight deliveries. The issues included safety, required traffic flow, the interaction between types of traffic, and which types of traffic should be emphasized. The focus of the study was to identify specific problem locations on campus and develop solutions and strategies for solving them. It was a highly collaborative effort involving the Champaign-Urbana Urbanized Area Transportation Study (CUUATS), the City of Urbana, the City of Champaign, the University of Illinois, the Illinois Department of Transportation, and the Champaign-Urbana Mass Transit District. It included multiple public meetings and joint meetings of citizen, policy and technical advisory committees, and business and University surveys. The comprehensive nature of the CATS study process and approach yielded appropriate and balanced solutions to campus transportation problems (see Figures III-B1 and III-B2).





III. Master Plan Update

1998
Villis & Ratliff Corporation, 1998
Sorpoi
atliff C
s & R
, Willi
e Campus Area Transportation Study (Bucher
ady (E
nsportation Study (Buc
ortatic
ansp
rea Tr
pus A
Cam
lors exerpt from the Campus Area Trar
pt fro
exer
ridors exerpt fro
<u> </u>
ocations/Co
Loca
ecific
y Sp
nts b
Eleme
ded E
nmen
econ
-B2: R
ıre III-
Figu

Location	Improvement				
Wright Street	Improved two-way bicycle path located on the eastside of				
Armory Avenue to Springfield	sidewalk on the eastside of the street				
(venue)	Transit lane adjacent to curb (eastside)				
	Defined freight loading/unloading areas On-street parking removed (Between Green Street and John				
	On-street parking removed (Between Green Street and John Street)				
	5. Leased parking between John Street and Daniel Street				
	Close segment of Wright Street between John Street and Daniel Close segment of Wright Street between John Street and Daniel				
	Street to create plaza (transit, service and emergency vehicles continue to operate through this segment)				
	One-lane vehicular traffic				
Green Street	Two through lanes to accommodate vehicular traffic				
Under Viaduct)	Two outside lanes used to accommodate bicycle and pedestrian				
	movements 3. Bicycle connections provided to the Boneyard Creek and John				
A 188 100	Street via Locust Street				
Green Street	Three lane cross section for vehicular traffic				
Viaduct to Wright Street)	 Designate freight delivery loading/unloading areas on side streets 				
	Increased sidewalk width and improved streetscaping with				
	possible bus-pull out areas and possible eastbound and				
	westbound right-turn lanes at Sixth Street and Fourth Street. 4. Investigate or consider "all-walk" cycle for traffic signal at Sixth				
	Street and at Wright Street				
Green Street Wright Street to Lincoln Avenue)	Two through lanes to accommodate vehicular traffic				
vviignt Street to Lincoln Avenue)	Transit lane between Wright Street and Mathews Avenue				
	 Pedestrian signal and traffic calming between Wright Street and Mathews Avenue at mid-block location 				
	4. Add on-street parking and bicycle path between Goodwin				
	Avenue and Lincoln Avenue				
	Explore extending a bike path/lane or route into Urbana to Lincoln Square				
Sixth Street	Two-way traffic flow between University Avenue and Gregory				
	Drive				
	Modify traffic signals at Armory Avenue, Green Street and Springfield Avenue				
	Install traffic signal at intersection of University Avenue				
	Identify areas for freight loadings/unloadings				
Gregory Drive	Install gate system between Sixth Street and Mathews Avenue				
	extended to allow for street closure during certain time periods				
The second of the second	Implement well defined pedestrian crosswalks				
Mathews Avenue	Convert eastside on-street meter parking to leased parking; remove westside parking				
Green Street to Nevada Street)	Improve two-way bicycle path				
	Improve pavement markings at major pedestrian crossings				
	Improve pavement markings at major pedestrian crossings Eliminate existing transit loading conflicts with bicyclists				
Goodwin Avenue					
Goodwin Avenue	4. Eliminate existing transit loading conflicts with bicyclists				
Goodwin Avenue	Eliminate existing transit loading conflicts with bicyclists Install traffic calming at the intersection of Illinois Street				
Goodwin Avenue	Eliminate existing transit loading conflicts with bicyclists Install traffic calming at the intersection of Illinois Street Install traffic calming at the intersection of Oregon Street				
Goodwin Avenue	Eliminate existing transit loading conflicts with bicyclists Install traffic calming at the intersection of Illinois Street Install traffic calming at the intersection of Oregon Street Install traffic calming at the intersection of Nevada Street				
Location	Eliminate existing transit loading conflicts with bicyclists Install traffic calming at the intersection of Illinois Street Install traffic calming at the intersection of Oregon Street Install traffic calming at the intersection of Nevada Street Install traffic calming at the intersection of Gregory Drive				
Location Springfield Avenue	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including:				
Location Springfield Avenue	Eliminate existing transit loading conflicts with bicyclists Install traffic calming at the intersection of Illinois Street Install traffic calming at the intersection of Oregon Street Install traffic calming at the intersection of Nevada Street Install traffic calming at the intersection of Gregory Drive Improvement Implement capacity enhancements including: a) Replacement and widening of viaduct				
Location Springfield Avenue	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate				
Location Springfield Avenue	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed				
Location Springfield Avenue Neil Street to Wright Street)	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals)				
Location Springfield Avenue Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Wathews Avenue to Lincoln Avenue	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management				
Location Springfield Avenue Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Wathews Avenue to Lincoln Avenue	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e.,				
Location Springfield Avenue Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Wathews Avenue to Lincoln Avenue	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities.				
Location Springfield Avenue Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Might Street to Mathews Avenue Mathews Avenue to Lincoln Avenue	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement				
Location Springfield Avenue Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Might Street to Mathews Avenue to Lincoln Avenue	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street				
Location Springfield Avenue Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Might Street to Mathews Avenue to Lincoln Avenue	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Might Street to Incoln Avenue	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project 4. Install traffic calming at the intersection of the street of the street in the				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Lincoln Avenue John Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement Improvement				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Lincoln Avenue John Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project Install traffic calming at the intersection of parking garage at Sixth Street and Sixth Street to Wright Street as future project Install traffic calming at the intersection of parking street is future project Install traffic calming at the intersection of parking street is future project.				
Location Springfield Avenue Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Lincoln Avenue John Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project 4. Install diagonal parking on northside of John Street in the 500 block 1. Explore option of parking garage at Sixth Street and John Street becoming exit only off Daniel Street 2. Convert the segment between Wight Street and Sixth Street				
Location Springfield Avenue Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Lincoln Avenue John Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project Install traffic calming arrage at Sixth Street and John Street becoming exit only off Daniel Street 2. Convert the segment between Wright Street and Sixth Street and Sixth Street and Sixth Street becoming exit only off Daniel Street 2. Convert the segment between Wright Street and Sixth Street form two-way traffic (vestbound)				
Location ipringfield Avenue Neil Street to Wright Street) ipringfield Avenue Wright Street to Mathews Avenue pringfield Avenue ohn Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Lincoln Avenue John Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project Install traffic signal consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming exit only off Daniel Street 3. Connect two-way bike path between Fourth Street in the 500 block Install traffic signal and complete intersection improvements				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Lincoln Avenue John Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project 4. Install traffic signal and omplete intersection improvements at Illinois Street 5. Convert the segment between Wright Street and Sixth Street from two-way traffic to one-way traffic (westbound) 3. Designate possible bicycle route 1. Install traffic signal and complete intersection improvements at Illinois Street				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Lincoln Avenue John Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project Install traffic signal and complete intersection improvements at Illinois Street 2. Lessignate possible bicycle route 1. Install traffic signal at Nevada Street 2. Install traffic signal and complete intersection improvements at Illinois Street 3. Install traffic signal and complete intersection improvements				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Lincoln Avenu John Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project 4. Install diagonal parking on northside of John Street in the 500 block 1. Explore option of parking garage at Sixth Street and John Street becoming exit only off Daniel Street 2. Convert the segment between Wright Street and Sixth Street townow-way traffic to one-way traffic (westbound) 3. Designate possible bicycle route 1. Install traffic signal and complete intersection improvements at Plensylvania Avenue				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Lincoln Avenue John Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Mathews Avenue to Lincoln Avenue Dohn Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project 4. Install diagonal parking on northside of John Street in the 500 block 5. Explore option of parking garage at Sixth Street and John Street becoming exit only off Daniel Street 6. Convert the segment between Wright Street and John Street becoming exit only off Daniel Street 7. Convert the segment between Wright Street and Sixth Street from two-way traffic to one-way traffic one-way traffic to one-way traffic and complete intersection improvements at Illinois Street 7. Install traffic sig				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Mathews Avenue to Lincoln Avenue Dohn Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project 4. Install diagonal parking on northside of John Street in the 500 block 1. Explore option of parking garage at Sixth Street and John Street becoming exit only off Daniel Street 2. Convert the segment between Wright Street and Sixth Street townown way traffic to one-way traffic (westbound) 3. Designate possible bicycle route 1. Install traffic signal and complete intersection improvements at Plennsylvania Avenue 4. Install traffic signal and complete intersection improvements at Florida Avenue 1. Install traffic calming at the intersection of John Street				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Mathews Avenue to Lincoln Avenue Dohn Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement				
	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Olimois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Mathews Avenue to Lincoln Avenue Ohn Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project 4. Install diagonal parking on northside of John Street in the 500 block 1. Explore option of parking garage at Sixth Street and John Street becoming exit only off Daniel Street 2. Convert the segment between Wright Street and John Street becoming exit only off Daniel Street and John Street becoming exit only off Daniel Street 2. Convert the segment between Wright Street and Sixth Stree from two-way traffic to one-way traffic to one-way traffic or one-				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Mathews Avenue to Lincoln Avenue Dohn Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Oregon Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Oregon Street 4. Install traffic calming at the intersection of Oregony Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project 4. Install diagonal parking on northiside of John Street in the 500 block 1. Explore option of parking garage at Sixth Street and Sixth Street to Wright Street and Sixth Street and Sixth Street becoming exit only off Daniel Street 2. Convert the segment between Wright Street and Sixth Street from two-way traffic to one-way traffic (westbound) 3. Designate possible bicycle route 1. Install traffic signal and complete intersection improvements at Illinois Street 2. Install traffic signal and complete intersection improvements at Pennsylvania Avenue 1. Install traffic calming at the intersection of Oregory Drive 4. Install traffic calming at the intersection of Peabody Avenue 5. Complete traffic signal and warrant study and possible intersection intersectio				
Location Springfield Avenue (Neil Street to Wright Street) Springfield Avenue (Wright Street to Mathews Avenue Springfield Avenue Mathews Avenue to Lincoln Avenue (John Street Daniel Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project 4. Install diagonal parking on northside of John Street in the 500 block 1. Explore option of parking garage at Sixth Street and John Street becoming exit only off Daniel Street 2. Convert the segment between Wright Street and Sixth Street from two-way traffic to one-way traffic (westbound) 3. Designate possible bicycle route 1. Install traffic signal and complete intersection improvements at Florida Avenue 4. Install traffic calming at the intersection of John Street 2. Install traffic calming at the intersection of Gregory Drive 4. Install traffic calming at the intersection of Gregory Drive 4. Install traffic calming at the intersection of Peabody Avenue 5. Complete traffic signal warrant study and possible intersection improvements at Pennsylvania Avenue 6. Install traffic calming at the intersection of John Street with				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue John Street Daniel Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Olimois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Oregon Street 4. Install traffic calming at the intersection of Oregony Drive Improvement				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project 4. Install diagonal parking on northside of John Street in the 500 block 1. Explore option of parking garage at Sixth Street and Sixth Street to Wright Street special parking on northside of John Street in the 500 block 1. Explore option of parking garage at Sixth Street and Sixth Street to Wright Street special diagonal parking on northside of John Street in the 500 block 1. Explore option of parking garage at Sixth Street and Sixth Street from two-way traffic to one-way traffic (westbound) 3. Designate possible bicycle route 1. Install traffic signal and complete intersection improvements at Illinois Street 2. Install traffic signal and complete intersection improvements at Pennsylvania Avenue 4. Install traffic calming at the intersection of John Street 3. Install traffic signal and complete intersection improvements at Florida Avenue 4. Install traffic calming at the intersection of Peabody Avenue 5. Complete traffic signal are the intersection of John Street wit				
Location Springfield Avenue Neil Street to Wright Street) Springfield Avenue Wright Street to Mathews Avenue Springfield Avenue Union Street Daniel Street Courth Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Oregon Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Nevada Street 4. Install traffic calming at the intersection of Gregory Drive Improvement				
Location Springfield Avenue (Neil Street to Wright Street) Springfield Avenue (Wright Street to Mathews Avenue Springfield Avenue Mathews Avenue to Lincoln Avenue (John Street Daniel Street	4. Eliminate existing transit loading conflicts with bicyclists 1. Install traffic calming at the intersection of Illinois Street 2. Install traffic calming at the intersection of Oregon Street 3. Install traffic calming at the intersection of Oregon Street 4. Install traffic calming at the intersection of Gregory Drive Improvement 1. Implement capacity enhancements including: a) Replacement and widening of viaduct b) Widening of roadway where appropriate c) Additional turn lanes as needed d) Traffic signal coordination 1. Pedestrian signal and traffic calming at mid-block location (coordinate with other signals) 1. Improved intersection design and traffic management 1. Make additional enhancement of pedestrian crossings (i.e., sidewalks, intersection crossings) with special consideration for persons with disabilities. 2. Explore option of parking garage at Sixth Street and John Street becoming entry only off John Street 3. Connect two-way bike path between Fourth Street and Sixth Street to Wright Street as future project 4. Install diagonal parking on northside of John Street in the 500 block 1. Explore option of parking garage at Sixth Street and John Street becoming exit only off Daniel Street 2. Convert the segment between Wright Street and Sixth Street the woway traffic to one-way traffic for one-way traffic or one-way traffic for one-way t				

III. Master Plan Update

We recommend that the following aspects of CATS be adopted into the UIUC Campus Master Plan as a way to facilitate and encourage CATS full implementation:

The Mission Statement

The CATS mission statement summarizes its goal: "To better accommodate pedestrian, bicycle, transit, and vehicle movements in a user-friendly environment." Sasaki Associates, Inc. recommends that the University adopt this mission statement as a basic planning objective and apply it to all campus transportation planning and design efforts.

Principles

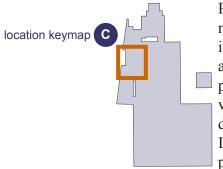
We recommend that the University adopt the following set of planning principles, taken from the CATS study:

- 1) The University should establish a "University District" (bounded by Neil St., Lincoln Ave., University Ave., and St. Mary's Rd.) and create a uniform transportation policy within the district. Uniform design standards for signage and road markings should be adopted in this area. All transportation planning (*e.g.* bikeways, commercial, parking, transit, and so on) for the district should be coordinated with Urbana and Champaign. To facilitate signage coordination, it is recommended that the University adopt the University District Crosswalk Guidelines prepared by CUUATS.
- 2) Through-traffic should be restricted to the edges of the district and traffic should be allowed within the district only for the purposes of pick-up, drop-off, essential services, and for finding parking.
- 3) University plans should emphasize the separation of modes of travel to minimize conflicts.
- 4) Within the University District, all physical planning and design strategies should give highest emphasis to pedestrian, bike, and transit movement (in that order) and de-emphasize vehicular traffic.
- 5) The University should provide adequate parking and service delivery needs of campus functions.
- 6) Transportation design improvements should meet Urbana, Champaign, and University maintenance capabilities.

III. Master Plan Update

C. Research Park Update

Prepared November 2006 by the University of Illinois (with input from Sasaki Associates, Inc.) — based on the "A Vision for Growth" Research Park Master Plan originally prepared September 2004 by Cannon Design and revised February 2005 by Fox/Atkins Development, LLC.



Perhaps no other planning effort to date better illustrates the dynamic and fluid nature of campus planning at the University of Illinois than does the Research Park. It has been an integral part of planning efforts in

the South Campus and is included in nearly every master plan developed for the South Campus since Sasaki's *South Farms Master Plan* of 1990, which generally sited it and the State Surveys Campus between the Illinois Central Railroad tracks and First St. with a northern boundary of St. Mary's Rd. and southern boundary halfway between Windsor Rd. and Curtis Rd. In the Sasaki *South Campus Master*



*NOTE: Block W3 is owned by the local power company, Ameren. The University currently has no arrangements with Ameren to lease the property so its numbers are not accounted for in Figure III-C2. The site has the potential to be utilized by the University Research Park as surface parking built over the underground utility lines. This would reduce the amount of Research Park land dedicated to vehicular parking in that area.

Block Description See Figure III-C1 for legend	Existing Gross Square Feet (GSF)	Proposed Gross Square Feet (GSF)	Total Gross Square Feet (GSF)	Estimated Employees office/lab planning assumption: 1 person/800 GSF	Planned Parking Spaces capacity shown on Master Plan	Targeted Parking Spaces	Balance of Parking Spaces
W1	63,467	397,500	460,967	576	469	1,613	-1,144
W2	219,370	165,000	384,370	480	1,890	1,345	545
W3 (Ameren*)	0	0	0	0	1,275*	0	1,275*
W4	117,633	152,500	270,133	338	1,744	945	799
W5	222,175	90,000	312,175	390	555	1,093	-538
W6	0	230,000	230,000	288	419	805	-386
W7	56,910	455,000	511,910	640	1,814	1,792	22
West subtotal	679,555	1,490,000	2,169,555	2,712	8,166	7,593	573
E1	0	492,000	492,000	615	590	1,722	-1,132
E2	0	340,000	340,000	425	1,905	1,190	715
E3	0	280,000	280,000	350	825	980	-155
E4	0	270,000	270,000	338	868	945	-77
E5	0	290,000	290,000	363	1,003	1,015	-12
E6	0	212,500	212,500	266	493	744	-251
East subtotal	0	1,884,500	1,884,500	2,356	5,684	6,596	-912
TOTAL	679,555	3,374,500	4,054,055	5,068	13,850	14,189	-339

Figure III-C2: Research Park Full Build-Out Statistics by block



III. Master Plan Update

Plan of 1999, the Research Park's planned southern boundary was moved northward to Windsor Rd. SmithGroup JJR's South Campus Master Plan Update of 2001 expanded the master plan's eastern boundary across First St. with a curvilinear eastern edge corresponding to a planned Championship Golf Course for the Division of Intercollegiate Athletics. In the Vision for Growth report produced by Cannon Design in 2004, the eastern boundary of the Research Park's plan was straightened along a north-south line created by the extension of Fourth St. to Windsor Rd.

