July 2011

Dear Friends and Colleagues of UW-River Falls:

With 226 acres of rolling land on its main campus, a picturesque central pedestrian mall, and the flowing South Fork Kinnickinnic River, the University of Wisconsin-River Falls is a uniquely beautiful place to study, live, work and visit. We recognize, however, that our campus must be more than just beautiful.

UW-River Falls must offer facilities capable of supporting 21st century student learning, pathways and entrances that welcome visitors, and an infrastructure that preserves the natural environment. I am confident that the plan summarized in this document meets each of these challenges.

I want to thank everyone who contributed to the development of our campus master plan, including our Campus Planner, Dale Braun. The final product is the result of countless hours of input from faculty, staff, students, alumni, community partners and external consultants. This visionary plan helps to ensure that UW-River Falls grows in a manner respectful of our heritage and our environment.

I encourage you to review this document with an eye to the future. I am certain that upon doing so, you will share my excitement about what the UW-River Falls campus will offer future generations of Falcons.

Dean Van Galen, Ph.D.
Chancellor
Pathway to Distinction

Our mission is to:
Help prepare students to be productive, creative, ethical, engaged citizens and leaders with an informed global perspective.

Vision
The University of Wisconsin-River Falls will distinguish itself as the St. Croix Valley’s public, comprehensive university that:

- Supports an inclusive campus community of highly-engaged learners and scholars.
- Develops distinctive, innovative, educational opportunities including regional and global partnerships that lead to student success, sustainable communities, and differentiation of the university within the state and nation.
- Fosters a challenging, supportive, student-centered environment that is characterized by academic excellence, inspiring and preparing students to serve as ethical, informed citizens and leaders in an increasingly complex, diverse, and global environment.

Core Values

STUDENT CENTERED
We commit ourselves to an unwavering focus on learning, holistic development, and success.

ACADEMIC EXCELLENCE
We help students attain their full potential as critical thinkers, effective communicators, leaders, and committed life-long learners by providing engaged and integrated learning educational experiences.

INCLUSIVENESS
We commit to a community of mutual respect, professional behavior, academic freedom and appreciation of individual differences and rich cultural diversity.

INNOVATION
We encourage innovation, sustainability, and creativity, often in partnership with others, to inspire people, catalyze new ideas, and support economic and community development.

GLOBAL ENGAGEMENT
We engage with ideas, people, cultures, and places beyond our campus to enrich learning and understanding.

INTEGRITY
We earn trust through honesty, accountability, and ethical behavior.
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Acknowledgements

Campus Master Plan Steering Committee
Master Plan Advisory Committee
Campus Master Planning Team

See the companion Executive Summary under separate cover.
Introduction

The Challenge

The campus is facing current and anticipated pressures. Student enrollment has grown dramatically since the late 1990s and it will continue to grow as University of Wisconsin-River Falls further contributes to building the Wisconsin economy and as our region becomes more integrated with the Twin Cities. Our enrollment has grown by over 1,000 students in the last ten years, and it is expected to increase by another 1,000 students in the next decade.

Larger student bodies bring more demand for on-campus living spaces, more open space, and more vehicle parking. The campus’s characteristic east-west orientation was set with the last campus master plan in 1968. The campus identity is defined by the South Fork Kinnickinnic River as it passes through the center of campus, yet the river and its floodplain create constraints for campus growth and change. The Campus Laboratory Farm not only symbolizes our history but is also ground where breakthrough research literally takes root. Yet the farm is threatened as the campus athletic and recreational needs increase and the City of River Falls grows around the campus.

Like all Wisconsin public universities, UW-River Falls must maximize its limited financial resources. Our existing structures must be fully utilized and repurposed if necessary to meet our faculty’s modern teaching methods, our students must be proud to live in our residence halls, and we must continue to keep our energy use low even as our demands rise.
Campus Best Practices

The UW-River Falls campus master plan reflects the state-of-the-art practices in campus master planning. The campus planning team led by JJR brought the lessons learned from the nation’s campuses to UW-River Falls.

A successful campus master plan must:

...focus on purpose:

- The university is a place of intellectual, cultural, and social education and exchange. The campus master plan should provide the physical spaces necessary to meet the broad goals of the university.
- Campus change and evolution should enhance and support the university’s purpose.
- The master plan should reinforce the environmental and aesthetic qualities of the campus that help attract and retain a diverse set of students, faculty, and staff.

...enhance academic and social interaction:

- Campus design and function should support both the academic and social success of students.
- The master plan should locate buildings and open spaces in close proximity to enhance synergistic learning and inclusive social interaction.
- Campus design guidelines should enhance and encourage a lively urban texture.

...promote campus diversity and inclusiveness:

- The university’s physical spaces should promote greater understanding and appreciation of diverse cultures and ethnicities and to actively support tolerance, civility, and respect for the rights and sensibilities of each person.
- In particular, persons with disabilities must effectively and safely access campus buildings and facilities.

...strive for environmental sustainability:

- Buildings, landscapes, and infrastructure should be compatible with the regional environment and should conserve natural resources.

...strive for financial sustainability:

- University facilities require significant financial and material resources to design, build, operate, and maintain. The master plan should establish capital priorities that emphasize efficiency, effectiveness, and the optimal use of valuable existing resources.
- Project design should not only make efficient use of the funds budgeted for their initial design and construction, but also consider the life cycle cost of their continuing operation and maintenance.

...anticipate change and thus design for function and flexibility:

- The campus master plan must be based on a flexible, forward-thinking, and campus wide framework that will guide current and future campus decisions.
- The master plan should satisfy the campus’s current program and functional requirements without compromising future flexibility and adaptability for changing needs and uses.
• Buildings, open spaces, and infrastructure should be able to accommodate changing pedagogy, technologies, and user requirements.
• Building designs should anticipate future additions.
• The university should maintain and enhance the unique character of the campus while accommodating growth and change.

...craft a sense of place:
• Campus should be a distinctive and memorable place for all members of the campus community and the surrounding region.
• Campus design should strengthen and re-establish the Genius Loci of the campus and its precincts.
• The master plan should create and preserve significant view corridors.

...move toward visual coherence:
• The campus should create a single integrated design in which the parts all relate to one another, regardless of when and where they are built.
• Consistent architecture, landscaping, and signage should create visual unity among all campus precincts and all campus facilities.
• Campus design and wayfinding should provide a clear and direct sense of orientation and direction.

...respect the built and environmental context:
• Any campus change should respect and address the university’s heritage, environmental context, and unique features.
• Buildings and sites should reflect UW-River Falls’s developing rural area.

• Buildings and open spaces should be designed so that they enhance their surroundings and the overall campus.
• Buildings and open spaces should reflect their climate.

...integrate the university with its host community:
• The university and its host community thrive only when both are successful.
• Campus decisions should meet both the university’s academic and strategic goals and the community’s goals.
• Buildings and open spaces should be designed and placed to respect the massing, scale, and character of the adjacent community.

...create a clear identity:
• The campus should have a clear identity within the community.
• Buildings, pathways, and open spaces should be oriented to create prominent campus and building entrances.

...put pedestrians first:
• The core of the campus should be a pedestrian-dominant area.
• The campus environment should be coherent, comfortable, and human-scale.

...recognize bicycles and automobiles:

• Campus design should sensitively accommodate the need for bicycles, automobiles, and parking on campus without compromising the convenience and safety of pedestrians.
• The master plan should promote non-motorized access and circulation.

...maintain campus safety:
• Campus design should support security concepts, such as Crime Prevention Through Environmental Design principles.
Campus Master Plan Guiding Principles

The campus master planning process was directed by the Guiding Principles. In this vision-driven process, the Guiding Principles commanded the formation and assessment of alternative concepts and subsequent evolution to the recommended master plan.

The UW-River Falls Campus Master Plan should:

... make the campus a distinctive and memorable place that enhances the educational and social experience for all members of the campus community.

• Create a physical environment that supports both the academic success and social growth of students.
• Organize buildings, pathways, and open spaces to create easily recognizable campus and building entrances.
• Promote a more unified campus community through consistent architecture, landscaping, and signage.
• Build upon the sense of tight-knit community and close proximity that exists on campus by increasing the land use efficiency.

... take advantage of the campus’s natural beauty.

• Recognize and celebrate the South Fork Kinnickinnic River as an important and unique campus amenity.
• Integrate the South Fork Kinnickinnic River with campus activities and major buildings and take advantage of riverfront open spaces and views.
• Build upon the success of the central mall and add to the system of civic spaces/public realm.

...provide a pedestrian-oriented campus.

• Maintain the core of the campus as a pedestrian-dominant area with parking located at the perimeter.
• Accommodate the need for a simple, direct, and easily understood campus road system that provides peripheral vehicular access.
• SENSITIVELY ACCOMMODATE THE NEED FOR VEHICLE PARKING ON CAMPUS AND IN AREAS ADJACENT TO CAMPUS.
• Create an easily understood hierarchy of meaningful, direct, and safe pedestrian connections between all campus facilities.
• Develop an overall environment that accommodates the disabled and removes existing barriers that obstruct access to all campus open spaces and buildings.
• Value environmental stewardship and increase the campus reliance on innovative sustainable practices.
• Meet current and future academic needs through optimal use of all existing facilities through renovation, repurposing, and remodeling wherever possible and economically feasible.
• Provide opportunities to educate the campus and community about the university’s environmental leadership.
• Create campus edges that are clearly defined while being welcoming to all community members. Cascade Avenue should be a seam that connects campus and community.

... embed sustainable principles throughout all campus systems.

• Ensure campus development is compatible with the city through joint university/community planning, addressing parking, access, and environmental impacts.
• Recognize the heritage of River Falls and Wisconsin through historic preservation of North and South Halls.
• Enhance the physical connections to Downtown River Falls.

In addition to these principles specific to the UW-River Falls Campus, the campus master plan will strive to meet the Board of Regent’s Physical Planning Principles.

... promote partnership with the River Falls and the St. Croix Valley community.

Board of Regents Physical Planning Principles

Upon recommendation of the President of the University of Wisconsin System, the Board of Regents adopts the following principles to guide physical planning of the University of Wisconsin System campuses:

1. To plan physical development within the context of planning guidelines specific to each institution.
2. To create a physical environment that contributes aesthetically and physically to the overall educational experience.
3. To plan facilities on the basis of student enrollment and other population levels and distributions that may reasonably be projected.
4. To plan facilities that are responsive to programs and the way they are delivered.
5. To recognize the increasingly diverse student population, and to provide for the needs of these students.
6. To maintain an ongoing comprehensive building space management function and a comprehensive space use plan specific to the university.
7. To make optimal use of all existing University of Wisconsin System facilities through renovation, conversion, and remodeling wherever possible.
8. To protect the large investments already made by students and the state in the physical plant and equipment.
a. Health and Safety: To assure that proper consideration is given to the health and safety of all who use university facilities.

b. Maintenance: To properly maintain all existing facilities, promoting maximum usefulness for program objectives, and to extend the useful life of facilities as long as economically feasible.

c. Accessibility: To develop an overall environment that is accessible to people with disabilities and to remove existing barriers that obstruct access to university buildings and facilities.

d. Resource Conservation: To achieve the maximum efficiency in the consumption of resources.

9. To encourage collaboration, partnerships, and innovation in planning.

10. To ensure facility development is compatible with the existing positive features of campus and neighborhood environs through joint university/community planning, addressing economic and environmental impact.

11. To include students in the planning process whenever feasible, but always in the case of planning for student fee-supported projects.

12. To provide for the transportation system needs of the university community.

13. To plan development at the University of Wisconsin Colleges in concert with the county and/or city in which the University of Wisconsin College is located.

14. To join in Wisconsin’s commitment to the recognition of the state’s heritage through historic preservation of buildings and other facilities.

(History: Res. 7868 adopted 3/5/99; amended by Res. 8431, 9/7/01)

Principled and Living Vision

The campus master plan guiding principles will outlast the plan’s recommendations. This master plan cannot anticipate or identify every situation the university will encounter over the long term. To guide future decision makers, the master plan provides a flexible framework based on core principles. Within this framework of principles and intents, the campus can comfortably understand new concerns and make wise decisions that still seek the university’s defined future. The specific issues most assuredly will change, but the campus master plan’s guiding principles and campus structure will remain constant.
Scope of the Campus Master Plan

The campus master plan provides a framework for open space, circulation, use relationships, and building placement. To achieve the UW-River Falls objectives, the campus master plan planning team created a flexible framework of land uses, open spaces, and infrastructure. Campus design guidelines ensure each major and minor campus decision is in support of the university’s long-term mission, vision, and values. Implementation recommendations create an ambitious yet reasonable action plan.

The campus master plan is a framework for UW-River Falls’s future. It is not intended to be so constraining and prescriptive as to stifle creativity, analysis, and judgment and predicate design solutions. However, the campus master plan should not be interpreted so loosely as to permit entirely different initiatives and conceptual directions. The goal is to achieve a balance between the campus master plan and the mutual decisions that must be reached throughout each project’s development process. The skillful use of this master plan by university planners and designers in concert with the Division of State Facilities and UW System will result in a functional, memorable, sustainable, and successful campus.

The master plan should apply throughout all UW-River Falls campus areas. The core campus, campus farms, and outreach centers such as the Hudson Center should have a consistent design standard. For current and future off-campus sites that are shared with other users, the master plan recommendations will structure these partnerships and the plan’s design guidelines should be incorporated unless otherwise unacceptable to the partner agency.

The campus master plan will direct campus development and reinvestment to meet the academic and campus needs and trends anticipated in the next 20 years. Yet the master plan should be a living document, re-examined and updated as campus challenges evolve. It is expected that the campus master plan will be updated in 2020 and completely re-examined in 2030.

Master Planning Process

The planning process for the campus master plan commenced in early 2010 and ended in summer 2011. Through a forward-thinking, interactive, and inclusive campus planning process, UW-River Falls’s staff, faculty, and students defined the campus’s physical future.

Assisted by the campus master planning team and UW System staff, UW-River Falls staff, faculty, and students developed the campus master plan through sequential steps. The master planning team understood the pressing campus issues, analyzed the campus buildings and site, interpreted the university’s academic plan, analyzed existing and future space needs, and determined how best to expand on-campus residential living.

In response to this input and analysis, the campus master planning team prepared three viable and contrasting alternatives for development. Inspired by the opportunities uncovered in these alternatives, staff, faculty, and students crafted a consensus campus concept. The master planning team then refined and illustrated this concept and created a phasing plan.

Master planning was inclusive and transparent at all stages. The master planning process was directed by the Chancellors Cabinet, which was expanded to include the campus planner, student representatives, and UW System representatives. The master plan commenced by interviewing dozens of campus leaders. Scores more faculty, staff, students, and community members participated in workshops, open houses, and presentations to confirm campus analysis...
and direct future decisions. The campus repeatedly reached into the community, meeting with adjacent neighborhoods, institutions, and City staff off campus. The university’s website and a Facebook page provided access to planning materials for review and facilitated written responses to the alternative concepts and the preliminary master plan. As a result of this collaborative process, the campus master plan has widespread understanding and support within all groups on campus and the community.

Plan Organization

- Chapter 1 summarizes the master planning philosophy, and a summary of the Guiding Principles and campus analysis.
- Chapter 2 identifies the issues and goals that shaped the master plan.
- Chapter 3 describes and illustrates the overarching vision for the campus.
- Chapter 4 presents recommendations, including detailed information for the campus neighborhoods and key locations.
- Chapter 5 provides detailed guidance for the design of buildings and site furnishings.
- Chapter 6 describes the implementation framework including project phasing.

The Appendix describes the campus outreach efforts. It is also a compilation of analyses completed for the campus master plan – Space Needs Analysis and Recommendations and Campus and Community Mapping and Analysis.

The Executive Summary is a concise summary of this Technical Report of the campus master plan. It is a graphically engaging and stand-alone brochure.
A Brief History of Campus

UW-River Falls was founded in 1874 as the State Normal School providing training for rural teachers. Agriculture education was added in 1912 which quickly expanded into a general agriculture curriculum. The campus lands stretch over 800 acres of land, including a 300-acre farm northwest of the City of River Falls.

The first campus building was dedicated on September 2, 1875. When the original building was destroyed by fire in 1897, other communities sought to have the school moved. But the citizens of River Falls were determined to retain it, and the building now known as South Hall was completed in 1898. After the fire, only a half day of classes was missed, for the community offered churches, lodge rooms and other buildings as meeting places.

The school experienced a slow but steady growth in curriculum and enrollment until 1912, when the Department of Agriculture was established and enrollment leaped. Construction of North Hall in 1914 and the addition of a wing in 1926 showed further progress. Both South Hall and North Hall are on the National Register of Historic Places. The addition of a four-year curriculum in 1926 preceded the change of all state normal schools to state teacher colleges in 1927.

In 1951, with the addition of liberal arts courses, the school was designated Wisconsin State College at River Falls. A boom in growth began after World War II. Student enrollment surpassed 1,000 students in 1956. To accommodate growth and change, new buildings and renovations increased their pace. Hathorn Hall, the first modern residence hall was constructed in 1951, and the
first phase of Chalmer Davee Library three years later. Stratton Hall and Hagestad Hall, the first student center, followed later in the decade.

Student enrollment quadrupled during the 1960’s, requiring a building boom of academic, student service, and residence halls. In just the three year period of 1965-1967, Agriculture Science, Agricultural Engineering Addition, Johnson Hall, McMillan Hall, Grimm Hall, Parker Hall, Crabtree Hall, Rodli Hall, and the heating plant opened. When graduate courses were added in 1964 the name became Wisconsin State University-River Falls.

In 1971 the University of Wisconsin System and the Wisconsin State Colleges System merged, and the university was renamed the University of Wisconsin-River Falls. The east end of the campus mall was established with construction of the E.H. Kleinpell Fine Arts Building in 1972 and Centennial Science Hall in 1977. The campus first crossed the South Fork Kinnickinnic when the Hunt Multipurpose Arena opened in 1972. Enrollment first surpassed 5,000 students in 1977.

In the early 1980’s the Regional Development Institute building was constructed as a satellite veterinary facility for UW-Madison, but was transferred to UW-River Falls in 1989 and renovated for office and conference uses. In 1987 Robert P. Knowles Physical Education and Recreation Center was constructed as the health and human performance general education program building, and the intramural fields followed a year later.

Building construction slowed in the 1990’s, and focus turned to renovations. South Hall was restored and rededicated in 1993, and the Chalmer Davee Library was remodeled during 1994-96. In the middle of the decade, UW-River Falls initiated its strategic planning process, “Reach for the Future.” This resulted in the creation of the School of Business and Economics, the merger and creation of the College of Education and Graduate Studies, and the renaming of the College of Agriculture, Food and Environmental Sciences. The Walker D. Wyman Education Building opened in 1999.

The university began the new millennium by celebrating its 125th anniversary and preparing for its future. The Board of Regents approved planning funds for a new student center and residence hall, and campus planning began for a new health and human performance building. C.H.I.L.D. Center (Creative Hours in Learning Development) opened in 2003 and the George R. Field South Fork Suites in 2005. An addition to the Hunt/ Knowles complex in 2005 provided pro-style locker facilities for the NFL’s Kansas City Chiefs football team during their summer training camp.

Within the last decade, the campus focused on its environmental impact and long-term environmental sustainability. In 2006 Gov. Jim Doyle selected the campus as one of four UW schools that will participate in the “Off-the-Grid Initiative,” which sets a goal of achieving energy independence within five years through the use of innovative energy generation methods and the purchase of “green” energy provided by local utilities without the use of fossil fuels. A year later, University of Wisconsin-River Falls Chancellor Don Betz joined more than 250 other college and university presidents to formally commit to sharply reducing and eventually eliminating all of the university’s global warming emissions. The University Center opened in 2007, demonstrating “green” building on campus and in the region.

The campus continues to change. An addition to the South Forks Suites was under construction during the preparation of the campus master plan, and the long-planned health and human performance addition is scheduled for the near future. A summary of UW-River Falls in 2011:

- City of River Falls population: 12,850.
- Enrollment: approximately 6,600.
- Less than 30 miles east of Minneapolis/St. Paul, Minnesota.
- Campus Size: 226-acre main campus with 26 buildings, plus two laboratory farms of 150 and 290 acres.
- Student/Faculty Ratio 20:1
- Varsity Sports: 18 for women and men, all NCAA Division III.
- Library: approximately 220,500 volumes
- Ten residence halls
Growth and Change

Student enrollment has grown significantly in recent decades. Given the recent growth of the St. Croix Valley and the greater Twin Cities metroplex, growth at UW-River Falls is expected to continue. Enrollment growth will come from multiple areas:

- Traditional and non-traditional students in the St. Croix Valley,
- Students, both in-state and out-of-state, attracted to quality programs,
- International students coming to the institution as internationalization and globalization become key priorities for the campus, and
- Increasing the retention and graduation rates of its current students.

The university expects that the increase in traditional undergraduates will be limited. Given its current approach to class scheduling and available larger classrooms, it is very close to capacity for traditional undergraduate enrollment. Substantial growth in the number of traditional undergraduates would require a capital investment in larger capacity classrooms that could take several years to complete.

Interim scheduling changes can allow some traditional undergraduate growth in the short term.

- Expanding the teaching day.
- Re-examining how available faculty, classrooms, and teaching labs are used.
- Increase J-Term and Summer enrollment.

Student Enrollment Growth Since UW-River Falls’s Founding
### Enrollment Projections

<table>
<thead>
<tr>
<th>Student Enrollment</th>
<th>Existing (Fall 2009)</th>
<th>Target A (2015/2016)</th>
<th>Percent Increase (from existing)</th>
<th>Target B (2025/2026)</th>
<th>Percent Increase (from existing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-campus</td>
<td>6,443</td>
<td>6,603</td>
<td>2%</td>
<td>7,441</td>
<td>15%</td>
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<tr>
<td>Off-campus</td>
<td>318</td>
<td>542</td>
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<td>21%</td>
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<tr>
<td>On-line</td>
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<td>799</td>
<td>2%</td>
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<tr>
<td>Total Student Headcount:</td>
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<td>7,246</td>
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<td>9,188</td>
<td>11%</td>
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### Faculty & Staff Projections

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<thead>
<tr>
<th>Employee Type</th>
<th>Existing (Fall 2009)</th>
<th>Target A (2015/2016)</th>
<th>Percent Increase (from existing)</th>
<th>Target B (2025/2026)</th>
<th>Percent Increase (from existing)</th>
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<td>303</td>
<td>371</td>
<td>1:26.0</td>
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<td>Faculty</td>
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<td>4</td>
<td>30</td>
<td>1:24.0</td>
</tr>
<tr>
<td>Faculty</td>
<td>Total¹</td>
<td>276</td>
<td>307</td>
<td>401</td>
<td>1:26.9</td>
</tr>
<tr>
<td>Staff</td>
<td>Total</td>
<td>399</td>
<td>418</td>
<td>482</td>
<td>1:26.9</td>
</tr>
<tr>
<td>Total Faculty¹ &amp; Staff FTE:</td>
<td>675</td>
<td>725</td>
<td>882</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Total faculty FTE requiring office space on campus. Includes teaching academic staff.

- Increase distance education technology, including online and hybrid courses and programs.
- Expand service-based programs. Currently, the university offers two service-based programs - Master’s in Management and the Educational Specialist in School Psychology.
- Increase graduate enrollment, both resident and non-resident, such as international students.
Student Enrollment Growth

Enrollment is expected to continue to grow, exceeding 9,000 students by 2025. During Fall 2009 there were 6,443 on-campus headcount students and 318 students classified as off-campus for a total of 6,761 students.

To track growth, the space needs analysis established two planning horizons. During the first planning horizon, the 2015/2016 academic year, growth to a total of 7,246 students is expected, with 6,603 headcount students on-campus, 542 headcount students off-campus (defined as students who take courses at a site other than the Main Campus, such as the Hudson Center), and 101 headcount students enrolled online. In the first planning horizon, both the on-campus and online growth is small. The university is expanding its online offerings, but it will take many years to fully establish this instruction method at the university.

At the second planning horizon, the 2025/2026 academic year, online instruction grows significantly. Student enrollment grows to 9,188 students, comprised of 7,441 headcount students on-campus, 948 headcount students off-campus, and 799 headcount students online. Enrollment growth is assumed to be evenly allocated across colleges.

These additional students will need more space on campus – more residence hall beds, more dining space in the University Center, and more classrooms and labs.

Faculty and Staff Growth

To serve the larger student enrollment, faculty and staff will need to expand as well. During Fall 2009 there were 276 faculty full-time equivalent (FTE) classified as on-campus. While there will be faculty who provide instruction at satellite facilities in the future, these faculty will maintain their primary office on the main campus. This is to support faculty’s alignment with their home departments.

Faculty is projected to grow by 11% (31 additional faculty FTE) by the 2015/2016 academic year, and by 45% (125 additional faculty FTE) by the 2025/2026 academic year. The faculty/student growth does not match student enrollment growth since the faculty/student ratio is expected to increase.

During Fall 2009, there were 399 FTE staff, all on the main campus. Staff is projected to increase at a rate of 5% (19 additional staff FTE) by 2015/2016 and 21% (83 additional staff FTE) by 2025/2026. These additional faculty and staff will need more academic and administrative offices and support spaces.

Especially in light of declining state support and other environmental factors, it is very difficult to predict future student enrollment and the number of faculty and staff the university will employ. Thus, although it is important to project the number of faculty and staff, this was done so with the understanding of this significant uncertainty.

Growth and Future Space Needs

To understand how much additional space will be necessary to accommodate the university’s anticipated growth and to link the university’s academic goal with the campus master plan, Paulien and Associates prepared an academic space needs analysis.

Building and classrooms recommendations must be based on a solid understanding of how the existing campus spaces are used and what the future demand for campus space will be. Just because the university intends to grow, the campus should not blindly build more of everything. Existing spaces must first be fully utilized, and only then more space should be constructed.

Paulien and Associates measured current utilization of classrooms, labs, offices, and other campus spaces. After comparing existing utilization with national benchmarks and guidelines, Paulien calculated the campus spaces needed to accommodate the future student enrollment and the resulting increase in faculty and staff, including the growth of the Hudson Center and online instruction.