This Research Park Update builds on the ideas developed in the most recent report by Cannon Design and integrates the long-term needs of the University. The goal, suggested by this report, is to "respect and enhance the existing market driven development pattern while providing a flexible framework to migrate to potential higher density in the future." The update plan (see Figure III-C3) recommends to:

- 1) Designate land within the Research Park for a
 State Surveys Campus. Located mostly along
 Griffith Dr. in the northwest part of the Research Park
 within parcels adjacent to existing surveys facilities,
 the proposed State Surveys Campus (see Figure IIIC4) will create a cluster of office/research facilities
 for State of Illinois units (predominantly Department
 of Natural Resources Surveys) to enhance efficiencies
 and interactions among all the State Surveys units.
- 2) Relocate the entire Illinois Fire Service Institute operations from its current location in the Research Park to a remote South Campus location.

 With the Illinois Fire Service Institute's (IFSI) growing space requirements and the potential for future conflicts between the training operations for IFSI and day-to-day Research Park use, relocating IFSI to a more remote location is recommended. In IFSI's future South Campus location, the Institute will have the benefit of housing all of its training facilities and resources at one site. In addition, the remote location buffers adverse impacts to non-University properties from its burn site, which will afford greater flexibility for training exercises than the current site does.

IFSI's move will also provide the Research Park with an expansion area (see Figure III-C5) for future,

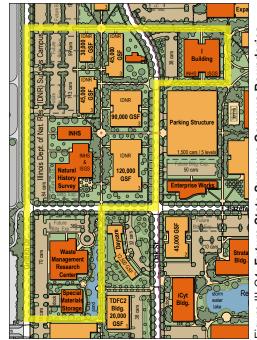


Figure III-C4: Future State Surveys Campus Boundaries (highlighted in yellow) in the Research Park.



Figure III-C5: Future Research Park single-story, technology fabrication area (current Illinois Fire Service Institute boundaries highlighted in yellow).

away from the prime building sites that are more suited to multi-story office and laboratory buildings.

For additional information on the Illinois Fire Service Institute relocation recommendation, see update issue "I.l." later in section III.

3) Adopt a street grid configuration to facilitate: of

single-story technology fabrication facilities in a zone

3) Adopt a street grid confguration to facilitate: efficient land use, compact infrastructure development, ability to economically increase the density of the research park over time, and creation of a stronger connection among Research Park facilities. Overall, the development structure for the Research Park Master Plan is delineated by a 'traditional' north-south/east-west street grid (see Figure III-C6). The development areas and street grid can be generally divided into halves east and west of First St.

East of First St., building setbacks/build-to lines flank a 'green' corridor (a series of connected open spaces on axis with Assembly Hall) whose right-of-way should be maintained to allow for construction of a future street, should it be deemed desirable or necessary. This north-south open space corridor is envisioned to be anchored on the north with a future Olympic Sports Arena (south of Assembly Hall) and anchored on the south with an iconic structure to be determined. This iconic structure could take the form of a tower slightly taller or shaped differently than the surrounding buildings to serve as a terminus for the green corridor and landmark for the Research Park.

Two new east-west roads 1) between Hazelwood Dr. and Gerty Dr. and 2) between Gerty Dr. and Windsor Rd. are envisioned to provide traffic circles that act as activity spaces that enliven the usage of the north-south green corridor. In addition to the office/research facilities located along the 'green' corridor, active and passive recreational areas are placed between each of the circles. The circles are locations where potential commercial/retail activity might occur along with visitor parking, mass transit stops, and Research Park connector nodes (that will serve to draw east-west pedestrian, bicycle, and vehicular movement to this north-south axis).

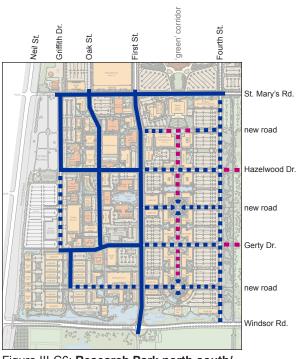


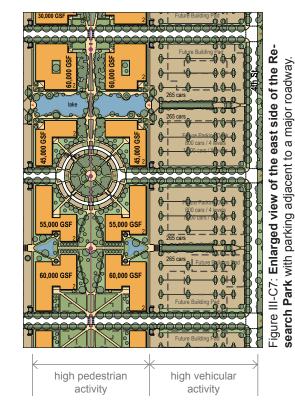
Figure III-C6: Research Park north-south/ east-west street grid



Surface parking is arranged in large lots along the main commuter throughways of First St. and Fourth St. to provide quick access to automobile parking and less pedestrian-vehicular conflict (see Figure III-C7). The large lots take advantage of parking economies of scale by having multiple buildings utilize a common parking lot; therefore, an exact capacity of 3.5 cars per every 1,000 gross square feet of building is not required as it would when every parking lot is dedicated to a specific building. In the scenario where parking lots are dedicated to specific buildings, not all tenants will use all the parking spaces allotted, which leaves additional, unused capacity in multiple, unconnected surface lots. Utilizing common parking facilities will reduce the overall amount of pavement required, which will lower construction costs, reduce storm water runoff, and preserve larger, future building sites to accommodate the ultimate build-out.

Construction of the Fourth St. extension will accommodate future growth areas east of First St. and provide alternative ingress and egress options for the entire Research Park and UIUC Campus. An extend-

ed Fourth St. will also provide an opportunity to create a natural drainage corridor (a naturalized "shelterbelt" between Fourth St. and an existing farm lane, see Figure III-C8) to assist the movement and infiltration of storm



of Fourth St. Extended

Cross-section concept sketches

and the adjacent shelterbelt (UOFP&P, 2005)

Street East Edge Alternatives Overflow, Event Parking Shelterbelt Planting Vegetated (natural succession) (low-mow turfarass (3. ane East Edge Alternatives naturalized drainare Extended txist Figure III-C8: top soil stockpiled and returned following structural fill removed to textanded. Paths to extended from east of cross streets) to connect to existing farm

III. Master Plan Update



Figure III-C9: Research Park planned storm water drainage patterns (blue arrows represent storm water drainage flows).

water surges from the runoff of new Research Park facilities east of First St. Each block's drainage will be collected mid-block and directed to the shelterbelt, which will channel the overland flow into naturalized storm water retention areas developed along Windsor Rd. Ultimately, the entire system is connected to the Embarrass River headwaters helping to maintain the river's natural flow; however, storm water will be retained at various points along the shelterbelt to promote infiltration that recharges the groundwater.

West of First St., existing facilities and infrastructure affect development patterns to a greater degree but, as possible, the same basic connective and activity framework and strategies explained for facilities east of First St. is intended to also be utilized for facilities west of First St. This will help integrate both sides of First St. into one cohesive campus area while also providing areas of unique character throughout.

4) Mixed uses (including hotel/conference facilities, childcare facility, retail, athletic facilities, and possible administrative office functions) should be developed within the Research Park. First and foremost the Research Park will provide facilities that foster the transition of research to the commercial marketplace. But, the right mix of services and amenities available within the Research Park will improve the park's ability to successfully evolve into the environment for innovation that is envisioned.

The Retail Assessment of the University of Illinois at Urbana-Champaign report by Jones Lang LaSalle in 2004 confirms the inclusion and appropriate types of retail for the Research Park with the suggestion that dining be clustered to utilize common facilities and that other types of retail be dispersed throughout the park based on surrounding uses and the critical mass to make it successful. Therefore, initial commercial/retail spaces should be built flexibly so that they can be converted into research/office space if the commercial/retail location is unsuccessful. For instance, the northeast corner of the intersection at Windsor Rd. and First St. makes good sense as an immediate, viable commercial/retail location due to the high volume of "drive-by" traffic. But, since the commer-

cial/retail component of the Research Park is intended to serve the park's tenants, this location is more viable once there is sufficient critical mass of Research Park facilities adjacent to that location. Ultimately, the Research Park is envisioned to be a predominantly pedestrian environment much like the core of campus so the park's retail/commercial components should be built to accommodate walk-up business.

Originally proposed/approved in the 2001 *South Campus Master Plan Update*, the Hotel / Restaurant / Conference Center is located at the southeast corner of First St. and St. Mary's Rd. and acts as a gateway structure serving both the Research Park and the very public events area of campus near Assembly Hall and Memorial Stadium.

Directly east of the Conference Center and due south of Assembly Hall is planned an Olympic Sports Stadium (discussed in section "III.D.") to become the venue for events that currently take place at Huff Hall, which will eventually be converted to academic classroom space. East of the Olympic Sports Stadium on the southwest corner of St. Mary's Rd. and Fourth St. extended is planned an Administrative Office Building, which will house administration staff that do not require a proximity to the core of campus or are currently in leased space.

The plan also creates an area for single-story, technology fabrication space within the park (see Figure III-C5). It is located in the southwestern corner of the Research Park surrounded by the railroad tracks, Windsor Rd., and the utility (Ameren and Illinois-American Water) properties west of the park.

- 5) Accommodate the potential for a Research Park

 / Main Campus conection via a fixed guideway

 'tram' route. A schematic route for a fixed guideway

 'tram' is accommodated in the Master Plan Update to
 make a transit connection between the Campus Core
 and the Research Park. Rails can be built in the roadway or in 'green' space providing route flexibility.
- 6) Maintain plan flexibility for long-term building and roadway infill capabilities. The development framework of this plan optimizes the capacity of the



Figure III-C10: Relocation of the Day Care facility site.

Day Care Site Relocation

At the July 2004 Board of Trustees meeting, a site at the northeast corner of First St. and Hazelwood Dr. was recommended and approved for a future Park-and-Ride / Day Care project to be developed in partnership with the Champaign-Urbana Mass Transit District. The Master Plan Update recommends relocating the Day Care facility (with no Park-and-Ride component) to a site at the southwest corner of Oak St. and Hazelwood Dr. (see Figure III-C10). This Day Care facility will be developed and managed by the Research Park master developer.

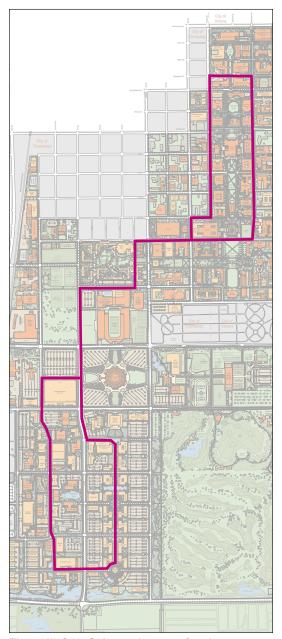


Figure III-C11: Schematic route for the fixed guideway 'tram' (highlighted in purple) to connect the Research Park and Main Campus.

Research Park because its layout is less suburban than the previous plan and institutes a street grid that integrates the rest of the urban areas of the adjacent campus and surrounding communities. This more 'traditional' street grid development is also more flexible in providing for future infill growth than the previous, approved plan. In addition, it is able to support a more rational expansion of Hazelwood Dr. and Gerty Dr. to Lincoln Ave. if/when those extensions are advantageous or required (see Figure III-C6).

The proposed development framework locates new facilities that fulfill current needs without inhibiting an ultimate build-out density comparable to the core of campus. Implementation of an ultimate build-out density is envisioned to occur similarly to the Main Campus where parking structures and alternate modes of transportation – such as walking, bicycles, and mass transit (fixed guideway and/or buses) – reduce the parking needs currently served by surface parking lots. Thus, surface parking lots are future building infill sites and locations for open spaces that help foster the campus research park setting.

Building locations illustrated on the plan suggest appropriate setback/build-to lines, facility entrances, and priority placement/orientation that allow for the plan-wide systems for open space, circulation, parking, storm water management, and ultimate build-out density. Building form and expression is otherwise flexible within the campus *Design Guidelines* (updated in Section IV of this *Master Plan Update*) and the *Research Park Master Developer Agreement*.

Building footprints for an ultimate build-out are suggested in the gray, dashed lines that overlay the plan. As the ultimate build-out is realized, the Research Park capacity could double (or greater) if 3-story to 5-story buildings get constructed instead of the 2-story buildings currently being planned and built. Of course, the real estate market, availability of transportation options, and other factors will direct that decision. In the meantime, the key is to develop facilities with a flexibility for expansion and renovation to help the Research Park establish the right mix of uses for enhancing desirability among its competition.

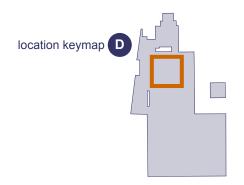


In the coming years, the Research Park is likely to evolve through minor plan modifications that meet ever-changing needs. This plan will provide the overall framework to guide its ultimate build-out and this framework is flexible to meet both current and anticipated market demands. It has been arranged in a way to promote ongoing growth, walkability, mixed uses and activities, core campus connections, and environments for innovation. The anticipated outcome is to foster an environment that attracts and sustains high-quality research as well as fosters the transfer of that research to real-world applications.

III. Master Plan Update

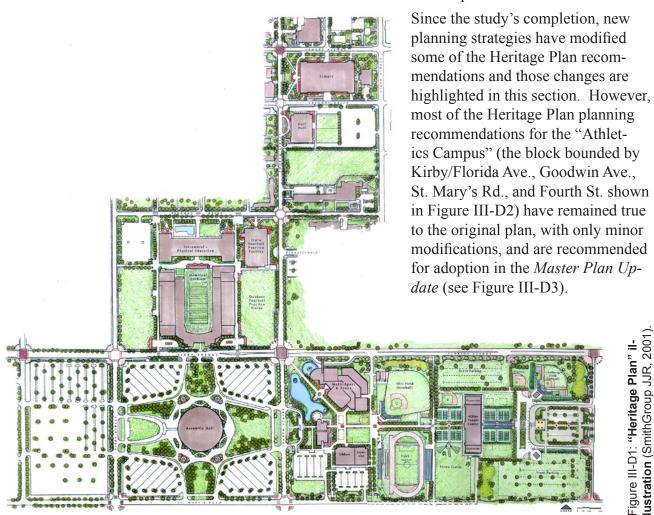
D. Division of Intercollegiate Athletics Areas

Prepared November 2006 by the University of Illinois (with input from Sasaki Associates, Inc.) — based on the "Heritage Plan" (originally prepared by SmithGroup JJR) and other recent planning efforts.



In September 2000, the University of Illinois Division of Intercollegiate Athletics (DIA) comissioned a design team headed by SmithGroup JJR (Chicago, IL) to develop the "Heritage Plan" in order to aesthetically enhance the DIA facilities and surrounding, outdoor public spaces. The study encompassed and made recommendations for all areas of campus where a DIA competition and/or practice venue was located or was being planned (see Figure III-D1). Its vision was to create a new University of Illinois Athletic Campus that reflects the unique expression of the Fighting Illini Spirit, inviting all visitors to enjoy and be-

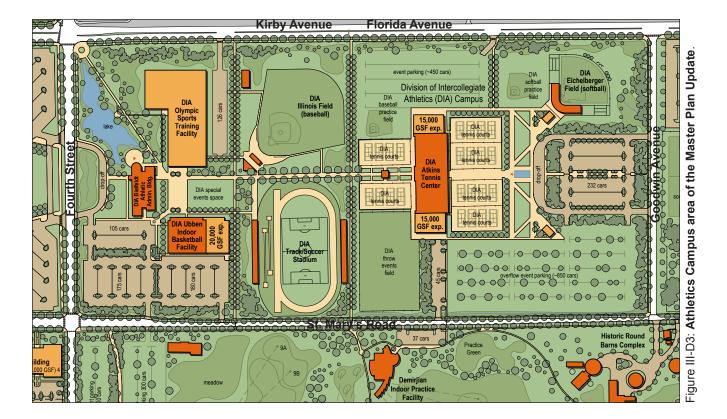
come a part of the Illinois tradition.



III. Master Plan Update



Figure III-D2: "Athletics Campus" area of the "Heritage Plan" (SmithGroup JJR, 2001).



III. Master Plan Update



Figure III-D4: **Playful, interpretive sculpture in the special events space** (Smith-Group JJR, 2001).

Overall, the recommendations of the Heritage Plan's Athletics Campus organize future venue expansions and additions rationally to build upon and add more detail to the previous planning efforts developed for this part of campus. For instance, additional detail is evident in how the Heritage Plan utilizes open, grassed areas between venue locations to provide additional athletics practice space when not being used for athletic events' spectator parking. Detail is also evident in how the plan accommodates a special events space to promote attractions and interactive sculpture (see Figure III-D4). Intended outcomes of the Heritage Plan efforts are to enhance the "game day" experience (see Figures III-D5 and III-D6) for fans as well as to foster an environment that excites fans' to attend the variety of Illini sporting events, excites donors' to help fund future venues, and

Figure III-D5: View of the "Athletics Campus" from the northwest (SmithGroup JJR, 2001).

Figure III-D6: View of the "Athletics Campus" from the east (SmithGroup JJR, 2001).

to become a part of the Illini athletics programs.

Master Plan-impacting planning efforts for DIA since the development of the Heritage Plan focus on the following issues (illus-

1) Increasing event parking capacity

trated in Figure III-D7):

excites prospective athletes

- 2) Locating a future, Championship Golf Course
- 3) Locating a new Olympic Sports Arena to accommodate the athletics events displaced by a future, adaptive reuse of Huff Hall to academic/classroom space

III. Master Plan Update

Event Parking

Automobile parking capacity along the Kirby/Florida Ave. corridor currently limits the ability to schedule simultaneous or even closely-timed events in this part of campus, which is frequently accessed by both University and non-University people. For instance, an event at Memorial Stadium, such as high school state championship football games, would be highly difficult if not impossible to schedule the same day as a major concert event at the Assembly Hall – even if the concert were being held later in the evening. So as additional planned and/or enlarged venue spaces are developed, schedule conflicts will worsen if the capacity of event parking is not increased.





III. Master Plan Update

Therefore, two obvious strategies can be employed to help expand the capacity for automobiles used by guests of events on campus: 1) shuttle guests to events (via buses and/or the future fixed guideway tram in Figure III-C11) from existing parking facilities in other areas of campus that are otherwise underutilized during evenings and weekends when events occur and 2) find opportunities to expand automobile parking spaces near event venues.

Figure III-D7 highlights with blue/yellow dots the opportunities proposed to increase event parking capacity:

- Optimize and expand existing parking layouts
- Utilize open spaces (natural and practice fields) that can function as overflow parking for major events
- Develop a new multi-level parking facility (discussed further in section III-Ic) and new surface parking lots

Golf Training Site

Figure III-D7 highlights with a green/yellow dot the location for the Demirjan Indoor Golf Facility (RATIO Architects), which is currently under construction, along the south side of St. Mary's Rd. The roughly 200 acre plot shown within the boundaries enclosed by the yellow/green highlight line should be maintained as a Golf Training Site. A future Championship Golf Course location (planning in-progress with donor) is yet to be determined; however, one potential University-owned site with enough available acreage and program that could relocate is the Academic Transition Zone – Cruse Farm.