The analysis recommended that additional space will be needed for classrooms, labs, offices, library, assembly space, and physical plant. The campus master plan accommodates all identified space needs, and specific needs are discussed in conjunction with each recommended project.
Striving for a Sustainable Campus

Concurrent with the preparation of the campus master plan, the campus prepared an integrated, comprehensive climate action plan to reduce fossil fuel energy use and greenhouse gas emissions on campus, to carbon neutrality. This plan will fulfill a requirement created when UW-River Falls signed the American College and University Presidents Climate Commitment (ACUPCC) in 2007.

The climate action plan will align with other campus plans including the Sustainable Campus-Community Plan, also under development concurrent with the campus master plan. The Sustainable Campus-Community Plan will describe how Goal 2 of the Strategic Plan will be accomplished through institutional involvement. The plan will prioritize tasks, assign responsibilities, create timelines and set measurable outcomes.

The campus master plan consciously does not have a discrete section that describes sustainable initiatives. Rather, sustainability principles are embedded in every recommendation. This master plan pursues resource conservation and reduced energy use at many levels. It moves the campus in the direction of less environmental impact, including improving the South Fork Kinnickinnic River water quality, reducing impervious surfaces, and increasing building energy performance.

The master plan reuses and repurposes many existing structures. Rodli Hall is repurposed from a dining commons to a student services office cluster. Centennial Science Hall is renovated from an antiquated science building to house general classrooms and meeting spaces. A new building for cramped Maintenance is avoided by reusing the RDI building. The core of the south campus sports and recreation complex is the existing Hunt /Knowles complex.

The worst performing structures are decommissioned and replaced. R.A. Karges Center and Emogene A. Nelson Building are removed with the south campus sports and recreation complex project. Hagestad Hall will be repurposed in the near-term for studio classrooms. In the long-term, the functionality of the building will decline and it will be demolished for a science building.

The new structures – the new residence halls, the south campus sports and recreation complex, the Wyman addition, and the science building – will be constructed to modern standards for efficiency and performance, with energy use a minimum of 30 percent better than code. The master plan recommends that new buildings have integrated renewable energy sources.

Yet the plan must also be economically sustainable. While the master plan is far-reaching and visionary, it is easily divided into incremental and discrete projects that can be funded. Projects will tap many funding sources including GPR and PR funding, grants, non-state funding, and partnerships with the City of River Falls.

The campus will provide beds for 40 percent of the student body, a very high on-campus residential rate, which will reduce commuting and vehicle use. Campus utilities will continue its transformation to more sustainable and efficient energy use.

The site must be as sustainable as the structures. Parking lots and their impervious surfaces are removed, with parking replaced in a parking structure. New road segments and parking lots will integrate storm water infiltration into the design. Lots N and K are reconstructed from asphalt lots that dump heated runoff into the river into biorention areas. A dense pedestrian and bike facility network will encourage pedestrians and bicyclists. Native plants are encouraged.
Concerns and Dreams

The campus master plan must address the concerns and dreams of campus users and visitors. To quickly and comprehensively understand the campus’s primary strengths, opportunities, weaknesses, and threats, the campus planning team interviewed hundreds of students, faculty, and staff and City of River Falls elected officials and staff in March 2010. This was followed by additional small group discussions of the campus alternatives with over 100 individuals in October 2010. The interviews occurred in small group sessions in an informal discussion format. Participants were invited to discuss their concerns regarding the physical campus and how physical improvements could further the academic goals.

Many similar issues resurfaced frequently throughout the stakeholder interviews. These issues are summarized below.

University’s Role in the Region

- UW-River Falls is the educational institution of the St. Croix Valley – “UWRF owns the region, the region owns UWRF”
- “Campus as a Lab” – the campus is the region’s demonstration site for new technologies and approaches.
- The campus and laboratory farm should be open and accessible to all.
- UW-River Falls is an extremely traditional campus – young undergrads, residential campus, 8-5 Mondays through Fridays.
- The student body is diverse – students come from urban and rural Wisconsin and the Twin Cities.
- The Hudson Center is targeting Twin City degree-completers. It gives UW-River Falls a presence on I-94 and is the first off-campus experiment.

Town/Gown Relations

- The community doesn’t feel welcome on campus, and there’s an invisible barrier at the campus edge.
- There’s a need for better visitor parking and wayfinding.
- The South Fork Kinnickinnic River is a community asset. The trails and Mel Wall Amphitheatre are used by entire community.
- There are multiple student housing developments adjacent to campus. The student neighborhoods west of campus are not attractive, but there’s been no significant crime issues.
- The city is proud of its water quality and has newly rediscovered the Kinnickinnic River, facing the new city hall on the river.
- The city desires vehicular campus circulation routes other than Cascade Avenue. The Third Street bridge can’t handle large emergency vehicles, and the campus needs more traffic release valves.
- Ramer Field event release creates traffic congestion on South Main.
Campus Gateway/Welcome Center
- Campus is considering a new campus one-stop gateway. Enrollment Services would be co-housed with Academic Success, perhaps in a renovated Hagestad Hall.
- The needed full reconstruction of Hagestad Hall will likely cost more than the available remodel budget.
- The visitor Parking Lot Q Lot is a poor first experience. Visitors must cross Cascade Avenue – a first test of survivability.
- The campus core should be pedestrian-focused and reduce vehicle circulation and parking.

Residential Campus
- The campus’s sense of community sets UW-River Falls apart from our competition.
- Students living in residence halls have a high satisfaction and retention rate. Many students like the traditional double-loaded corridors.
- The halls are at and beyond capacity.
- UW-River Falls is expanding its Learning Communities.
- Current residence hall bed count should not determine limits of student body growth. Additional residence halls will be built if needed.
- In the west residential area, there’s a need for more recreational space.
- More on-campus recreation spaces are needed. When Emogene A. Nelson Building and R.A. Karges Center are demolished, all recreation facilities will move to south campus at the HHP complex.
- There are several areas of campus with ADA accessibility concerns, including most residence halls and the path to south campus sports and the recreation complex.

Campus Safety
- Students love the compactness of campus. Many students feel Hunt/Knowles is too far. Many athletes drive home from practice at the south campus sports and recreation complex.
- Students and staff want improvements to the path to the south campus sports and recreation complex, including lighting.
- Crime is comparable to other campuses. The campus is perceived as safe.
- A lack of utilities restricts additional lighting and emergency phones south of the river. There’s no utility infrastructure south of river (no water, sewer, steam, electrical, and IT).

Jens Gunelson, UWRF Campus Photographer

University faculty and staff listening session.
Cascade Avenue and North Hall
• The pedestrian/vehicle conflict on Cascade Avenue is tremendous since students cross the regional road every day. A serious car/pedestrian accident is inevitable.
• North Hall has inadequate spaces for teaching. But if North Hall becomes all administrative use, will that create a disconnected administrative silo?
• The North Hall auditorium has poor ventilation. What is its future? Is there a need for a 1,500 – 1,700 seat auditorium on campus?
• Should Central Administration move south of Cascade Avenue to be closer to students?

Facility Conditions
• Rodli Hall is a campus embarrassment. Campus should fully utilize it. There are several of ideas of what to locate there, and this is our opportunity to “dream a little”.
• Many of the facilities needs modernization – poor labs, little technology in classrooms, outdated equipment.
• Everyone loves University Center, especially eating and meeting there. Although its new, does it need to be expanded already?
• The campus needs more collaborative spaces in academic buildings and residence halls, where small groups of students and professors can informally gather and work.
• Other than the arena, the campus does not have a space for very large gatherings like the first-year experience program and campus speakers. North Hall auditorium is not sufficient.

Academic Space Needs
• Sciences facilities should be grouped and clustered for more interaction among the STEM disciplines (science, technology, engineering, and math). Biology has the potential to increase by 200 major students.
• UW-River Falls is evaluating opportunities for increasing the use of hybrid instruction (online/in class).
• Math is isolated in North Hall and should be nearer to the sciences.
• Visual Arts has a variety of space-intensive programs. Digital Media Arts is a potential upcoming program.
• Teacher Education will continue to be a primary mission of UW-River Falls. Most graduates stay within the region.
• UW-River Falls could expand Communicative Disorders (Speech, Hearing and Language Clinic).
• College of Business and Economics intends to eventually deliver all courses via hybrid instruction. They will decrease the demand on classrooms.
• If online instruction is going to increase, UW-River Falls needs to provide more support for faculty, e.g., Faculty Development Center focused on technology and curriculum).
• There should be more cross-disciplinary curriculum (e.g. STEM, multi-media graphics).
• Campus needs more collaborative learning environments, study rooms, student lounges, and project work storage (Arts).
• How will outreach centers like Hudson be used?
• There is a lack of faculty and capstone research space.
Parking and Transportation
- Parking is perceived as inadequate, especially compared to other UW campuses. There is high demand for Cascade Avenue on-street parking – staff and students arrive on campus early to grab a spot.
- Parking permit costs are extremely low.
- Everyone wants a parking ramp but no one wants to pay for it.
- The campus has attempted to provide mass transit services, but past efforts have failed. There’s no service available now, which is a barrier to increase environmental sustainability. Should there be a shuttle to the Twin Cities?

Project Financing
- Teaching is hampered and limited by poor facilities. Academic program should drive facilities planning, not the other way around.
- The south campus sports and recreation complex project is eagerly anticipated, but there’s lots of skepticism on when and if it will actually occur.
- The current capital campaign is the university’s first attempt.
- Student Senate does not want student fees to be the financial fallback plan for all campus projects. Student fees can’t pay for everything.

Other Issues
- The university’s focus on environmental sustainability is driven by students. Staff is still figuring out its level of commitment. A carbon neutrality plan is underway.
- The campus values South Fork Kinnickinnic River and its desires to take better advantage of it, but campus isn’t clear on how to do that.
Built and Environmental Context

To understand the physical configuration of the UW-River Falls campus, the campus planning team prepared a series of campus and community analysis maps. In each, a particular component of the campus and community was separated and examined. Each layer then highlights particular challenges and opportunities for the campus. The campus planning team prepared nine analysis maps, included in the Appendix.

The analysis shaped how the planning team and Steering Committee assessed campus constraints and opportunities.

Campus in the Community
- Campus has rural location but has good connections to the Twin Cities metropolitan region.
- Campus is near downtown, but not well connected.
- UW-River Falls has two educational neighbors, Chippewa Valley Technical College and River Falls High School, but little current coordination.
- Campus is surrounded by single-family residential neighborhoods.
- City of River Falls is growing around the campus.

Land Use
- The campus core, is comprised of one academic/administrative core and two residential neighborhoods.
- Out of the campus core are Hunt/Knowles complex, the Campus Laboratory Farm, and Mann Valley Lab Farm.
- All recreational facilities are moving south of the river with the south campus sports and recreation complex project.

Building Profiles
- Most campus structures serve their assigned functions well and are in adequate physical condition.
- Three buildings are in good shape but need renovations:
  i. Agricultural Engineering Addition (labs do not meet contemporary agriculture engineering technology needs),
  ii. Maintenance and Central Stores Building (significantly undersized for the number of maintenance services and employees they serve), and
  iii. Greenhouse (lack of headhouse space for plant preparation/analysis and demonstration).
- Five structures are in poor physical condition and need to be addressed in the campus master plan:
  i. Hagestad Hall,
  ii. Agriculture Science,
  iii. Centennial Science Hall,
  iv. North Hall, and
  v. Rodli Hall.
- As part of the planned south campus sports and recreation complex, two facilities (Emogene A. Nelson Building and R.A. Karges Center) will be demolished and Ramer Field/Athletic Fields will be renovated.
Open Space
• Central mall is the campus’s primary active open space.
• The South Fork Kinnickinnic River and its floodplain are significant natural amenities.
• The Cascade Avenue building setback forms the front image of campus, but it is largely unused.
• Athletic and recreational fields are all located south of the river.
• The Campus Laboratory Farm is distant from the campus core.

Pedestrian and Bicycle Circulation
• The campus core is largely pedestrian-oriented, except for the Third Street and Sixth Street vehicle crossings.
• There are multiple pedestrian/vehicle conflicts – on the mall, within parking lots and roads, and crossing Cascade Avenue.
• The Hunt/Knowles complex is an acceptable walk distance from the campus core, but it is perceived as distant due to its isolation.

Vehicle Circulation
• Vehicle circulation is disjointed and confusing.
• Both the campus and the city desire an internal campus circulation network.
• Hunt/Knowles complex is accessible only through city streets.
• Planned reconstruction of Cascade Avenue will put roundabouts at Second Street and Sixth Street and will move all on-street parking to off-street lots.
• There is no recognizable campus gateway and one is needed. Could the roundabouts act as gateways?

Vehicle Parking
• On-campus parking is provided at a rate that is typical for suburban campuses. But not included in this rate is the significant number of students and staff that park off-campus in on-street spaces.
• Close lots are well-used. Distant lots often have vacancies.
• More on-campus parking is needed if campus is to grow since no additional off-campus parking will become available.
• Visitor parking is inconvenient and not well located.

Natural Features
• The South Fork Kinnickinnic River is not a focus for campus activities.
• The South Fork is a Class II Trout Stream, but the Kinnickinnic River main branch is a Class I Trout Stream.
• On-campus wetlands are located within the river floodplain and in the east residential area.

Utilities
• Campus is well served by utility generation and distribution.
• The State of Wisconsin has a goal to move central heating plant to an alternate fuel source, but there’s no plan yet in place.
Key Challenges

In addressing the broad range of issues and opportunities facing the campus, the campus planning process sought to balance various interests and resolve existing and potential conflicts among the different voices on campus and in the larger community. While there were many challenges to resolve, the following were the most significant:

• Accommodate the significant expected growth of student enrollment while maintaining a compact campus and not compromising the South Fork Kinnickinnic River.
• Better connect the main campus with the emerging south campus sports and recreation complex.
• Promote pedestrians and bicyclists while accommodating automobiles.
• Renovate or replace aging campus facilities such as Rodli Hall and Hagestad Hall.
• Allow the campus to grow and evolve without adversely affecting the Campus Laboratory Farm and surrounding neighborhoods.
Vision

The campus master plan is the preferred physical vision for UW-River Falls’s continued growth and evolution over the next 20 years. As the campus master plan is implemented, the university’s academic and support programs will grow and change, the campus will become more residential, and campus growth and expansion will occur in logical sequencing.

The campus master plan recommendations address existing facilities, site, and space needs and anticipate future opportunities and challenges. Throughout the campus, the use of valuable existing space is intensified so that impacts to the Campus Laboratory Farm are minimized. The core campus will continue to intensify as low-density structures are replaced by a science building, an education building expansion, two residence halls, and the renovation of Rodli Hall.

This growth and intensification does not come at the expense of open space. The campus mall is extended west with the removal of Third Street. The campus mall and the east residential neighborhood open space are preserved and better defined. The South Fork Kinnickinnic are better integrated and connected to campus.

As the campus grows, it will become more focused on the pedestrian. A connected pedestrian and bicycle network connects main campus to the south campus sports and recreation complex and downtown River Falls automobiles and parking are accommodated but kept to the edges.

The university is committed to the City of River Falls and its immediate neighbors. The campus respects the adjacent neighborhoods by limiting campus-related parking while buffering adjacent residential areas from campus activities. The campus will support continued downtown revitalization by partnering on Cascade Avenue reconstruction and a shared parking structure.

The university will accomplish these goals through a series of efficient, logical, and financially reasonable steps.
The UW-River Falls Campus should be:

Dedicated to Mission
We will be the learning nucleus of the St. Croix Valley. The campus should support and cultivate academic and social growth, providing open, collaborative, and flexible environments for teaching, research, and outreach, the exchange of ideas, and the nurturing of innovation.

Inwardly and Outwardly Connected
The campus should be welcoming to first-time visitors, community members, and faculty, staff, and students. The campus should be internally connected among the campus core, the Campus Laboratory Farm, the south campus sports and recreation complex, and both sides of Cascade Avenue. The campus should be fully connected to its community, including Downtown River Falls and adjacent neighborhoods.

Environmentally Sustainable
UW-River Falls is a steward of the South Fork Kinnickinnic River. The river serves to define our character and campus patterns but is also a living laboratory in our back yard. The South Fork Kinnickinnic River should be integrated into campus life while water quality and riverbanks are improved. The campus should be a regional demonstration site for river enhancement and energy efficiency.
Community-Building
UW-River Falls should enhance the community-building aspects of campus. It should broaden housing options, expand the campus’s social and cultural infrastructure, and promote a healthy and vibrant River Falls.

Compact and Integrated
Creativity and learning depend on bringing disciplines, people, and ideas together. The campus should concentrate academics and learning into an expanded and defined campus core. The campus should become more pedestrian-oriented.

Coordinated and Engaged
In the planning and design of the campus, the university should continue to integrate multiple disciplines, engage both the campus and River Falls communities, and coordinate academic, development, landscape, and infrastructure initiatives.
Campus Master Plan
South of the South Fork Kinnickinnic River
Recommendations

This section describes the campus master plan’s project recommendations. The detailed projects directly forward and advance the campus-building principles.

Commitment to the Community

Protect and Enhance the South Fork Kinnickinnic River
Reinforce the Relationship between the Campus and its Natural Setting
Establish the Campus Edge
Strengthen the University Presence in Downtown
Support Redevelopment Along South Main Street
Respect and Enhance Surrounding Neighborhoods
Respect and Enhance Adjacent Rural Areas
Campus Patterns
Concentrate Academics in the Campus Core
Cluster Public Administrative Uses near Gateways
Incrementally Renovate Buildings to Accommodate Demand for Space
Broaden and Expand Housing On-Campus Options
Provide a High-Quality Sports and Recreation Complex
Protect Outdoor Teaching and Research Facilities
Create Place and Identity throughout Campus
Welcome Visitors to Campus
Extend and Define the Campus Mall
Preserve and Enhance Views on Campus and Into Campus
Adjust the Campus Boundary to Anticipate Future Needs

Campus Movement
Create a Safe, Multimodal, and Green Campus Street Network
Embrace the Reconstructed Cascade Avenue
Create a Fine-Grained Pedestrian Network
Encourage Cycling
Move Parking to the Campus Edges

Campus Utilities
Maintain a Permanent Network of Utility Corridors
Locate Utility Corridors under Streets and Open Spaces
Incorporate Services into Landscape and Streetscape Design
Continue to Focus on Energy Conservation
Maintain, Improve, and Expand System Components
Commitment to the Community

The UW-River Falls campus is an essential part of the River Falls community. The university is a major employer and traffic generator, the campus hosts community events, and the university helps to define the City’s image statewide. The South Fork Kinnickinnic River flows through the campus. Student residential and campus parking shape the character of several adjacent neighborhoods. The university and its campus are inextricably linked with its home community and the vitality and success of each are symbiotic.

The campus master plan considers the physical, ecological, social, cultural, economic, and academic ties the university has with the greater community. The campus master plan recognizes that the university’s leadership and stewardship role extends well beyond the campus boundaries. This section sets out broad objectives and strategies that will guide the university’s relationship with its host community.

- Protect and Enhance the South Fork Kinnickinnic River
- Reinforce the Relationship between the Campus and its Natural Setting
- Establish the Campus Edge
- Strengthen the University Presence in Downtown
- Support Redevelopment Along South Main Street
- Respect and Enhance Surrounding Neighborhoods
- Respect and Enhance Adjacent Rural Areas
Protect and Enhance the South Fork Kinnickinnic River

The South Fork Kinnickinnic River passes through campus, separating the core campus from the south campus sport and recreation complex and the Campus Laboratory Farm. The health of the river and the downstream Kinnickinnic River are directly dependent on the stewardship of the campus.

Runoff from campus has the potential to travel directly to the South Fork Kinnickinnic River. As evidenced by past thermal and water quality monitoring, it is apparent that development throughout the square mile of the entire South Fork Kinnickinnic River watershed is causing an increase in average stream temperature of about 3-4 degrees Fahrenheit during storm events. It is also apparent that development is causing increases in total suspended solids, total nitrogen, phosphorous, copper, lead, and zinc.

RECONSTRUCT LOTS N AND K TO STORM WATER TREATMENT AREAS

ParkingLots N and K are located in the river floodplain, south of Hathorn Hall and west of Agriculture Science, respectively. Student vehicles are stored in these lots, dripping automotive fluids and other non-point pollutants onto the surface parking lot. When flooding occurs, these pollutants are washed directly into the river. The black asphalt parking lots heat up rainwater just as it is draining into the river.

The campus should decommission both Lots N and K, relocating student parking elsewhere. The asphalt should be removed and replaced by passive recreation open space comprised primarily of lawn. At the edges of the open space adjacent to the river, the campus should construct bioretention swales. They should be constructed to capture storm water and temporarily to hold it to allow pollutants to settle out and the water temperature to decrease. Water would gradually infiltrate the bioretention area or be evapotranspired.

PURSUE STORMWATER MANAGEMENT BEST PRACTICES

The campus should utilize best practices for storm water management for all projects, including new and existing buildings, roads, sidewalks, and landscaping, or where significant runoff is expected. Any changes to the existing storm water runoff or the storm sewer system should also employ best management practices for storm water management.

The campus prepared a Storm Water Management Plan in 2006 and updated it in 2009. The report summarized: “UW-River Falls has been an active participant in the water quality improvement effort of the South Fork Kinnickinnic River for many years. The management of university land from the main campus to the farms shows a conscious effort of storm water management.”

The management plan reviewed existing campus efforts and summarized pertinent state and local codes. It recommends best practices and specific projects to improve storm water performance. Most recommendations have been embedded within this master plan’s recommendations. See the Storm Water Management Plan for additional information.

PROTECT THE RIVER DURING CONSTRUCTION PROJECTS

As recommended by the Storm Water Management Plan (2009), “The Kinnickinnic River has been designated an area of special natural resource interest and an outstanding resource water by WisDNR. According to NR 151, all land on the UW-River Falls campus within 75 feet of the South Fork or the wetlands surrounding the South Fork is considered a protective area. The university should attempt to keep impervious areas in post-construction sites out of this protective area whenever possible. If land disturbing activity takes place within the protective area, vegetative cover of at least 70% is required to provide bank stability and filtering of pollutants from upslope overland flow. Rock riprap can be used on the riverbank to prevent erosion on steep slopes and in areas where high velocity flows occur. Best management practices such as filter strips and swales, which are designed to control pollutants from non-point sources, can be located in the protective area. These restrictions do not apply to redevelopment post-construction sites or the construction of bridges that cross the river.”

The proposed road connection along the south edge of Agriculture Science complex may impact the 75 foot riparian buffer. See page 76 for recommendations to minimize the impact on the river.
Reinforce the Relationship between the Campus and its Natural Setting

The UW-River Falls campus has many identities based on its uses and adjacencies. Its an urban campus next to downtown, a rural campus next to agricultural fields, and a natural campus straddling a river. The character of buildings, roads, and open spaces should reinforce the campus's natural setting and the important role of the South Fork Kinnickinnic River.

**ORIENT NEW BUILDINGS TOWARD THE SOUTH FORK KINNICKINNIC RIVER**

The University Center is the only existing campus building that fully embraces its location along the South Fork Kinnickinnic River. Its south-facing atrium brings the natural riverine environment into the building, reminding building users of their place within the campus’s natural environment.

As new buildings are constructed near the South Fork Kinnickinnic River, they should similarly be oriented to the river. In particular, the Hathorn Hall addition should open to the south and the river, attempting to link the interior spaces with the river corridor.

**INCREASE RIVER ACCESS AT STRATEGIC LOCATIONS**

The entire length of the South Fork Kinnickinnic River corridor on campus should feature an informal riparian landscape. The corridor serves as a research/academic laboratory, and could be developed as a demonstration of riparian plant communities with plant identifications.

The university should consider native plantings whenever possible. Informal recreational paths should parallel the river on both the north and south sides. Bioretention areas should slow and treat storm water before it enters the South Fork Kinnickinnic River.

Within campus, the river landscape should have two characters. Access to the river should be enabled on the north bank between the Third Street and the Sixth Street bridges. In this area, campus users should be able to visually and physically access the river. A continuous boardwalk/trail should provide access near the water’s edge, and periodic stops should highlight significant views and provide seating and interpretive signage. Canopy trees well suited to the environment should be incorporated sporadically along the north bank without blocking views to the river. All plant material should be low enough or high enough to allow and frame clear views to the river.

West of the Third Street Bridge and east of the Sixth Street Bridge, the river character should be as natural as possible. Recreational trails and boardwalks should be limited to existing trails and necessary new pedestrian connections. The river corridor should be designed and managed to provide wildlife habitat, improve water quality, and support academic research and instruction. In areas where banks have eroded, the university should pursue naturalized bank stabilization.
Establish the Campus Edges

Key to integrating the university into its community is establishing and reinforcing the campus edges. Campus gateways mark the threshold between the campus and its context. They are the places where one feels one has arrived at or has left the campus.

The campus does not currently have an effective campus gateway. The signage at Main and Cascade identifies the campus and is an effective portal for pedestrians originating in downtown, but motorists cannot enter the campus at this location.

The south edge of Cascade Avenue has a university character, but there is no central entry portal for campus visitors. From Cascade Avenue, there are too many entrances into campus (Spruce Street, Third Street, Fourth Street, Sixth Street, and Crescent Street) and signage does not indicate where the motorists should enter the campus or how to find major destinations.

The campus should enhance and beautify the landscape treatment at designated campus gateway locations to create significant and memorable portals. Gateways should be reinforced with landscape and architectural features to signify entrance and arrival. Gateways should be appropriately scaled and materials/colors should be uniform and consistent throughout campus. Signage at the campus gateways should prominently introduce visitors to the campus and be consistent with the university’s existing comprehensive signage plan.
ESTABLISH THE MAJOR CAMPUS GATEWAY AT SIXTH STREET
The campus should have one major gateway – the Sixth Street roundabout. The major gateway is the key entry point into campus and the entry that the campus should direct first-time visitors to use. This entrance will serve the two major campus destinations for campus visitors – the student services offices in Rodli Hall and University Center. It will also serve as the likely access point for deliveries at the University Center and Maintenance and Central Stores Building.