Olympic Sports Arena

Figure III-D7 highlights with a yellow outline the location of a new Olympic Sports Arena (directly south of Assembly Hall) to accommodate the athletics events displaced by a future, adaptive reuse of Huff Hall to academic/classroom space. This facility's south side is envisioned to provide an outdoor amphitheater venue for plays and concerts.

E. Orchard Downs Redevelopment

Planning in-progress.



Campus is working with land developer teams to interact with the community and generate plans on how to best develop the property.

It is expected to be a multigenerational community that includes single-family homes, condominiums, multi-family housing, retiree housing, neighborhood retail/office space (commensurate with the overall development), and recreational facilities.

The following text is from the "Our Vision for Orchard Downs" brochure distributed to community stakeholders and helps to provide a sense of the project's expectations.

Our Vision

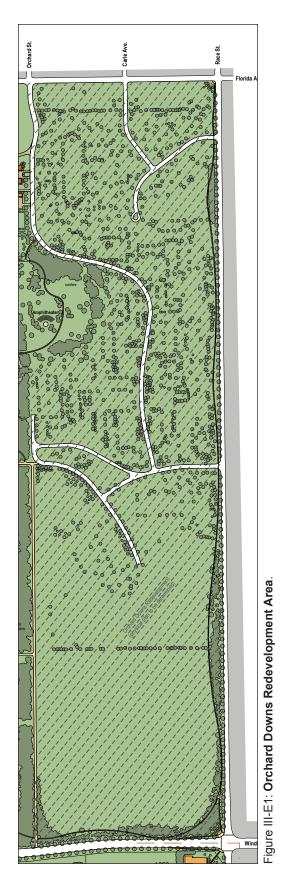
Envision an intimate neighborhood community where energetic residents interrelate with each other and their environment.

Envision broad walkways that inspire people to move about; large, shady green trees along trails with interesting sights and destinations; and community spaces that encourage people to meet and linger awhile.

Envision a community constantly challenging its intellect with artistic and cultural exhibitions, where emeritus faculty and graduate students can partake in stimulating, thought-provoking interactions.

Finally, envision waking up in a residence that adapts to your changing physical needs and abilities as you mature so you can live an active, productive life regardless of any age-related challenges that might arise.

We see the Orchard Downs Redevelopment Project as a signature achievement – a model for a future that addresses the needs of a population committed to intellectual growth and learning as a way of being.



III. Master Plan Update

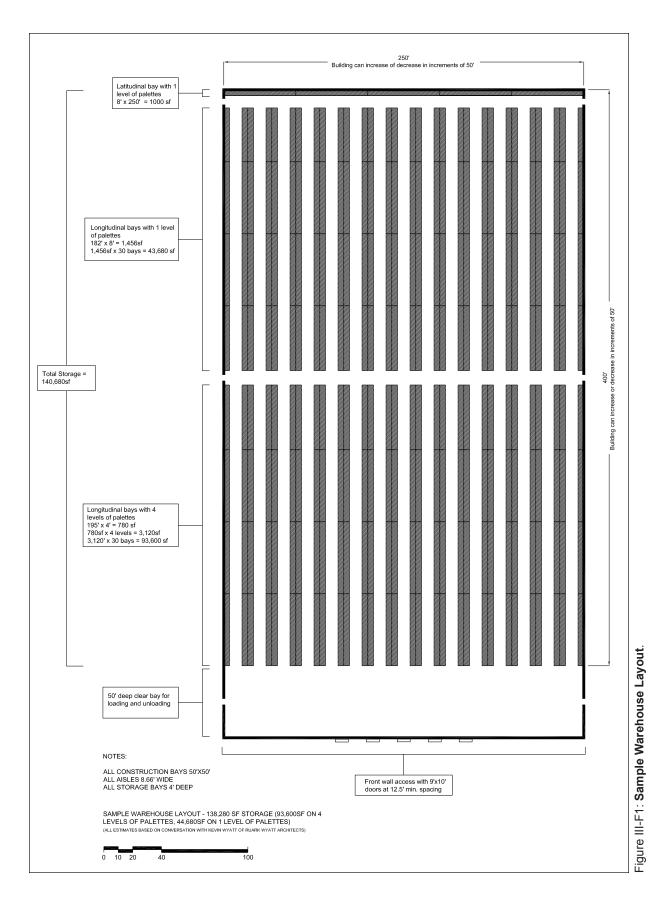
F. Campus Storage Facility

Prepared July 2004 by Sasaki Associates, Inc. (revised Nov. 2006).



There are several conditions that require the University to develop a plan for storage facilities in the near future: 1) the need to free space used as storage in the campus core for better uses; 2) the anticipated displacement of storage facilities from the Research Park and College of Agriculture, Consumer, and Environmental Sciences (ACES) land between St. Mary's Rd. and Windsor Rd.; and 3) the anticipated need to relocate the storage facilities from Orchard Downs when that site is redeveloped. The planning objective is to establish a permanent site where storage facilities can be consolidated and easily expanded over time to meet the future demand for storage space. Ideally, the site will have enough expansion potential to accommodate possible future growth.

Currently, storage at the University consists of independent pole barn type buildings or space located within permanent buildings throughout the campus. Each storage location is dedicated for use by a particular campus unit. In order to consolidate storage functions and increase efficiency, the construction of a central warehouse facility to accommodate all the campus' storage needs has been proposed. Users of the central facility will lease space modules within a single large building. The amount of Phase One space required to consolidate existing storage space in a single facility is 135,000 net square feet. To accommodate future potential expansion, it is estimated that an additional 135,000 net square feet of storage will be required. The typical warehouse building size for 135,000 net square feet of multi-level storage is 250' x 400' (100,000 gross square feet) with one third of the storage volume on a single level and the other two thirds on pallets stored four high and one deep, accessible by forklift. Figure III-F1 illustrates a possible layout of this type of facility using a building module of fifty-foot bays.



III. Master Plan Update

Dynamics Testing Laboratory site north of the Police Firing Range on Curtis Rd. (see Figure III-F3). The second is the land west of Race St. south of Old Church Rd. (see Figure III-F4). These locations have been compared in terms of proximity to campus, the size and shape of the site, the relative proximity of the Embarras River floodplain, access to utilities, soil type, potential for future growth, current ownership of the land, and the impact this development would have on surrounding ACES activities. Figure III-F5 provides a comparative matrix of the two sites. Figure III-F2: Proposed Sites for the Campus Storage Facility Old Church Road

III. Master Plan Update

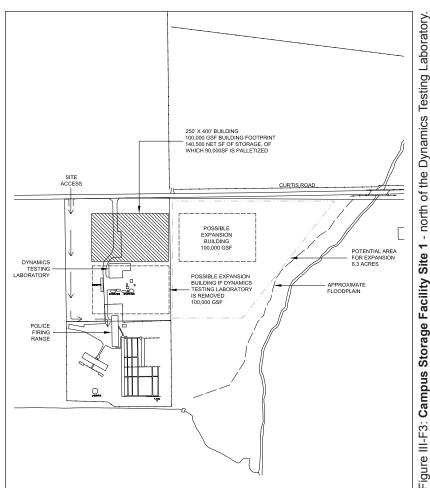
Two sites were evaluated as potential locations for central warehouse facilities (see Figure III-F2). The first is the

Site 1 is owned by the University and has utilities available. It is therefore free for immediate construction of a Phase One warehouse. However, its long-term suitability is questionable because Phase Two expansion may require 8 more acres of ACES research land and could increase traffic, which may hinder ACES activities. Any unanticipated necessary future growth could not be accommodated without more impact on ACES land. Site 2 is owned by the University of Illinois Foundation and is more suitable for Phase One and Phase Two warehouse construction because it is large enough to accommodate future warehouse growth without negative impacts on ACES land. Within Site 2, the preferred location for warehouse facilities would be the area immediately south of Old Church St. This site offers adequate suitable land, yet allows sufficient remaining land area to accommodate the Fire Services Institute training facility, which is ultimately planned for this area as well.

Site 2 may take slightly longer to prepare and implement

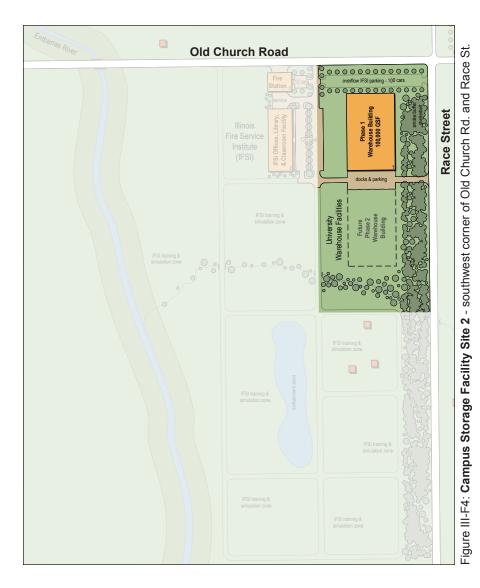
than Site 1, however, the longterm benefits of greater expansion flexibility and few long-term land conflicts argue for Site 2 as the preferred warehouse complex location. If Site 2 can be acquired before storage facility displacement begins at Orchard Downs and the Research Park, Phase One storage needs can be met at Site 2.

In the event that the acquisition of Site 2 is not a viable option to



III. Master Plan Update

meet Phase One warehouse needs, two alternative solutions are recommended. The first is to construct temporary storage facilities for Phase One needs on the Dynamics Testing Laboratory site while Site 2 is acquired and the permanent warehouse is constructed there. After the permanent warehouse is complete, storage from the **Dynamics Testing Labora**tory would be relocated to the new facility. The second alternative is to build the permanent warehouse on the **Dynamics Testing Labora**tory Site (Figure III-F3). If the Dynamics Testing Laboratory were demolished, a second warehouse could be constructed to the south of the first warehouse. Any expansion required beyond the second warehouse could be accommodated on the land to the east.



	Site 1 - north of Dynamics Testing Lab	Site 2 - southwest corner of Old Church Rd. and Race St.		
Current Ownership	University of Illinois	University of Illinois Foundation		
Parcel Size	8 acres (640' x 545')	20 acres (1415' x 615')		
Distance from Campus Core	3.5 miles	5 miles		
Utilities	All available	Could be extended to the site from the Beef/Sheep Facility at the NW corner of Old Church Rd. and Race St.		
Proximity to Flood Plain	Outside flood plain	Flood plain encroaches site restricting the buildable area but the balance could be used for training by Illinois Fire Service Institute		
Soil Types	Flanagan Silt Loam & Drummer Silty Clay Loam	Flanagan Silt Loam, Drummer Silty Clay Loam, Catlin Silt Loam, Plano Silt Loam, Colo Silty Clay Loam & Amber Silty Clay Loam		
Potential for Future Growth	Area between Eastern edge of the site and the Embarras River could be developed	Within the Site 2 boundaries, an area directly south of the Phase One building site along Race St.		
Future Expan- sion Conflict(s)	High risk of conflict with adjacent ACES land uses	Low risk		

G. Campus Commercial Areas

Prepared May 2004 by Jones Lang LaSalle IP, Inc.

Following is the Executive Summary text from the "Retail Assessment of the University of Illinois at Urbana-Champaign" report commissioned for the Master Plan Update. The entire report may be downloaded from http://www.uofpp.uillinois.edu/docs/UIUC/reports/UIUCretail.pdf.
Recommendations in this report for the Orchard Downs Redevelopment reflect the planning possibilities being contemplated prior to community input currently being collected; however, the Orchard Downs Redevelopment project recommendations in the Master Plan Update reflect the current project strategies.

Jones Lang LaSalle is pleased to present this assessment of retail in the Champaign-Urbana market and, more particularly, its assessment of existing retail or retail under consideration at five locations on the University of Illinois at Urbana-Champaign campus. The information contained in this study is intended to support the University's refinement of the retail component in its master plan update.

A detailed review has been completed of the demographics and psychographics for the region, the Champaign-Urbana market and the five individual trade areas associated with the study sites. All existing retail in the Champaign-Urbana trade area was examined. An assessment of retail feasibility and potential was developed based on the demographic findings and existing retail offerings in the market.

Champaign-Urbana Retail

Champaign-Urbana's current retail offering may be summarized as follows:

- Market Place Mall presents a strong, traditional national tenant line-up
- It offers the appropriate department stores for the trade area
- There is a healthy assortment of big box retailers in the power centers adjacent to the mall
- Many national chain restaurants are represented in the area around the mall
- Only a limited number of lifestyle merchants has entered the Champaign-Urbana market to date
- There is a surprisingly low level of local and regional retailers in the market
- The current retail selection on and around campus is predominantly food (e.g., submarine sandwiches and ethnic fast food), services (e.g., hair salons and tattoo parlors), and books
- There is an inadequate grocery offering on campus
- One could expect to see more cutting-edge, university-oriented local retail and a greater number of coffee shops near campus

III. Master Plan Update

Retail at the University of Illinois at Urbana-Champaign Campus

The demographic/psychographic review and examination of existing retail led to several conclusions regarding the campus' sites.

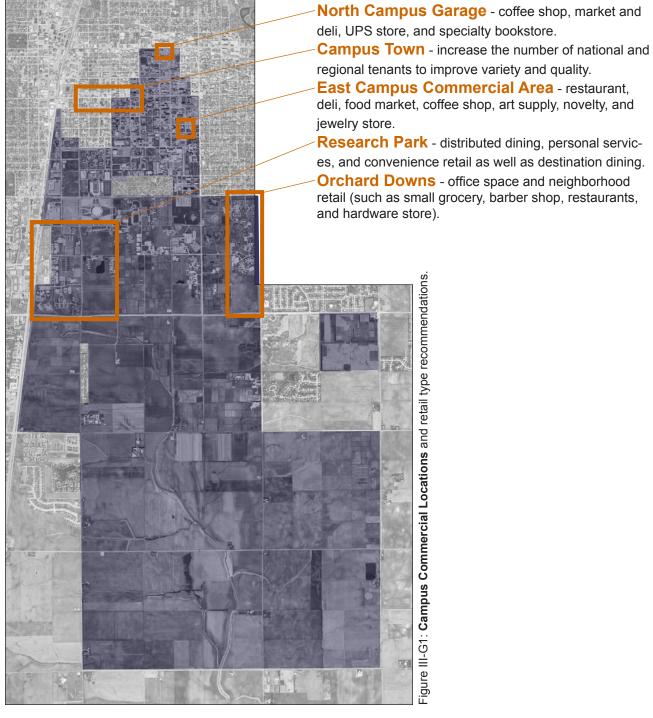
- It is appropriate to plan retail space at the five study sites
- The team did not determine that there are any other obvious locations for additional retail on or near campus; however, as buildings are developed or redeveloped, there will be opportunities to add retail as is being done in the East Campus Commercial Area and the North Campus Parking Garage
- Retail in the East Campus Commercial Area, the North Campus Parking Garage and Campus Town serve the immediate student, campus employee and local resident audiences
- Retail proposed for the University Research Park and Orchard Downs sites may serve not only the customer in the immediate area but also could draw customers from the entire trade area
- The enhanced fringe arterial system proposed for the two cities would contribute to easy access for the proposed Orchard Downs and University Research Park sites; they are both located north of Windsor Rd. and would be easily accessible from the fringe arterial system or via feeder roads, further strengthening these sites' viability as mixed use developments
- The sites may be served by the market's excellent bus system and the proposed guideway transportation system now under consideration; the permanent track is understood to be reassuring for developers, and the opposite would be true as well developments should help to determine where the track will be laid

Benefits

There are many benefits to placing retail at the identified sites or refining what is already there:

- Greater levels of convenience would be achieved for the consumers of the five projects through:
 - A larger grocery selection near campus
 - Restaurants and services distributed throughout the campus area
 - Reduced need to travel to other cities in the region to fulfill shopping needs due to the greater retail offering in the Champaign-Urbana trade area
- Quality of life would be enhanced for the cities' residents from:
 - A broader entertainment offering from new restaurants, coffee shops, and clubs
 - An expanded retail selection with the addition of lifestyle tenants
- Support for the University's goals of:
 - Rebalancing the student population to grow the percentage of graduate students within a stable, controlled total by a shift to retail/entertainment/services that target the adult/family population (*e.g.*, lifestyle retailers) rather than the undergraduate (*e.g.*, tattoo parlors)
 - Attracting new businesses and other employers to the market resulting from a more satisfying retail and entertainment selection

It is important to consider the impact of the campus on the Champaign-Urbana trade area and the primary and secondary markets that will benefit by and serve as patrons of the five key areas of development or redevelopment. Each of the study sites may be programmed to attract some combination of student population, campus faculty and other employees, and local residents and workers. Each one may be unique in its approach to retail offerings to meet the needs of people who live, work, and play within close proximity to these evolving areas.



H. Open Space Enhancements

Prepared July 2004 by Sasaki Associates, Inc. (revised Nov. 2006).

Introduction

During the history of the University of Illinois at Urbana-Champaign there have been multiple planning documents prepared to guide the development of the campus landscape. These documents include master plans by noted architects (Charles Platt, Clarence Blackall, James White, and Frederick Mann among others) and two specific Landscape Reports: the 1929 Vitale Report and the 1964 Sasaki Dawson DeMay Report. The 1985-1990 Campus Master Plan Reports also briefly addressed landscape issues by prescribing design guidelines for the campus landscape. In 1999, the University published a summary *Design Guidelines* document that is still in effect today. The principal focus of these reports was to define an open space framework that would guide the orderly development of campus buildings, streets, and parking balanced with an attractive and livable landscape. The plans established the importance of open space in the larger context of campus development and were instrumental in making sure that the expansion of the campus included open space as well as buildings. The consistent adherence to these plans from generation to generation has yielded a campus plan with unique, meaningful, and enduring open spaces that are fundamental to the character and quality of the campus.

Over the past several years there has been a significant amount of dialog on the subject of sustainability with respect to the campus landscape at the Urbana-Champaign campus. The Campus Sustainability Committee; the Chancellor's Design Advisory Committee; and the Campus Office for Planning, Design and Construction (which is now part of Facilities and Services) have held numerous meetings and prepared reports on this subject. In May 2002 the Committee for a Sustainable Campus Environment produced a comprehensive report that included general guidelines to improve campus landscape management, open space quality, landscape structures, stormwater management, landscape maintenance, landscape lighting, and noise control.