Gateway elements should be located on the southwest and southeast intersection corners as well as the interior of the roundabout. The scale and character of the Sixth Street gateway should be influenced by the speed and distance of motorists that pass by and enter the campus. Landscape treatment for the major gateway should be significant and imposing. Gateway walls, monumentation, graphics, and colors should indicate a major educational institution. Landscape elements should be bold and simple in arrangement, massing, and alignment.

ESTABLISH MINOR GATEWAYS
Minor gateways are other entry points into campus. Minor gateways should balance vehicular and pedestrian scales. Minor gateway design should be integrated into the surrounding to streetscape design. Walls, monumentation, graphics, and colors should be in scale with the surrounding community. Plantings around minor gateways should be low and formal to assure visibility. They should be simple in arrangement, massing, and alignment.

Second Street roundabout at Cascade Avenue
The low signage and landscaping should be located within the roundabout or on the southwest and southeast intersection corners. Although this will be the first entrance that a visitor arriving via downtown will encounter, the signage of at this minor gateway should indicate that the Sixth Street major gateway is the intended visitor entrance.

Chalmer Davie Library/E.H. Kleinpell Fine Arts Drop-Off off Cascade Avenue
Minor signage should indicate community drop-off and access to the library, E.H. Kleinpell Fine Arts, and the campus mall.

Birch Street off Cascade Avenue
This entrance will be a popular entry point for commuting and residential students as it provides access to Parking Lot O. The university should also direct regular drivers of campus delivery vehicles going to Maintenance and Central Stores Building to use the Birch Street entrance. The turning radii of the entrance should allow large delivery vehicles. Although this entrance will be the first that a visitor arriving via State Route 65 will encounter, the signage at this minor gateway should indicate that the Sixth Street major gateway is the intended visitor entrance.

Main Street entrance to Parking Lot E
Minor signage should indicate this entrance to the campus parking lot.
The Second Street secondary gateway could be an impressive campus entrance for those coming from downtown. The gateway will be formed by the roundabout, the parking structure on the north and the new science building on the south. The interior of the roundabout should include campus signage, perhaps on a low wall.
The Sixth Street primary gateway should be the main entrance into campus. Campus signage in the roundabout should be accompanied by vehicle-scale columns. The renovated Rodli Hall will welcome campus first-time visitors.
Main Street entrance to south campus sports and recreation complex
This access point is the primary entrance for all athletic competition and practice facilities, and will be an important entrance for athletic events. The signage at this minor gateway should reflect the university’s athletic brand. The event-only access points on Main Street and Cemetery Road should feature no signage other than necessary directional signs.

South Wasson entrance to Campus Laboratory Farm
The gateway elements at this location should be consistent with the university’s existing comprehensive signage plan yet still maintain the rural/farm character.

The Third Street entrance off Cascade Avenue should be reduced to a minor driveway for deliveries to South Hall and limited accessible parking. This campus entrance should be reconstructed so it does not read as a gateway into campus, and signage and landscaping should not highlight this driveway.

Strengthen the University Presence in Downtown
Downtown River Falls is a typical small Wisconsin downtown with an urban streetscape. Unlike many other Wisconsin downtowns, however, River Falls’s downtown is relatively economically strong, tapping into the market of the university as well as the City. Many first-time visitors will form their impressions of the university before they get to the campus. A strong downtown is critical for both the City and the university.

EXTEND PRIMARY PEDESTRIAN MALL TO MAIN AND CASCADE
The portion of campus adjacent to the Cascade Avenue and Main Street intersection is the west residential neighborhood. The center of campus activity is several blocks from downtown. The activity associated with the University Center, the fine arts building, and the library does not flow directly into downtown. Therefore, a direct pedestrian connection is needed between the two activity centers.

The master plan recommends the western expansion of the campus mall to a new Second Street entrance. The primary pedestrian walk through the campus mall should be extended through the west residential neighborhood to the intersection of Cascade Avenue and Main Street. The existing campus signage plaza and associated pedestrian path should be expanded after the demolition of the Emogene A. Nelson Building. Those traveling on Main Street and Cascade Avenue should have views into the west residential neighborhood.

PARTNER IN A CASCADE AVENUE PARKING STRUCTURE
A major challenge in rejuvenating traditional downtowns like that of River Falls is a lack of space for automobile parking. Many downtowns have demolished historic structures to provide downtown parking, destroying the very character that made downtown unique.

The campus master plan recommends a parking structure on Parking Lot Q, located north of Cascade Avenue and east of Second Street. This location is within easy walking distance of most of downtown River Falls. The parking structure could provide a source for parking, allowing increased density and activity in the downtown while preserving existing structures. The university and City should partner to construct this parking structure. (See more details in the Campus Movement section.)
Support Redevelopment Along South Main Street

The City seeks to continue redevelopment along South Main Street, transitioning the commercial corridor from automobile-oriented suburban form to a more traditional urban form. The intent is that South Main Street redevelopment will support an extension of downtown retail and other commercial uses. Campus buildings located on South Main Street should be located with a minimal setback typical of new and redeveloped commercial and institutional structures on the street. The setback of campus structures should not contain surface parking, but rather be landscaped/hardscaped in a manner appropriate for an urban commercial street.

Respect and Enhance Surrounding Neighborhoods

While the campus is largely defined by a ring of roads comprised of Cascade Avenue, South Wasson Lane, Cemetery Road, and South Main Street, three neighborhoods share that ring with the campus. The function and image of campus are dependent on the strength of adjacent neighborhoods. Working together, the university and its residential neighbors can ensure these areas remain attractive and healthy.

BUFFER AND BUILD COMPATIBLE STRUCTURES AT THE RESIDENTIAL EDGES

Campus uses should buffer and protect adjacent residential uses. The campus is adjacent to two types of neighborhoods. The Grotenhuis and South View neighborhoods are largely made up of stable single-family homes that contain some university faculty and staff. The Glen View neighborhood is a transitional multifamily neighborhood with many student residents.

Residential Edge – Grotenhuis Neighborhood and South View

Parking Lot O and the east entry road are adjacent to the rear yards of the Valley View Drive homes in the Grotenhuis neighborhood. Surface parking and event-only circulation are adjacent to the rear yards of the East Johnson Street homes in the South View neighborhood. Few students live in these single-family neighborhoods. No direct vehicular or pedestrian access to these neighborhoods is expected (other than an emergency access easement to Valley View Drive). These campus
edges should be fenced and heavily landscaped to block lights and muffle some sounds from parking and circulation.

**Residential Edge – Glen View**

The south campus sports and recreation complex is adjacent to the Glen View neighborhood. The pre-design report placed utilitarian uses such as a biofuel plant along this campus edge. Vehicular access to the utilitarian area will be via the Main Street entrance. To alleviate the impact of service vehicles on the adjacent residential streets, the existing vehicle connection to Sycamore Street will be gated for only fire department access. Many students live in the Glen View neighborhood and thus this campus edge should allow for free appropriate pedestrian access. This edge should be heavily landscaped to block lights and muffle sounds from the service and loading functions of south campus sports and recreation complex.

**DO NOT INCREASE OFF-CAMPUS PARKING PRESSURE**

A significant number of students, faculty, and staff park in legal on-street spaces in the neighborhoods north of Cascade Avenue and west of South Main Street. As the student enrollment increases, the demand for automobile parking will increase. The master plan assumes that existing off-campus on-street parking will remain in use, but that the demand for off-campus parking will not increase. The master plan provides sufficient parking on campus for anticipated student enrollment growth. To ensure appropriate campus parking, the university should partner with adjacent neighborhoods and the

City to enforce city parking regulations and limit any expansion of off-campus on-street parking.

**Respect and Enhance Adjacent Rural Areas**

The university’s campus edge along South Wasson and Cemetery Road abut the Campus Laboratory Farm and are rural in character. Within the last five years, this area of the City of River Falls has rapidly begun to urbanize with a new high school campus and higher density housing. Despite this changing character, the Campus Laboratory Farm should remain rural in character and function. Future campus building placement, circulation, and landscaping should reinforce the Campus Laboratory Farm’s rural character, while anticipating increased intrusion from adjacent development. Perimeter fencing should be similar in style to regional rural fencing patterns and materials.
Campus Patterns

The pattern of activities, buildings, and open spaces defines the functionality, livability, and beauty of campus. As the campus has grown and expanded, its east-west orientation has remained, shaped by Cascade Avenue and the South Fork Kinnickinnic River. This master plan furthers this pattern, limiting the campus core to one side of the river and extending the campus mall westward.

The university evolution will continue past this master plan, but the campus patterns established now will influence change for decades. The master plan prepares the campus for its next stage of growth and maturation.
Concentrate Academics in the Campus Core

The campus mall is the academic heart of campus. Nearly all academic classrooms, labs, and offices are around the campus core. While the Health and Human Performance department will move south of the river with the south campus sports and recreation complex, all other academic uses are brought within the core campus, east of Second Street and west of Sixth Street.

ACCOMMODATE THE GROWTH OF THE PHYSICAL SCIENCES

The sciences have always been a significant part of the teacher education curricula, partly because of the curricula in Agriculture and in secondary education, but also because of the preprofessional programs in medicine, veterinary science and other fields.

Science Integration

The sciences are now split on either end of the campus mall. Centennial Science Hall houses the Chemistry, Physics, and Psychology departments and the broad field science programs. The Agriculture Science Building houses the Biology department, as well as Agricultural Economics, Agriculture Education, Agricultural Engineering Technology, Animal Science, and Plant and Earth Science departments.

The sciences faculty, with support from the Provost, have advocated for an integrated approach to the sciences. Current interdisciplinary efforts, particularly among Biology, Chemistry, and Physics, are difficult due to the spatial mismatch. The academic goal at UW-River Falls is to bring together the pure and applied physical sciences. This mirrors a national trend in integrating the physical sciences. The common term for this effort is STEM, which incorporates the sciences, technology, engineering, and math.

At UW-River Falls, the STEM concept has been expanded to include the historical strength of the university – agricultural science. The Biology department will serve as a link between the pure sciences and the applied agriculture sciences.

However the physical location of these departments is inhibiting interdisciplinary collaboration. STEM programs are scattered across campus. Physics and Chemistry are in Centennial Science Hall, Math in North Hall, Computer Science and Information Systems in South Hall, and Biology and Plant and Earth Science (which includes the Geology and Environmental Science majors) in Agriculture Science. The spatial mismatch limits interaction between faculty, requires unnecessary duplication of equipment, and inhibits formation and maintenance of interdisciplinary programs such as Biotechnology.

Inadequacy of Centennial Science Hall

The long-term use of Centennial Science Hall for more intense sciences will be difficult and costly. Centennial Science Hall was constructed in 1977 as the primary science facility on campus, replacing obsolete labs in North Hall. An observatory was added in 1980. While the building has been maintained, neither significant interior remodeling nor improvements in fixtures and furniture has occurred since 1977. Labs do not support group work or computer technology. Building systems and equipment are outdated and worn. Support spaces are inadequate to serve the laboratories. The utilization of some teaching laboratories exceeds the space use guidelines due to the number of courses offered. A comprehensive renovation will be needed to change laboratory sizes and configuration so that it can meet current and intended pedagogy. Science labs are typically some of the most expensive academic spaces to build, so the costs of renovating Centennial Science Hall will likely be relatively high.

Even after Centennial Science Hall were completely renovated for the sciences, it would not provide sufficient room for the combined and integrated sciences. According to the space needs analysis, Biology, Chemistry, and Physics currently have approximately 41,600 ASF. These three disciplines will generate a guideline space need of around 76,000 ASF by the 2025/2026 academic year, comprised of teaching laboratories, open laboratories, research laboratories, academic offices, and other academic department space (exclusive of classrooms). Centennial Science Hall has 37,725 ASF. Additionally, Biology, Chemistry, and Physics would still be split from Agriculture Sciences, and Math would still be in North Hall.

New Science Building

The master plan recommends that the university construct a new science building on the site of Hagestad Hall. Chemistry and Physics should relocate from Centennial Science Hall and Math should relocated from North Hall. The building should contain wet and dry laboratories, collaborative spaces, faculty offices, and a limited number of classrooms. The master plan indicates a three-story
This view from the Hagestad Grove shows a potential design for the New Science Building on the left. In the background are the campus mall extended west and the Agriculture Science Complex. The wide north-south path on the left connects the campus mall with the south campus sports and recreation complex.
building with approximately 168,000 GSF. A pre-design study will confirm the departments to be located in the project, the necessary mix of spaces, and the building size.

The new science building will help in meeting two campus wide needs. First, the existing amount of research space on campus, which includes faculty and student capstone research space, is minimal compared to similar institutions. The space needs analysis indicates a significant need for research space now and in the future. The university has a deficit of almost 14,000 ASF at the current enrollment. The projected deficit of research space in the 2015/2016 academic year is 16,100 ASF, which increases to almost 23,800 ASF in the 2025/2026 academic year. The new science building should include research space.

Second, while there are a number of departmental study rooms throughout campus, there is little collaborative learning space in the academic buildings. Collaborative learning spaces are spaces outside of classrooms and faculty offices that are necessary for informal faculty/student work and student group work. They can have varying layout and technology needs. Collaborative learning spaces that have imbedded technologies is paramount in supporting the contemporary pedagogy of group learning. The new science building should contribute to the campus’s pool of collaborative spaces.

The departments located in the new science building should share the offices, classrooms, and underutilized labs in the Agriculture Science complex. As much as possible, the pure and applied physical sciences should be programmatically and physically integrated.

**Upper Floor Connection**

One option for further integration is a physical connection between the new science building and the Agriculture Science complex. If the structures are linked, they should connect in a way that does not close off the west end of the campus mall. One option, shown in the master plan, is an upper floor bridge that allows climate-controlled access among buildings, an important factor when carrying specimens in the harsh Wisconsin winter climate. This bridge should be more than conveyance. It should include learning spaces such as collaborative space. The master plan demonstrates an upper floor connection that is approximately 12,000 GSF.

The decision to connect buildings should keep in mind the negative implications. Ground level connections, particularly those that rise multiple levels above grade, block views and access between buildings, interrupt exterior pedestrian routes, and have the potential to create the perception of an unbroken “wall” of buildings. Below grade connections, where feasible, can avoid these concerns and should be investigated.

Any upper floor connection between the new science building and the Agriculture Science complex should allow for a wide, safe, and inviting pedestrian access between the campus mall and the west residential neighborhood. It should be relatively transparent, enabling views between the bridge and the primary pedestrian path, and possible views through the bridge. It should be designed so that the connection serves as an open gateway into the campus mall for those entering from the west.

**Site Design**

The new science building will form the new extended west end of the campus mall. The building should open up to the campus mall, with the primary entrance located on its southeast corner facing the mall. A small plaza in front of the primary entrance should connect to the primary pedestrian path.

The building must be carefully placed on its site. The grove of mature trees east of Hagestad Hall should be preserved by both the siting of the new science building and also its construction. The building architecture should open up to the grove of trees to incorporate this natural amenity into the building.

The building placement should help create an appropriate streetscape along Cascade Avenue and the new Second Street campus road. The Cascade Avenue front will help form the community’s impression of the campus and thus should be appropriately designed. The northwest corner will need to accommodate the planned Second Street roundabout.

The campus mall primary pedestrian path will pass south of the structure. The site and building design should provide sufficient space for the wide path and associated landscaping, and also should front and enliven the path.
Accessible parking should be provided near the building, but located so that it does not block critical pedestrian routes.

**RENOVATE AGRICULTURE SCIENCE COMPLEX**

As the physical sciences are integrated, the Agriculture Science complex will also require renovation.

Physically, the Agriculture Science building does not meet modern instruction methods. The labs do not meet contemporary laboratory instruction needs, floor loading is very limited, and low ceiling heights limit visibility. A comprehensive renovation will be needed.

Necessary building renovations should be determined only after a detailed space needs assessment for the College of Agriculture, Food, and Environmental Science (CAFES). The course offerings in CAFES is in transition, evidenced by the recent elimination of the Food Science major. Teaching laboratories in disciplines such as CAFES do not have enrollment levels to provide the critical mass necessary to generate the amount of space required. However, as long as the university offers these programs, independent of the enrollment levels, the space will be required unless partnerships with other institutions or industry can provide the necessary space to support the programs.

The detailed space needs analysis should find opportunities to right size and renovate the teaching laboratories, in the context of how the university will provide instruction for combined STEM and Agriculture Sciences. The Agriculture Science space needs study should be prepared in conjunction with the pre-design space needs study for the new science building.

**EXPAND THE GREENHOUSE FOR ACADEMIC INSTRUCTION**

The Greenhouse was constructed in 1973 with major additions constructed in 1987 and 1989. A small headhouse addition was constructed as part of the first addition. The Greenhouse is used by the Plant and Earth Science department, including the disciplines of plant science, agronomy, soil science, horticulture, and resource management.

While the growing houses are functionally adequate, the building lacks storage and headhouse/demonstration space. The campus has indicated a need for a headhouse addition to allow more instructional space. An addition on the north end should include spaces for a teaching laboratory, offices, and materials storage. A physical link to the Agricultural Engineering Addition is possible. Future growing houses on the south end of the existing structure are anticipated. The Agriculture Science fifth floor greenhouse could be relocated and combined with a future addition to the main greenhouse.

**EXPAND WALKER D. WYMAN EDUCATION BUILDING FOR CLINICAL SERVICES**

The Walker D. Wyman Education Building was constructed in 1999 as a replacement facility for the old Ames Laboratory School (now the site of the University Center). The building is occupied by the teacher education, social work, communicative disorders, school
psychology, and counseling programs. The building features a preschool and hearing clinic, and provides clinical services to patients throughout the region.

While Walker D. Wyman Education Building contains some of the best classrooms on campus, over the life of this master plan, the university desires to expand the building’s clinical services. An addition on the north side of the building could provide the additional space needed. Parking for those accessing the community clinical services should be provided in a reconfigured and expanded Lot U.

The building addition should help to define the passive open space north of Hathorn Hall. The addition provides an opportunity to address two issues related to the adjacent University Center. The northwest corner of the University Center has become a de facto front door, yet it was designed as a secondary entrance. Additionally, the University Center’s theater and exhibition spaces could be better supported with a larger elevator. If feasible and practical, the Wyman addition could connect to the University Center, sharing an elevator and formal entrance. Any construction in this area will need to address a campus utility corridor running north/south between Wyman and the University Center.

RENOVATE CENTENNIAL SCIENCE HALL AS A CLASSROOM BUILDING

After Chemistry and Physics departments move to the new science building, the university should renovate Centennial Science Hall as a classroom building.

The campus wide space needs analysis indicated that the university requires additional classroom space. Currently, there is around 65,300 ASF of space categorized as classrooms. At the current student enrollment level, approximately 78,800 ASF of classroom space is required, which is a deficit of almost 13,500 ASF. By the 2015/2016 academic year, the space need results in a deficit of almost 16,700 ASF. By the 2025/2026 academic year, the space deficit increases to almost 26,900 ASF.

In the comprehensive renovation, the building’s spaces should be updated and reconfigured and its systems and equipment modernized. The general classroom building will serve the entire campus, including the sciences. The science-related facilities in Centennial Science Hall that are difficult to move, such as the observatory and planetarium, should remain.

Prior to the renovation of Centennial Science Hall for classrooms, the university should prepare a detailed classroom mix analysis. The campus wide space needs analysis did not consider right-sizing “A” classrooms or conversion of “B” classrooms to other uses. Such renovation would affect the need for classroom space on campus. A detailed classroom mix analysis will determine the need for classroom space on campus. Such an analysis would consider excluding “B” classrooms, identify which “A” classrooms should be right-sized, and determine how many total classrooms are needed of what size on campus at the intended student enrollment.

Centennial Science Hall will also continue to contain academic offices. The Psychology department can remain and the Journalism department can relocate from North Hall.
Cluster Public Administrative Uses near Gateways

To better welcome first time visitors and community residents to the campus, the administrative uses that they frequently use should be located near the campus gateways with sufficient short-term parking.

RENOVATE RODLI HALL AS A STUDENT SERVICES BUILDING

David Rodli Hall is a 63,473 GSF, two story building originally constructed in 1967 for use as a dining hall. It is currently unoccupied, except for limited use by Fast Copy and limited classrooms. To help determine the appropriate use for the building, the master planning team prepared a facility assessment that evaluated the facility condition and explored the feasibility of adaptive reuse.

Adaptive Reuse

As noted previously, the space needs analysis indicated current and future needs for science classrooms and teaching and research laboratories. Given Rodli Hall’s location adjacent to Centennial Science Hall, consideration was given to expanding sciences in Rodli Hall. This option was not considered feasible due to the physical limitation of the building, including first floor headroom, structural bay sizes, and the building envelopes replacement needed to accommodate wet labs.

The master plan recommends the reorganization and co-location of administrative student services in Rodli Hall. One possible collection of campus office uses is a Student Services grouping that possibly could include Registrar, Accounts Receivable, Financial Assistance, Admissions, Career, Counseling and Student Health Services, Academic Success Center, Global Connections, Textbook Services, and some common space including a welcome center. These departments are now located in four separate buildings on both sides of Cascade Avenue. Bringing them closer would allow increased efficiencies for use of facilities and staff as well as increased convenience for current and prospective students.

Prior to the campus master planning process, the campus considered renovating Hagestad Hall for some of these campus office uses. However, given the likely high costs for renovating Hagestad Hall for these uses, renovating Rodli Hall is a financially more prudent course.

Student Services such as Admissions and Financial Assistance are typically located near the “front door” or main entrance to the campus. Academic Support Services such as tutoring, writing, or math centers, etc. are typically found within the academic core of the campus or at the point between the academic core and student housing. The Rodli Hall site is central to campus, located on the campus mall’s primary east-west pedestrian path, adjacent to the campus major gateway at Sixth Street and Cascade Avenue, and adjacent to student housing. The site works well for a student services office cluster.

When Rodli Hall is renovated, the university should consider the specific departments that are most needed on campus at the time and are most reasonable uses for

The west entrance of Rodli Hall could serve as a common welcome atrium for the Student Services Building.
the reuse of Rodli Hall. The university should also consider limited academic space such as classrooms.

**Site Design**
The Rodli Hall site is a strategic site. Located at the major campus gateway, first-time visitors will be directed to Rodli Hall and its admissions and related services. The building’s site should provide an adequate amount of short-term parking, reserved for campus visitors. Campus signage should direct first-time visitors to the parking lot and west entrance. The west lobby, potentially a shared welcome center for all the building offices, should be an appropriate welcome to the campus for prospective students and their parents.

The building is also located on the primary path, just east of the campus mall. The south entrance will be very visible and accessible to student walk-by traffic. This entrance could lead to academic support and other important services for retention and student success. The south facade should be welcoming and should appropriately front the pedestrian path. The campus should investigate enclosing the first floor south overhang, creating a transparent space for active uses, drawing students into the building.

**RENOVATE NORTH HALL FOR ADMINISTRATIVE USES**
North Hall is one of the oldest structures on campus. The original section was constructed in 1914, a large expansion occurred in 1926, and a major remodeling occurred in 1979. North Hall houses the Math and Journalism academic departments, a portion of technology services, and most main administrative units including executive administration suites. It also contains an auditorium, used for concerts and lectures. Despite mechanical issues resulting from its age, North Hall continues to be a very functional building. The heritage building will require continued renovations to replace multiple systems.

**Conflicts on Cascade Avenue**
North Hall is the only university structure located north of Cascade Avenue, a regional arterial road that carries significant automotive traffic. The classrooms and student services located in North Hall create a logistical challenge. Students attending class and visiting these offices must cross Cascade Avenue, causing delay and frustration for drivers and increasing the risk of a pedestrian/vehicle crash.

North Hall has a variety of academic teaching spaces. In Fall 2009, there were a total of 69 lecture courses scheduled in the six classrooms, 14 laboratory courses in the computer teaching laboratory, and 3 courses in the auditorium. Over 2,500 students were enrolled in all courses scheduled in North Hall, requiring that hundreds of students cross Cascade Avenue daily. On a typical Monday during that semester, over 1,200 students crossed Cascade Avenue to attend class. Student crossings are constant throughout the academic day, peaking during class changes.

North Hall also has many administrative offices, many serving students, that require additional students to cross Cascade Avenue. For example, programs located in the RDI building (extension programs, graduate studies hour during peak times of use – late June (summer registration), late August (Fall tuition payments), the first week of a semester, and the last week of a semester. At each of these peak times, the average number of students served per hour is 25.

- The Office of Financial Assistance provides financial counseling plus provides reference materials and receives information/materials from students throughout the year. But their peak time is in early Fall (first week of class) when they average 25 people per day.
- The Registrar’s peak time is the first week of the semester, and the first week of Fall semester in particular, when they see on average 25 people per hour.

The pedestrian/vehicle congestion, frustration, and crash risk are self-created issues, due to the location of spaces that attract significant students in North Hall.

**Classrooms and Administrative Offices Relocation**
The campus should relocate the seven classrooms from North Hall into the core campus south of Cascade Avenue, possibly in Centennial Science Hall when it is renovated to be a general classroom building. Student service offices in North Hall should be relocated to a building south of Cascade Avenue, such as the renovated Rodli Hall.

The existing academic and office space should be repurposed for additional administrative office uses. Administrative offices that are not student focused should be relocated to North Hall. For example, programs located in the RDI building (extension programs, graduate studies
program, the survey research center, and the agriculture resource center) could be relocated to North Hall. With its convenient access to surface and structured parking, North Hall is an ideal location for a university office that attracts visitors from off-campus.

Renovate Buildings to Accommodate Demand for Space

The anticipated increase in student enrollment will create space demands for many departments and centers across campus. Many space demands can be accommodated by more efficiently using existing space.

RENOVATE UNIVERSITY CENTER TO INCREASE EFFICIENCY AND DECREASE DEMAND FOR MEETING SPACE

The University Center is a new building, the pride of the students. It is working well for dining, student organizations, and meeting space. However, as the student enrollment increases, it will not have the capacity to serve the campus population.

The existing space within the University Center can be used more efficiently. The university could construct a mezzanine in the atrium space over the student organizations space to provide additional assignable square footage.

When student enrollment growth creates pressures for dining, the campus master plan recommends against creating a secondary dining option elsewhere on campus. With the opening of the University Center, multiple dining options were consolidated. The result has been a unified student body, one that gathers together for meals as well as events. The campus should aim to maintain a single dining service location over the life of this master plan.

The meeting space in University Center is too popular. As the newest and most technologically advanced conference
space on campus, there is a high demand for meeting in the University Center, even when participants travel from elsewhere on campus. The demand for conference spaces in other campus buildings has declined. As space in the University Center is needed for dining and other student uses, quality conference space should be distributed throughout campus in other buildings. As new buildings are constructed and existing buildings renovated, quality meeting spaces should be located throughout campus.

**COMPREHENSIVELY RENOVATE THE LIBRARY IN PLANNED PHASES**

The Chalmer Davee Library is a major student destination on campus. It was constructed in three phases in 1956, 1968, and 1996, and the lower level was remodeled in 2009-2010. The upper two floors are used by the university library. The lower level is shared by technology services, the area research center, the academic success center, and the Banks Center for Interdisciplinary Studies. Overall, the library has around 68,200 ASF of library space.

Overall there is a shortage of stack and study space. As indicated in the campus wide space needs analysis, the library has a need for just over 80,400 ASF at the current student enrollment. In the 2015/2016 academic year, the guideline need grows to 83,000 ASF, and then to 89,100 ASF by 2025/2026.

The academic success center will relocate to the renovated Rodli Hall, but its backfill space is intended for technology services. The library should investigate both compact storage and remotely storing some of the collection. The library should investigate a potential 10,000 GSF expansion space on the second floor, which may require additional structural support.

**RENOVATE THE RDI BUILDING FOR MAINTENANCE OFFICES**

The Maintenance and Central Stores Building houses all shops and administrative offices, Central Stores, and postal services of the Facilities Management department. (Student Life custodial services is based in Hathorn Hall.) This building serves as the central receiving point for the university.

Functionally the building works well, except the shops are undersized for the number of maintenance employees they support. Facilities Management serves on-campus facilities as well as off-campus facilities, such as the two farms and the Pigeon Lake buildings.

The building is approximately 26,000 ASF, and facilities management has already wisely taken measures to maximize the efficiency of their existing space. At the current enrollment there is a deficit of approximately 26,000 ASF of physical plant space. This need is projected to increase in 2025/2026 to 29,200 ASF as facilities staff are required to serve an expanding campus. The deficit in physical plant space is for additional storage and shop areas. Office space for physical plant employees requiring dedicated offices is not included in this space deficit.

In the short term, the administrative offices in the adjacent RDI building should relocate to North Hall or similar administrative space, and the facilities management offices should backfill this space. The office portion of the Maintenance and Central Stores Building should then be renovated to increase space efficiency.

In the long term, however, this additional office space will not meet the needs of Maintenance and Central Stores Building. The campus should not consider an addition to the building in its current location. The building site should be complementary and supportive of the residential and recreational needs of the east residential neighborhood. Rather the campus should consider locations out of the campus core for a relocated and expanded Maintenance and Central Stores Building. As the campus expands along South Wasson Road, Facilities Management and Central Stores may be relocated there.
Broaden and Expand Housing On-Campus Options

Student housing facility improvements are essential to meeting student demand and the university’s strategic objectives. The renovation and addition of new residence halls would reinforce the university’s brand as a university committed to providing on-campus housing, support recruitment and retention goals, and increase student life on campus.

UW–River Falls is a very residential campus, about 40% of the students live on campus, which is one of the highest rates in the UW–System. In Fall 2010, while the on-campus total capacity was 2,332 in 10 residence halls, approximately 2,580 students lived on campus. Beyond capacity residents were housed in lounge space converted to student beds, resident advisor rooms used as doubles, and students housed at the Best Western Hotel adjacent to campus.

As student enrollment increases over time, the university desires to continue to provide residential space for 40% of the student body, so that goals related to recruitment, retention, and increasing student life are achieved. The George R. Field South Fork Suites Addition will expand campus housing by 240 more beds. In addition, campus will require two new residence halls, totalling more than 400 new beds.

All existing residence halls are traditional double rooms. The exception is the George R. Field South Fork Suites, which feature four-person furnished suites (each suite has four private single bedrooms, a living room, a dining area/kitchenette, and a bathroom). Ideally, the campus should provide a progressive series of rooms types – doubles, semi-suites, suites, and apartments. The George R. Field South Fork Suites project diversified on-campus housing types, and new projects and renovations should continue the diversification.

**CONSTRUCT A SUITE-STYLE RESIDENCE HALL ON THE R.A. KARGES CENTER SITE**

After R.A. Karges Center is demolished as part of the south campus sports and recreation complex project, a new three-story semi-suite or suite-style residence hall should be constructed on the site. The residence hall will help balance the residential neighborhoods, expanding the existing 733 beds in the west residential neighborhood. The master plan shows a structure with approximately 78,000 ASF aboveground. The new residence hall will expand the options of room types in this neighborhood, integrating freshmen with sophomores and upper classmen.

Given its proximity to the new science building, a portion of the new residence hall could be programmed as a science-related live/learn hall.

**CONSTRUCT A SUITE-STYLE ADDITION TO HATHORN HALL**

Hathorn Hall is a popular residence hall due to its central location. It is the campus’s largest hall with over 450 beds. Yet, because it is disconnected from both the west and the east residential neighborhoods, the residents of Hathorn Hall do not receive the benefits of being a part of a collection of halls. The campus should construct a south addition to Hathorn Hall, in the form of semi-suites or suites. The building could be either three stories similar to Hathorn Hall, or four stories, stepping down to the river. The master plan shows a four-story structure with approximately 81,200 ASF aboveground. The addition will expand the population base of this popular hall while expanding the room type options.

The new building should be constructed on Lot G once alternate parking is provided elsewhere on campus. The building could be sited to enclose the south courtyard. Service access for lawn maintenance should be provided. The building’s windows and entrances should open up to the South Fork Kinnickinnic River, engaging the residents with the river.

**INCREMENTALLY RENOVATE EXISTING TRADITIONAL HALLS**

The campus should continue to incrementally update and renovate the existing residence halls. Early renovations should address the utilization and functionality of basement areas in all residence halls.

61RECOMMENDATIONS
Provide a High-Quality Sports and Recreation Complex

The university has long planned an expansion of Hunt Multipurpose Arena and Knowles Center, consolidating the Health and Human Performance department with athletic and recreation facilities. The university released a pre-design report in 2010, and design and construction have been scheduled at the state level to begin in 2012.

The single project is attempting to meet many campus needs. Listed by importance, those needs are:

• Health and Human Performance education program (250 majors, 200 minors, and 2,150 students annually in general education and applied courses),
• Varsity athletics (18 intervarsity sports serving 400 student men and women athletes),
• Student recreation activities (approximately 45% of students participate in club and intramurals), and
• Deferred maintenance and functional deficiencies and needs of the existing Hunt/Knowles complex.

This $74.5 million initiative will be built in two phases. The pre-design report provides guidance on building and site programming and design. The design report will further clarify and define the character of the south campus sport and recreation complex.

Integration with Campus

The south campus sports and recreation complex should be integrated into the core campus, both in circulation and in identity. While the complex’s front door will face the parking lot to the south, the complex should have a prominent northeast pedestrian entrance. The north/south walking path that crosses the river should directly connect to the pedestrian entrance, without pedestrians needing to walk across a parking lot or other automotive service areas.

To simplify traffic and turning patterns on Main Street, the Main Street automotive entrance should line up with the entrance to the commercial shopping center on the west side of Main Street. The complex should have additional road connections to Main Street and Cemetery Road to ease large event traffic releases, but these additional road connections should only be opened for large events.

The campus master plan moves automotive parking from the campus core to the campus edges, including the south campus area. The design report should accommodate additional parking of at least 450 parking spaces. (See Campus Movement section.)

The landscaping around the athletic fields south of the South Fork Kinnickinnic River should consist of large grassed areas defined by large tree massings. The athletic fields that are not artificial turf will require irrigation in the spring and summer months and should be the only campus open spaces that are irrigated. The planting of trees between and around fields should create large, outdoor rooms that serve to scale down the expansive open space. Landscaping should also serve as a transition from the fields to the adjacent neighborhoods and the Campus Laboratory Farm. Site furnishings should be consistent with the site furnishing standards.

Protect Outdoor Teaching and Research Facilities

More so than many other universities in the UW system, UW-River Fall’s research and instruction occur outside the classroom and laboratories. The Campus Laboratory Farm and other areas south of the river serve as working laboratories for many departments within the College of Agriculture, Food and Environmental Sciences.

Preserve Campus Farm Research Areas

From the outside perspective, the campus can easily grow and expand for the long-term since the Campus Laboratory Farm could serve as a future development site. However, these seemingly seldom used open spaces are important research and instructional uses. The master plan preserves for long-term Campus Laboratory Farm use all space south of the South Fork Kinnickinnic River and east of the Sixth Street right-of-way extended south. The nursery plots northeast of the sports and recreation complex should be preserved in place.

Prepare a Precinct Master Plan to Expand Campus Farm

CAFES faculty and leadership have indicated that the Campus Laboratory Farm needs additional space for current programming. A portion of the south campus sports and recreation complex will occur on land within the Campus Laboratory Farm, increasing the need. The precinct master plan should determine the necessary space and facilities based on future enrollment, academic needs, and the university’s academic plan, shaped by
benchmarking from similar comprehensive universities with agricultural instruction.

**The campus master plan expands the Campus**

Laboratory Farm by proposing the purchase of all low density parcels adjacent to the Campus Laboratory Farm. The Campus Laboratory Farm expansion should occur on a parcel along Cemetery Road (now leased by the university) and group of parcels along South Wasson Lane. The South Wasson Lane parcels contains a tributary to South Fork Kinnickinnic River, so the precinct master plan should consider the water quality of the river and the tributary.

**PREPARE FOR LONG-TERM CAMPUS DEVELOPMENT**

In the long-term after the horizon of this master plan, the campus may need to construct buildings south of the river on land designated for the Campus Laboratory Farm. This decision should only be the result of significant analysis that considers the following:

- No incremental campus growth should occur south of the river. When buildings are constructed, they should support a significant department or college that is relatively independent. The number and scale of the buildings should be significant enough to create a campus precinct with sufficient campus services such as dining.
- Outdoor research areas should be replicated in an off-campus location. The off-campus location should be sufficiently large to eventually meet the university’s long-term outdoor research and instruction needs, assuming that the Campus Laboratory Farm uses will migrate to the new location.
Create Place and Identity throughout Campus

The beauty and livability of the campus is dependent on the open spaces, the critical areas between buildings where students relax, storm water recharges, and pedestrians circulate. The campus should have a hierarchy of open spaces.

EXTEND AND DEFINE THE CAMPUS MALL

The campus’s most formal quadrangle is defined by Second Street on the west, Sixth Street on the east, the north edges of the Food Science Addition, Agriculture Science, the South Green, Wyman Hall and its proposed addition, and university Center, and the south edges of Centennial Science Hall, E.H. Kleinpell Fine Arts, Chalmer Davee Library, South Hall, and the recommended new science building.

The Campus Mall Plan considers the west boundary the existing Third Street alignment. The campus master plan recommends that the campus mall be extended west to the new Second Street alignment. The design guidelines in the Campus Mall Plan should govern the design of the expanded area.

The campus mall should exhibit a unified, high-quality design character. The campus mall design should honor campus history and context while creating a unique and memorable sense of place for the university.

The campus mall should link campus academic and service functions while improving the physical environment and

Campus open spaces should be places where students, faculty, and staff meet and interact.
character of the university. The design of the campus mall should follow the guidelines of the Campus Mall Plan, completed in 2009. The goals of the Campus Mall Plan are to:

- Create a physical environment that enhances the academic experience
- Reflect an expectation of excellence and encourage interaction among its users
- Promote safety and security
- Preserve and enhance open space
- Strengthen campus identity and aesthetics
- Improve pedestrian linkages and campus wide access

The campus mall pathways should be multi-modal, designed to be shared by pedestrians, bicycles, and select infrequent vehicles such as maintenance and emergency vehicles.

**Component Spaces**
The 2009 Campus Mall Plan created a series of memorable green spaces that respect the linkages of the existing and future functions within the mall.

- The Chancellors Grove is the grove of trees located north of the Agriculture Science complex near the interface between the Food Science Addition and the Agriculture Science building.
- The parking lot south of South Hall should be reconstructed as a picturesque space which provides a formal entry plaza to South Hall. The clock tower will accentuate the plaza and relate to the historic nature of the building. A wide sidewalk should connect the South Hall entrance with the primary pedestrian path.
- Dedicated in 2005, the Dahika Garden is a reflective sculpture garden populated primarily by native flowers. The garden, which adjoins the south side of E.H. Kleinpell Fine Arts, features walking paths, numerous limestone slabs that each weigh more than two tons, and six benches in small patios shaded by Imperial Honey Locust trees.
- A proposed amphitheater is nestled into the hillside near E.H. Kleinpell Fine Arts and is an important programmable space for outdoor lectures or a quiet place to study.

Through the campus mall passes the campus’s significant linear east-west promenade that links the far east and west ends of campus. (See the Campus Movement section for recommendations related to the east-west promenade.)

New campus structures that are adjacent to the campus mall, such as the recommended science building, should have their primary orientation toward and connect to the campus mall.

**CREATE A NETWORK OF CONNECTED QUADRANGLES**
The most prominent and important open spaces are quadrangles – locations for formal and informal outdoor circulation and activities. They should form the campus’s iconic and organizational open spaces.

**South Green Quadrangle Definition**
Although adjacent to the campus mall, the South Green open space should have a different purpose and design. It is bordered by the campus mall primary pedestrian walk to the north, Agriculture Science on the

The east residential quadrangle should support informal student gathering, active and passive recreation, and small-scale events.
west, Hathorn Hall on the south, and Wyman Hall and its proposed addition on the east.

The South Green should support the recreational needs of the residents of Hathorn Hall. Its open space should allow for informal recreation, such as sunbasking, tossing a Frisbee, and playing catch. The majority of the quadrangles should be open lawn, allowing passive recreation and just hanging out. Canopy trees should occur primarily at the edges of the open space. Those on the primary campus mall pedestrian path should allow to view the activities within the South Green. As recommended in the Campus Mall Plan, the west end of the South Green should include a storm water pond.

Hagestad Grove Quadrangle Canopy

This informal quadrangle is bordered by the proposed science building, South Hall, Cascade Avenue, the campus mall. Characterized by the peaceful character of the full canopy, this informal space features the Wall Memorial Fountain Plaza. Landscaping should remain informal and minimal. Pedestrian walkway intrusion into this space should be minimized. The recommended science hall should open up to and respect the Hagestad Grove Quadrangle.

North/South Hall Quadrangle

This quadrangle is comprised of the open space north of South Hall and south of North Hall, between Third Street and Fourth Street. Although this space is divided by Cascade Avenue, the campus should consider and design this space as a unified space. The Cascade Avenue median landscaping should be designed and integrated into the quadrangle design. The quadrangle should have a more formal character to landscaping and pedestrian circulation. While the space should be comfortable for pedestrians, the perspective of motorists on Cascade Avenue is important as this quadrangle will be the only space visible to those off-campus and the first quadrangle encountered by first-time visitors.

**East Residential Quadrangle**

The east residential neighborhood rings an informal quadrangle formed by the eastern residence halls, Regional Development Institute, and Maintenance and Central Stores Building. The campus master plan expands the quadrangle by removing the road connection north of Maintenance and Central Stores Building and Parking Lot T.

This quadrangle should support informal student gathering, active and passive recreation, and small-scale events. The quadrangle should contain a variety of recreational facilities, such as the tennis courts removed for the George R. Field South Fork Suites Addition, basketball, and sand volleyball. The remainder of the space should allow for informal field play.

Though the east-west primary pedestrian walk should share the formal landscaping of the campus mall primary pedestrian walkway, the rest of this quadrangle should have a less formal arrangement of walks, tree canopy, and landscaping relative to the campus mall. It should contain both large areas that are shaded with large canopy trees as well as large open sunny lawn areas. The tree canopy should occur primarily at edges, leaving the center mostly open for recreation.

**Design Guidelines for All Quadrangles**

Pedestrians walkways should define the boundaries of the quadrangle and diagonal walkways should respect pedestrian desire lines.

Quadrangle landscape treatment should be simple and should reinforce significant visual site lines, points of connections, axial relationships, and building entrances. Open grass areas and tree massing should reinforce the open space. Plant groupings can be formally or informally spaced, but the overall treatment should reinforce qualities of space and place within the quadrangle. Since they form the edges of the quadrangle, individual landscape treatment of buildings should reinforce the character and sense of place of the quadrangle.

Pedestrian lighting, site furniture, and signage should all complement and reinforce the sense of a unified open quadrangle space. Special elements such as fountains, monuments, art installations, and site furniture can occur at walkway junctions and in expanded pavement areas.

**STRENGTHEN THE IDENTITY AND PROGRAM THE UNIVERSITY CENTER PLAZA**

The University Center Plaza is the heart of the campus, a student gathering space for informal lounging and for planned events such as concerts or career fairs. The campus’s primary hardscaped open space should be the plaza located north of University Center. This open paved area should be the one place where students instinctively
Landscape should be simple and should reinforce significant visual site lines, points of connections, and axial relationships.

Understanding how students are using and could use University Center Plaza is critical to designing and programming them. The plaza design should support the intended mix of activities, such as grouping trees or shrubs together to slow traffic, and provide quiet areas with benches for resting and small group discussions. University Center Plaza, and any other future campus plaza, should have:

- Clear definition of space through plantings, seating, elevation changes, or other landscape elements
- Ability to move through the plaza that matches the intended plaza activities
- Minimal stairs
- Views into and out of the plaza
- Special surface textures that define the space
- Interactive and stimulating sculpture or other “hard” elements
- Seating arrangements that support a variety of activities – intimate discussions, people-watching, quiet studying, group gatherings, etc.
- Plantings to bring a human scale and intimacy, define the space, and provide shade
- Trash and recycling containers
- Slopes that are at least one percent for drainage but not more than two percent

Landscape should be simple and should reinforce significant visual site lines, points of connections, and axial relationships.
The University Center Plaza should be a primarily open paved area. It should be the heart of outdoor campus activity, the place where students instinctively gather.
The relationship between the plaza and the surrounding buildings and significant landscape features should be an important consideration in the plaza design and programming. The university should consider the microclimate of the area, including sun exposure and seasonal conditions.

Plazas and other special nodes should receive a unique paving treatment. The university should use 4 feet x 8 feet, full range, clay pavers to accent the University Center Plaza and other special area such as the clock tower. All pavers shall be installed over a reinforced concrete base to prevent differential settlement.

**FEATURE COURTYARDS IN EACH BUILDING SITE DESIGN**

Courtyards are secondary hardscaped open spaces. Unlike plazas, courtyards are smaller spaces that serve as adjuncts to a building or a cluster of buildings. Courtyard landscape treatments can be more flexible and relate more to individual building design. Courtyards should include seating areas for informal study and should provide areas of sun and shade. Courtyard areas should offer a variety of landscape treatments that respond to the scale and use of the space and sets courtyards apart from quadrangles. Courtyards should include consistent site furnishings and signage.

The campus should consider constructing courtyards in the following locations:

- Area bordered by Johnson Hall, Prucha Hall, and May Hall – Expand this passive recreation space after the demolition of the Emogene A. Nelson Building site. The courtyard should allow for passive use, and active recreational uses should occur in the reconstructed space south of Stratton Hall. A minor courtyard may be constructed between Stratton Hall and Prucha Hall.
  - Area bordered by Agriculture Science, Agricultural Engineering Addition, and Greenhouse Addition – Parking Lot H should be removed, replaced with a courtyard that should serve as the central outdoor gathering space for the Agriculture Science complex. The Greenhouse north addition will help redefine this space.
  - Area bordered by Hathorn Hall and Addition – The interior courtyard should allow for passive use, and active recreational uses should occur in the reconstructed space south of the addition. The Hathorn Hall addition should provide a means for maintenance to access the courtyard.
  - Area between South Hall and Chalmer Davee Library – As recommended in the Campus Mall Plan, this courtyard should appropriately incorporate the loading areas for both buildings.
  - Southwest entrance courtyard to E.H. Kleinpell Fine Arts
  - East residential neighborhood – Courtyards among and between McMillan, Grimm, and Parker Halls should encourage residents to gather and recreate outside their halls.
  - Lot O portal – The passageway between Crabtree Hall and the South Forks Suites Addition will become the entry portal into campus for those parking in Lot O. This hardscape courtyard should allow for easy access into the east residential quadrangle, and may include a wayfinding kiosk.
  - Within the south campus sports and recreation complex – The pre-design report identifies and designs several courtyards.

**RECONSTRUCT LOTS K AND N TO RECREATION FIELDS**

After sufficient replacement parking is provided on campus, the university should remove Parking Lot K, located south of Stratton Hall, and Parking Lot N. Both parking lots are located in the floodplain of the South Fork Kinnickinnic River and negatively impact water quality.

The campus should reconstruct both spaces to outdoor recreational open spaces. The space on Lot K will serve the recreational needs of the west residential neighborhood. The space on Lot N will serve the needs of the Hathorn Hall residents. The recreational spaces could feature limited facilities such as basketball or sand volleyball courts. Most of each space should be reserved for passive recreation and field play.
DESIGN OPEN SPACES TO SERVE THE CAMPUS IN ALL SEASONS

Campus open spaces should be functional throughout the academic year. UW-River Falls experiences long winters of cold and snow, yet the needs of students, faculty, and staff to gather, learn, and recreate do not abate when the temperature falls and snow piles up. The campus should embrace winter. When open spaces are designed, winter activities such as sledding, skating, and skiing should be considered. The master plan recommends recreational trails on both sides of the South Fork Kinnickinnic River. In winter, one trail may be plowed and the other groomed for hiking, snow shoeing, or cross-country skiing. Areas adjacent to the river may be flooded for ice skating. The University Center Plaza should continue to be the site of winter carnivals, with the University Center serving as the warming house.

The open space south of the University Center may be flooded in the winter for a skating rink. Outdoor seating, perhaps a fire pit, would activate the campus during the cold academic months. The University Center would serve as the warming house.
Welcome Visitors to Campus

The first-time visitor’s experience of campus is critical. Most visiting potential students decide whether to attend a university within the first half-hour of arriving on a campus. River Falls residents are frequent campus users, so the campus must be understandable and navigable for the occasional community visitor. Positive first impressions are critical.

RENOVATE RODLI HALL TO WELCOME FIRST-TIME VISITORS

Rodli Hall should be the first stop for campus visitors. As described on page 57, Rodli Hall should be renovated to house a cluster of student services. Part of that administrative cluster will be the offices of interest for first-time student visitors, including Admissions and Financial Aid. The welcome desk could also serve as a parking office satellite, providing parking passes for elsewhere on campus.

City and campus signage should direct campus visitors to the Sixth Street primary gateway entrance. Signage should direct them to the small short-term parking lot located on the west side of the building. The building’s west entrance should be prominent and inviting to campus visitors.

LOCATE STRATEGIC INFORMATION KIOSKS

Kiosks are important amenities for the campus environment. They allow a means of presenting information and announcements relative to student groups and university activities. They also serve to reduce the amount weof litter by providing a means of posting announcements, both student posting and official notice functions. Kiosks are required at entry points for trails funded through LAWCON.

The kiosk unit should reflect architectural materials and design that are common to the campus fabric and complement recommended building materials. The materials should be durable or easily replaceable.

The kiosks and their immediate areas should be maintained by a specific campus entity. Many institutions place this responsibility on a student government subcommittee. To create a clean look, the kiosk should place university announcements behind a locked cover. Lighting for the unit can be handled by adjacent pedestrian fixtures.

The kiosk should be placed within an area of pavement adequate to allow circulation around all sides. The minimum dimension of pavement out from the kiosk should be six feet. Ideally the pavement should be comprised of unit pavers to differentiate it from adjacent walkways.

Information kiosks should be located at major crossing points on primary pedestrian walkways and where there will be large volumes of pedestrian traffic. Kiosks can also be located within major organizational open spaces adjacent to significant student gathering areas or buildings. The University Center and Chalmer Davee Library need kiosks to minimize the desirability of posting announcements on other vertical surfaces such as lamp posts, building facades, etc. Units with maps should be located at Rodli Hall and other designated visitor parking locations.

Kiosks, you-are-here signs, campus signs, and building identification signs should have similar materials and design elements.
Adjust the Campus Boundary to Anticipate Future Needs

Most building and open space projects described in this master plan do not require the purchase of land outside the current campus boundaries. To prepare for the next master planning horizon, the university should seek opportunities to negotiate with willing adjacent property owners.

DISCONTINUE LEASING PARCEL LOCATED NORTH OF CASCADE AND EAST OF FOURTH STREET

The university currently leases a parcel on Spring Street for surface parking. After a parking structure is constructed on Parking Lot Q, this surface lot will not be needed for campus uses and the university should end the lease. More intense use of this leased parcel is unlikely. On the remainder of the block are single family residences and several churches, and it is unlikely that the university will purchase and renovate/demolish the church sites. Additionally, the campus master plan recommends reducing the amount of campus uses that attract students on the north side of Cascade Avenue. The surface lots would better serve adjacent uses, such as for residential infill sites or as parking for the churches.

PURCHASE RURAL PARCELS ON WEST SIDE OF SOUTH WASSON LANE AND NORTH SIDE OF CEMETERY ROAD

To expand the Campus Farm, the university should purchase low-density parcels immediately adjacent to the farm. The university now leases the Cemetery Road lot, identified as parcel number 276013040310.

PURCHASE RESIDENTIAL PARCELS WEST OF SOUTH CAMPUS SPORT AND ATHLETIC COMPLEX

To allow for future expansion of the south campus sport and recreation complex, the university should purchase the multi-family residential parcels south of the Foster Street ROW extended. The parcel numbers are 276011210500 and 276011210600.
Campus Movement

While the campus core is walkable, access to further destinations like downtown River Falls, the south campus sports and recreation complex, and the Campus Laboratory Farm are more difficult. The campus experience depends in large part on how people move about and how well connected it is.