Parallel to the concern for the use of ecological principles

Mission Statement of the Committee for a Sustainable Environment

We will lead by example to foster environmental awareness and responsibility across the campus community. Through education, research, and public service we are committed to conservation, recycling, and ecological design. The campus will become a model of sustainable design and management through its everyday actions, monitoring, and reporting taking into account all appropriate economic, environmental, and social concerns.

to produce a sustainable landscape, there has been a growing awareness that there is a shortage of smaller landscape spaces that might offer greater variety of experience and planting in the campus landscape.

There has also been recent interest in developing principles for the use of art in the campus landscape. While there are a number of excellent examples of sculpture across the campus, such as the Lorado Taft Alma Mater, there are no comprehensive guidelines regarding the type and location for art in the campus landscape.

The purpose of this report is to recommend ways in which the issues of sustainability, landscape variety, and campus art may be addressed at the Urbana-Champaign campus.

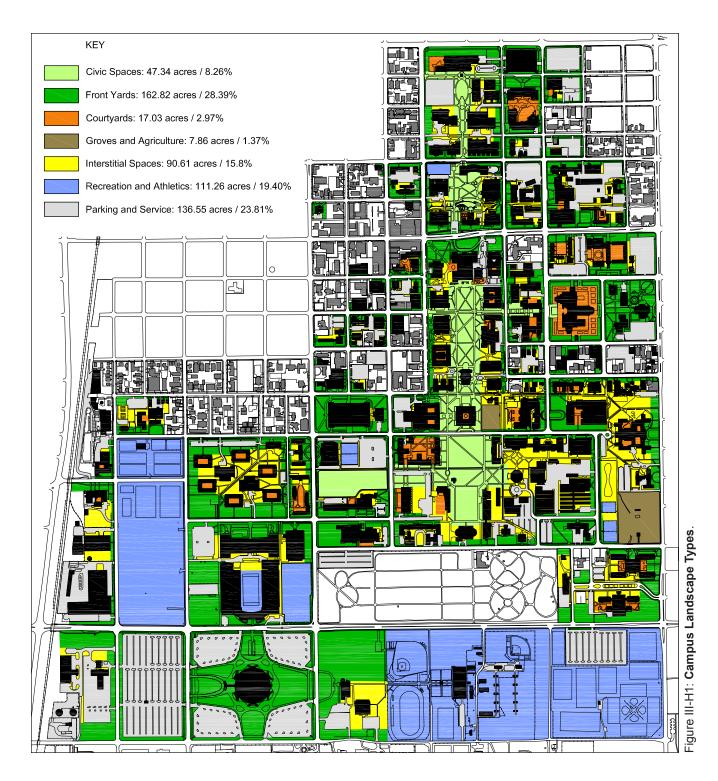
Recommendations

The 1999 Design Guidelines for Site Development distinguish between small courtyards and the large malls, quads, and streets of the campus, however, the guidelines for general site design principles and planting do not always explain whether they apply to courtyards, large spaces, or both. To correct this condition and to appropriately recognize the various types of landscapes that exist within the campus landscape, this report provides recommendations for six different landscape types. The six landscape types are illustrated on the attached map titled "Campus Landscape Types" (see Figure III-H1). The recommendations may serve as the basis for amending the Campus Site Development Guidelines.

In the interest of establishing a common understanding of the alternative solutions available in the campus landscape design, the following categories and comments are offered as a preface to the recommendations. The alternatives demonstrate a range of approaches of varying sustainability.

ALTERNATIVE CAMPUS LANDSCAPES:

 <u>Natural Succession</u> – a "hands-off" approach to the landscape. Designated areas would be left to evolve without direct intervention by people. No external energy would be used to manage or support this landscape, and it could evolve indefinitely with minimum management requirements. Ongoing, indirect human



III. Master Plan Update

impacts such as pollution, hydrologic impacts, introduced seed sources, etc. would be unavoidable. While

being the most "natural" approach to the landscape, this approach would likely not result in a plant community that would meet campus use requirements, meet aesthetic standards, nor meet the desire for a regionally derived natural community. Invasive species could possibly dominate this community for decades.

 Managed Natural Areas – a constructed plant community designed to simulate regionally appropriate, naturally



Figure III-H2: **Natural Succession example** - University of Wisconsin Arboretum.

occurring plant communities such as prairie, savanna, woodlands, and wetlands. For applications within the high-density portion of the built campus, prairie, savanna, and wetland communities are probably not practical because of the requirements for fire in prairies and savannas, and for connectivity to larger systems for wetland communities. Constructed natural areas would require significant time for establishment and development, would require periodic maintenance, possible renewal planting, and (in the case of woodland com-

munities) could be regenerative over time. Successful constructed natural areas are available as models. For example, Jen Jensen's woodland natural area at the Henry Ford Estate at the University of Michigan, Dearborn; the Greene Prairie at the University of Wisconsin-Madison Arboretum; and Beal Plantation at Michigan State University. Significant Managed Natural Areas and Constructed Natural Areas



Figure III-H3: In the late 19th century, the Boneyard area approximated a **Managed Natural Area** - if turf were not used, the area would more closely resemble a Bottomland Forest.

also exist at Indiana University (Bloomington) and Miami University of Ohio.

 Managed Park Landscape – today's campus is of this type. Its fundamental groundcover is turf grass and various patterns and densities of trees, shrubs, and

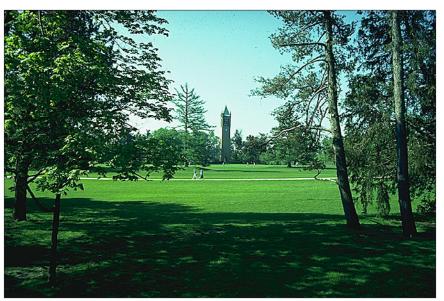


Figure III-H4: **Managed Park Landscape example** - Iowa State University.

groundcover are employed to create a variety of geometric and naturalistic landscape effects. Fossil fuels are imported for mowing grass, though in the 19th century sheep and horse drawn mowing machines were employed in large parks. Leaves are typically collected in this landscape to protect the lawns; therefore, the natural nutrient cycle for trees is interrupted. Within the park landscape, gardens, hedges, and some shrub beds may be added at additional maintenance cost.

• <u>Managed Agricultural Landscape</u> – historically, agricultural demonstration and research areas were within easy walking distance rather than separate from the



Figure III-H5: **Managed Agricultural Landscape example** - UIUC Morrow Plots.

built campus. The Morrow plots and Illini Grove are the only remnants of this landscape type in the core campus today. This type of landscape requires ongoing management but could be operated as a balanced soilplant-animal community that would be sustainable indefinitely with minimal importation of fossil energy. Much of rural England and numerous Amish settlements in the United States are examples of sustainable. managed agricultural landscapes. It is unlikely, however,

that areas of the core campus landscape could be devoted to sustainable agriculture because of possible conflicts of use.

CIVIC SPACES:

The designed civic landscape at the heart of the campus is a significant cultural landscape. Sasaki Associates, Inc. recommends that the character defining features of the Main Quadrangle (and to the extent possible of other campus civic spaces) be protected, rehabilitated as required, and maintained in close accordance with the design principles that guided their original design. These character defining features include the orderly arrangement of trees to define malls and quadrangles, smaller ornamental trees and hedges that frame major buildings and unify the edges of the malls

and quadrangles, and continuous lawns that allow for intensive use and unify the grounds in a way that enhances the spaciousness and clarity of the plan.



Figure III-H6: The **Main Quad** serves the University as an icon or its values and as passive and active recreation space.

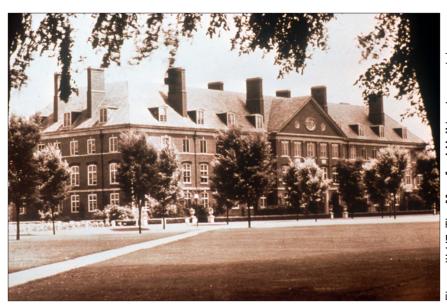


Figure III-H7: The **Mumford Hall** landscape (*circa* 1947) is an example of the regular ordering of canpoy trees, hedges, ornamental trees, and lawn.

III. Master Plan Update

An exception to this recommendation is the "Military Axis" west of the South Quad. In the interest of establishing a more regenerative landscape that requires less human intervention over time and that can serve as a resource for teaching, research, and outreach, we recommend that the Military Axis west of the South Quad be designed as a managed natural area.

The campus civic spaces comprise about 47 acres or 8 percent of the campus landscape north of St. Mary's Rd. Included in these areas are the Main Quadrangle, the South Quadrangle, the Agriculture Quadrangle, the Military Axis, the Centennial Mall, the Bardeen Quadrangle, the Oval Allée, and the Clark St. cross axis. With the exception of the Military Axis, all of these civic spaces were developed during the 20th century. The Main Quadrangle is an historic designed landscape with origins back to 1900 and all of the others have been developed since 1985, even though in some cases their designs go back to the 1910s and 1920s. The Military Axis remains to be completed.

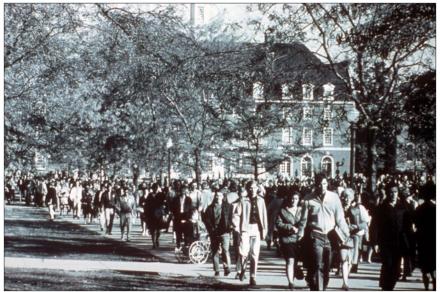


Figure III-H8: Pedestrian circulation has always been a priority function of the **Main-Quadrangle** (*circa* 1966).

The civic spaces serve important functional and aesthetic purposes. Functionally, they are among the principal pedestrian circulation spaces of the campus, they serve as passive and active recreation spaces, and they provide a place for both informal and planned gatherings that reinforce the sense of campus community. Aesthetically, the civic spaces have, since the 1910s and 1920s, sought to foster a feeling of restraint and serenity through the regular ordering of shade trees, hedges,

ornamental trees, and broad lawns. The elegant, unified order of the civic spaces, and in particular the Main Quadrangle, assigns them landmark status and a symbolic value that is important to the definition of the University. The Main Quadrangle is an historic cultural resource that is worthy of protection and maintenance. It is, when taken together with its buildings, a work of fine art unique to this place.

It is, therefore, important that the principles that guided the original Platt and Vitale design for the civic landscape continue to be applied to the existing civic spaces. These include:

- Establishing well defined architectural lines of hedges along the major malls and quadrangles.
- Planting small, native ornamental trees (such as crabapples) between the hedges and the buildings for scale, shade, flower, and silhouette values. In addition to crabapples, noted by Vitale as an appropriate Illinois native, other small native trees may be considered for these locations. Other species may include Redbud (*Cercis canadensis*), American Hornbeam (*Ostrya virginiana*), Witchhazel (*Hamamelis vernalis* and *Hamamelis virginiana*), and Serviceberry (*Amelanchier arborea*).
- The great vistas along the malls and quadrangles should be kept open. The quadrangles should be carefully graded and maintained as lawns.
- "Malls and quadrangles should be planted with longlived, native trees sufficiently diverse to relieve monotony and ensure protection in case of an attack of disease upon a species but not exaggerated at the expense of continuity of form, color, and texture, and of the feeling of restraint and of serenity which is the fundamental conception of our design." (Vitale)

• As less viable plantings are eliminated, replacement

species should be chosen for their ability to endure for long periods to time, to reinforce the historic form and function of the civic spaces, and to reduce the intensity of maintenance. By this action, the civic spaces will become more sustainable.



Figure III-H9: historically, rows of trees defined and enhanced the **Civic Spaces** (*circa* 1938).



Figure III-H10: lines of hedges and trees help define the edges of **Civic Spaces**.



Figure III-H11: small ornamental trees planted between hedges and buildings improve scale and add shade and aesthetic value – historically, crabapples have been used; however, new and replacement plantings might employ small, native trees such as Redbud (*Cercis canadensis*) or American Hornbeam (*Carpinus caroliniana*).



III. Master Plan Update

The application of these principles will not only maintain the visual quality of the civic spaces but will assure that

appropriate open areas will continue to serve gathering and circulation functions in a practical way. Large lawns, while perhaps not as environmentally sustainable without the import of energy and fertilizers as other plantings, have the advantage of providing a low cost, durable, and versatile groundcover that is attractive, accommodates heavy pedestrian use, prevents erosion, and performs reasonably well with respect to reducing runoff and reducing reflected heat. The alternative use of groundcovers, natural grass communities. forest communities or shrubbery in the heaviest used civic spaces of the campus would not satisfy the functional or visual requirements of these spaces. Efforts to reduce the need for imported fertilizers and energy for lawn maintenance should continue to be pursued over time so that the environmental costs of lawn maintenance in the civic spaces can be minimized.

With respect to the species mix of trees, shrubs, and groundcovers within the civic space land-

scape, we recommend that a balance to be struck between species diversity and the need to maintain continuity in the overall composition of the landscape. The feeling of "restraint and serenity," which was a fundamental goal of the original landscape campus plan for its civic spaces, is still a worthy goal today. Echoing the Vitale report, we recommend that the campus civic spaces "be planted with long-lived native trees, sufficiently diversified to relieve the monotony and ensure protection in case of an attack by





14: rows of trees in Civic Spaces provide Figure III-H13: a "feeling of restraint and serenity" was fundamental to the original design intent of the University's Civic Spaces.

disease upon a species, but not exaggerated at the expense of continuity."

For the Military Axis, it is proposed that a new approach to the civic space design be adopted to visually complement the design of the other civic spaces and which is less reliant on the maintenance of turf grass and hedges. It is the University's intent that the landscape areas between the pedestrian walkways along the length of the Military Axis be developed as a managed natural landscape representing the native Illinois landscape inclusive of prairie, savanna. wetland, and woodland communities. The design of this landscape will need to consider security issues, the costs of establishment and maintenance, and its functional and visual compatibility with adjacent campus areas and activities. In the event that the prairie, wetland, and savanna communities cannot be maintained over time in a sustainable way, the Military Axis landscape should be designed as a constructed natural woodland. A woodland plant community



Figure III-H15: the **Military Axis** could be developed as a managed landscape representing the native Illinois landscape inclusive of prairie, savanna, wetland, and woodland communities.

is reasonably assured of success because of its modest maintenance requirements, relative stability once established, and its general compatibility with the activities of a university campus. Unlike grassland communities, which can be subject to rapid invasion by weed species and which require management by fire or mowing to sustain their form, a woodland community, once established, is capable of maintaining and regenerating itself indefinitely with minimum requirements for management

and maintenance. The eventual ground surface within the constructed woodland landscape would consist of natural leaf litter and a herbaceous layer consistent with the canopy community. Campus woodlands have successfully been made part of several peer institutions: The Beal Plantation at Michigan State University, the Muir Woods at the University of Wisconsin-Madison, and Hort Woods at Penn State University.

In developing a managed, native landscape consisting of

prairie, savanna, and woodlands on the Military Axis, an effort should be made to maintain planted areas in large,

uninterrupted blocks to the maximum extent possible. This will simplify maintenance, be visually more coherent than many fragmented pieces, and will reduce grassland edges, which will, in turn, aid in preventing the invasion of exotic species. Care will also need to be exercised regarding the placement of plantings to allow for appropriate security. Concrete paths would line the edges of the space and provide for diagonal cross movements.



Figure III-H16: **Beal Plantation** is a constructed native plant community at Michigan.

INTERSTITIAL SPACES AND COURTYARDS:

In accordance with previous campus design guidelines including the Vitale 1929 Report, we recommend that courtyards and interstitial landscape spaces be places that contrast the civic spaces by being designed with greater va-

riety from area to area, by their more intimate scale, and by offering areas devoted to gardens, seating, shade trees, shrubbery, flowering trees, and works of arts. Residential courtyards, if large enough, may have areas devoted to informal active recreation as well.

These areas offer excellent opportunities to increase the biological diversity of the campus flora, to enhance the habitat value of the landscape, to promote stormwater infiltration through the use of groundcover

Figure III-H17: Janet Weston Fountain Courtyard in the Commerce Quad contrasts campus civic spaces with its intimate scale and more detailed planting.

and mulched shrub beds instead of lawns, to demonstrate natural plant associations through a collection of native

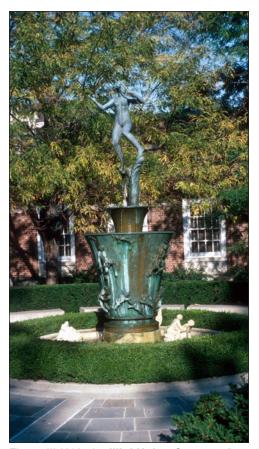


Figure III-H18: the **Illini Union Courtyard** provides seating, shade, and a setting for Carl Milles' "Diana's Fountain."

plants, and to enrich the visual variety of the campus landscape.

Together, the courtyard spaces and interstitial areas of the campus offer the most significant land area (108 acres) within the campus landscape that has the flexibility of use requirements and variety of orientation, exposure, and shade and sun conditions to host a new kind of sustainable landscape suggested by the Landscape Management Subcommittee of the Committee on a Sustainable Campus Environment. The subcommittee proposed a landscape that:

- Reflects the native plant communities of Central Illinois
- Minimizes the need for imported fossil, hydro, or nuclear energy for landscape maintenance
- Has low life-cycle costs
- Provides greater opportunities for teaching, research, and outreach
- Offers a naturalistic aesthetic, based on the patterns of plants found in nature

It is proposed that courtyards and interstitial areas be designed with the following guidelines in mind:

• Accommodate Use: The areas should accommodate the existing or desired uses that the spaces' constituents and

Campus Planning, Construction, and Maintenance determine to be appropriate. Gardens, walkways, sitting areas, informal play space, lawns for sunning or gatherings, fountains, sculpture, trees, shrubs, habitats, research areas, instruction areas, rain gardens for stormwater control, and demonstration areas are among the appropriate uses for these areas.



Figure III-H19: the **Dorner Drive** pond is an opportunity for a more naturalized planting.

• <u>Contrasting Scale and Variety</u>: Courtyards and interstitial areas can be intimate in scale and their plantings

can be more varied and complex to contrast the restraint and simplicity of the civic spaces. The experience of passing from the streets, through the interstitial spaces, to the campus civic spaces offers the possibility for attractive, planned spatial sequences from closed, shaded planted areas to the sunlit openness of the quads. The space between Lincoln Hall and the English Building is an example of this type of experience.



Figure III-H20: native plantings alongside pathways can be used to enhance biodiversity on campus.

• Regional Appropriateness: Where use and circumstances permit, courtyards and interstitial spaces should be designed, to the practical extent possible, with regionally native plants in patterns that mimic the organization and functions of naturally occurring plant communities. In areas where replication of natural community assemblages are not feasible, a garden or park approach may be adopted in which the species used represent the regionally native plants but their organization and composition may be adapted to design requirements such as

security, maintenance, visual transparency, service access, stormwater management, and similar uses. The adaptations may take the form of gardens, plant collections, or parklands with areas of turf grass.