The campus should be highly walkable. This chapter addresses all aspects of the campus’s movement networks, focusing on strategies that will make the campus more friendly to pedestrians and bicyclists while still accommodating automobiles.

- Create a Safe, Multimodal, and Green Campus Street Network
- Embrace the Reconstructed Cascade Avenue
- Create a Fine-Grained Pedestrian Network
- Encourage Cycling
- Move Parking to the Campus Edges
Create a Safe, Multimodal, and Green Campus Ring Road Network

Vehicular circulation around the campus is confusing and disconnected. The campus is dependent on Cascade Avenue for internal circulation to vehicle parking and loading areas. The entrances at Spruce Street and Crescent Street are not internally connected to the partial campus loop connecting the Third Street and Sixth Street entrances. Through a series of incremental road projects, the campus should create a ring road that provides vehicular circulation that neither disrupts the pedestrian orientation of the campus core nor depends on Cascade Avenue.

Additionally, the vehicular circulation road interfere with major pedestrian routes. Third Street south of South Hall and the road segment between Sixth Street and RDI create significant pedestrian/vehicle conflict and risk crashes and injury.

The campus should be focused on pedestrians. Automobiles and service vehicles must continue to have access in all parts of campus, yet this access should be secondary to pedestrian circulation both in design and in function. A continuous campus ring road will provide circulation while keeping vehicles out of the campus core.

**CONSTRUCT WEST CAMPUS ENTRANCE BETWEEN SECOND STREET AND WEST END OF AGRICULTURE SCIENCE**

Third Street cuts through the campus mall, creating a pedestrian/vehicle conflict. During class changes, vehicles are stuck as they perilously try to drive through crossing pedestrians.

As a part of the Cascade Avenue reconstruction plan, the City will construct a roundabout on Cascade Avenue at Second Street. The campus should construct a campus entry road that connects to this roundabout. As shown on the master plan graphic, the road should pass between the new residence hall and new science building, connecting to the existing campus road that provides access to Parking Lot S.

After the completion of the segment between the roundabout and Food Science Addition, the Spruce Street entrance should be removed. The former right-of-way should be reserved for the new residence hall project and necessary pedestrian circulation.

Third Street south of South Hall should be removed. The Third Street connection to Cascade Avenue will remain, as the access point to the small parking lot west of South Hall. The curbs and drive lanes of Third Street at Cascade Avenue should be reconstructed so that Third Street appears as a driveway and not an important campus entrance.

**CONSTRUCT A ROAD CONNECTION BETWEEN WEST END OF AGRICULTURE SCIENCE AND WYMAN EDUCATION BUILDING**

The campus should construct a road connection between the Parking Lot S and Parking Lot U, around the Agricultural Engineering Addition, Greenhouse, and the Hathorn Hall addition. The design of the road connection should minimize the width of the cross-section and minimize the impact on the South Fork Kinnickinnic River.

In 2006, the university hired GRAEF to prepare a design study of this road connection. In the study, entitled Roadway Corridor Planning Study - Spruce Street to Third Street, GRAEF explored a wide variety of potential road designs and alignments. The preferred alignment places a narrow road immediately adjacent to the Agricultura Engineering Addition. Retaining walls or an earthen berm within the river’s floodplain will be necessary. This alternative was preferred since it minimized the impacts to the natural environment.

The campus master plan recommends that the university continue to study and pursue the preferred alternative. The preferred design will require completion of the Chapter 30 permitting process, including the opportunity for a public hearing, and a hydraulic study of this section of river.

Close cooperation and coordination with WisDNR will be necessary. During the analysis, WisDNR provided critical review and a preliminary indication that the preferred alternative could be permitted. The final direction on the road’s alignment and design will be based on continuing dialogue and resolution of competing WisDNR goals (permitting versus fisheries). The establishment of a comprehensive program or master plan for restoration of the South Fork Kinnickinnic River channel adjacent to the campus property may influence the WisDNR review and permitting.

(See the 2006 Roadway Corridor Planning Study - Spruce Street to Third Street plan for more information about the typical cross-section of this road connection.)
Typical roadway section of the road connection around Agricultural Engineering Addition – two narrow vehicles lanes, a terrace, and a multi-use path. This typical cross-section should be used for the other new sections of the campus ring road. (Source: 2006 Roadway Corridor Planning Study - Spruce Street to Third Street)
CONSTRUCT A ROAD CONNECTION BETWEEN THE HEATING PLANT AND GEORGE R. FIELD SOUTH FORK SUITES

The George R. Field South Fork Suites Addition project includes a road extension from the south end of the residence hall to Parking Lot L. This road connection should be extended west, following an alignment south of Maintenance and Central Stores Building, east of the central heating plant, and connecting to Sixth Street. This section of the campus ring road should provide a vehicular connection between Sixth Street and Parking Lot O, without impacting pedestrian movement through the east residential open space. The connection between George R. Field South Fork Suites and Parking Lot L will require a wetland crossing, and the extension to the central heating plant will require the relocation of the small storage buildings. In particular, the hazardous waste storage should be removed from the South Fork Kinnickinnic River floodplain to reduce the level of impact of accidents, leaks, and spills.

CONSTRUCT EAST ENTRANCE ROAD

The university should construct a road connection between the south end of the George R. Field South Fork Suites Addition, south and east of the expanded Parking Lot O, and connect to Cascade Avenue at Birch Street. The southernmost section of the road connection should be constructed with the expansion of Parking Lot O. The east section should be created through modification of the circulation of the parking without requiring an expansion of the lot. The connection east of the C.H.I.L.D. Center will require the purchase of one single family residence.

The circulation north end of Parking Lot O should be modified so that the C.H.I.L.D. Center has a dedicated drop-off zone that is separate from any circulation path that connects the east entrance road to Wild Rose Avenue.

When the east entrance is constructed, the Cascade Avenue connection to Wild Rose Avenue near Crescent Street should be closed. This entrance has a throat length that is too short to be a safe and effective entrance.

CONSTRUCT CONNECTION BETWEEN WILD ROSE AVENUE AND SIXTH STREET

The university should construct a connection between the western end of Wild Rose Avenue near McMillan Hall and Sixth Street north of Rodli Hall. Unlike other sections of the campus ring road, this section does not need a parallel sidewalk since there are existing effective sidewalk connections south of Rodli Hall and along Cascade Avenue. This road connection should be a part of the Rodli Hall renovation project.

APPLY CAMPUS ROAD DESIGN GUIDELINES

The campus street design and landscaping should emphasize the predominance of pedestrians over automobiles. These guidelines apply to internal campus streets and those surrounding the campus. These guidelines apply to internal campus streets. The campus should also promote these guidelines when city streets surrounding the campus are reconstructed.

Typical Cross-Section

Campus roads should support multiple modes, including automobiles, delivery vehicles, bicyclists, and pedestrians.

Vehicle travel lanes should be narrow, typically 11 feet in width. There should be only a single lane in each direction, and no turning lanes or acceleration/deceleration lanes are necessary. Traffic volumes on internal roads are expected to be low enough to allow bicyclists to safely share travel lanes with automobiles. This traffic mix will also slow the speeds of automobiles. No campus road should have on-street parking, with the exception of Wild Rose Avenue north of the east residential neighborhood.

Sidewalks or trails should provide safe pedestrian connections among all building and open space pedestrian destinations. Sidewalks should be integrated into the road cross-section on at least one side of all campus streets. Where campus buildings or active recreational uses are on both sides of the street, such as the Second Street entrance north of the Food Science Addition, Sixth Street entrance north of the heating plant, the ring road between Hathorn Hall Addition and the recreational open space, sidewalks should parallel the travel lanes on both sides. Where campus roads are at the edge of the campus such as between Parking Lot O and the adjacent residential road and when it is adjacent to the South Fork Kinnickinnic River, only one sidewalk is necessary, typically on the campus core side of the ring road. Where the road closely parallels a trail, a sidewalk within the street cross-section may not be necessary.
To encourage pedestrian safety and shorten crossing distances, turning radii should be minimized. Large delivery vehicles are expected to use the campus street network, especially to access Maintenance and Central Stores Building, the central heating plant, and University Center. On road segments that large delivery vehicles are expected to use, turning radii should be a balance between pedestrian safety and large vehicle turning paths. The campus should instruct regular delivery vehicles headed to Maintenance and Central Stores Building to use the east Birch Street entrance. Infrequent deliveries to Maintenance and Central Stores Building and deliveries to the central heating plant and University Center will likely use Sixth Street to enter and leave campus.

The road design for circulation at the Campus Laboratory Farm should be developed outside these guidelines.

**Landscape**

The campus should establish a street hierarchy and streetscape consistency to support identity, order, and structure for the campus. Landscape treatment should establish clarity for vehicular circulation routes. Landscape treatments should reinforce vehicular corridors, project a consistent campus image, promote pedestrian/cyclist visibility and safety, and encourage a lively urban texture.

In contrast to the formal tree placement along the primary pedestrian walks and within major open spaces, the landscaping for campus streets should be informal. Open spaces should organize and define the campus, not streets. Street alignments should not set the landscaping.

Campus roads should be narrow, slow, and pedestrian-friendly.
pattern, but rather appear to intrude into the campus environment. The landscaping should emphasize the predominance of the pedestrian over vehicles.

Outside the vehicle and pedestrian travel paths, the ground plane of street cross-sections should be predominantly lawn. Street landscape treatments should be coordinated with the site furnishing standards and campus signage.

**Sustainable Streets**

New and reconstructed campus streets should maximize the inclusion of “Green Street” applications to infiltrate storm water on site. Integrated storm water treatment reduces the volume and velocity of storm water reaching the South Fork Kinnickinnic River and improves water quality.

When designing and constructing campus streets, the university should consult the campus Storm Water Management Plan (2009) and consider best management practices for storm water, including:

- Street design: Preserve wetlands, buffers, and high-permeability soils and minimize impervious areas.
- Swales: Infiltrate storm water and reduce flow velocity, but ensure pedestrian convenience through design.
- Bioretention curb extensions and sidewalk planters: Accept and treat street runoff in tree boxes, planter boxes, or curb extensions.
- Permeable pavement: On low-volume streets, consider permeable concrete, permeable asphalt, permeable interlocking concrete pavers, and grid pavers.
- Roads: Construct grassed swales leading to bioretention area or to storm water treatment ponds.

**RECONSTRUCT SIXTH STREET SOUTH OF RING ROAD INTERSECTION**

The university should reconstruct the dead-end segment of Sixth Street south of the ring road intersection. A sidewalk should be constructed that links Sixth Street to the river pedestrian bridge. The northern portion of this sidewalk should be wide and reinforced, enough to provide delivery vehicle access from Sixth Street to the central heating plant west loading area.

Embrace the Reconstructed Cascade Avenue

Cascade Avenue is the primary campus edge, the most active seam between the campus and the community. In early 2007, the City, Wisconsin Department of Transportation, and the university collaborated to develop a concept plan for Cascade Avenue from Spruce Street to Wasson Lane. The City prepared construction documentation for this road reconstruction concurrent with the preparation of the campus master plan. The concept plan is intended to make the corridor more attractive, safer, and more efficient for both motorists and pedestrians.

**SUMMARY OF CASCADE AVENUE CONCEPT PLAN**

The concept plan introduces roundabouts to the corridor at three locations, Wasson Lane, Sixth Street and Second Street. The roundabouts will control the speed of traffic, allow freedom of movement from cross street traffic, maintain flow of traffic along Cascade Avenue, and provide both a design element and a transitioning element for urban design.

**Second Street to Sixth Street**

The section between Second Street and Sixth Street will most directly impact campus circulation since it impacts pedestrian crossings to North Hall, Parking Lot Q, and downtown. This section will consist of a single lane in each direction with a wide median. The median will be continuous between Second Street and Sixth Street except for an eastbound left turn lane at the Third Street intersection. No parking will be allowed on Cascade Avenue between Sixth Street and Second Street.
A trail system will be provided along all of Cascade Avenue, including a 10-foot multi-mode trail on the south side of Cascade Avenue. The road will also include shoulder lanes for bicycles. Sidewalks will connect campus buildings to designated pedestrian crossing locations.

To help ensure that pedestrians are more likely to use the crosswalk locations, a fence will be incorporated into the landscaping in the median between the crosswalks at Sixth Street and Second Street except for openings at crosswalks near Third Street, Fourth Street, and Fifth Street. The crosswalks will be constructed with permeable pavers or other materials that will provide better and permanent delineation of the crosswalks.

**Parking**

Cascade Avenue on-street parking provides significant parking for campus. The Cascade Avenue concept plan eliminates parking on Cascade Avenue from Second Street to Sixth Street. On-street parking will also be eliminated on the south side of Cascade Avenue from Sixth Street east and many other places.

To compensate for the removal, Parking Lot Q west of North Hall will be reconstructed as a single parking lot and expanded into the Third Street right-of-way. Free on-street parking is largely replaced by parking in off-street campus parking lots. One expected benefit of the parking relocation is a reduction in the amount of traffic circulating on Cascade Avenue looking for parking, replaced by vehicles proceeding directly to the parking lots.

Include rain gardens and other storm water best practices into road design.
Landscaping
Landscaping within the right-of-way of a prominent city street such as Cascade Avenue plays an important role in both traffic calming and the aesthetic character of the corridor. The plan shows three distinct landscape design segments along Cascade Avenue from a more informal landscape design on the eastern end of the corridor near Cascade Avenue and Wasson Lane to one that is more semi-formal in nature at the western end of the corridor at Cascade Avenue and Second Street. The central segment of the corridor within the heart of the historic section of the campus near North Hall calls for a landscape design that is more formal and serves as the thoroughfare’s aesthetic hallmark.

The landscaping plan presented in the concept plan reflects a possible and desirable level of landscaping for the corridor. As there are significant costs associated with various degrees of landscaping, the implementation of such landscaping may need to be staged and may be influenced by the ability of various stakeholders, principally the university, to participate in the cost of such landscaping.

Establish Campus Gateways at the Cascade Roundabouts
As recommended elsewhere, the roundabouts at Sixth Street and Second Street offer an opportunity to create a campus gateway. The interior of the roundabout should contain appropriately scaled campus signage and landscaping. Signage could be incorporated into a low wall. The southwest and southeast corners of each roundabout could also contain campus signage, landscaping, and columns or other gateway elements.

The university should work with the City to design and maintain the landscaping within the wide median between Second Street and Sixth Street. Landscaping should be coordinated with the design intent of the North Hall/South Hall quadrangle. The university should seek to minimize the appearance of any fencing within the right-of-way, while still encouraging pedestrians to cross Cascade Avenue at designated crosswalks.

Construct a Drop-off for Library and Fine Arts on Cascade Avenue
E.H. Kleinpell Fine Arts and Chalmer Davee Library are frequent destinations for community visitors. To provide convenient vehicular access to these buildings, the university should construct a half circle drop-off on the south side of Cascade Avenue between these buildings. The circular driveway should allow for safe drop-off and pick-up of pedestrians. The elderly and disabled who are attending performances at E.H. Kleinpell Fine Arts can be dropped off and the driver can park the vehicle at more remote lots such as Parking Lot O or Q. Any parking within the drop-off should be short-term or for disabled motorists.

Remove Cascade Avenue on-Street Parking Between Sixth Street and Crescent Street
The Cascade Avenue concept plan recommends that on-street parking be permitted on one side of Cascade Avenue east of Sixth Street and that Wild Rose Avenue become a one-way access road. The campus master plan recommends that the university and the City coordinate on the design of this section to better serve both campus and city motorists. On-street parking on Cascade Avenue between Sixth Street and Crescent Street should be relocated to a double-loaded Wild Rose Avenue. The Cascade Avenue right-of-way will shift north, allowing for the widening of Wild Rose Avenue. Wild Rose Avenue will be a part of the campus ring road, allowing for two-way traffic. Ninety-degree angle on-street parking should be constructed on both sides of Wild Rose Avenue. The other Cascade Avenue cross-section elements such as the median, travel lanes, terrace, and sidewalks should remain, but be shifted north. Wild Rose Avenue should be reconstructed when Cascade Avenue between Sixth Street and Wasson Lane is reconstructed.

 Appropriately Design Buildings and Landscape Along Cascade Avenue
One goal of the Cascade Avenue reconstruction is to improve the aesthetics of this important city entryway. The campus contributes to the aesthetic of the street through its streetscape, including building placement, circulation, and landscaping. The campus’s Cascade Avenue edge should generally support the City’s intended character for the corridor.

The setback for new structures on Cascade Avenue, such as the new west residence hall and the new science building, should be similar to the existing urban setbacks of E.H. Kleinpell Fine Arts Center and May Hall. The deeper setbacks for the historic structures of South Hall and
North Hall should not be replicated, but rather highlight and differentiate these structures. Between Main Street and Sixth Street, the setback should not contain surface parking, but rather landscaping that is appropriate for fronting a residential neighborhood, such as mowed lawn.

Pedestrian access from the Cascade Avenue sidewalk into campus should be free and unobstructed by buildings and landscaping. The campus should place buildings, sidewalks, and landscaping to encourage pedestrian street crossings at designated crosswalks along Cascade Avenue.

Campus development and open space design on the north side of Cascade Avenue west of North Hall should respect the historic front west facade of North Hall. Development should respect the City’s Second Street Design Subdistrict guidelines, which indicate this area should be well-landscaped with pedestrian lighting, narrowed streets, crosswalks, and traditional design guidelines.

Create a Fine-Grained Pedestrian Network

Campus design should prioritize pedestrian movement over other transportation methods. The campus should establish a connected pedestrian network, a hierarchy of pedestrian walkways, with consistent materials to help to define and articulate open spaces and enhance campus wayfinding. The network should connect to border sidewalks and the campus should promote and encourage a lively urban pedestrian environment in the streets surrounding the campus.

STRENGTHEN AND EXTEND THE EAST-WEST PROMENADE

The most prominent pedestrian path is the current east-west promenade that runs through the campus mall. Given the long east-west orientation of the campus, it is the east-west promenade that provides the key pedestrian connections between the academic uses within the campus core. The existing east-west promenade is effective, especially between Third Street and Sixth Street. The section between Spruce Street and Third Street is less effective, mostly due to significant pedestrian crossing conflict at Third Street. The east-west sidewalk in the east residential neighborhood is effective, but the pedestrian connection south of Rodli Hall is not comfortable for many pedestrians.

The east-west promenade should be connected and extended so that it reaches the Cascade/Main intersection and the Wild Center. On the west end of campus between Third Street and Spruce Street, the core campus promenade should be extended west
through the south end of the Hagestad Hall site and connecting to the new science building. After crossing the Second Street entrance, the prominent sidewalk should continue west between Stratton and Prucha Halls, connecting into the pedestrian plaza between Johnson and May Halls on the Emogene A. Nelson Building site.

On the east end of campus, there is a missing link between Sixth Street and south of McMillan Hall. Parking Lot T should be moved to the west side of Rodli Hall, replaced by the east-west promenade south of the building. The ring road north of the heating plant should stay south and not interfere with the promenade.

Within most of the campus core, the east-west promenade should be a double walk, with two wide, two-way sidewalks on the north and south edges of the campus mall. As the double walks approach the crosswalks for Second Street and Sixth Street, the walks should merge into one wide walk to simplify and concentrate the street crossings, making it safer for both pedestrians and motorists. West of Second Street and east of Sixth Street, the promenade should be a single wide pathway.

To differentiate the east-west promenade from other primary pedestrian walks, it should be detailed with special pavement and/or accent banding to provide interest and pedestrian scale. The materials selected should be elegant, simple, and timeless. The pavement material should also be capable of being repaired and replaced with ease and consistency. The placement of benches, pedestrian lights, and landscaping should reinforce the linear aspect of the promenade.

The Second Street and Sixth Street termination points of the promenade should be designed to discourage vehicle entrance. Pavement changes, landscaping, bollards, and site furnishings should prominently mark the ends of the campus mall.

CONSTRUCT A NORTH-SOUTH PEDESTRIAN WALK BETWEEN THE ATHLETIC COMPLEX AND THE CAMPUS CORE

The traditional campus core orientation is east-west, along the north side of the South Fork Kinnickinnic River. With the construction of the south campus sports and recreation complex, a major campus destination will emerge south of the river. The chief path to access the south campus sports and recreation complex passes between the Greenhouse and Hathorn Hall and the pedestrian bridge to the south. This existing path will increase in importance and the campus should improve it accordingly.

North of the river area, the north-south pedestrian walk should be designed as a primary pedestrian walk, sharing many design features with the east-west promenade. As detailed elsewhere, the pavement should be wide and the landscaping formal.

Within the river area and within the sports and recreation complex, the path should remain wide, but its alignment and landscaping can be less formal. The path should fit within the riverine landscape, a relatively quiet refuge between the bustle of the campus core and the sports and recreation complex.

The north end destinations for the north-south pedestrian walk will be the new science building and the parking structure. The pedestrian movement to and around both of these projects will be determined when the projects are designed. At that time, the campus should extend the north-south pedestrian walk north to access both projects. The alignment and design of the path should respect and enhance the character of the Hagestad Grove Quadrangle.

DESIGN GUIDELINES FOR THE PEDESTRIAN NETWORK

Network

The pedestrian network should be continuous, aligned so that it connects major destinations, and offer pedestrians a safe, interesting, and relatively direct means of travel across campus.

Pedestrian walks should generally follow the natural desire lines between destinations, with the recognition that in most cases 90-degree turns are not comfortable and therefore not realistic for pedestrian movement. Landscaping can be used to encourage a certain pedestrian movement, but will not be adequate to force an action that does not approximate the desire line. Students and faculty will always discover new and apparently more direct routes. It is impractical to add new walks in all such instances, but where pedestrian volume is greater than the width of the existing walk, additional pavement should be added. Conversely, walkways not being used should be removed rather than be repaired.
The east-west promenade will connect the campus mall with the east and west residential neighborhoods. As the wide path crosses Sixth Street at the renovated Rodli Hall, the pavement of the path the road should emphasize the prominence of the pedestrian.
Short path segments that are repetitive of other nearby paths and do not follow pedestrian desire lines should be removed.

Sidewalks should parallel all vehicular circulation routes (see campus road cross-section recommendations). Pedestrian walks should connect major pedestrian origin/destination points, including major parking lots, river crossing bridges, and the entrances to major generators like University Center and Chalmer Davee Library. Pedestrian walks should interconnect with existing and proposed quadrangles, respecting major desire lines across open spaces but otherwise preserving large unbroken lawns.

To the extent possible, all pedestrian walks should be handicapped accessible and should not have steps.

Service drives that are parallel to pedestrian walks should be separated with a landscape buffer, and service crossings of pedestrian walks should be minimized. Service vehicles should never park directly on walks. They may park at designated service parking spaces located adjacent to walks with appropriate landscaping to minimize the negative visual effect to pedestrians.

Hierarchy
The campus should implement a hierarchy of walks. A few select primary pedestrian walks should connect all areas of campus and collect large volumes of students. These primary walks should be given dominance over secondary walks in width and materials. Primary walks, such as the east-west promenade and the north-south pedestrian walk, should connect to major pedestrian destinations. Secondary walks should connect the primary walks with the entrances to other destinations.

Junctions
Junctions of primary pedestrian walks should accommodate a significant volume of pedestrian traffic and function as major collection points. At significant intersections and connecting points, plazas can serve as focal points and meeting places (see plaza design guidelines). Landscaping around junctions should be more urban in character, with tree pockets, art installations, seating, and possibly a special element such as specimen plant material, a wayfinding element, a fountain, or a kiosk.

Road Crossings
The east-west promenade and the north-south pedestrian walk cross the campus entry and ring roads. Primary and secondary walks should merge when approaching roads to minimize the number and size of street crossings. Where pedestrian walks cross vehicular roads, they should always be at a right angle with an open view of the street. Standard pavement markings or special street pavement materials should be used to highlight pedestrian movement at major pedestrian crossings, including each location where primary pedestrian walks end at a road or other vehicular route. Crosswalks and barrier-free ramps that are constructed to meet ADA, state, and local code requirements should be constructed at roadway intersections.

Width
The width of the pedestrian walks should be established by network hierarchy, usage, and urban design considerations. Primary pedestrian corridors should be 12 feet wide and secondary pedestrian walkways should be eight feet wide. Walks must be wide enough to accommodate anticipated pedestrian volumes. In cases where primary pedestrian walks accommodate an unusually large number of people, significant bicycle traffic, or an emergency vehicle access route, the walks can be wider. It should be assumed that most pedestrian walks will require snow plowing by a truck with an eight-foot plow blade, and in no case should a pedestrian walk be narrower than eight feet wide. The university should encourage the City of River Falls to construct sidewalks within one block of campus that are at least five feet in width.

Materials
Consistent walkway material is a critical element for achieving visual continuity and campus unity. As a base material, concrete should be the dominant pedestrian walkway material for durability and ease of maintenance and repair.

The finish, scoring, and connection details should be consistent and uniform. Heavily articulated and patterned pavement is discouraged. Primary pedestrian walkways should be constructed with a tooled joint and broom finish with a “square on square” scoring pattern to match existing campus walkways. This scoring pattern serves as a guide for emergency service personnel to quickly identify accessible emergency routes. Secondary pedestrian walkways should have a basic scoring pattern at six foot intervals.

Paving materials of contrasting color and texture should only be used in special areas, such as junctions of primary paths and at major building entrances. Special materials, patterns, banding,
Special paving materials should be used at major pedestrian walk junctions areas.

Special marking and pavement materials should be used at major road crossings.

Special materials should be used at pedestrian walk junctions and termination points.
etc., may be used to articulate these special areas. Paved pedestrian building entrance areas should still be simple and relate to overall campus walk pavement. Material chosen for walkways and walkway design should not become subservient to individual buildings and their materials.

These special paver areas should ideally utilize a flexible base system, due to its lower initial cost, proven durability, and ease of accommodating future alterations. Brick may be utilized on a project-specific basis.

Walks should be engineered to provide water runoff, prevent ponding water, and to permit easy snow removal. ADA codes require that all walks have no more than a two percent cross slope. Adequate space for snow stacking should be reserved adjacent to sidewalks.