• Fit with Context: Courtyard and interstitial spaces should be designed to properly reflect the scale and organization of adjacent campus buildings. Small gardens that fail to properly relate



Figure III-H21: **Chi Omega Plaza** provides seating and shade in contrast to the Main Quad nearby.

to the public scale and character of the campus should be avoided. Small, unrelated gestures in garden design may have the effect of visually fragmenting the campus landscape; therefore, all designs for courtyards and interstitial spaces should be carefully studied in their relationship to the larger context of adjacent campus buildings, paths, vistas, spatial sequences, spatial hierarchies, and plantings.

The principal native plant community that should serve as the basis for the construction of courtyards and interstitial spaces is the Oak-Hickory forest. Species from the primary canopy, woody associates, understory, and herbaceous layer can be employed. Alternative models to the Oak-Hickory forest may be employed for educational, demonstration, or research purposes; however, these should be studied care-



Figure III-H22: interstitial spaces are opportunities for more diverse plantings.

fully to ensure their success. These may include other forest communities from nearby bioregions such as Floodplain Forest, Maple-Basswood forest, Beech-Maple forest, and the Western Mesophytic forest. It is recommended that prairie and savanna communities that require fire for their proper development and management not be used as plant community models in the courtyards and interstitial spaces. Prairie grasses and forbes may, however, be employed in garden settings.

FRONT YARD LANDSCAPES:

It is recommended that the landscape areas between campus streets and the fronts of street-facing buildings be treated with a simple palette of native street trees, lawns, and native ornamental trees and shrubs similar to the plantings used in the campus civic spaces. The principal objective should be to establish visual unity and continuity along as much of the street frontage of the campus, as feasible, given the great variety of utility lines, utility appurtenances,

service drives, walkways, and other structures that are required in this landscape. The canopy trees should be the primary framework plants and should be arranged to reinforce the spatial order of campus streets.

The front yard landscape areas comprise about 162 acres, or nearly 30 percent of the campus landscape north of St. Mary's Rd. Included in these areas are some of the most attractive and defining landscapes of the campus, such as the President's Walk along University Ave. and the Alma Mater landscape at the southeast corner of Wright St. and Green St. These areas serve the important functions of accommodating pedestrian circulation along the edges and in-and-out of the campus. They also serve the function of creating a visual impression of the campus as seen from all of the



Figure III-H23: the **President's Walk** along University Ave. displays the traditional combination of canopy trees, ornamental trees, and hedges to dramatic effect.

streets that serve it. Some of these spaces achieve landmark status. Used by thousands of people daily, the front

yards along the streets of the campus are significant outdoor spaces.

The front yard spaces should be designed, where possible, to include rows of street trees that reinforce and spatially define the edges of the street corridor and create a frame through which campus interior areas and buildings may be viewed. Canopy trees will help reduce reflected heat from street and walk pavements and stabilize soils in the front yard areas.

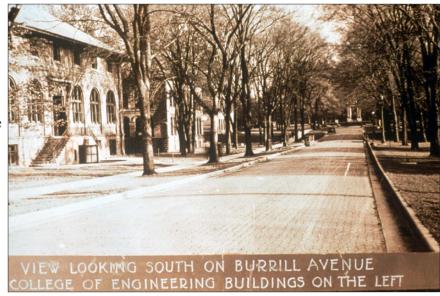


Figure III-H24: **Burrill Avenue** (*circa* 1920) is anothe example of the unifying effects of long lines of trees

In the past, yew hedges have been used along the major edges of the campus; however, recently there has been a trend towards removing the hedges to reduce maintenance

Figure III-H25: where existing conditions dictate, informal arrangements may be used in front yard landscapes.

costs. We recommended that the hedges along University Ave., Green St., Wright St., and Matthews Ave. be retained to define the core academic area and only be removed in other areas if absolutely necessary for cost reasons. From a design and placemaking perspective, the hedges are a very desirable feature of the front yard landscape. This was recognized by Sasaki in the 1964 landscape guidelines in which it was proposed that the front yards of the campus should be designed with a hedge close to the street and lawn

between the hedge and building with appropriately sized trees be planted in the lawn. Hedges and fences were used extensively throughout the 19th and early 20th centuries at many campuses across the United States to bring clear

definition to campuses as distinct and special places devoted to education. Combined with numerous pedestrian gateways, the hedges enhance the experience of entering the campus and improve the overall definition of the landscape. Their long lines of continuity echo and reinforce the overall geometric order of streets, paths, and architecture that characterize the dominant order of the campus.

In many locations where rows of street trees and hedges are not possible or practical because of utilities, pavements,

or space limitations, it would be desirable to create a tree canopy with an informal arrangement of trees such as the



Figure III-H26: **Alma Mater Plaza** at the corner of Wright St. and Green St. combines hedges and trees with sculpture to create a campus landmark.

tree plantings surrounding the Armory.

Trees, whether arranged in rows or informally, should be regionally native species and composed in groups of the same or very similar species to create visually unified effect along a given block or several blocks of front yard landscape. Only where large setbacks allow for extensive informal groves of trees should heterogeneous plantings of visually diverse species be employed, for example, at the Ubben Basketball Complex. In a heavily populated, manmade landscape such as the UIUC campus in which buildings and pavements are visually dominant and where the landscape is constantly under threat of further fragmentation, it is important that visual unity be promoted at every opportunity. This includes the careful selection and grouping of tree species whose overall effect will be one of harmony and continuity rather than visual fragmentation and divergence, as noted in the section on civic spaces.

There may also be opportunities to replace lawn areas in front yard landscapes with beds of groundcover. This could reduce the need for lawn mowing and the use of fossil fuels, but could be more costly in labor.



Figure III-H27: **Green Street** (circa 1905) shows the definition and continuity that long lines of trees can bring to front yard landscapes.



Figure III-H28: **Ubben Basketball Complex** would benefit from an informal grove planting.



Figure III-H29: streets, such as **Goodwin Avenue**, that define the Core Academic Area should retain the traditional composition of canopy trees, hedges, and ornamental trees.

III. Master Plan Update

OTHER LANDSCAPES:

In addition to the outdoor living spaces of the campus (civic spaces, courtyards, interstitial spaces, and front yards), there are other more specialized landscapes that comprise about 45 percent of the total landscape area. These include parking lots, service areas, play fields, groves, and plots and groves. The character of each of these landscape types is largely determined by its use requirements: parking and service areas must be almost completely paved; play fields

and recreation areas must be either paved for tennis and court games or kept in turf or artificial turf for field sports; and plots and groves serve educational and research purposes.

Surface parking lots and service areas should be screened with evergreen or densely branched deciduous shrubs and shade trees should be included in the lots and/or at the lot edges to reduce the heat absorption and reflection from the pavement. To the extent practical, concrete pavers on a granular base should be employed to promote stormwater infiltration during those times of year when the ground is not frozen. Likewise, where possible, surface drainage from paved areas should be directed to lawns and planted areas such as rain gardens prior to discharge into piped structures. Drainage from play fields and recreation surfaces should be treated similarly where possible. The edges of play fields and recreation areas should also employ trees to the extent that they can contribute spatial definition and shade without interfering with the sun requirements of the recreation fields or courts.

The Illini Grove and the Morrow Plots should be protected as historic research areas. The Illini Grove should be studied and rejuvenated to support current teaching and research activities.

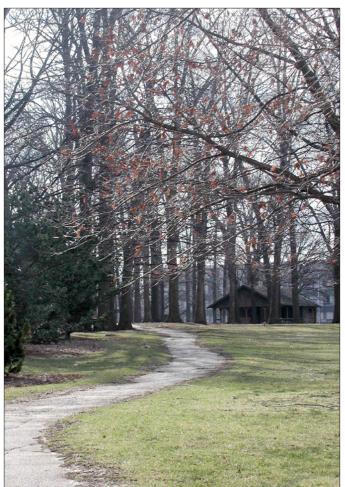


Figure III-H30: the **Illini Grove** is a protected historic area that could be studied and rejuvenated for research and teaching purposes.

CAMPUS ART:

Sasaki Associates, Inc. recommends that a campus art committee be established to determine the type and placement of art on campus. This recommendation recognizes that guidelines are inadequate to determine a positive outcome in the display of works of art on the campus and that skilled judgment must accompany every decision. We recommend that the committee membership include the campus land-scape architect, the director of the Krannert Art Museum, faculty member(s) from the College of Fine and Applied Arts, a representative from University Development, a representative from the Provost's office, and others as deemed appropriate.

The committee's charge should be to prepare a complete inventory and recording of existing art on campus, the responsibility for approving and selecting all public artworks for the campus, and for assuring that campus art is supportive of the community's intellectual and cultural vitality.

We recommend that campus art be of the highest quality, be diverse in its type and media, and that all works of art be carefully integrated with their surroundings. With respect to integrating art into the campus, the committee should also recognize that the campus buildings and landscape at their best can be works of fine arts and are not simply settings for other works. Proper care should be demonstrated to understand and maintain the integrity of those buildings and landscapes that are in themselves art.

Issues to Study Further

While the following proposals fall outside the original Master Plan Update scope and budget, it is recommended that a greater understanding of the issues contributing to the success of a more sustainable and educational campus landscape be evaluated in more detail. These areas include:

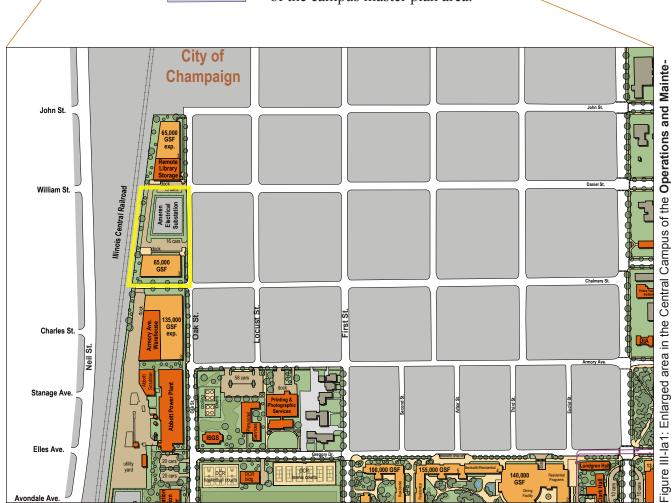
- Determine how to best enforce design guidelines and control damaging disturbances of campus landscapes
- Develop a stormwater plan to address management of water quantity and quality
- Develop a palette of appropriate campus plant materials for use in future campus landscape construction projects (this list shall link each species with its consummate soil types and environmental conditions as well as the natural species associations to promote a more sustainable landscape implementation)
- Develop a campus landscape endowment to provide funding that promotes protection, rejuvenation, creation, and maintenance of valued campus landscape spaces

I. Additional Planning Updates/Opportunities

Prepared January 2007 by the University of Illinois.

a. Operations and Maintenance Zone Land Addition

When the Remote Library Storage building was developed (in the block bounded by John St. to the north, Oak St. to the east, Daniels St. to the south, and the Illinois Central Railroad to the west), that site was noncontiguous with the rest of the master plan boundaries. In order to offer future expansion for operations and maintenance facilities, we recommend the block between current campus master plan boundaries (bounded by Daniels St. to the north, Oak St. to the east, Chalmers St. to the south, and the Illinois Central Railroad to the west) be added to the campus master plan (see Figure III-Ia1). This (roughly) 2.75 acres addition will also connect the Remote Library Storage site with the rest of the campus master plan area.



III. Master Plan Update

location

keymap

iance Zone Land Addition (outlined in yellow)

Current City of Champaign zoning (see Figure III-Ia2) for the properties within this block is 'I1 - Light Industrial' (for the land where the Ameren Electrical Substation resides) and 'MF3 - Multifamily High Density / Limited Business' (for the rest of the block); however, most of the existing buildings within this block are single family residence rental properties. Rental demand for the facilities in this block is assumed to be good given the relatively close proximity to the Main Campus but also somewhat marginalized being located along the railroad tracks and next to an electrical substation. Even so, the demand from this small pool of rental units will be easily absorbed within the University area market.

Currently, there is no immediate program need requiring the use of this area; therefore, the intent for acquiring these properties is over time as each one becomes available for sale. However, if an immediate program need is established that requires the use of this block, acquisition of these properties will need to be more active. Once the University owns all the parcels (excluding the Ameren Electrical Substation), it should pursue the vacation of city streets in the University-owned blocks to allow for more flexibility with future site development(s).



Figure III-la2: Enlarged area in the Central Campus of the **City of Champaign Official Zoning Map** (City of Champaign, 2006).

SF1 Single Family

SF2 Two Family

b. Champaign Residence Halls

The Champaign Residence Halls project will support the UIUC Housing Division's mission to enrich academic development and student diversity with the creation of a new residential neighborhood for the first and second year students at the University of Illinois. The plan is a multiphased, multi-year redevelopment of the "six-pack" block (bounded by Gregory Dr. to the north, Fourth St. to the east, Peabody Dr. to the south, and First St. to the west) into a residential quadrangle that will accommodate a new dining facility and nine (9) new residence halls. Throughout its phases, this neighborhood will continue to house the current population of more than 3,570 students as it updates the facilities' student life amenities.

A planning study (by Mackey Mitchell Associates) was created in early 2005 to answer early questions about the feasibility and options of this redevelopment. The objectives of this study were to: 1) determine appropriate standards for residential construction; 2) determine the best value in terms of cost and end product; 3) analyze and accommodate constraints that will affect redevelopment; 4) verify results and conclusions; and 5) determine a plan that provides the best long-term solution for the University. The preferred plan option resulting from this study is shown in Figure III-Ib1.



Figure III-Ib1: Enlarged area in the Central Campus of the **Champaign Residence Halls Redevelopment** study area Markey Mitchell Associates 2005)

III. Master Plan Update

Using Mackey Mitchell's long-range plan and feasibility study as a basis, a new master plan was developed (by Booth Hansen) for the Champaign Residence Halls during the phase one – the Student Dining and Residential Programs (SDRP) building – design of this project. Several factors have changed since the initial study of this multi-year demolition and construction project but the key goals are as follows: 1) develop a multi-phase, multi-year plan to build a new residence hall community replacing 3,570 beds currently provided by the "six-pack" community without

significant increase or decrease from that total: 2) ensure that no phase of this plan decreases the entire community total by more than fifty beds; 3) ensure construction in close proximity to many existing residence halls maintains appropriate setbacks of 40' minimum: 4) relocate all on-site parking within the neighborhood; 5) maintain Euclid

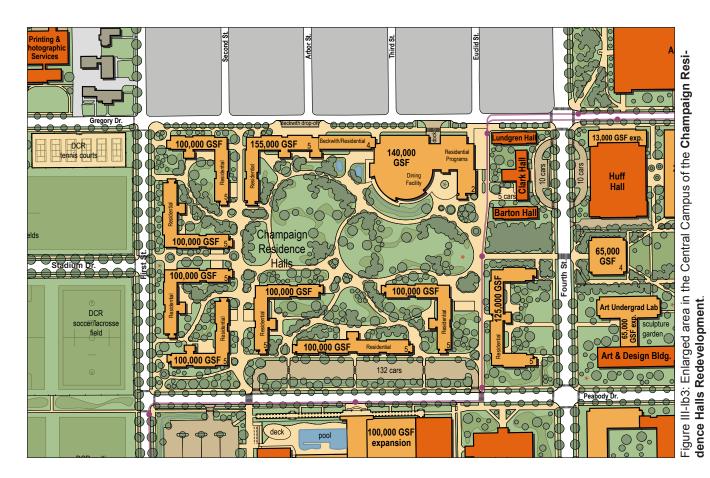


Figure III-lb2: Enlarged area in the Central Campus of the **Champaign Residence Halls Redevelopment** plan (Booth Hansen, 2006) overlaying the existing buildings shown with dashed lines.

St. as a means of service, utility, and fire safety access, as well as future light rail use; and 6) replace current dining facilities (Peabody and Gregory Halls) with the new Student Dining and Residential Programs building, and demolish those facilities when the SDRP is functional.

This new plan (shown in Figure III-Ib2 and III-Ib3), approved by the University of Illinois Board of Trustees in May of 2006, creates a new quad open space for residential life, establishes a visual and pedestrian link to the east-west Military Axis, and promotes a more naturalized landscape setting with meandering trails to frequented destinations such as the Intramural Physical Education building south of the site. The new quad provides a large outdoor space for

interaction between residence hall communities and smaller, more formal landscapes for intimate group interaction. All phases are anticipated to be completed within a 14-16 year period if construction/demolition occurs continuously without funding or calendar adjustments.



c. Lot E14 Parking Structure

A central campus parking structure development project (in the block bounded by Chalmers St. to the north, Sixth St. to the east, Armory Ave. to the south, and Fifth St. to the west) was abandoned a few years back as the University planners determined that an additional parking facility so close to the core of campus would exacerbate existing conflicts (discussed in Section III-B, Campus Area Transportation) between automobiles and other modes of travel in the Main Campus. Therefore, University planners propose to develop an automobile parking structure at the south end of the surface parking lot directly west of the Assembly Hall,

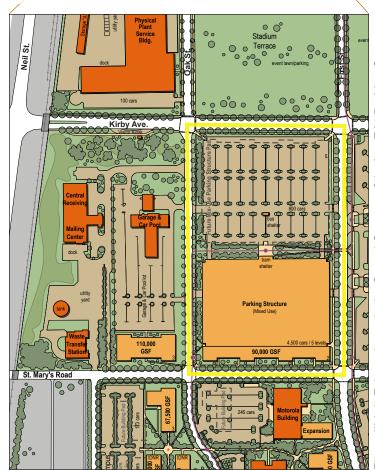
which is at the edge of campus adjacent to a main arterial roadway for the community.

This surface parking lot, known in Campus Parking nomenclature as the E14 lot, captures quite a bit of campus-bound traffic before it can get to the Main Campus. The E14 parking lot is utilized heavily for events at Assembly Hall and Memorial Stadium in addition to being utilized as a remote parking facility for University employees, students, and visitors. Parkers at E14 are shuttled throughout campus via buses that serve the entire Main Campus as well as the Research Park just south of E14.

With the assistance of parking structure consultants (Desman Associates), the University of Illinois is currently looking at the feasibility of developing a large parking facility (about 4,000-5,000 spaces) in the south half of the E14 parking lot (shown in Figure III-Ic1). University planners anticipate this will ease the demands on parking from Main Campus, the Research Park, and the many events to occur in Assembly Hall, Memorial Stadium, the future Confer-

ence Center, and the Athletics Campus. The structure's design will incorporate multimodal transit facilities so an automobile driver could park and easily change travel modes to pedestrian, bicycle, and/or mass transit (bus or future fixed guideway) to get to their desired destination. For the foreseeable future, the north half of the E14 surface lot will continue as a surface parking lot to 1) remain a parking asset during the construction of the parking structure on the south half; 2) remain a ground-level, pre-game activity space for athletic events; and 3) be a site for a future parking structure expansion.

The feasibility study is also studying the viability of mixed uses in the proposed parking structure to more efficiently offset the debt service for its construction. The other-than-parking uses envisioned in this facility are office and/or retail space related to campus needs that do not compete with but rather complement the office and retail developments of the Research Park.



location

keymap

Figure III-lc1: Enlarged area in the Central Campus of the **Lot E14 Parking Structure** (Lot E14 outlined in yellow).

d. College of Veterinary Medicine Campus

The College of Veterinary Medicine (Vet Med) worked with professional services consultants (CUH2A) to de-

ST. MARY'S ROAD

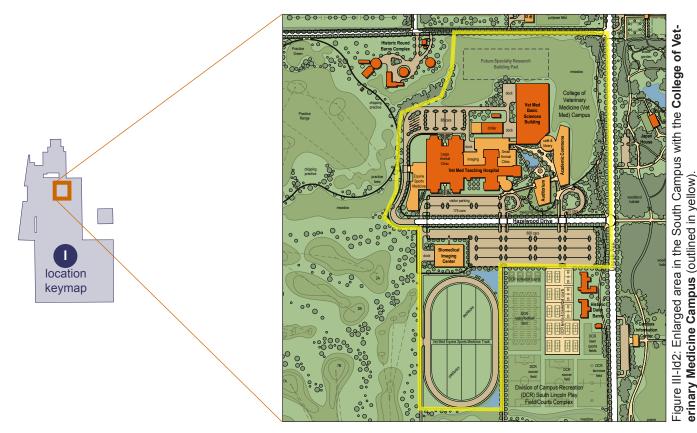
Future Specialty Research

Medicinal Plant Garden

Future Beckman Biomedical Imaging Center

Figure III-Id1: Enlarged area in the South Campus of the **College of Veterinary Medicine Campus** visiionary facilities expansion plan (CUH2A, 2005).

velop an visionary facilities expansion plan for their current facilities in the Vet Med Campus (shown in Figure III-Id1). This plan accommodates Vet Med program growth and easier access for public outreach; however, requires some southward growth of their current land allotment to provide space for staff/student parking as well as new equine research facilities. This plan, when integrated into the campus master plan, required only slight modifications to take into account adjacent program needs. We recommend the resulting Vet Med plan (shown in Figure III-Id2) for adoption into the campus master plan.



III. Master Plan Update

e. Campus Recreation Facilities

Over the years, University of Illinois student playfields and courts have been lost to academic program infill. As the current Dairy Research facilities relocate into the South Campus, the opportunity exists to develop these lost recreation facilities in the area (shown in Figure III-Ie1) south of the proposed Vet Med automobile parking lot and north of the future ACES Arena automobile parking lot. The adjacent parking lots on the north and south sides of these playfields would provide automobile access for students to these recreation facilities during evenings and weekends

when those lots are not needed by Vet Med and the ACES Arena. An existing bicycle path along Lincoln Ave. will also provide access to the facilities for students.

We also recommend the historic Dairy Barns on the northeast corner of this site be preserved and adapted into Division of Recreation storage and lockers/restrooms with adjacent bicycle parking.

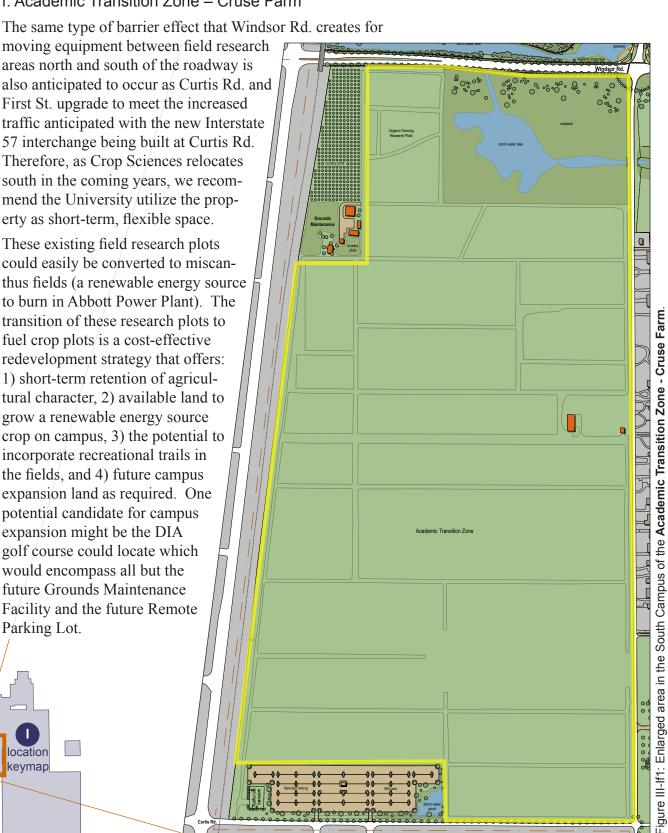


location

keymap

III-le1: Enlarged area in the South Campus of proposed Campus Recreation Facilities (playfields and courts area outlined in yellow)

f. Academic Transition Zone - Cruse Farm



III. Master Plan Update

g. Grounds Maintenance Facility

The University of Illinois nursery plots are currently located in the future Arboretum, which will eventually require relocation as the Arboretum develops. UIUC Facilities and Services identified the area located in the northeast corner of Cruse Farm Academic Transition Zone as an ideal location for their Grounds Maintenance Facility. UIUC Facilities and Services can utilize the existing Cruse Farm buildings for the grounds equipment storage/maintenance and access the site

Per Command Picts

Grounds

Gr

Figure III-1g1: Enlarged area in the South Campus of the **Grounds Maintenance Facility** (area outlined in yellow).

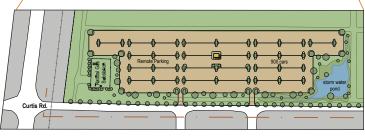
through the existing farm lanes in the Cruse Farm.

Given this site's adjacency to the Natural Resources and Environmental Sciences (NRES) certified organic vegetable research plots, Grounds will need to safeguard against chemical overspray or runoff from the Grounds Nursery Plots while the organic plots remain in the area. However, these organic plots are planned to be relocated to the NRES land plots at the southwest corner of Windsor Rd. and Race St. once organic plots can be certified in the new location.

h. Remote Parking Lot

The current Remote Parking Lot is the surface parking lot west of Assembly Hall, known in Campus Parking nomenclature as the E14 lot. Faculty, staff, and students can opt to park there and take a shuttle to Main Campus for a lower cost than parking at a lot or structure in the Main Campus. However, given new developments adjacent to the E14 lot as well as the proposed parking structure at the site, increased parking demands on the E14 site make it less and less viable as a lower cost parking option. Therefore, University planners propose the development of a shuttled

remote parking lot along Curtis Rd. that would capture campus-bound traffic coming from southwest of campus as well as the new Interstate 57 interchange to be built at Curtis Rd. Current community bus routes already serve the apartments along the south side of Curtis Rd in this location



location keymap

Figure III-lh1: Remote Parking Lot.

Figure III-li1: Enlarged area in the South Campus of the College of ACES Welcome Center (area outlined in yellow).

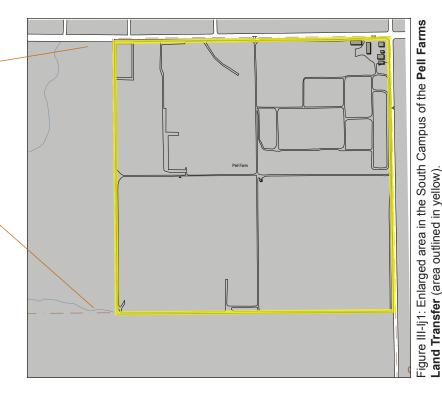
location keymap

i. College of ACES Welcome Center

The University of Illinois College of Agricultural, Consumer, and Environmental Sciences (ACES) propose to develop a campus gateway facility (Welcome Center) at the southwest corner of Windsor Rd. and Race St. to inform the public about current research and activities at ACES. The location is a campus entry point with a visible ACES presence and would be across the Race St. from a community retirement village potentially offering a supply of seniors who wish to volunteer their time to the facility. The Welcome Center is envisioned to portray a farmstead theme; therefore, it is a potential site to relocate any farm houses, barns, and/or other outbuildings from the Main Campus.

j. Pell Farms Land Transfer

A previous University of Illinois Board of Trustees action authorized transfer of the University-owned Pell Farm (Natural Resources and Environmental Sciences' Pomology Research) to the University of Illinois Foundation so the Foundation could exchange that land for like-valued, University of Illinois Foundation-owned properties in the South Campus. We recommend removing this parcel of land from the Campus Master Plan Boundaries.



k. Illinois Fire Service Institute

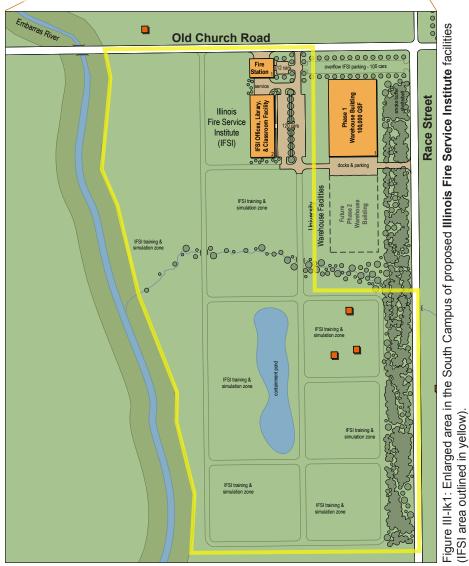
The Illinois Fire Service Institute (IFSI) will relocate all facilities (training, classroom, office, library, etc.) and operations from its current location in the Research Park to a remote South Campus location – the southwest corner of Race St. and Old Church Rd. With the Illinois Fire Service Institute's growing space requirements and the potential for future conflicts between the training operations for IFSI and day-to-day Research Park use, relocating IFSI to a more remote location is recommended.

In IFSI's future South Campus location, the Institute will have the benefit of housing all of its training facilities and resources at one site. In addition, the remote location buffers adverse impacts to non-University properties from its

burn site, which will afford greater flexibility for training exercises than the current site does. This flexibility is greatly extended the variety and amount of space available for different types of training and simulations

The western half of the site. roughly following the shoreline of the Embarras River, is within the 100-year flood line, which will limit the construction of any permanent structures or types of exercises that requires containment of any materials utilized for training.

A fifty-feet wide, naturalized shelterbelt of vegetation along the Race St. edge of the site is recommended to reduce the amount smoke drift from the site.



kevmap

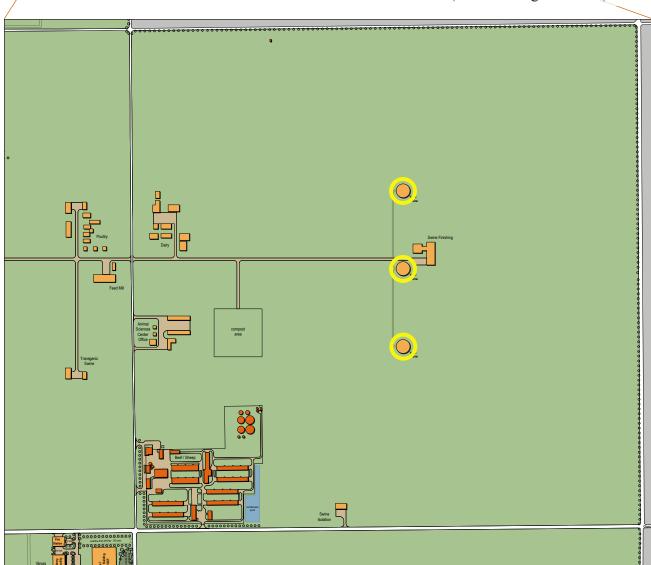
III. Master Plan Update

I. Wind Turbines

location

keymap

The University of Illinois recently studied the feasibility of building some wind turbines in the South Campus to provide electricity as a renewable energy source. This study analyzed locations for 1) the ability to connect to the University utility grid and 2) the best wind flow. The block bounded by Curtis Rd. to the north, Philo Rd. to the east, Old Church Rd. to the south, and Race St. to the west is able to meet that criteria. If the University pursues the development of wind turbines on campus, we recommend that three sites be chosen in that block that can utilize the farm lanes and utilities infrastructure in place to serve the College of Agricultural, Consumer, and Environmental Sciences field research stations (shown in Figure III-II1).



III. Master Plan Update

Figure III-II1: Enlarged area in the South Campus of proposed **Wind Turbines** (each site outlined in yellow).

m. Design Guidelines Update

During the course of developing the Campus Master Plan Update, the language in the Design Guidelines (a companion set of design standards meant to guide the build-out of the master plan through suggestions on the use of materials, building form, and similar components affecting campus image) required editing. Most of the edits address sustainability and accessibility issues in addition to updating the images and explanations used to clarify the intent. Section IV of this report contains the updated Design Guidelines.

IV. Design Guidelines Update

Revised November 2006 by University of Illinois from earlier versions based on the original *Design Guidelines* created April 1986 by Sasaki Associates, Inc. (Watertown, MA) for the *North Campus Master Plan*.

Introduction

The University of Illinois at Urbana-Champaign (UIUC) Design Guidelines is a companion set of performance criteria to the Master Plan. Whereas the role of the Master Plan is to provide a framework for open space, circulation, use relationships, and building placement, the role of the Design Guidelines is to assure that specific designs implemented within the Master Plan framework will be of consistent high quality. These guidelines are not intended to be so constraining as to stifle analysis and judgment or to predicate design solutions; however, they should not be interpreted so loosely as to permit entirely different initiatives and/or conceptual directions.



Figure IV-1: Oblique aerial view (Land Slides, 2000) of UIUC from the northern edge of campus along University Ave. looking south to the horizon across the acdemic core and the agricultural field research plots.

Design Guidelines Purpose

To provide Professional Services Consultants with planning and design direction for campus facilities (all buildings, sites, and built/natural elements within the physical campus environment). The guidelines seek to enhance campus unity and provide a campus aesthetic that appropriately reflects the prestige and enduring qualities of the University.

The intent of the *Design Guidelines* is to achieve a balance between the guidelines set forth and the judgments that must be exercised at each phase of plan development so the campus is built as an integrated whole and over an extended period of time. Since the UIUC Campus already has a number of development standards ranging from broadly stated campus design traditions to specific design details in the *UIUC Facilities Standards* (located at *www.fs.uiuc.edu*), these guidelines are intended to supplement, rather than supersede, any existing standards.

On every new project, the University of Illinois is committed to further enhancing the campus environment through:

- <u>Design Excellence</u> All new UIUC facilities must project an aesthetic identity and uniqueness appropriate to its function while also integrating into the overall *Master Plan* framework.
- <u>Universal Design</u> All new UIUC facilities must create an equal access campus environment with a well integrated design that fosters pedestrian travel, the predominant mode in and around campus. Prior to codification in the Americans with Disabilities Act, UIUC was one of the leaders offering accessible design environments and intends to continue to lead in this effort.
- <u>Sustainability</u> All new UIUC facilities must be designed to promote the most environmentally and financially responsible construction, maintenance, and use. Therefore, all buildings, major additions, and site developments will meet a minimum Leadership in Energy and Environmental Design (LEED) Silver rating regardless of whether the University decides to pursue certification. The goal on each project, however, must always be to reach for the highest ratings possible.

<u>Technical Innovation</u> – As appropriate, all new UIUC facilities must, through carefully and aesthetically considered design, incorporate technologies that might

supersede the *Design Guidelines* (*e.g.* using "green" roofs or photovoltaics in lieu of a predominantly "pitched" roof).

During projects' planning and design phases, the greatest impact on the above commitments can be achieved at the lowest cost. Thus, the guidelines provide essential visionary direction as construction codes, standards, strategies, and technologies evolve.



Figure IV-2: Architect's rendering (Cesar Pelli & Associates, LLP, 2003) of the Business Instructional Facility, which is anticipated to be a LEEDs gold certified building.

IV. Design Guidelines Update

Administration of the Guidelines

Three different types of University groups with varying responsibilities and involvement will oversee facility project designs in consideration of the *Design Guidelines*:

Manage...

- <u>Facilities and Services</u> (F&S) This campus unit is responsible for managing capital facility project planning, design, construction, and maintenance. The Director of the F&S Planning Division will approve any deviations from the *UIUC Facilities Standards* and/or *Design Guidelines* on projects.
- <u>University Office for Facilities Planning and Programs</u> (UOFP&P) This university administration unit is responsible for coordinating and overseeing capital related processes at all the campuses of the University of Illinois. UOFP&P is responsible for campus master plans, design guidelines, and review of capital facility project designs that require Board of Trustees approval.

Review...

• <u>Chancellor's Design Advisory Committee</u> (CDAC) – This committee reviews the designs of various campus buildings, site developments, and environmental art works being planned. Committee members are faculty from the UIUC campus units of the School of Architecture, the School of Art and Design, the College of Engineering, the Krannert Center for Performing Arts, the Department of Landscape Architecture, the Department of Natural Resources and Environmental Sciences, and the Department of Urban and Regional Planning. Meetings occur, on average, every month and the Director of the F&S Planning Division coordinates the agenda.

Approve...

• <u>Board of Trustees of the University of Illinois</u> (BOT) – The Board approves the design of any new facility, major addition, remodel, or site development significant enough to visually impact the character of campus. Meetings occur, on average, every few months and UOFP&P coordinates design presentations requiring BOT approval.

Note:

The design of any project with a visual impact on the character of campus must be coordinated with the F&S Director of Planning. As deemed appropriate, any project or its unique design element/quality may be reviewed by CDAC.

The F&S Director of Planning and/or appropriate project review committee will review any design elements not covered by or are deviations from the *UIUC Facilities Standards* before the project can proceed with the new design.

Building Design Guidelines

Unity between Old and New

The basic goal of any new building must be to contribute to the overall visual unity in deference to its individual expression. Central to the idea of achieving a unified design for the UIUC Campus is the need to develop clear ties between new (or expanded) and existing facilities. These ties should be both visual and functional. Visual ties involve building form, which can be defined in fundamental aspects of size, shape, color, texture, directionality, and location. Facilities possessing similar aspects of form will be perceived as a unified group. The more aspects that are similar, the greater sense of unity there will be.