Metal railings at ramps should be of non-ferrous metals that do not require frequent repainting. Railings on stairs and along boardwalks should be of composite materials that do not require periodic staining, sealing, or frequent replacement.

Primary pedestrian corridors should be composed of seven-inch reinforced standard gray concrete, and secondary pedestrian walkways should be composed of five-inch standard grey concrete. All primary, and some secondary, pedestrian paths will be used by maintenance and emergency vehicles. In addition, walks near residence halls should be designed to also accommodate move-in and move-out vehicle traffic. Increased pavement thickness and reinforced thickened edges should be used.

Campus pedestrian paths should have consistent materials such as scored concrete.
to support these vehicles. For areas of questionable soil stability, consult emergency service providers to assist in the design of pavement thickness and reinforcements.

**Landscaping**

The primary pedestrian walks should have a single row of regularly spaced canopy trees along both sides of each walk. Regularly spaced (30-40 feet on center), large canopy trees should border primary pedestrian walkways. The trees should be spaced in a consistent alignment to distinguish them from adjacent landscape treatment and to reinforce the primary pedestrian walks. Landscaping along secondary walks should be more informal and should relate to the open square quadrangles they pass through and by.

**CONSTRUCT A TRAIL NETWORK ALONG THE SOUTH FORK KINNICKINNIC RIVER**

A trail network should parallel both the north and south sides of the South Fork Kinnickinnic River between the pedestrian bridges south of the Greenhouse and George R. Field South Fork Suites. Many segments already exist south of the river. The university will need construct connecting segments along the north side of the river.

The trails are intended to get campus users closer to the river so that their awareness and appreciation increase, but also provide direct pedestrian connections, particularly to and from George R. Field South Fork Suites and recreational fields. The trails should be naturalistic, meander, and offer a handful of observation points.

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*Multi-use recreational asphalt trails*

*Boardwalks should enable interaction with the river*
Recreational trails should have different materials and widths depending on the type of recreation and the terrain. Multi-use paths and connecting trails, such as those along the south side of the South Fork Kinnickinnic River, should be wide enough to accommodate bicycles and pedestrians (at least ten feet), and should be asphalt. Trails should contain dark-sky pedestrian lighting and emergency call boxes where necessary utilities are present.

In some areas, soil conditions will not allow a paved trail. Wisconsin state law prohibits fill for trails through wetlands. This includes any material that raises the ground surface, such as gravel or wood chips. Boardwalks are a viable alternative that protect the ground surface, and although they do not require a water certification or permit under current regulations, WisDNR staff should be consulted to review plans and make suggestions prior to construction.

Boardwalks should enable interaction with the river and education about the river’s functions, water quality, and habitat. Boardwalks within the wetland areas adjacent to the South Fork Kinnickinnic River should be designed as follows:

- Provide a minimum width of four feet to allow safe two-directional travel.
- Elevate the boardwalk approximately eight inches from the ground surface to allow for passage of wildlife under the walk.
- Orient boardwalk decking perpendicular to the direction of travel to reduce slipping on wet surfaces and avoid trapping bike tires.
- Ramp down to adjacent trail sections to promote accessibility and allow bike travel.
- Provide a continuous raised outer edge to prevent strollers and wheelchairs from leaving the path.
- Use certified wood or recycled plastic lumber in earth tones or natural finish to promote sustainability and low maintenance.
- To reduce environmental impacts of boardwalk construction, consider using drilled helical piers instead of buried posts for support based on soil conditions.

CONSTRUCT A NEW PEDESTRIAN BRIDGE TO CONNECT FIELD SOUTH FORK SUITES AND RECREATION FIELDS

The campus buildings, streets, parking, and formal open spaces remain outside the river’s floodplain. The master plan specifically does not recommend an automotive crossing of the South Fork Kinnickinnic River.

However, the master plan does encourage greater pedestrian interaction with the river, providing travel paths along and over the river. The campus currently has three pedestrian river crossings south of the Greenhouse, south of the heating plant, and south of George R. Field South Fork Suites. The campus should investigate a fourth pedestrian crossing south of Maintenance and Central Stores Building. This additional pedestrian river crossing will provide a more direct path for those living in George R. Field South Fork Suites and its addition, and Crabtree Hall to access the renovated intramural fields and the south campus sports and recreation complex.

CONSTRUCTION ACCESS PLANS

The campus master plan recommends a multiple building construction and renovation program. The pedestrian network will be built in phases as these buildings and their sites are constructed. While projects are constructed, the network needs to accommodate pedestrians and bicyclists. Pedestrian pathways should remain unobstructed wherever possible. Signed detours are absolutely necessary when construction causes blocked sidewalks. Likewise, construction vehicles should be prohibited from parking on sidewalks. Building construction plans should indicate where construction staging and parking should occur. The university should require that bicycle and pedestrian access plans for all phases of construction be reviewed and approved before construction projects begin.
Encourage Cycling

One key component of creating a more sustainable campus is encouraging cycling on campus as an alternative to commuting to and circulating around campus via a personal automobile. Although the harsh Wisconsin winters mean that cycling cannot be a year-round choice for everyone, the campus master plan seeks to make cycling a viable mode that is more attractive for most users most of the year.

The campus is compact enough that no internal campus trip should require a vehicle (excepting delivery and accessible transportation). To be effective, the bicycle path network must be connected, safe, and extensive. Bicycle commuting and circulation are important contributors to reducing the negative impacts from automobile trips and parking, including impervious surfaces, emissions, and the heat island effect.

CREATE A CONNECTED NETWORK OF BICYCLE PATHS

The campus should have a connected and complete bicycle network. The bicycle network should consist of off-street recreational trails, bicycle-friendly campus streets, and primary pedestrian walks. Bicyclists should not be permitted to use secondary pedestrian walks. The bicycle network should contain no stairs.

The bicycle network should connect major bicycle origin/destination points, including outdoor bicycle parking areas, access points to indoor bicycle storage areas, and bicycle access points from off-campus. The bicycle network should connect directly and seamlessly to the City’s trail network.

Vehicles and bicycles should safely share campus street lanes.

The bicycle network should include the primary pedestrian walks.
including the bike paths on the reconstructed Cascade Avenue, the wide curb lane on South Main Street, and the paths along the South Fork Kinnickinnic River.

The campus should be pedestrian-focused. Signage should remind bicyclists to look out for and give way to pedestrians. On primary pedestrian walks where bicycle and pedestrian volumes are too great to maintain the safety of both groups, the campus should consider a parallel bikeway designed in a manner that suggests the circulation routes are part of a unified circulation system instead of two separate systems.

Paved routes should be well-maintained and cleared of snow to ensure safe use by bicyclists.

PROVIDE SHORT AND LONG-TERM BICYCLE PARKING

Convenient bicycle parking is a necessary component of a sustainable campus. Bicycle parking should be an integrated part of the design of each new building and facility, not an afterthought.

Short and Long-Term Parking

The campus should have two levels of bicycle parking. Short-term bicycle parking will serve students and others making frequent stops. Students are expected to use a bike throughout the day, biking between residence halls, other campus buildings, and to off-campus services. Short-term parking should be located near every public non-residential building. All short-term parking should be secure and at least 25 percent of short-term bicycle parking should be weather-protected, where more than 10 short-term spaces are required. (See the site furnishing standards for more information on criteria and location for short-term parking.)

A second type of bicycle parking is long-term parking, which provides faculty, staff, and off-campus student commuters a secure and weather-protected place to store their bicycles. Commuters are expected to park their bike in long-term parking once a day, walking across the campus throughout the day. Bicycle commuters are generally willing to walk a short distance if they are confident the parking is secure. North of the river, nearly the entire campus is within a five-minute walk of the center of campus, so only one centralized long-term bicycle parking location is needed. The south campus sports and recreation complex should have its own long-term bicycle parking location. At the centralized long-term bicycle parking location, all parking should be secure and weather-protected.

Long-term parking should also be located at every residence hall. Each residence hall should provide secure bicycle parking for at least 15 percent of hall residents, with at least 50 percent weather-protected. Long-term parking may occur within residence halls such as in a basement. Wall-mounted racks are well suited to indoor storage. The university should encourage off-campus student housing managers to provide long-term bicycle parking that is secure and weather-protected.

Secure and Weather-Protected

Secure bicycle parking should include a bicycle rack and be well-lit. Additional security is possible when long-term bicycle parking is located in highly visible locations such
as within view of streets and pedestrian walks. Where necessary, areas enclosed by a fence with a locked gate provide additional security.

Weather-protected bicycle parking protects bicycle frames, seats, and tires from damaging rain and sun and further encourages bicycle use. Cover can be provided by bike lockers or locating bicycle parking under existing overhangs or awnings or under overhead building connections. Freestanding bicycle shelters are also acceptable and should be designed to withstand code-required snow and wind loads, be well lit, and not obstruct visibility from streets and pedestrian walks.

See the site furnishing standards for more information about secure parking, weather-protected parking, equipment criteria, and location requirements.

INVESTIGATE INNOVATIVE CAMPUS CYCLING PROGRAMS

The university should research campus programs that increase bicycling on campus, including a bike-share program. A bike-share program would allow a member to pick up a bike at one location on campus and leave it at a separate location, avoiding a long walk or short drive to a class, meeting, or appointment.

Bike lockers near May Hall provide secure and weather-protected storage.
Move Parking to the Campus Edges

In order to create a more pedestrian-oriented and sustainable campus, the balance between pedestrians and vehicles must shift. In particular, many vehicle parking lots and Third Street are intrusive to the campus mall, reducing the pedestrian orientation of the campus core.

The campus currently has a sufficient parking supply to meet demand, but as student enrollment grows, parking demand will also increase. Regardless of the adequacy of supply, there will be complaints about the location of parking. Many faculty and staff enjoy the convenience of parking on the campus mall.

The campus master plan seeks to adjust the balance of campus towards pedestrians and bicyclists and away from the prominence of the automobile. By relocating vehicle parking to the edges, the number of automobiles driving through the campus core will be reduced, land will be available for campus mall open space, campus aesthetics will improve, and the walking and cycling experience will be enhanced.

ACCOMMODATE THE NEED FOR EXPANDED VEHICLE PARKING

When comparing the number of campus users (students, faculty, and staff) to the on-campus parking supply, the parking provision ratio is similar to that of a typical suburban campus. However, when the additional 1,000 off-campus, on-street parking spaces are added in, the parking supply per campus user ratio at UW-River Falls (0.56 space/user) is much higher than similar universities.

Several factors contribute to the high car use (and thus parking supply), including a rural location that is still within easy commuting distance to the Twin Cities, and the high percentage of students with off-campus employment. Campus leaders do not see these factors changing over the master plan horizon. Admissions staff note that UW-River Falls has a recruiting advantage by allowing all students to bring cars to campus and providing sufficient parking spaces. During the master planning process, participants considered the potential benefits of reducing the demand for vehicles on-campus and the supply of parking. However, campus leadership concluded that the campus’s high parking supply per user should remain. While the campus master plan recommends a series of projects that will improve the pedestrian and bicycle facilities, it assumes no significant shift away from vehicles within the master plan horizon.

Student enrollment growth will create additional on-campus parking demands. While the master plan assumes that the existing supply of off-campus on-street parking spaces will remain available, it assumes that no additional off-campus spaces will become available. The university does not wish to risk straining its relationships with adjacent residential neighborhoods by increasing the off-campus parking demand and sending students further into neighborhoods.

The existing on-campus parking space count sums to approximately 2,340. With the projected additional 1,117 campus users anticipated over the master plan horizon, approximately 630 additional on-campus spaces are needed (0.56 space/user).

The master plan graphic indicates that the total of on-campus spaces is increased by approximately 700 spaces, with an approximate total of 3,000 spaces. (Note that the actual on-campus parking spaces is approximately 3,250, which includes Cascade Avenue parking spaces relocated to on-campus.)

Within the horizon of this campus master plan, the parking space per user ratio will remain constant. However, the university’s goal should be to reduce the parking demand by increasing the attractiveness of carpooling, bicycling, walking, and perhaps future transit. At the end years of this master plan and beyond, the university should consider reducing the parking space per user ratio to one that is more common among suburban university campuses. A fundamental shift away from personal automobiles toward walking, biking, and ridesharing will be necessary to achieve this goal. This master plan prepares for the future transition away from private automobiles by increasing the viability of other modes.

REMOVE PARKING FROM CAMPUS MALL

The campus provides convenient surface parking to faculty and staff, located immediately adjacent to every academic and administrative building. However, the cost of this parking is campus walkability and aesthetics. Many of these parking lots intrude into the open space character of the campus mall, taking opportunities for
outdoor instructional and recreation spaces and turning them over to vehicle storage. Campus pedestrians are forced to walk through parking lots and to access campus mall buildings like South Hall and Hagestad Hall. Parking utilization studies indicate that the faculty/staff parking lots within the campus mall are among the lowest utilized on campus.

The campus master plan recommends removing parking lots from the interior of campus, particularly within the campus mall. Parking lots south of South Hall, within the Agriculture Science complex, south of Karges, south of Hagestad Hall, and south of Rodli should be partially or completely converted back to open space. These 170 space should be replaced outside the campus mall.

The campus should also remove the minimal but disruptive parallel parking along Sixth Street within the campus boundary. This on-street parking makes the Sixth Street pedestrian crossing less pedestrian-friendly in two ways. The on-street parking unnecessarily widens Sixth Street, lengthening the crossing distance and crossing time. Additionally, the parked cars block view of crossing pedestrians from motorists, increasing the risk of a pedestrian/vehicle crash.

Surface parking spaces within the campus core should be limited to service and handicapped parking and all other parking should occur in perimeter parking lots. A limited number of metered spaces should be provided within the campus core for short-term parking needs.

**REMOVE PARKING FROM THE FLOODPLAIN**

Two student parking lots, Lot K south of Stratton Hall and Lot N south of Hathorn Hall, are within the floodplain of the South Fork Kinnickinnic River. Students vehicles that are not moved out of the lots in time are damaged during flooding events. Additionally, vehicle and road pollutants are washed directly into the river during heavy rains and flooding. The master plan recommends the conversion of Parking Lots N and K to open space recreation and storm water management so, in part, the water quality of the South Fork Kinnickinnic River will improve. The approximately 330 spaces in these two lots must be replaced elsewhere on campus.

**EXPAND PARKING ON CAMPUS EDGES**

To provide sufficient on-campus parking to support enrollment growth and replace existing parking that is removed, parking lots on the edges of campus should be expanded.

**Lot O – George R. Field South Fork Suites**

As part of the George R. Field South Fork Suites Addition project, Lot O will be expanded. The campus master plan recommends that this lot be further expanded south, designed and constructed in conjunction with redesign of Lot O to create the Birch Street entrance road and a portion of the ring road. Stormwater and bioretention areas should be included within the parking lot or south of the parking lot to capture and treat water before flowing into the river.
South Campus Sport and Recreation Complex
The pre-design study expanded parking south and east of the buildings to serve athletic events. During the design and construction of this project, these parking lots should be further expanded.

Construct a Parking Structure on Lot Q
The university should construct a parking structure on the block bordered by Cascade Avenue, Second Street, Spring Street, and the Third Street right-of-way. A parking structure that is three stories would be an appropriate height relative to both Main Street commercial uses and North Hall.

The university should seek a partnership with the City of River Falls to plan, design, and construct the parking structure. First, the block contains a municipal wellhead, so the design of the structure will need to preserve municipal utility access. Second, the parking structure is located within close walking distance of downtown and could partially serve downtown parking needs. This parking resource could enable and support further redevelopment and intensification of downtown River Falls.

The campus currently does not have any parking structures. In the future, parking structures may be preferred over surface parking lots in order to reduce the development footprint. The design of above-grade parking structures should consider the following:

- Ground Level Interest: Where parking structures and pedestrian walkways adjoin, the parking structure should have landscape features and architectural detail, materials, and textures that establish a comfortable and well-proportioned human scale. Where appropriate, maintain the urban street front activity by having the ground level contain offices or other appropriate uses adjacent to the Cascade Avenue side of the facility.

- Exterior Facades: The exterior walls of parking structures should be finished with materials similar to adjacent campus buildings. Exterior elevations should contain horizontal rather than angled design.
elements; e.g. ramps or sloping floors should be located away from the visible perimeter of the structure. The scale of the large structure should be visually broken down by sensitive articulation of horizontal and vertical elements and variations in massing, openings, and materials to establish a harmonious elevation. Exterior openings should attempt to emulate the window patterns of adjacent campus buildings. Parking structure walls facing residential areas should have openings sized and located to avoid vehicle noise and light impacts on adjacent residences.

- Security: Elevators and stairs should be located on the perimeter of the structure to provide natural surveillance from exterior public areas. The stairs, elevator shaft and cab should have glass facing the exterior public areas. Floor plans should be open to improve sight lines, eliminate hiding places, and enhance visibility from the surrounding areas.

**Relocate Cascade Avenue Parking to On-Campus**
The Cascade Avenue project will relocate most on-street parking to on-campus parking lots. As described previously in this section, the relocated parking should be accommodated in new parking lots on the Third Street right-of-way and along an expanded and shifted Wild Rose Avenue north of the east residential neighborhood.

**VEHICLE PARKING DESIGN STANDARDS**
Vehicle parking design should consider the following guidelines:

- Pedestrian access to and from lots should be carefully considered to minimize vehicular-pedestrian conflicts. Vehicle parking should not be placed in primary pedestrian corridors and main pedestrian desire paths.
- Where parking lots border primary pedestrian walks, campus roads, or residential off-campus neighborhoods, the edges of lots should be landscaped to provide a buffer zone and vegetative screening.
- The lot interior should incorporate wide islands with appropriately-scaled plantings to soften the visual effect of the lot. Interior landscape islands should provide shade, reduce heat of large paved areas, and allow storm water infiltration.
- The campus soils will typically support storm water infiltration. The university should consider integrating storm water treatment through permeable pavement and other infiltration best management practices. University staff is capable of maintaining permeable pavements. Due to higher installed cost relative to conventional concrete, their use should be determined on a project-by-project basis against other best management practices.
- Lots should be appropriately lit to increase safety. Lights should be appropriately shielded to minimize glare and light pollution. The campus should consider motion sensors to reduce power demand, where appropriate and where adequate lighting for safety can be maintained.
- Entryways and vehicular circulation should be easily accessed with safe viewing angles for oncoming traffic, and clear signage should occur at each main entrance.
- Lots should have the appropriate number of service and handicapped spaces to accommodate the surrounding buildings.
- Lots should be double-loaded for the most efficient parking layout.
- The layout of surface parking lots should allow efficient plowing methods and provide locations to store snow.
- Place bioretention areas in parking lot islands, on lot perimeters, or in lawn areas between sidewalks. Where possible, place bioretention areas around existing inlets. Lot design should direct runoff first to a filter strip to remove coarse sediment.

Stormwater should be infiltrated through vehicle parking surfaces using best practices such as permeable pavers.
Campus Utilities

Campus and UW System facilities staff assessed the likely impacts of the recommended master plan projects on campus utility capacity and distribution.

Existing utility corridors could impact several potential campus development projects:

- A significant utility corridor runs south of Rodli Hall, with a steam line the furthest north and primary/ signal just south of the steam. Additions to the south face of Rodli Hall would impact this corridor and thus would be cost prohibitive.
- The storm and sanitary utilities south of University Center and Maintenance and Central Store serve not only the campus but also adjacent neighborhoods.
- A minor duct bank runs through the Hagestad Hall site. When this site is redeveloped, these minor utilities should be moved into existing corridors either north or south of the site.

Summary of Existing Utility Systems

HEATING PLANT AND STEAM DISTRIBUTION

The peak central heating plant load of the last several years has been 48,000 lb/hr, which is the upper limit of one boiler output. Campus facilities staff considers 65,000 lb/hr the firm maximum capacity (one large boiler and the small boiler on line) with one large boiler on standby.

Campus facilities staff has determined that the net increase in building space identified in the master plan will not push the campus over the firm maximum capacity. Also, they do not see any significant bottle neck in the steam distribution system. Depending upon future decisions regarding coal fired boiler operation, the university may have the opportunity to install new, higher efficiency gas boilers or biomass fueled boilers.

ELECTRICAL DISTRIBUTION

Depending upon power requirements and how the proposed new buildings are cooled, the campus utility system may not have enough capacity with the existing 5,000 KVA substation or the distribution circuits for the complete 20 year build out for the master plan. Campus facilities staff will need to continue to monitor the loads and condition of the distribution system to plan how to match the needs for the long-term growth.

The campus switchgear and feeder cables were replaced in 1987. The useful life of this type distribution equipment is approximately 30 years. Therefore replacement of the switchgear equipment will be needed about the same time that the additional feeder will be required for the new buildings. The replacement switchgear should contain additional distribution circuit breaker capacity for new feeders. At that time, it would be appropriate to look at a substation design concept which includes two switchgear lineups fed from separate utility transformers with a tie buss between lineups for redundancy.

Regarding electrical distribution, the only potential significant problem would be an addition to the Walker D. Wyman Education Building. The footprint for the addition would be over the main feeder duct back for the western third of the campus. Most likely this addition would require some reconstruction of the distribution system, which is an opportunity for a positive improvement to the campus.

CHILLED WATER

The existing Central Chilled Water Plant was not originally designed to handle the entire campus per DSF direction. The plant was designed and constructed to have additional chillers and associated cooling towers added as additional load is brought on-line for the east side of campus. When Rodli Hall, the east residence halls, and/or North Hall are added to the chilled water system, a third chiller and cooling tower will have to be added to the Central Chilled Water Plant.

Additional study of how best to cool new space on the west side of campus will need to be completed in the near future. One solution would be to install a chilled water plant as part of the proposed new science building construction that would support the west end of campus. If the new plant were connected to the existing chilled water loop, the new plant would provide system redundancy.
Maintain a Permanent Network of Utility Corridors

Established utility corridors (see Appendix) for steam, electricity, data and chilled water distribution must be maintained to provide service access for maintenance and repair at all man holes, switch locations, and valve boxes.

- Additions to the south face of Rodli Hall would impact this corridor, would be cost prohibitive, and should be avoided.
- Relocate the primary and signal ductbank north of the Walker D. Wyman Education Building to allow construction of the building addition. At that time reconstruct and add signal conduits between Chalmer Davee Library and signal pit SB. Relocate the 8” water main north of Walker D. Wyman Education Building to allow a north building addition to be constructed.

Locate Utility Corridors under Streets and Open Spaces

Where feasible, minimal development should take place over utility corridors to allow access for repair or replacement of underground utilities.

Incorporate Services into Landscape and Streetscape Design

Water supply locations should be strategically located near planting beds and other landscape features that need periodic watering. Power outlets should be installed near gathering spots that could be used for programming space.
Continue to Focus on Energy Conservation

In 2010, UW-River Falls ranked as the most energy efficient campus in the UW System. Energy conservation through improved efficiency and scheduling optimization should continue to be a high priority and all future development should reflect these goals. When economically feasible, new projects should include renewable energy features such as solar thermal, solar electric, and/or the use of ground source heat pump technology.

- Evaluate future available fuel sources for the central heating plant and make changes accordingly.
Maintain, Improve, and Expand System Components

Any major construction project should be used as an opportunity for expansion or improvement of the utility infrastructure, including removing known bottlenecks or replacing weak components.

- Replace the electrical switchgear equipment with new equipment with additional distribution capability to serve current and future loads. Consider installing two switchgear lineups for redundancy. Install a new ductbank and campus feeder from the substation yard to the east terminus of the ductbank serving South Fork Suite residence hall for east campus primary service redundancy.

- Extend a new campus feeder to the site of the new science building and the Karges site residence hall.

- Improve fiber optic distribution infrastructure, connectors and an optic loop to all major academic buildings, south campus, and the Mann Valley Farm.

- Address campus wide availability of stand by power via generators to MDF and IDF's in each building to support data network communications switching systems.

- Continue to monitor sewer conditions by televising lines as opportunities arise.

- Build a central boiler and chilled water plant to serve the south campus as part of the south campus sport and recreation complex project.

- Construct a chilled water plant serving the western third of campus in conjunction with the new science building. Consider cross-connecting the east and west chilled water loops to provide water chilling redundancy.
These campus design guidelines describe the university’s expectations for campus facility improvements. They will guide campus staff as they design, construct, and maintain the campus. They will also clarify the university’s expectations for facility design professionals that are commissioned by the university.
Architectural Design Guidelines

The following Architectural Guidelines give criteria that will guide new buildings, additions, and renovation projects. These guidelines represent the university’s commitment for future building projects to create a cohesive campus environment.

The guidelines are not intended to be so prescriptive that they restrict creativity. Their purpose is to achieve a balance between the guidelines and the mutual decisions that must be reached throughout each project’s development process. The use of these guidelines by designers in concert with Division of State Facilities, UW System and Campus representatives will contribute to the creation of a desirable campus character.

Sustainability and Stewardship

The university intends to be a premier nationwide example of campus sustainability.

The Wisconsin Department of Administration Division of State Facilities (DSF) Sustainable Facilities Standards must be followed in all new construction projects. The DSF Sustainable Facilities Standards are generally based on LEED (Leadership in Energy and Environmental Design.) LEED is the current international standard for measuring and tracking building performance and sustainability. The decision whether to pursue LEED Certification (and if so, what Certification Level to pursue) will be made by the university on a project-by-project basis.

On April 11, 2006 Wisconsin Governor Jim Doyle signed Executive Order #145. As implemented in the DSF Sustainable Facilities Standards Energy and Atmosphere Credit 1, this requires new building projects greater than $2,000,000 to perform a minimum of 30% better than ASHRAE/IESNA Standard 90.1-2004 (without amendments).

The DSF Sustainable Facility Standards and Executive Order #145 should be viewed only as a minimum foundation from which all new projects will need to build upon and exceed. Improving building performance and reducing greenhouse emissions should be emphasized in all future building projects. Sustainability should be a critical guiding factor in all aspects of building planning and design, construction, maintenance, and operations.
Architectural Style

The university does not have a preferred architectural style for new construction. New buildings should reflect the current state of the art in building efficiency, performance, and energy generation. In this way, new buildings become a continually evolving record of ideas on architecture and campus life, and add diversity and variety to the campus.