No one aspect of form is responsible for visual unity; rather, a combination of factors unique to each situation will result in a compatible composition. For example, the

Commerce Courtyard (south of the Main Library) is a group of four buildings – three of which are nearly identical in all aspects of form (David Kinley Hall, Wohler's Hall, & Architecture) and a fourth (Survey Building) that is much smaller in size. The Survey Building compensates for its small size because it shares sufficient similarity of color, texture, shape, alignment, and proximity with the three dominant buildings.

The Main Quadrangle is another example where the aspects of shared building size, location, and alignment around the quadrangle space exert a unifying influence in spite of considerable differences in color, texture, and building shape. The Foreign Languages Building (the flat roofed building in the right-hand side of Figure IV-3), however,



Figure IV-3: Oblique aerial view (Land Slides, 2000) of the Main Quad looking northward

has a strongly divergent shape (narrow base, broad top) and texture (overall grain of detail, window, and solid area) and becomes a disharmonious element. It should also be noted here that, while this example discusses building elements to make this point, the unifying influence of landscape (spatial hierarchy, plants, paths, and topography) contributes significantly to the success of the Main Quadrangle.

These examples illustrate that while the aspects of building form are interactive, some play a more important role than others in coalescing the campus together. Accordingly, primary attention should be given to building location, size, and directionality (alignment and proportion). All campus facilities (all buildings, sites, and built/natural elements within the physical campus environment) play an important role in this campus-wide connection between old and new.

Successful principles used in the achievement of unity in existing, traditional campus facilities can provide guidance for the development new (or expanded) buildings. Some of these observations and principles are listed below.

- Overall building proportions tend to be horizontal.
- Roofs are used as unifying elements. They often include chimneys (Mumford Hall), vents (Noyes Laboratory), or towers (English Building) to enliven the profile and character of the roof.
- Buildings are generally organized into three clearly defined parts: base, middle, and top.
- Walls are generally regular planes and read as solid walls rather than curtain walls.
- Walls are frequently subdivided into interesting and carefully composed patterns created by the rhythmic repetition of doors, windows, cornices, dormers, changes in material, and subtle layering.
- Compositional emphasis is often assigned to the main and secondary entrances.
- Windows are "punched" and usually have white or light colored frames. Windows are often grouped together to form larger visual units that relate well to the overall scale of large façades.
- Façade materials are typically brick with stone accents.

Building Location

Building locations should conform to master plan setback lines (see Figure IV-4 as an example) intended to complement and develop unity among existing buildings via common directionality and location. Keeping buildings (except the Beckman Institute or the Main Library) off street axes will also limit the size of buildings to a one block area. Aligning buildings also helps to clearly define open spaces.

Building Size

Recognizing that some diversity enriches the visual environment and humanizes the scale of the surroundings, building size should be controlled to maintain a common scale relationship between existing and proposed (or expanded) buildings. Building height should, typically, be three to five stories (or 40-60 feet) with the level of details appropriate to the scale of human experience. Only special architectural elements in key landmark locations should exceed this limit. Examples of such elements are the Beckman Institute entrance tower and the Illini Union cupola along the North-South Axis of the Main Campus.

Façade Proportion

Directional aspects of campus buildings include building alignment as well as façade proportion and expression. All new (or expanded) buildings should align with the street grid, be essentially horizontal in proportion, and exhibit a horizontal façade expression. Most campus buildings con to this rule but Turner Hall, Coordinated Science Laboratory (CSL), and the Psychology Building are conspicuous exceptions. Turner Hall is horizontal in overall proportion but the vertical striping of the façade makes it appear more vertical in expression while Psychology and CSL are vertical in both proportion and expression.

Building Shape, Color, and Texture

Secondary aspects of form (such as shape, color, and texture) should also be compatible with traditional campus design standards. General building shape should be rectangular or square; although, "focus" buildings (such as the ACES Library, shown in Figure IV-5, or Assembly Hall) can successfully depart from this convention.

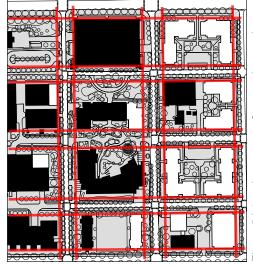


Figure IV-4: enlargement of a sample area in the North Campus of the Campus Master Plan Update showing the overlay of setback lines.



Figure IV-5: View from the South Quad (UOFP&P 2001) looking south-eastward to the ACES Library, which is the terminus of the Military Axis.



Figure IV-6: Oblique aerial view (Land Slides, 2000) of the South Quad area, buildings shown from image bottom to top: Education Building, Temple Hoyne Buell Hall, and the Ag Engineering Sciences Building.

Many traditional campus buildings from the early 20th century are in the neo-Georgian style. The details of this style (strong base, stone cornices, brick exteriors, pitched roofs, dormers, chimneys, entrance columns, and regularly spaced, double-sash windows with mullions) create an overall building texture and color pattern that is generally restrained but lively in character. The walls are regular and continuous (not sculpted) and the degree of transparency is relatively high; therefore, walls do not appear blank and impassive. These guidelines do not suggest that the neo-Georgian style be readopted but recommend that new buildings be designed to achieve aspects of the style that have become ingrained in the UIUC architectural venacular: regularity, transparency, color pattern, and lively character.

For example, many recent campus buildings are not neo-Georgian (*e.g.* Micro and Nanotechnology Laboratory, Siebel Center, and Business Instructional Facility), yet are compatible with the style because they share basic textural, color, and shape characteristics. The Freer Hall addition is a good example of compatibility between old and new architecture. Several less successful examples are the Materials Research Laboratory in which small windows create a solid, uninviting façade or the Advanced Computation Building whose massive monumentality is overpowering.

Transparency

A number of campus buildings possess a transparency that helps increase awareness and feelings of involvement in the overall collegiate setting. The large bay windows on the south side of the Illini Union, the open atrium of Temple Hovne Buell Hall (seen in Figure IV-6), and the glazed stair towers of the Ag Engineering Sciences Building are good examples of how the greater campus can be experienced from within the buildings. Solid walls, particularly at ground level, tend to emphasize boundaries and separation that undermines the notion of the campus as a public place. New buildings on campus should be designed as public buildings with a level of transparency (as appropriate) that encourages a visual fusion of indoor and outdoor spaces. Exterior building walls should be considered both as a means of containing and defining interior space as well as an element centrally involved in the broader goal of defining and connecting the campus environment as a whole.

IV. Design Guidelines Update

Specific Building Types

- Bridges and Tunnels should be employed only to improve functional links between facilities because they often diminish the sense of liveliness and security at the ground level. Therefore, bridges between buildings must be designed to maintain the same sense of connection that a ground-level open axis provides. The bridge at the Chemical and Life Sciences Building (see Figure IV-7) is a good example because it acts as an important gateway between the exterior elements on either side of it without creating dead space underneath. Views through it are carefully framed to maintain a sense of open passage that preserves the importance of its axial terminus, prominent vantage points, and landmarks.
- Parking Garages are a unique building type that require contextual design intervention to mitigate the typically austere appearance. Large blank walls and continuous strip windows should be avoided in favor of fenestration patterns more closely resembling inhabited buildings (as shown in Figure IV-8). Devices such as louvers or screens can be employed to make the façade surface more regular. Where possible, the first floor level of parking garages should be designed for human occupancy uses (such as retail, office, or service functions that will maintain activity at the ground level).



Figure IV-7: View from Mathews Ave. (UOFP&P, 2001) looking eastward along the walkway and under the Chemical and Life Sciences Building bridge.

Building Design Principles

In order for new facilities to blend into the campus surrounds as seamlessly as possible, building design for developing (both expanding and infill) areas of campus must complement building design on more established areas of the campus. It is the intent of these guidelines to ensure an architectural expression compatible with the main body of the UIUC campus without unduly restricting the creativity of designers. They have been crafted to avoid imposing unrealistic constraints that could result in excessive costs per square foot of construction.

• Massing – In order to preserve the build-out capacity of campus, buildings must be no less than three stories above grade. Higher buildings are permitted, but the height must demonstrate sensitivity to adjacent and nearby buildings.

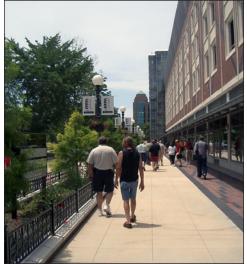


Figure IV-8: View along the retail corridor of the North Campus Parking Deck (UOFP&P, 2006) looking westward toward the Beckman Institute

IV. Design Guidelines Update



Figure IV-9: View of the Grainger Engineering Library (F&S, 2006) mechanical canyon.

• Roofs – At least 80% of the structure must have a roof of a pitch of no less than 6 in 12. Some elements (exterior stairwells and mechanical spaces) may have flat roofs. Pitched parapets that give a flat roof the appearance of a 6 in 12 or steeper roof are acceptable, as was built in Campbell Hall. Roof projections for the purposes of mechanical, ventilation and/or plumbing requirements must be minimized and treated as elements contributing to the architecture of the building.

An optimal growing environment will dictate the pitch of "green" roof areas.

Flat roof areas used for placement of mechanical equipment shall be enclosed by a roof-like appearing parapet similar to Grainger Library's (shown in Figure IV-9). Acceptable materials are pre-finished metal standing seam, slate, copper, zinc, commercial quality fiberglass/asphalt shingle or concrete, and clay tile. Stacks and vents must be ganged or "manifolded" into architectural projections as was done with the Chemical and Life Sciences Building (shown in Figure IV-7).

- Exterior Walls All exterior walls must be 100% brick masonry units; however, non-modular or "oversized" units are acceptable by exception only and must be approved by the Director of the F&S Planning Division. Brick must be either "old campus" (example: David Kinley Hall), "contemporary campus" (example: Illini Union Bookstore) or "Beckman" blend. A mixture (examples: Computing Systems Research Lab and Campbell Hall) of these may also be acceptable. Stone/cast stone trim is desirable, but not mandatory. Prefabricated curtain walls are acceptable only in exceptional situations. The proposed brick blend and the proposed color of pre-finished metal products is subject to the approval of the Director of the F&S Planning Division.
- Windows All windows must be pre-finished metal frame with double-pane or insulating glass. Window frame color can vary to complement the color of the roofs and walls. Reflective glass is not acceptable; "low-e" tinted or energy-efficient glass is encouraged but not mandatory. Windows should be incorporated as "punched" windows similar to those in the central portion of the campus (example: Illini Union).

Windows need not always be square or rectangular; although, traditional shapes must be dominate. Accent windows of other shapes may be incorporated into the design (examples: Grainger Library and Huff Hall).

• Projections and Ornamentation – Canopies and accents at major doorways (examples: west side of Henry Administration Building and the Illini Union Bookstore), Protective projections (example: south entry of Grainger Library - see Figure IV-10), or recessed doorways (example: north entry of Grainger Library) must be designed to protect occupants and visitors from the weather. Air-lock foyers must be used at major entrances. Canopies and projections must be of material and design compatible with the building. The main entrance to the building should be easily identifiable, and part of a larger "entrance element." This element should be in scale with the building plane.



Figure IV-10: View of the Grainger Engineering Library (UOFP&P, 2004) accent windows, protective projections, recessed doorways.

Site Development Guidelines

While streets and buildings define the basic open space skeleton of campus, its character and the way it is perceived are largely determined by the treatment of the campus landscape. The *Master Plan* categorizes landscape types as Civic Spaces (examples: the Main Quad and the Oval Allée), Courtyards (examples: Beckman Courtyard and Commerce Courtyard), various dedicated use areas (examples: Morrow Plots and parking lots), and quite a few spaces in-front-of and in-between buildings (examples: "Alma Mater" Plaza and Chi Omega Plaza - see Figure IV-11) – all of which differ in function and appearance.

Just as each new campus building must establish clear and enduring ties to existing and planned facilities, new site developments must connect with current and proposed campus surrounds. To visually reinforce the connectedness and permanence of the landscape throughout campus, common site design qualities (defined in terms of color, form, shape, size, and texture) should be arranged to achieve the desired visual continuity and spatial definition. Site design qualities are found and managed in the elements that comprise campus landscape/open spaces. Plantings and pavements



Figure IV-11: View along the informal pathway of the Chi Omega Plaza (F&S, 2006) looking southeastward toward the Main Quad and Lincoln Hall.

offer the biggest visual impact but other elements (such as gateways, lighting, sculpture, fountains, signage, site furnishings, topography, and walls) also play an important role in how the campus is ultimately perceived.

Campus Landscape Vision

The University envisions a campus landscape that achieves the following objectives:

- Create and maintain a sense of place that is inspiring, fosters appreciation for the Illinois natural and cultural heritage, and protects campus historic landscapes.
- Provide an environment that is safe, accessible, encourages healthy activities, and which is supportive of education outside the traditional classroom.
- Foster a dignified campus setting that is appropriate to an institution of higher education.
- Utilize resources responsibly through the appropriate use of materials, practices, and technologies to achieve an ecologically-friendly campus landscape.
- Design a clean, simple, and understated landscape that is an elegant public space and reasonable to maintain.
- Establish a comprehensively-designed campus landscape where the need for later "fixes" (such as postand-chain barriers used to block undesired pedestrian pathways) are avoided.

Historically, courtyards and the areas in-between buildings have been developed with informal designs and accents contrasting the formality of the larger, adjacent Civic Spaces. This hierarchy helps to reinforce the campus' urban structure by offering a sense of orientation, delineating transitions into vehicular-free zones, and encouraging the variety of spaces that appear and function in diverse ways to meet different programmatic needs. As the design characteristics of developing Civic Spaces evolve, issues of formality and other site design qualities should be in keeping with the framework of the *Master Plan* and with the nearby contextual character in order to maintain a campus-wide continuity. For instance, one developing Civic Space, the Military Axis, will be designed to represent a native Central Illinois landscape and will be more informal in character while also maintaining the functions of a Civic Space.



Figure IV-12: View of the Rain Garden installation (F&S, 2006) near the Dorner Drive Retention Pond, a new site development representative of the campus landscape vision by applying sustainable design strategies appropriate to the site conditions.

IV. Design Guidelines Update

Plantings

The following general principles will be used to guide campus planting design:

- For all campus areas, tree, shrub, and hedge plantings should be appropriate to the scale of the space. A broad stroke use of plants in large rows and masses is generally preferred to fussy, intricate plantings in order to maintain a proper scale relationship with large University buildings. Intimate scale plantings are only appropriate in smaller courtyard spaces and in proximity to smaller campus buildings.
- For all campus areas, plantings should reinforce the basic campus structure (defined by streets and buildings) and positively shape open spaces.
- In general, plantings in civic spaces and front yard landscapes should be simple and restrained, limiting the diversity of species within given groups or rows of trees. This principle should also apply to the streetscapes and the framework open spaces associated with South Campus developments (areas south of Kirby/Florida Ave.).
- Throughout campus, plant selections should favor plants that are native to Illinois. Native plants will be used except in situations where they are programmatically, functionally, and horticulturally inappropriate. Plants should be selected to match the existing soil and exposure conditions; however, soils and drainage patterns may be restored or modified to support native plantings and plant associations as supported by the project budget.

The *UIUC Facilities Standards* maintains and updates a list of approved plants that may be used on campus.

• Historic landscape areas of the campus shall be protected to retain their design integrity. Renewal of these areas may, however, include the replacement of historic plant species with carefully selected native species that fulfill the original design intent. Historic areas include, for example, the Main Quad and the "Front Yard" areas of the Campus Core.



Figure IV-13: North looking view along the Main Quad side of the English Building (UOFP&P, 2001) illustrates the historic landscape spaces plantings hierarchy to be maintained as more sustainable plants replace the existing.



Figure IV-14: View of the Grainger Library Service Area (F&S, 2006) illustrating the use of a site wall as well as plantings in the available space to screen the service areas views.

- Plantings for courtyards, residential quads, and other interstitial areas should be organized to increase the variety of campus landscape experiences and plants should be selected to increase the diversity of species employed on campus. These areas should serve as a complement to the simpler, restrained design of the campus streets and civic spaces. As noted by Ferruccio Vitale (consulting landscape architect who established the space-defining landscape characteristics for the campus environs in his 1929 landscape framework report that continues to influence UIUC's development patterns and the role of plants in its landscape), these spaces should contrast with the great quads and malls of the civic landscape. Their scale can be more intimate and personal, their design can be tailored to the specific functions of buildings, and the character their spaces can vary from area to area.
- Screening at service areas should employ evergreen trees. Site walls may be used where space does not allow for plants (as shown in Figure IV-14). All screening for surface vehicle and bicycle parking lots must be designed so that views in and out of the space are not obscured to the point of making them unsafe.
- For the rural South Campus, plantings should be consistent with the character of the existing agricultural and natural landscape. For example, shelterbelt plantings next to the Research Park and other South Campus research centers are appropriate.

Pavements

Patterns of circulation for campus are built around the idea of using existing street corridors for vehicle, bicycle, and pedestrian pathways. In addition to roadways, the other types of off-street pavements described in this section include service and emergency access drives, vehicular and bicycle parking, pedestrian and bicycle pathways, and malls and plazas. The individual design and layout of pavements should emphasize pedestrian movement as the primary means of movement on campus. Therefore, locations with conflict between bicycle, pedestrians, and/or vehicles should be well lit and regulated by signage and/or other means that grants the right-of-way to pedestrians.

Service and campus access roads should be located in accordance with the *Master Plan* and should be curbed except in the rural South Campus areas. All service drives should suit the specific service requirements of the facility it serves as well as be designed to conform to the *UIUC Facilities Standards* with allowances for service vehicles and emergency access. Where service drives must also function as pedestrian pathways, they should be kept free of parking, provide adequate space for pedestrian refuge, and visually appear as pedestrian space (for example, Chemistry and Life Sciences Building shown in Figure IV-15).

Along public streets, the street edge between curb and buildings should be designed to reflect the intensity of pedestrian use (such as the Wright Street Transit Plaza). Areas of high pedestrian use should be paved and areas of lower usage should include a planted parkway. Where underground utilities do not conflict, trees should be placed behind the curb in a continuous planting bed with pedestrian walkways behind the tree line to remove pedestrian activity from the immediate street edge. Where space permits, bicycle paths should be located out of the street and behind the tree line as well (such as along Wright Street in the Engineering Campus).

Where heavy pedestrian crossing activity or on-street parking precludes the use of a planted parkway street edge, pathway pavement may extend to the street curb. If continuous pavement abuts the street curb, tree plantings should be established in large cutouts with a minimum 100 square feet sized cutout to help ensure survivability (as at the Illini Union Bookstore shown in Figure IV-16).