The pursuit of energy efficiency and sustainability should not be hamstrung by a requirement to have new construction mimic the appearance of historic campus buildings. However, this does not mean that designers should follow the current aesthetic preconceptions of what a “green” high-performance building should look like. Traditional appearing masonry wall buildings with modest amounts of glazing are often more energy efficient than highly glazed designs.1 New high-performance buildings constructed on the campus should respect the overall campus ensemble. These guidelines are intended to help achieve the goal of creating high-performance buildings that enhance the campus as a whole.

The following principles should inform design decisions:

1. Energy efficiency – Buildings should have state-of-the-art energy efficiency and be designed to maximize opportunities for building integrated renewable energy.

2. Respect for environmental context – New buildings should respect and address the context of the site and its unique features. They should reflect the fact that they are constructed in a northern Wisconsin climate. In a larger sense, this encompasses sustainability both in site-specific responses to improving building performance and in the fact that in a world of finite resources buildings need to function in a way that can be sustained over the long term. The natural context includes natural features, including rivers, marshes, hills, bluffs, and outcroppings of buff stone contrasting with green vegetation. Organic architecture that responds to the environmental context should be considered.

3. Long-term cost effectiveness – Buildings require significant financial and material resources to design, build, operate, and maintain. Buildings need to make efficient use of the funds budgeted for their initial design and construction, but the life cycle cost of their continuing operation and maintenance should also be factored into design decisions.

4. Respect for built context – New buildings should respect the context of the overall campus physical organization. They should also respect the context created by nearby structures. Buildings should be designed so that they enhance their surroundings and the overall campus. In some cases, it may be appropriate for new buildings to have a bold iconic design. Such buildings may serve a symbolic function as a gateway to campus or an anchoring building to a major open space. More commonly, however, new buildings, while reflecting current design thinking, will need to quietly meld with the existing context, in deference to existing iconic buildings or open spaces. New building design should pay attention to the creation of new outdoor spaces and the reinforcement and enhancement of existing open spaces and pathways that will be preserved.

5. Function and flexibility – Buildings must satisfy their initial program and functional requirements without compromising future flexibility and adaptability for changing uses. Building structures and systems should be able to accommodate some level of changing technologies and user requirements. Where appropriate, building designs should also address the potential for future additions should expansion become necessary. Building geometry (bay spacing and ceiling height in particular) should be generous to accommodate future internal space reconfigurations and uses.

6. Focus on purpose – The university is a place of intellectual, cultural, and social education and exchange. Building design decisions should be viewed from the standpoint of how they enhance and support that purpose.

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Building Location and Orientation

Building location and orientation decisions should be made with input from energy modeling software, as these early decisions can enhance or detract from building performance. The positioning of new buildings and additions should pay careful attention to the creation of new outdoor spaces and the reinforcement and enhancement of existing spaces and pathways. Buildings should be sited to respect existing development patterns. To minimize the development footprint, new construction should use the site as efficiently as possible so as not to preclude future development. The university should consider setbacks and separation from roadways, existing buildings, and other land uses. A minimum distance between buildings of 60 feet should be considered.

Plan Configuration and Massing

Building plan configuration and massing decisions should also be made with input from energy modeling software early in the design process. The scale and mass of buildings will vary by building program and function. The massing of a building or group of buildings can help visually express the building’s internal functions and contribute to the setting of the adjacent structures. There must be a coherent relationship of the mass of an individual building to neighboring structures to provide an acceptable density of development and maintain a harmonious campus neighborhood.

Fenestration

The university is a place of intellectual and social interaction, and academic activities should be visible to passers-by when possible. Ground floor transparency is encouraged to mutually benefit and connect interior and exterior spaces. Large expansive facades with no fenestration are generally unacceptable.

The location of windows and doors in a wall should be informed by energy modeling software and follow the University Center-Brick primary material with stone and metal panel secondary materials.
DSF Daylighting Standards for State Facilities. Shading of windows is encouraged by the Daylighting Standards, “For this reason, and because it is fundamentally good practice to design with the sun in mind, DSF strongly encourages fixed exterior shading. Operable exterior shading is not recommended. DSF encourages creativity, tempered by an awareness of maintenance requirements. Horizontal louvers or grilles are not permitted unless they are designed for long-term durability, low maintenance and safety, so that ice and snow removal is not required.”

Ground Level Articulation
Campus buildings often have substantial pedestrian traffic immediately adjacent, and designers are encouraged to pay particular attention to the ground level using articulation, pattern, and detailing to provide pedestrian scale and visual interest. The fronts of buildings should face the central mall. Main entrances should be convenient for student pedestrians and easily identifiable.

Height
Current construction on the campus is generally of a low-rise nature. The desire to minimize the development footprint or combine uses in a single structure may lead to the future planning of taller structures than has been typical in the past. However, future buildings on campus should be limited to four stories above grade. This will result in building heights that do not trigger the high-rise building code requirements in Section 403 of the International Building Code. Occupants of spaces higher than four stories lose connection with ground-level activity and can feel a sense of isolation.

The campus zoning is “U” University District. This district does not contain any specific height limits, however, Campus conversations with the City of River Falls planning department indicate that when the code is silent, proposed actions must be interpreted by City staff for compliance. A review of other zoning districts reveals a building height maximum of 45 feet, therefore, the expectation and interpretation is that all buildings in the City will be 45 feet high or less, unless authorized by a variance. Buildings with a height greater than 45 feet should seek a variance from the Board of Appeals.

Careful consideration of the height relationships to adjacent buildings is important. Consideration should also be given to the shadows cast by the building in relation to important outdoor spaces and walkways. The shadows cast by the building should also be considered to avoid shading existing or proposed solar panels located nearby.

Exterior Building Materials

PRIMARY MATERIAL – CLAY BRICK
The selection of exterior cladding materials is important in how the building relates to its context and in the creation of visual unity on the campus. From the construction of the first building in 1875 to the present time, clay brick has been the primary building material utilized throughout the campus.

Current DSF architectural standards are based on rain-screen masonry construction. This time-proven construction type is preferred for public institutions where a long service life is required. Rain screen masonry construction can accommodate significant amounts of continuous insulation in the cavity and is therefore compatible with high thermal efficiency. This section of the guidelines should be updated if future advances in building technology lead to the State’s adoption of different types of preferred enclosure construction.

The university’s current brick color palette is primarily red to orange with some brown brick. Refer to the facing table for a photo inventory of the existing brick on campus. The use of brick masonry as a primary material is an appropriate starting point for new buildings on campus. Brick colors should coordinate and harmonize with nearby buildings. Introducing new color ranges including bright colors is discouraged. For additions to existing buildings, materials and colors should be in keeping with the existing building. Standard modular size brick is preferred. If economics dictate a larger masonry unit, larger sizes of clay brick are preferred over concrete masonry units.
Primary Materials – Existing Brick on the UW-River Falls Campus

<table>
<thead>
<tr>
<th>Agriculture Science and Agricultural Engineering Brick</th>
<th>Centennial Science Hall Brick</th>
<th>Chalmer Davee Library Brick – 1956</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Science Addition Brick</td>
<td>Hagestad Hall Brick</td>
<td>Hagestad Hall Brick East</td>
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<tr>
<td>---------------------------------------------</td>
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</tr>
<tr>
<td>Hagestad Hall Brick – South</td>
<td>Hathorn Brick – East</td>
<td>Rathorn Brick – West</td>
</tr>
<tr>
<td>Central Heating Plant Brick</td>
<td>R.A. Karges Center Brick</td>
<td>North Hall Brick – 1914</td>
</tr>
<tr>
<td>Brick Type</td>
<td>Location</td>
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<tr>
<td>----------------------------------</td>
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<td></td>
</tr>
<tr>
<td>North Hall Brick – 1914 and 1926</td>
<td>Observatory Brick</td>
<td></td>
</tr>
<tr>
<td>South Hall Brick – 1898</td>
<td>South Entrance/Façade</td>
<td></td>
</tr>
<tr>
<td>Rodli Brick</td>
<td>Wyman Brick</td>
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</tr>
</tbody>
</table>

**CAMPUS WIDE DESIGN**
### Secondary Materials - Existing Stone on the UW-River Falls Campus

<table>
<thead>
<tr>
<th>Material</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chalmer Davee Library Stone – Shaded</td>
<td><img src="image1" alt="Chalmer Davee Library Stone – Shaded" /></td>
</tr>
<tr>
<td>Chalmer Davee Library Stone – Sunlit</td>
<td><img src="image2" alt="Chalmer Davee Library Stone – Sunlit" /></td>
</tr>
<tr>
<td>R.A. Karges Center Stone (west vestibule)</td>
<td>![R.A. Karges Center Stone (west vestibule)]</td>
</tr>
<tr>
<td>South Hall Stone – 1992 south façade</td>
<td><img src="image3" alt="South Hall Stone – 1992 south façade" /></td>
</tr>
<tr>
<td>South Hall Stone – original 1898</td>
<td><img src="image4" alt="South Hall Stone – original 1898" /></td>
</tr>
<tr>
<td>Wyman Split Face Block</td>
<td><img src="image5" alt="Wyman Split Face Block" /></td>
</tr>
<tr>
<td>Hagestad Hall Stone (1960’s)</td>
<td>![Hagestad Hall Stone (1960’s)]</td>
</tr>
</tbody>
</table>
The variables of brick bond, pattern, mortar color, and brick color allow the same brick masonry palette to be used in a variety of styles and settings. The brick used on campus typically have a modest color range and are not strongly textured or irregular. New buildings should not use bricks with wide color ranges, strong textures, or which are irregular.

SECONDARY MATERIALS
Secondary or accent materials would be defined as materials which in total make up less than 50% of the non-glazed areas of the façade. Materials complimentary to brick with the appearance of cut or natural stone are the preferred secondary materials. Refer to the table on page 110 for a photo inventory of the existing stone on campus. Metal panels may also be appropriate as an accent material. The use of muted complimentary or earth tone colors is preferred over bright or shiny metal finishes on metal panels or windows and door frames.

All material selections should be reviewed with university facilities and maintenance staff so as not to introduce materials that require specialized maintenance or cleaning procedures. The preference is for materials that have stood the test of time and are likely to be durable and attractive throughout their lifespan. Recently introduced materials should be carefully investigated by designers and approved by the university prior to their use.

Windows
Windows not only provide light and views to internal spaces, but also give adjacent outdoor paths and spaces the security and richness that derives from the visibility of adjacent activity. For this reason, vision glass that is highly reflective or deeply tinted is discouraged. (These materials may be utilized for curtain wall spandrel panels.) The introduction of new colors of tinted glass should be avoided. Instead, colors should utilize the existing palette. Window frames should be thermally broken aluminum with an anodized or high performance fluoropolymer finish.

This section of the guidelines should be revisited and updated as future advances in glazing or window frame technology evolve. The recent development of high optical clarity transparent photovoltaic modules holds promise of providing another option for building integrated photovoltaics.

Roofs
These guidelines do not prescribe a particular type or style of roof or roofing material. The majority of the current buildings on campus have flat roofs, but this precedent does not need to be followed in planning new projects.

Current LEED and sustainability practice look favorably on vegetated roofs and flat roofs with high solar reflectivity, often white. The Division of State Facilities has developed design guidelines and standards for vegetated roofs. Vegetated roofs may prove beneficial to the university’s storm water management, can reduce the urban heat

Continued use of asphalt shingles on historic buildings such as South Hall would be acceptable if historic integrity and roof structural capacity concerns preclude the use of more durable roofing materials.

North Hall
island effect, and the plantings are beneficial from a carbon reduction standpoint. The use of vegetated roofs is encouraged but should not be mandated until initial installations prove successful from a long-term roof and plant maintenance standpoint. Installation of vegetated roofs on existing structures may not be possible due to limited roof loading capability.

The use of white roofing materials should be carefully considered. While they do reduce the urban heat island effect, there are potential disadvantages. In this climate, studies show little or no energy savings or a net gain in energy use. The DSF roofing specialist has noted that the ice that forms on the roof is not very visible and may be a slip hazard to maintenance personnel. In addition, the roofs quickly become gray without periodic cleaning or recoating.

Pitched roofs should be a color and texture that does not distract from the natural setting. Use of metal roofing is acceptable, but bright or highly specular roof materials should be avoided. Metal roof panels with integrated photovoltaics should be considered where appropriate. Other potential materials for pitched roofing would be slate, concrete, or clay tiles. Asphalt shingle roofs have a short usable life and wind damage has been a frequent problem. Therefore, use of asphalt shingles should be limited to utilitarian buildings where relatively frequent roof replacement can be performed simply and inexpensively.

ROOFTOP EQUIPMENT
Rooftop mechanical equipment should be visually screened with materials and structures compatible with the overall building design. Where rooftop equipment must be exposed, (for example, exhaust stacks), the equipment should be painted in a color compatible with the building color palette. Acoustic mitigation should be considered to minimize objectionable noise impacts on pedestrians and neighbors.

Rooftop mounted solar hot water panels or photovoltaic arrays do not require visual screening. The current small-scale building or rooftop mounted wind turbine technology are primarily useful for teaching or public awareness purposes, and as such, they may have a place in the campus environment. If the technology for building mounted wind turbines advances to the point of producing significant power with acceptable noise and vibration, large-scale adoption may be considered.

Accessibility
The university is committed to providing equal access to its facilities for those with physical challenges. Any new construction, additions, or renovations must comply with the Americans with Disabilities Act guidelines and the accessibility requirements of applicable building codes. Improving accessibility must be an important consideration in the planning of upgrades, maintenance and repairs to existing facilities. Renovations to existing buildings should improve barrier free accessibility while being sensitive to the architectural fabric of the entrance setting.

Project designers should consult with the campus administration whether additional accessibility features not required by code should be included to meet the needs of the campus community. Where feasible, universal design principles should be considered to provide consistent and dignified access for all building users.

Entrances
Primary entrances should be located to reinforce specific campus planning objectives and simplify wayfinding. The primary entrance should be articulated in a way that distinguishes it as a major building element. Building entrances should be distinctive and welcoming. Entrances are frequently meeting and gathering places for building users and should be designed to encourage interaction and contribute to the life and activity of streets and walks.

To address the severe weather conditions of Wisconsin winters, building entries should be protected by either recessing the entry or by extending canopies. Public entrances shall have airlock vestibules with water resistant, non-skid flooring with walk-off matting or grates.

Designers are encouraged to use the online calculator at http://www.roofcalc.com/ Created by Oak Ridge National Laboratory and Lawrence Berkeley National Laboratory for information on expected energy costs for various roofing materials.

Connections Between Buildings
Indoor walkway connections between buildings may be considered where significant pedestrian traffic occurs between buildings in close proximity. The planning for connections between buildings should keep in mind the following:

- Ground level connections have the potential to block views and access between buildings and interrupt exterior pedestrian routes.
- Multi-level above grade connections can block views and has the potential to create the perception of an unbroken wall of buildings.
- Below grade connections can avoid the previous concerns and should be investigated where feasible.

Respect for Historic Resources
North Hall and South Hall are listed on the State and National Register of Historic Places. Additions to or renovations of this building should comply with the "Secretary of the Interior's Standards for the Treatment of Historic Properties". Designers should consult with Architectural Services at the Wisconsin Historical Society for review of rehabilitation work for conformance with the Secretary of the Interior's Standards for Rehabilitation. Exterior changes to North Hall and South Hall must be reviewed by the City of River Falls Historic Preservation Commission. New construction near these buildings should respect the building's scale and historic integrity.

Service and Mechanical Facilities
Areas devoted to trash removal, building services, emergency generators, and mechanical and electrical equipment should be designed so that their visibility from walkways and other public areas is minimized. Landscaping, fences or walls in accordance with the Site/Landscape Design Guidelines should be used to visually screen these areas. When possible, vehicular and service entries should be located away from main pedestrian routes and main entrances.

Building Signage and Wayfinding
The development of a comprehensive signage and wayfinding plan that addresses the university’s graphic design identity objectives in a unified and consistent manner should be implemented as soon as feasible. The comprehensive signage and wayfinding plan should address all sign types:

- Entrance monument campus identification signs
- Campus area or neighborhood identification signs
- Parking lot identification and regulatory signs
- Campus map directory signs
- Wayfinding signs
- Visitor destination signs
- Street name signs
- Light pole banners
- Electronic signs (freestanding, mounted to building exterior, internal.)
- Freestanding building name signs
- Exterior building name graphics
Interior or exterior dedication plaques
- Building interior signage

Public art and monuments are addressed in the following section.

**EXTERIOR BUILDING NAME GRAPHICS**

The current practice of locating graphically consistent freestanding building identification signs along streets and pedestrian pathways should be continued. For consistency, earlier versions of the identification signs should be replaced to match the current standard.

In locations where freestanding building identification signs are not feasible, all primary building entrances shall have the building name (at a minimum) identified at the entrance in a location easily visible to pedestrians from a distance. The building name shall be individually surface mounted letters. Building name font size should be eight inch minimum. Surface mounted letters are to be made of a durable and permanent material such as bronze or stainless steel and mounted without exposed fasteners. If the ambient illumination from nearby building, walks and drive lighting is not sufficient, surface mounted letters should be externally illuminated. The use of high efficiency LED lighting and/or integrated or dedicated photovoltaic panels for this purpose is encouraged. Internally illuminated letters and lighted box signs are prohibited. Letters carved in the exterior wall material may be used if determined to be appropriate.

**ELECTRONIC SIGNS**

Electronic signs should not be mounted on building exteriors without approval of the university. The only potential scenarios where electronic signs will be considered are at athletic and performing arts venues. This prohibition would not apply to approved works of public art involving electronic display panels or projected images.

**EXTERIOR DEDICATION PLAQUES**

Interior dedication plaques are preferred over plaques mounted to the building exterior. Where exterior plaques are necessary, they should be incised stone or durable cast metal such as bronze. Dedication stones and cornerstones should be of a material and color compatible with the surrounding masonry.

**WAYFINDING**

Distinctive entry and wayfinding signage can greatly enhance the image of the campus. An easily understood and navigated campus can leave a positive impression with visiting students. It is recommended that UW-River Falls continues to implement its established unified signage system. The signage mounting should complement building signage and the family of selected site furnishings, which has a black powdercoat finish.

Signage at the campus gateways should prominently introduce visitors to the campus. Gateway walls, monumentation, graphics, and colors should indicate a major educational institution. The design of gateway
signage should reflect the campus wide unified signage system.

Public Art and Monuments

Public art is an important ingredient in the campus landscape and can broaden the cultural perspectives of the university community. Public art and monuments promote social gathering and discourse, and contribute to the character of the campus. Public art and monuments can serve as a memorable touchstone and orientation feature in the campus context.

A distinction needs to be made between art funded under Wisconsin’s Percent for Art Program, and art, monuments, and memorials funded by donors or the university to memorialize an event or individual of campus significance. The Wisconsin Arts Board’s policies and procedures regarding selection and placement of public art will be followed for Percent for Art projects.

The university receives many requests for art, monuments and memorials to recognize an event or individual that are outside of the Percent for Art Program.

Care needs to be given to the placement and execution of each piece of art. The work must be sensitively sited in relation to its context within the campus. While other sections of the master plan identify some areas suggested for the placement of Public Arts and Monuments, this is not comprehensive. Therefore, the university should create a stand-alone Public Art and Monument Master Plan to comprehensively document existing public art and monuments and suggest new locations for new works of various types and scales. This would provide the university with a guide to use in discussions about siting and types of new artwork and monuments. This document could also develop guidelines for displaying student and faculty art as well as artist selection policies for donor or campus funded works. Although potentially a controversial subject, this document could develop policies and procedures for the replacement, removal, or relocation of public art and monuments that have deteriorated, are aesthetically obsolescent, or are otherwise inappropriate.

As a totality, the university’s public art collection should speak to diverse cultural and aesthetic viewpoints. The work should be vandal-resistant, appropriately lighted, and not require on-going, significant maintenance needs. Planning and strategies to maintain installations are recommended as part of a comprehensive maintenance plan.

SIGNAGE FOR PUBLIC ART AND MONUMENTS

Signage for public art and monuments should be consistent and recognizable across the campus setting. Signage should be discrete to not obstruct nor interfere with the work of art. Signage should include the artist’s name; the work of art’s title, date, and material; a concise design statement, and donor recognition. Signage should be durable. Cast bronze or stainless steel are suitable signage materials. Metal signs should be mounted to a concrete or stone base. Signage placement should not conflict with landscape care and snow removal activities. Ideally, signs would remain visible during the winter months. The placement of signage is required to comply with The Americans with Disabilities Act. The university’s Accessibility Coordinator should be consulted about signage design and placement.
Site Design Guidelines

There is a wide diversity of landscapes at UW-River Falls, including the traditional campus mall, the South Fork Kinnickinnic River system, the athletic campus, and the rural research plots and Campus Laboratory Farm.

No set of site design guidelines could create visual homogeneity on the UW-River Falls campus and that is not the intent of the campus master plan. Rather, it intends to create an order and structure to the campus, to provide an overall conceptual framework for the development of open spaces, establish a high level of quality in the design of open spaces, and link the campus’s eclectic building styles through common open space design.

Developing a more environmentally sustainable campus is a primary goal of the campus master plan. Sustainable site and open space design techniques are incorporated into these guidelines.

Building Landscaping

Plantings should not mask building entrances, but enhance and focus attention to the entrances and other architectural features. Public entrances to buildings should be easily found and accessed.

Outdoor transition space should be designed between the building approach and indoor lobbies. This transition space should include materials that relate to the materials used in the building interior or on the exterior walls. This space should also provide some protection from rain, sun, and wind.

Small landscaped areas should be located near the building entrance to serve the building occupants during lunch breaks and between classes. These areas should be relatively intimate in scale and should frame views out of the space.

Landscape treatment adjacent to buildings should be simple with a limited plant palette. Planting beds and foundation plantings should be in areas that serve to transition open space areas to individual buildings. Massing and size of planted areas should be in scale with buildings and complement or reinforce the landscape of the open space areas and the campus landscape character.

Plantings should not be located in ways that create hazardous conditions and should not create dark pockets near entrances or along sidewalks at night. To maintain safety, heights of shrubs and small trees should be limited to ensure adequate sight availability.

Large plantings should be located far enough from building walls to allow for air movement. Plantings should not completely obstruct views from building windows. Plants located near windows should be near enough to filter glare and bright sunlight, but distant enough from windows to maintain views. To protect building façades from lawn mower damage provide mulched planting beds or gravel borders around buildings.
Open space and building landscaping should enhance and focus attention on building entrances and architectural features.
Plant Material

The campus, and the campus mall in particular, currently has a variety of mature, deciduous shade tree species ranging from oaks to maples to ash that contribute to the campus’s special character and add interest to the campus. Such trees take 30 years or more to develop and cannot be easily replaced. Therefore, all significant trees should be protected. Maintenance and construction projects may cause damage or require the removal of existing vegetation. However, these instances should be thoroughly evaluated and only permitted when absolutely necessary. The university should develop a standard tree replacement strategy for trees lost due to construction. One possible replacement requirement could be that when trees must be removed, three of the same species with a four-inch minimum caliper shall be provided as a replacement. (See the Campus Mall Plan for trees that are to be removed and trees that are not to be replaced.)

As it selects and installs new plant material, the university should continue the use of native species that have grown well on campus. As part of the Campus Mall Plan, UW-River Falls staff and JJR carefully selected new plant material. The proposed plant material will widen the range of native species on campus, enhance the campus’s open space aesthetic, and expand the campus’s role as living educational laboratory for sustainable landscape design.

The recommended plant material should be used throughout campus, and species may be grouped by campus zone. See the Campus Mall Plan for more detailed plant material for plazas within the campus mall. The university should investigate control strategies for invasive species such as garlic mustard and buckthorn. The university staff has not had the resources to control invasive species in less intensively managed areas. The use of native species should be focused in areas that will be more intensively maintained so that invasive species do not crowd them out.

Proposed Large Canopy Deciduous Trees

- *Acer x freemanii* ‘Sienna’ (Sienna Glen™)
- *Acer rubrum* ‘Northwood’
• Acer saccharum ‘Bailsta’
• Quercus alba
• Quercus macrocarpa
• Quercus × macdanielii ‘Clemens’ (Heritage Oak)
• Gymnocladus dioica ‘Prairie Titan’
• Tilia americana ‘Redmond’
• Quercus ellipsoidalis
• Ulmus americana ‘Lewis + Clark’ (Prairie Expedition American Elm) (if not available use Ulmus × ‘Cathedral’)

Proposed Medium Size Deciduous Trees
• Acer miyabei ‘Morton’ (State Street™)
• Cladrastis Kentuckea (American Yellowwood)
• Carpinus caroliniana
• Phellodendron sachalinense ‘His Majesty’
• Tilia tomentosa ‘Sashazam’ (Satin Shadow Linden)

Proposed Ornamental Trees
• Syringa pekinensis ‘Morton’ (China Snow™)
• Cornus mas ‘Golden Glory’
• Maackia amurensis ‘Sumertime’
• Magnolia ‘Butterflies’
• Magnolia kobus var. loebneri ‘Merrill’
• Xanthoceras sorbifolium
• Cercis canadensis (MN Strain)
• Amelanchier canadensis ‘Glenform’
• Amelanchier laevis ‘Majestic’
• Acer triflorum (Three Flower Maple)

Site and Open Space Design
The intent for site and open space design for the recommended buildings, connections, and opens spaces are embedded with the description of each project. For campus open spaces not described elsewhere, the ground plane should be predominantly sod with low maintenance groundcovers or native shrub areas at special points. For all open spaces, the campus should limit mown areas, use native plant materials, and limit the use of chemical fertilizers and pesticides.

Aboveground Utility Infrastructure
The type, size, and spacing of aboveground utility appurtenances can alter substantially the aesthetic appearance of campus open spaces. Typical utilities often found on university campuses that have aboveground and aerial appurtenances can include electrical lines, padmount switches and transformers, condensing units, and emergency generators; telephone/cable transmission lines and pedestals; water and wastewater lines; steam pit covers/hatches; gas lines; and garbage/recycling dumpster pads.