Pedestrian and bicycle pathways should be poured-in-place concrete. Bicycle paths should also bear a consistently dark color contrast and painted, traffic control striping that differentiates them from pedestrian pathways. All pedestrian paths should be a minimum 6' width and meet public accessibility needs. Any pathways or plazas over 8' wide should be designed to accommodate vehicular traffic for service and snow removal (for example, the broadwalks in the Main Quad). Bicycle pathways should support twoway travel with a minimum 7' width with a pavement thickness that is designed to meet required vehicle loads.

The use of proven hardscape design techniques and ad-



Figure IV-15: West looking view along the pedestrian and service corridor at the Chemical and Life Sciences Building (UOFP&P, 2001).



Figure IV-16: North looking view along the Wrigh Street Transit Plaza side of the Illini Union Bookstore Building (UOFP&P, 2002).

vancements in pavement material technology that promote better storm water infiltration and groundwater recharge throughout campus shall be employed as appropriate.

Other Elements in Site Design

- <u>Gateways</u> The primary purpose of gateways, whether pedestrian or vehicular, should be the symbolic passage to and the clear definition of the campus realm (example: gateway wall at the Beckman Institute). Secondarily, gateways may also be made operational, where appropriate, to regulate access. The scale of gateway structures and the materials used to construct them should suggest the importance of the University as an enduring, public institution (example: Wright St. gateway shown in Figure IV-17). Brick stone, and metal (steel, wrought iron, and/or bronze) are all suitable materials that are consistent with the campus theme.
- <u>Lighting</u> Campus lighting must conform to the specifications in the *UIUC Facilities Standards*, and should be organized in simple patterns that reinforce the basic structure of streets, open spaces, and pathways (bicycle and pedestrian). Where lights follow streets or pathways, they should be placed in straight rows on one or both sides but preferably not in a staggered, alternating pattern. Pathways will ordinarily only require lighting from one side, so a single row will suffice. Roadway lighting may require lighting on both sides, in which case lights should be placed opposite one another. Alternating light placement does not result in the simple and readable pattern that a single row or paired double row does, especially where the road is relatively short.

Poles and fixtures for lighting pathways and open spaces should be uniform and in conformance with the *UIUC Facilities Standards*. New poles and fixtures should be selected for compatibility with existing pedestrian lighting on campus. Pathway light sources should be metal halide with a uniform illumination level of ½ foot-candles projected downward only.

Lighting for service areas and surface parking lots should use concealed source fixtures (with downward projected illumination) on 30'-35' poles that are coordinated with tree canopies and walls/screens. These poles



Figure IV-17: Eastward view through the campus gateway structure at Wright Street (UOFP&P, 2001) looking down the pathway that leads to the Main Quad with Lincoln Hall's south side to left and pedestrian lighting standards opposite.

and fixtures should be a simple inconspicuous design that conforms with the *UIUC Facilities Standards*. A metal halide lighting level of ½ foot-candle should be maintained in surface parking lots and service areas.

Exterior lighting of buildings should be confined to entrance points and special features (example: Illini Union cupola). Entrance lighting may use exposed or concealed source fixtures. Any exposed source fixtures used should be pedestrian pathway fixtures compatible.

• Sculpture & Fountains – Art is a special element in the landscape and, as such, should create delight as well as accentuate the quality of campus' built environment. Works of art are a secondary level of landmarks that must be in harmony with the larger order of building landmarks. Appropriate scale and character of sculpture and fountains is critical to success in any location. Generally, sculpture and fountains should be large enough to fit within the surrounding space but should not be so monumentality massive to overpower the setting. In addition, these elements should be understood as objects to endure with a classical, timeless quality rather than a style associated with short-lived trends.

Sculpture/fountain design should always be integral to its immediate setting. The design of a given art display setting should be expanded to include more than the selection and placement of the work. Lighting, pavements, plantings, site furniture, topography, and walls should all be arranged to effect a wedding of the art piece and the campus landscape. The environment should be arranged so if the sculpture/fountain were removed, one would feel that it was missing (example: "Diana" at the Illini Union shown in Figure IV-18).

The best sunlight conditions for displaying sculpture are usually cross light rather than direct front or back lighting, which tends to de-emphasize the three-dimensional qualities. Back lighting is the worst of these conditions. If the piece has a "front," it should ideally be oriented to receive front or cross lighting for most of the day.

Water may be combined with sculptural elements or may be used sculpturally itself (example: "Janet Weston Fountain" at David Kinley Hall shown in Figure IV-19). How a piece will visually appear in times when water is



Figure IV-18: View looking north eastward to the "Diana Fountain" setting at the west entrance of the Illini Union (UOFP&P, 2002).



Figure IV-19: The "Janet Weston Fountain" as seen from the Commerce Quad side entrance of David Kinley Hall (UOFP&P, 2001).



Figure IV-20: View of the non-standard site furniture in the courtyard of Doris Kelley Christopher Hall (F&S, 2006).

- not present must also be considered. For instance, large reflecting pools are generally not recommended because they are lifeless and conspicuous when not in use.
- <u>Signage</u> Each campus facility shall have a campus standard building sign, as specified in the *UIUC Facilities Standards*, displaying the name of the facility and its street address. These signs are manufactured and installed by Facilities and Services but must be planned for in any project design. Other fixed, site signage on campus (retail advertisements, informational/directional "wayfinding," and traffic safety/control) shall, to the extent feasible, match or coordinate with the campus facility signage and/or the street and traffic signage provided by the municipalities of the University District. Any signage with the potential to detract from the campus setting, such as an electronic marquee, will be reviewed by the Chancellor's Design Advisory Committee.
- <u>Site Furnishings</u> In the more public areas of campus civic spaces (example: campus standard site furnishings on the Main Quad), front yards, and parking lots/facilities, the *UIUC Facilities Standards* has specifications for campus standard benches, bicycle racks, bollards, planters, trash receptacles, and other campus landscape furnishings that are vandalism-resistant. However, courtyard spaces provide opportunities for more specialized site furnishings design to enhance a project's programmatic needs (example: the Doris Kelley Christopher Hall courtyard shown in Figure IV-20).
- <u>Topography</u> The dominant landform characteristic of campus overall is flat, but gentle slopes can be found near drainage corridors and basins around campus. Given the horizontal uniformity of campus, abrupt vertical elevation changes are dramatic campus landscape effects that should be understood as man-made works rather than an out-of-context "naturalized" elements. For example, since mounds would not normally be found in the local geography, earth berms are generally avoided except where integrated as sculpture or part of a sculptural work (example: mounded area along Peabody Drive in front of the Art & Design Building).

Vertical design elements in the landscape must maintain accessibility as an integral component of design rather-

than a conspicuous afterthought to meet code (example: southwest Siebel Center entry in Figure IV-21).

Where noticeable grade change is present, site design should take advantage of this feature, as functionally appropriate, to enhance the quality of the facility and the overall campus landscape. For instance, an existing low area on site might be an opportunity to develop a rain garden that will increase the biodiversity of a given area and provide a natural groundwater recharge basin reducing the amount of storm water pipes required.

 Walls and Fences – Walls provide a clear definition of the campus realm. In fact, walls function much like and are often built in concert with campus gateways. Walls also provide screening, seating, plant containers, and retaining for abrupt grade changes (examples: walls west of Foellinger Auditorium shown in Figure IV-22).

The scale of walls and the materials used to construct them (generally brick, stone, and wrought iron) should not only reflect their practical usage and immediate building context but also illustrate the University's importance and enduring qualities as a public institution.

Fencing is generally only utilized for athletics/recreation fields, storage, or operations facilities (example: Campus Recreation Fields along Stadium Drive) in the north and central campuses; however, it is used more extensively in the larger scale research, storage, and training facilities (example: any new ACES Field Research Station fencing) of the South Campus. The *UIUC Facilities Standards* have specifications for campus standard fences in the various campus applications.

• <u>Utilities</u> – The *UIUC Facilities Standards* have specifications for utility lines standards; however, utility lines should, as feasible, be grouped into underground corridors that minimize any unsightly appearance.

Conclusion

While individual project decisions may seem minor at the time they are made, a series of uncoordinated changes will result in an *ad-hoc* campus aesthetic. The University prepared and enforces these guidelines to help ensure the coordination of design elements critical to its visual identity.



Figure IV-21: View of the integrated universal access design at the southwest entrance of the Thomas M. Siebel Center (UOFP&P, 2004).



Figure IV-22: Northward looking view of the Main Quad broadwalk and site walls (UOFP&P, 2001) between Gregory Hall and Foellinger Auditorium

V. Appendix

Annotated Source List

The University of Illinois at Urbana-Champaign (UIUC) Campus Master Plan Update references many sources that contribute to its final form. Following is a list of sources, arranged in chronologival order, that provide historic documentation as to the rationale that influenced development the campus master plan to its current state. Many are on file at the University of Illinois Library or can be downloaded at... http://www.uofpp.uillinois.edu/UIUCplan.htm

- Tilton, Leon Deming and Thomas Edward O'Donnell. *The Illinois Campus Plan*. Urbana-Champaign, IL: The University of Illinois Press, 1930.

 Book documenting campus history (1867 until 1930) of the growth and development of the University of Illinois.
- Sasaki Associates, Inc. *University of Illinois at Urbana-Champaign North Campus Master Plan*.

 Watertown, MA: The Board of Trustees of the University of Illinois, April 1986.

 Master plan report on the North Campus planning area (University Ave. to Green St., 6th St. to Linclon Ave.) of the University of Illinois at Urbana-Champaign created to help guide the growth and development of this part of campus into the twenty-first Century.
- Sasaki Associates, Inc. *University of Illinois at Urbana-Champaign South Campus Master Plan*.

 Watertown, MA: The Board of Trustees of the University of Illinois, September 1986.

 Master plan report on the South Campus planning area (Nevada St. to St. Mary's Rd., Neil St. to Linclon Ave.) of the University of Illinois at Urbana-Champaign created to help guide the growth and development of this part of campus into the twenty-first Century. This area of campus is now considered part of the Central Campus Planning Area.
- Sasaki Associates, Inc. *University of Illinois at Urbana-Champaign Central Campus Master Plan.*Watertown, MA: The Board of Trustees of the University of Illinois, October 1989.

 Master plan report on the Central Campus planning area (Green St. to Gregory Dr., 4th St. to Linclon Ave.) of the University of Illinois at Urbana-Champaign created to help guide the growth and development of this part of campus into the twenty-first Century.
- Sasaki Associates, Inc. *University of Illinois at Urbana-Champaign Arboretum Master Plan*. Watertown, MA: The Board of Trustees of the University of Illinois, July 1990.

 Master plan report on the Arboretum planning area (Florida Ave. to Windsor Rd., Lincoln Ave. to Race St.) of the University of Illinois at Urbana-Champaign created to help guide its development.
- Sasaki Associates, Inc. *University of Illinois at Urbana-Champaign South Farms Master Plan*. Watertown, MA: The Board of Trustees of the University of Illinois, September 1990.

 Master plan report on the South Farms planning area (Kirby/Florida Ave. to Church St./Deers Rd., Neil St. to Philo Rd.) of the University of Illinois at Urbana-Champaign created to help guide the growth and development of this part of campus into the twenty-first Century.

Campus Safety Task Force. *Campus Safety Task Force Report*. (produced by the University Office for Capital Programs) Urbana-Champaign, IL: The Board of Trustees of the University of Illinois, 1995.

Report focusing on 3 primary areas of a comprehensive approach to increase safety and preventative measures on the University of Illinois at Urbana-Champaign campus: safety education, enforcement, and facilities planning.

University Office for Capital Programs. *University of Illinois at Urbana-Champaign Core Campus Master Plan Update*. Champaign, IL: The Board of Trustees of the University of Illinois, October 1996.

An accumulation of information concerning landscape historical background, master plan landscape design guidelines, campus tree inventory data, the landscape planning and design process, and summaries of major landscape and site initiatives (*circa* 1994) in the Core Academic Campus planning area (University Ave. to St. Mary's Rd., Neil St. to Linclon Ave.) at the University of Illinois at Urbana-Champaign campus.

University of Illinois at Urbana-Champaign Office for Project Planning and Facilities Manangement. Historic Preservation: University of Illinois at Urbana-Champaign. Urbana-Champaign, IL: The Board of Trustees of the University of Illinois, 1998.

A historic preservation oriented report on the history and historic resources of the University of Illinois at Urbana-Champaign campus.

Sasaki Associates, Inc. *University of Illinois at Urbana-Champaign South Campus Master Plan.*Watertown, MA: The Board of Trustees of the University of Illinois, June 1999.

Master plan report on the formerly named South Farms planning area (Kirby/Florida Ave. to Airport Rd., Neil St. to Philo Rd.) of the University of Illinois at Urbana-Champaign created to help guide the future growth and development of this part of campus.

Bucher, Willis & Ratliff Corporation. *University of Illinois Campus Area Transportation Study Final Report*. St. Louis, MO: Champaign-Urbana Urbanized Area Transportation Study (CATS), June 1999.

Report on the collective efforts of the Champaign Urbana Urbanized Area Transportation Study, the Cities of Urbana and Champaign, the University of Illinois, the Illinois Department of Transportation, and the Champaign-Urbana Mass Transit District that discusses how travel should be accommodated in the University District among vehicles, pedestrians, bicycles, and transit as well as priorities for future fundings.

SmithGroup JJR. *University of Illinois at Urbana-Champaign North Campus Planning Feasibility Study*. Chicago, IL: The Board of Trustees of the University of Illinois, September 2000.

Feasibility study to determine the viability of and options for Research Park facilities development in the planning area (University Ave. to Springfield Ave., Wright St. to Lincoln Ave.) of the North Campus of the University of Illinois and the adjacent City of Urbana properties.

Carl Walker, Inc. *University of Illinois at Urbana-Champaign Campus Parking Master Plan Final Report*. Glendale Heights, IL: The Board of Trustees of the University of Illinois, May 2001. Report on the existing parking demand, parking development priorities, and recommended revenue streams for automobile parking facilities in the Academic Core of campus.

- Sasaki Associates, Inc. *University of Illinois at Urbana-Champaign Arboretum Master Plan Update.*Watertown, MA: The Board of Trustees of the University of Illinois, June 2001.

 Master plan update report on the Arboretum planning area (Florida Ave. to Windsor Rd., Lincoln Ave. to Race St.) of the University of Illinois at Urbana-Champaign created to help guide its development.
- Sasaki Associates, Inc. Land Use Plan for the South Campus Area Assigned to the Department of Natural Resources and Environmental Sciences. Watertown, MA: The Board of Trustees of the University of Illinois, June 2001.

 Report to describe the NRES land and facilities program defining the specific land allocations and building orga-

nization within the acreage identified for NRES in the South Campus Master Plan (June 1999).

Smith Group JJR. *University of Illinois at Urbana-Champaign South Campus Master Plan Update*. Chicago, IL: The Board of Trustees of the University of Illinois, July 2001.

Master plan update report to address emerging Research Park issues in the planning area (St. Mary's Rd. to Windsor Rd., Neil St. to Lincoln Ave.) of the 1999 South Campus Master Plan.

- Smith Group JJR. *University of Illinois Division of Intercollegiate Athletics Heritage Plan*. Chicago, IL: The Board of Trustees of the University of Illinois, 2002.

 Comprehensive plan for Division of Intercollegiate Athletics areas future growth.
- Ellerbee Becket, Inc. *University of Illinois at Urbana-Champaign Assembly Hall Feasibility Study*. Kansas City, MO: The Board of Trustees of the University of Illinois, May 2002. Report to assess the feasibility of modernizing the Assembly Hall.
- Ellerbee Becket, Inc. *Univ. of Illinois at Urbana-Champaign New Arena / Assembly Hall Renovation Study.* Kansas City, MO: The Board of Trustees of the University of Illinois, July 2004.

 Report to study the feasibility of a new basketball specific facility and necessary modernizing of the Assembly Hall (based on 2002 Assembly Hall Feasibility Study) for it to remain a competitive multi-purpose arena facility (without UIUC Basketball) for the foreseeable future.
- Jones Lang LaSalle IP, Inc. *Retail Assessment of the University of Illinois at Urbana-Champaign*. Chicago, IL: The Board of Trustees of the University of Illinois, May 2004.

 Master Plan Update (2007) report to assess the Urbana-Champaign retail market in general, existing UIUC retail locations, and five retail locations under consideration.
- Brailsford & Dunlavey. *University of Illinois Orchard Downs Redevelopment Plan*. Washington, DC: The Board of Trustees of the University of Illinois, September 2004.

 Report to examine strategies for improving the family and graduate housing neighborhood at Orchard Downs.
- Cannon Design. *University of Illinois at Urbana-Champaign Research Park Master Plan: A Vision for Growth.* Chicago, IL: Fox/Atkins Development, LLC., Champaign, IL, 2004, updated by Fox/Atkins Development, LLC, February 2005.

Master plan update report produced by the UIUC Research Park Master Developer with input from multiple stakeholders to communicate future plans for development of the UIUC Research Park area (St. Mary's Rd. to Windsor Ave, Neil St. to 4th St. extended).

V. Appendix

- Mackey Mitchell Associates. *University of Illinois Champaign Residence Halls Redevelopment Master Plan.* St. Louis, MO: The Board of Trustees of the University of Illinois, February 2005. Report to study the various approaches to redeveloping the Champaign Residence Halls (new construction, renovation, or a mix), phasing, and the best long-term site plan solution for the University.
- Booth Hansen. *University of Illinois Champaign Residence Halls Redevelopment Master Plan Update*. Chicago, IL: The Board of Trustees of the University of Illinois, May 2006.

 Based on the Mackey Mitchell Associates study in February 2005, the Student Dining/Residential Programs Building and First Wing of the New Residence Hall became the first project to evolve from the Champaign Residence.

Building and First Wing of the New Residence Hall became the first project to evolve from the Champaign Residence Halls Redevelopment. During the planning of this project, the Booth Hansen team developed a revised master plan scheme for the site, which is shown in the Master Plan Update (2007).

Martin/Alexiou/Bryson, PLLC. *University of Illinois at Urbana-Champaign Intermodal Study*. Raleigh, NC: The Board of Trustees of the University of Illinois, July 2006.

Transportation study to: 1) review existing studies and plans; 2) review and assess existing conditions; 3) project and assess future conditions; 4) perform peer review and comparative studies; 5) develop goals, objectives, and criteria; 6) develop alternative plans; 7) identify incentives to use alternative modes; 8) develop final plan; and 9) develop priorities and phasing recommendations.

University of Illinois. *Vision for Orchard Downs*. Urbana-Champaign, IL: The Board of Trustees of the University of Illinois, October 2006.

Informational brochure distributed to community stakeholders to convey the intended expectations of the project.