Each type of utility and mechanical appurtenance has characteristic location, connection, and access needs. As the university design and installs each utility project, the university should consider the following guidelines for both public and private utility infrastructure:

• Balance the utility needs and the campus impacts. New aboveground and underground utility installations should be allowed only when they do not require extensive removal, damage, or alteration of campus trees or terrain, or when they do not impair the project area’s aesthetic quality.

• Restrict new aboveground utility structures. New aerial utility installations should not be allowed when there is a feasible and prudent alternative. New aerial utility installations should be allowed only when other locations are unusually difficult and costly, underground placement is not feasible technically or is prohibitively costly, and the facility’s design and materials not only minimize the negative visual impacts but also contribute to adjacent buildings and open spaces.

• Avoid exposed utility meters. Utility meters should not be mounted on the front or campus mall-facing façade of buildings, but rather should be mounted on the side or rear façades wherever possible. Where meters are required to be in a visible location, the meetings and leads running to these meters should be screened to the full extent permissible.

• Screen visible appurtenances. The university should screen aboveground utility appurtenances from all existing and future public view points, including from streets, parking lots, sidewalks, campus open spaces, and other public areas. Screening can be accomplished through landscaping, stone, and fencing. Large mechanical equipment (those equal to or greater than four feet in height and equal to or greater than six feet in any one direction) should be fenced with opaque wood or brick-faced masonry on all sides that face campus public spaces. Small
Infiltrate storm water in parking lots and around buildings using bioretention areas.

- mechanical equipment (those smaller than four feet in height) should have landscape screening and an opaque shrub bed. Landscape berms can be an acceptable method of screening, but should be done in conjunction with planting and/or fencing. Plants used for screening should provide year-round screening and be large enough at installation to provide full screening within three years.

- Provide necessary vehicular access and surface clearances. Certain utility appurtenances need vehicular access and surface clearance. Consult with the utility provider for specific vehicle access and surface clearance needs. If utility appurtenance is in a planted area, expect that the plants will be subject to damage from vehicles and plan accordingly. Place bollards wherever vehicles can reach or damage aboveground mechanical equipment.

Infiltrate storm water in parking lots and around buildings using bioretention areas.
Site Furnishing Standards

These site furnishing standards contribute to a positive campus character and achieve a unified and clearly defined campus. Site furnishings such as pedestrian and street lights, benches, trash/recycling receptacles, and bicycle racks enhance the functionality of campus. But when those site furnishings are coordinated, they also contribute to a sense of orientation and achieve an increased sense of order.

Like the overall campus design guidelines, the site furnishing standards, recommended design family, and specific units should be used throughout campus. Campus farms and Pigeon Lake may use different furnishing sources but should follow location and selection criteria.

The campus should limit its site furnishings to only one family. A single family of furnishings works together in terms of their materials, style, detailing, color, and scale so that they establish a unified, cohesive image. The family of site furnishing recommended in these guidelines consists of black powdercoated furnishings. The style of the entire family of furnishings is neither traditional nor contemporary but a blend of the two to both reflect the past as well as look ahead to the future. Black furnishings are recommended since they are easier for the campus to touch-up with paint and it is easier to find matching/similar black color for campus site furniture.

Existing campus site furnishings vary in age, condition, style, and material. Existing furnishings that are outdated, vandalized, or deteriorated should be replaced as needed with the recommended style until all site furnishings conform with the design guidelines. Implementation of these recommendations will by necessity occur over time through separate physical improvement projects and regular replacement. It is important that university representatives take advantage of opportunities to replace damaged or worn out units with the recommended replacement units so that consistency is maintained.

The site furnishing standards should increase the efficiency and efficacy of limited site facilities budgets. Selection and installation criteria will minimize maintenance efforts and costs. Limiting site furnishings to a single family will reduce the need to store spare parts and train staff for repairs, thus achieving a higher level of cost effectiveness. To ensure that current site furnishings selections will be long-term investments, the site furnishing standards recommend traditional designs that are not fads and suggest styles and sources that will be available for the long-term. The standards simplify and expedite purchasing decisions.

The site furnishing standards are organized under the following headings:

- Installation: Special considerations regarding where units should be used in the campus setting and their installation
- Selection: General design considerations to follow in selecting equipment
- Source: Recommended sources and styles
Pedestrian Lighting

Light fixtures can be iconic elements in the campus landscape. Pedestrian lighting design should organize and articulate the campus setting and enhance safety and security.

INSTALLATION

• Strategic placement of units will optimize light distribution and minimize the number of units.
• Pedestrian lighting should be located along pedestrian paths at approximately 50 feet on-center spacing to allow adequate light levels.
• Luminaires can be located on top of brick columns such as in gateways, plazas, paved areas, and on curbs. Multiple luminaire configurations should be utilized for special effects where a greater level of detail and attention is desired.
• Care should be taken in locating the poles to ensure consistent alignments and setbacks (five feet) from walkway edges. All fixtures should be set plumb and level.
• To facilitate lawn maintenance, a concrete maintenance collar should be created at the base of the pole. The collar should be slightly below ground level to allow for mower overhang during lawn cutting, thus minimizing hand-trimming.
• To facilitate snow removal and to reduce damage by maintenance equipment, the use of bollard-type light fixtures should be avoided.
• To avoid long-term maintenance concerns, light fixtures imbedded in the ground or in paving should not be used except in extraordinary lighting designs and locations.
• The campus should eliminate the use of wall packs for pedestrian and vehicular parking lighting.

SELECTION

• Pedestrian lighting should be of a different scale from street and parking lot lighting.
• Illumination, intensity, quality, and distribution should respond to the character and patterns of use. A rule of thumb for illumination of pedestrian walks is 0.2 – 1.0 horizontal footcandles (FC) and 0.1 – 0.5 vertical FC.
• The source of illumination should be concealed. Distracting, uncontrolled glare must be minimized and the lit surface emphasized.
• A full cutoff fixture that meets dark-sky guidelines should be utilized to reduce light pollution in the night sky and reduce glare. The university should consider further light pollution restrictions within a reasonable proximity of the Centennial Science Hall Observatory. Non-essential lighting could be controlled by motion-sensors.
• The university should choose lamp types that have superior lamp life ratings and are energy efficient. For example, LED lamps provide long life and energy savings. For pedestrian lighting, the campus should also consider a metal halide bulb for security and aesthetic reasons. The metal halide bulb emits a white light which allows better recognition of facial characteristics at greater distances and provides better color representation of architectural materials, cars, clothing, etc.
• When selecting a fixture, university should consider the maintenance and cost effectiveness of each potential fixture. University should consider limiting the number of luminaire and pole types to ease maintenance and replacement, and pole/luminaire height.
• Smooth round poles are recommended since square poles are not as strong and aligning multiple square poles is difficult.
• Attached banner mounts should be utilized in specific areas to identify special university events, campus entry or edges, or designate other special use areas.

RECOMMENDED SOURCES

• Existing black campus mall pedestrian fixture
• Lumec Contemporary Lantern Series – luminaire L80-SE-SF80 and pole RA61 fulfill these design guidelines

In addition, all existing emergency telephones should be incrementally replaced with a more identifiable, contemporary style unit.
Existing campus emergency telephones

Existing black campus mall pedestrian fixture

Lumec – Contemporary Lantern
Street and Parking Lot Lighting

Lighting design should articulate the campus vehicular circulation system (streets and parking lots) for user orientation and safety.

**INSTALLATION**
- A quality lighting plan will improve cost effectiveness by optimizing intensity and distribution with the least number of fixtures.
- Streetlights are to be regularly spaced along major streets and offset from the road a consistent and safe distance.
- Campus should select illumination appropriate to the vehicular use. Parking lot lighting should be at sufficient levels of intensity for safety. Driving requires recognition of vertical objects in the field of vision making vertical illumination equally important as horizontal illumination. Intersections require higher levels of illumination. Rules of thumb for vehicular FC levels are suggested below.
- Parking lot lighting poles should be located in planting islands so they are less visually obtrusive. If this is not feasible, the poles should be set on three-four foot high concrete bases to protect them from damage by vehicles and snow removal equipment.

**SELECTION**
- Units with standardized style, color, height, diameter, and location should be simple and unobtrusive. Since luminaires and poles are visually prominent during the day, a coordinated system compatible with other site furnishings is needed.
- A limited variety of luminaires is desirable to simplify maintenance requirements and stocking of replacement parts and units.
- The university should choose lamp types that have superior lamp life ratings and energy efficiency. LED luminaires should be used to provide even distribution and energy efficiency.
- Concealed light sources for street and parking lot lighting are desired. Distracting glare is to be minimized. The lit surface is important, not the source itself.
- Light distribution should be controlled to optimize intensity and ensure uniformity of illumination.
- A full cutoff fixture that meets dark-sky guidelines should be utilized to reduce light pollution in the night sky and reduce glare. See page 122 for guidance on lighting near the Centennial Science Hall Observatory.
- Pole style should be simple and modern. Consideration should be given to utilizing new fiberglass spun poles due to their light weight, damage resistance, and ease of maintenance/replacement.
- Smooth round poles are recommended since square poles are not as strong and aligning multiple square poles is difficult.

**SOURCE**
- Kim Archetype (or similar)
- Any induction shoebox fixture

### Average Footcandle Level
<table>
<thead>
<tr>
<th>Use</th>
<th>Horizontal</th>
<th>Vertical</th>
<th>Max to Avg.</th>
<th>Min to Avg.</th>
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<td>1.5-2.0</td>
<td>0.75-1.0</td>
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<td>Roadways-Light</td>
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<td>0.25-0.5</td>
<td>4:1</td>
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<td>0.10-0.5</td>
<td>4:1</td>
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<tr>
<td>Parking</td>
<td>0.5-0.9</td>
<td>0.5-0.75</td>
<td>4:1</td>
<td>0.33:1</td>
</tr>
</tbody>
</table>

Rules of thumb for street and parking lot illumination
Kim Archetype Full Cutoff Luminaire
Bicycle Racks

There are many varying styles and configurations currently on campus for locking bicycles, with the most prevalent being a double post Rolling Rack.

INSTALLATION

- Bicycle racks need to be conveniently located, yet separate from major pedestrian walks and building entrances. Wherever feasible, bicycle racks should be located contiguous to, but set back from, primary pedestrian walkways since these corridors also serve as bicycle routes. Six feet of clear zone should be maintained from a pedestrian walkway. Short-term bicycle parking should be located within reasonable and convenient proximity to building entrances, but kept at least two feet from the edge of doors.
- Bike racks should be conveniently located to serve multiple buildings.
- All bicycle parking should be located in secure, highly visible areas within view of streets or pedestrian walks, and well lit.
- Locate parking in visible and prominent locations. Bicycle racks that are visually or physically isolated will not be used and are targets for thieves.
- Bicycle parking may be provided in floor, wall, or ceiling mounted racks. Mounted bike racks should be placed on a flat paved surface with a slope not to exceed two percent.
- If a bicycle rack layout includes two or more aisles, the design should assume a bike length of 72 inches and double locked bike width of 32 inches. Aisle space should allow a minimum of 48 inches, increased to 72 inches in high traffic bicycle parking areas where many racks might be located, such as the University Center or Library. These large parking areas should also have at least two entrances to ease congestion during times of high turnover.
- To promote year-round biking, some bicycle parking should be covered through a roof or similar covering or within a building.
- Grouping bicycle racks allows for a greater level of aesthetic control and policing. Grouped bicycle storage areas should utilize a contrasting paving color or texture surface differentiating it from the main pedestrian walkways. Bicycle parking areas are ideal environments for pervious pavement. These areas should be properly illuminated and visually screened by a low hedge or site wall.
- Most bicycle racks should be permanently secured to the ground per manufacturer’s recommendations. In some locations where bicycle usage is low and snow storage is necessary, bicycle racks may be removed during the winter months.

SOURCE

- Dero Rolling Rack (black, powdercoated) or similar from local fence or metal fabricator

SELECTION

- A simply designed bicycle rack having little visual impact is preferred. When bicycles are not present, the rack should be relatively inconspicuous.
- The unit should accommodate a wide range of bicycle frame types, sizes, wheel sizes, and locking apparatuses (including a U-shaped shackle lock, chain, and cable). The rack should hold the bicycle frame, not just a wheel. Bike racks should have two points of contact.
- The unit must be structurally adequate to withstand most vandalism, extensive student use, and inclement weather conditions. It should be covered with material that will not chip the paint of a bicycle that leans against it. Bike racks should be installed and maintained to avoid hazards such as sharp edges. Welds must be grounded and smoothed.
- Bike racks must be at least 32 inches tall so that the bike rack will be clearly visible to pedestrians and will not be a trip hazard.
- Racks should provide for double-sided parking
- Rack design should not collect leaves or litter, thereby easing maintenance.
Dero Rolling Rack
Benches

Benches represent one of the most prevalent site amenities found on a campus. Currently, six to eight varying styles of benches have been identified on the UW-River Falls campus.

INSTALLATION

• Benches should be located along pedestrian corridors but out of the path of travel.
• Benches should be installed adjacent to building entrances, in plazas and courtyards, and at South Fork Kinnickinnic River overlooks.
• Benches should be organized and oriented to encourage user interaction.
• Benches should be organized with other site elements such as light poles, trash receptacles, etc.

SELECTION

• Bench style should be clean and simple, and add to the atmosphere of its surroundings.
• Benches should be structurally adequate to withstand extensive student use, inclement weather conditions, and most vandalism.
• Benches should be comfortable, functional, and have backs.
• Benches should require little or no maintenance.
• The bench material should be powdercoated steel on a steel base for resistance to moisture, insects, splinters, cracks, and vandalism.
• Benches should contain mostly recycled material and be easily recyclable at the end of their useful life.

SOURCE

• Landscape Forms Village Green or similar six-foot, black, powdercoated, steel ribbon-style bench
**Tables**

Many tables of varying styles are located throughout campus.

**INSTALLATION**

- Tables should be located in areas adjacent to food service, near major buildings, and in residential areas.
- Tables should be adjacent to pedestrian corridors but separated with landscaping.

**SELECTION**

- Tables should be designed as a black metal-framed table with a durable, perforated black fiberglass or metal top.
- Tables should include surface mounting capability for installation in paved areas.
- Tables should meet ADA accessibility standards.

**SOURCE**

- Landscape Forms Carousel Table or similar

In addition, the university currently has a variety of park-style picnic tables constructed of wood and a steel frame. The park-style table offers flexibility in location as climate conditions and sun angles change throughout the year. The park-style tables has been used for all-building picnics and gatherings. For outdoor events, it is recommended to restrict the use of park-style picnic to functions on south campus or at the campus farms. For outdoor events on the main campus, the university should provide banquet tables with folding chairs set up on plazas or courtyards, then stored in adjacent buildings or in central storage locations.
Trash and Recycle Receptacles

**INSTALLATION**
- Receptacles should be located at the intersections of primary pedestrian walkways, in plazas, courtyards, vehicle and bicycle parking areas, at building entries, and where groups of pedestrian seating are provided.
- Receptacles within athletic areas should be located adjacent to bleachers, fence gates, rest room facilities, and other building entrances.
- Trash and recycle receptacles should be located where needed, but should remain visually inconspicuous.
- The units should be placed contiguous to walks and on a concrete surface extending outward from the walk. The unit should be level and firmly secured to the ground.
- The unit should be sturdy and secured to discourage vandalism and to extend the life of the unit. Installation will vary according to location.

**SELECTION**
- Receptacles should have a simple design style and from the same design family as other site furnishings.
- Anticipated use levels should determine the appropriate capacity for receptacles and guide trash and recycle collection schedules.
- Receptacles should have an internal canister with lid for trash control and ease of trash removal.
- Receptacles for both trash and recyclables should be clearly labeled. Glass and paper recycling receptacles should be integrated into the trash receptacles or be located adjacent to trash receptacles.

**SOURCE**
- Landscape Forms: Scarborough Litter Receptacle or similar
- Victor Stanley Ironsites Series S-42 Receptacle with rain shed or similar
Implementation

The long-term value of the campus master plan will be its power to establish capital priorities and optimize limited and valuable resources. The master planning process identified over fifty potential projects, including site improvements, building expansions and renovations, and new buildings.
Project Review

In addition to specific building and site improvements, the campus master plan identifies goals, intents, and planning principles. In order for these goals, intents, and principles to be realized, the university must establish a process for reviewing all design and construction projects that will impact the campus’s physical setting. These design guidelines should be followed for all campus improvements, from major building construction to routine landscaping and maintenance.

The ambassadors of the campus master plan are to be campus planning and facilities staff. These staff must represent the campus master plan continuously and consistently at all levels.

- In daily decision-making, campus planning and facilities staff must communicate the master plan intent, principles, and requirements internally to campus staff and campus leadership.
- For routine campus maintenance, these staff must train campus maintenance staff and service providers regarding the master plan and its design guidelines so that they are integrated into the everyday work of facilities and maintenance staff.
- For major building design and construction projects, these staff must educate and guide the members of ad hoc committees that oversee major building projects, UW System staff, DSF project managers, as well as design and documentation consultants. Adherence to these guidelines should begin at a project’s identification, site selection, and programming, extend through preliminary and final design stage, and ultimately through project construction and completion.

Even when specific design decisions are not directly addressed in these design guidelines, the design character of every campus project should strive to meet the master plan’s goals, intents, and principles. Interpretation will be required periodically and consultation from JJR should be sought as required.

These guidelines are not intended to restrict creative expression. Rather, they are intended to guide physical planning and design to unify the campus image and enhance livability.
Sequencing and Phasing Considerations

Working with the campus planning team, the Chancellor’s Executive Cabinet identified sequencing and phasing considerations. This analysis took into account:

• Strategic vision/major initiatives
• Student needs and preferences
• Current space use and projected space utilization
• Funding sources and statewide budget constraints
• Ability to generate revenue and ability to drive fund-raising
• Impact on student and faculty recruiting

The campus master plan horizon is 20 years. The phasing is split into six-year periods to correspond with UW System planning and budgeting cycles.

The summary charts describe recommended projects relative to their phasing and potential funding sources.
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<th>PROJECT NAME</th>
<th>GPR Priority</th>
<th>PR Priority</th>
<th>Immediate 11-13</th>
<th>Immediate 13-15</th>
<th>Immediate 15-17</th>
<th>Medium-Term 2017-2023</th>
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Immediate – 2011-2017

In the first six-year phase (2011-2017), the most significant campus changes occur at the north boundary and in the south campus. The design and construction of the sport and recreation complex occurs in south campus, with the accompanied demolition of Emogene A. Nelson Building and R.A. Karges Center structures on the north boundary. The City constructs the first phase of the Cascade Avenue reconstruction, from Main Street to Sixth Street, with roundabouts at Second Street and Sixth Street. Rodli Hall is renovated as a student services center and the campus’s new front door. The campus further reduces its dependence on the electrical grid with a wind energy project.

Many structures are internally improved and remodeled. Johnson Hall restrooms are renovated. The North Hall auditorium and IT spaces are renovated. A multi-phase residence hall basement space remodeling project begins.
CAMPUS WIDE OR OFF-CAMPUS
- Residence Hall Basement Space Remodeling – Phase I
- Wind Energy Project (Turbines)
Medium-Term – 2017-2023

In the second six-year phase (2017-2023), the long planned science building is constructed, prompting a wave of projects such as west campus chilled water plant, the parking ramp construction, the removal of Third Street, and the North Hall stewardship project. Additionally, the efficiency of University Center increases with the mezzanine project.

Campus core residential options increase with the Hathorn Hall addition and basement space remodeling. Residence hall improvements continue with phases II and II of the residence hall basement space remodeling project.
CAMPUS WIDE OR OFF-CAMPUS
- Residence Hall Basement Space Remodeling – Phase II and III
- West Campus Chilled Water Plant
Long-Term – 2023-2029

In the third six-year phase (2023-2029), academic spaces continue to improve and expand. The Agriculture Science complex is renovated, the Greenhouse gets a headhouse addition, and both are fully integrated with the new science building. Clinical spaces expand with the Wyman addition. The second and third floor offices and art labs of E.H. Kleinpell Fine Arts are renovated. Maintenance and Central Stores Building offices are also renovated.

The multi-phase Cascade Avenue reconstruction is completed with the final segment from Sixth Street to Wasson Lane. The campus moves its east entrance from Crescent to Birch Street and the incremental construction of the campus ring road is complete.

Continued enrollment growth will require the construction of the second residence hall at Spruce and Cascade Avenue, as well as continued improvements at existing residence halls such as the fourth phase of the residence hall basement space remodeling project.

Improvements are made to the South Fork Kinnickinnic River, better connecting the river to campus both physically and visually. Photovoltaic electrical panels are installed.

Beyond the life of this master plan are the future phases of the south campus sport and recreation complex as well as new structures for maintenance, recreation, the College of Business.
Master Plan Update

The campus master plan is an integrated document that identifies the complex relationships among the built, open space, and natural environments that will directly support UW-River Falls to achieve its growth and change for the next 20 years.

However, times change, and so will academic and administrative goals and enrollment trends. The campus master plan should be checked periodically with regard to such changes and against development that has occurred under the plan to ensure it remains a living document, responsive and relevant to the university’s needs.

The campus planner should be charged with oversight and implementation of the campus master plan, supported by integrated planning and facilities management. During the preparation of the biennial Campus Physical Development Plan, the campus planner should indicate the university’s progress in meeting the plan’s objectives, review recent projects in relation to the policies and guidelines of the plan, rank remaining next steps in the campus master plan for follow-up, add new goals to the campus master plan as appropriate, and update plan elements as needed.

A more comprehensive review and updates of the campus master plan should occur in ten years, 2021. At that time it should be reviewed to confirm that it continues to be an effective guide, fully responsive to changing circumstances.
Appendix

To support the master planning process, the master planning team prepared several sets of analyses.

- Campus Mapping and Analysis
- Campus Wide Space Needs Analysis (Paulien and Associates)
Campus Mapping and Analysis

To understand the campus’s physical configuration, the master planning team prepared a series of campus analysis maps. In each, a particular component of the campus was separated and examined. Each layer then highlights particular challenges and opportunities. Nine analysis maps were prepared:

- Campus in the Community
- Land Use
- Building Profiles
- Open Space
- Pedestrian and Bicycle Circulation
- Vehicle Circulation
- Vehicle Parking
- Natural Features
- Utilities
Campus and Community

Despite its rural location, the UW-River Falls campus has good regional accessibility. Cascade Avenue (Highway 29/35) provides all access to core campus and off-campus parking. Cascade Avenue connects on the west end of campus to Main Street (Highway 29/35 south of Cascade) and east of campus to Highway 65. Using Highway 35 and Interstate 94, the campus is only a 30-minute drive from downtown St. Paul, making the campus very accessible for those living in the eastern suburbs of the Twin Cities.

The campus is located on the south side of the City of River Falls, just south of the city’s downtown. Although within easy walking distance, the physical connection between the campus and downtown is not clear. Western campus facilities are not oriented to the Cascade/Main intersection and crossing Cascade Avenue is difficult. Most students travel through the Best Western parking lot to access downtown.

Nearly all campus structures are located on the core campus north of the South Fork Kinnickinnic River. The core campus is divided into three sections – academic and administrative buildings arranged in an oval, with residential concentrations flanking on the west and east ends. Pedestrian access to the Hunt/Knowles complex is via a pedestrian bridge on the west end of the academic core, but increasingly more students are using the Sixth Street river crossing as more students live in the east residential cluster and more activities occur in the Hunt/Knowles complex area. Students using the Sixth Street river crossing walk along the south side of the river, which is a safety concern since there are neither lighting nor emergency call boxes.

Three campus facilities are outside the core. First, the Hunt/Knowles complex, recreational fields, and the planned south campus sports and recreation complex expansion are located south of the South Fork Kinnickinnic River, accessed by vehicles from Main Street and by foot by the Third Street pedestrian bridge. The two laboratory farms are also located away from the core campus. Campus Laboratory Farm is contiguous with the core campus, but has vehicular access from South Wasson Lane. The Mann Valley Lab Farm is located 2.5 miles northwest on County Road MM near South Glover Road.

Two educational facilities are adjacent to the campus. The River Falls campus of Chippewa Valley Technical College is northeast of the core campus on South Wasson Road. River Falls High School is south of Campus Laboratory Farm on Cemetery Road. Partnerships to share facilities and programming between these educational institutions are possible.
Land Use

The campus is organized into distinct land use districts. Academic uses and the University Center are concentrated around the central campus mall. Outside this core is North Hall, which houses both administrative and academic uses. Other administrative uses outside the campus core are housed in the Regional Development Institute.

Four residence halls are clustered on the west end near the intersection of Main Street and Cascade Avenue, and five residence halls are clustered on the east end near Cascade Avenue and Crescent Street. These residential clusters cooperate with programming and resource sharing. The campus’s oldest and largest residence hall, Hathorn Hall, is located directly on the central mall. Hathorn Hall and George R. Field South Fork Suites function independently in residential programming.

The athletic facilities are currently distributed across campus, both in R.A. Karges Center and in the Hunt/Knowles complex. With the construction of the south campus sports and recreation complex project, all athletic facilities will be located south of the South Fork Kinnickinnic River. Recreational fields are located south of the river and within the east residential cluster. The isolation of athletic facilities is a concern for student athletes and spectators. Student athletes, particularly women, drive back to their residence halls after evening practices. The athletic program is concerned that the number of student spectators may decrease for basketball games when the gymnasium moves outside the campus core.

Outside campus, residential and worship facilities surround the campus nearly on all sides. Students live in neighborhoods west of campus (State/Vine, West Johnson Street) and north of campus (Third, Fourth, Walnut). City and campus staff have described some of these private apartment complexes as “student ghettos”. City and campus police have indicated that crime has not been a problem in these student neighborhoods.

Retail uses related to downtown are adjacent to the northwest corner of campus. Auto-oriented retail uses related to South Main Street are adjacent to the Hunt/Knowles complex. Students frequent Main Street restaurants on the weekend. Some students shop at the Riverside Square grocery store, but many others report they shop at Shopko or travel to Hudson-area retailers.

The City has expanded south to nearly envelope the campus. UW-River Falls and, in particular Campus Laboratory Farm, were on the edge of the city. Adjacent parcels south and east of Campus Laboratory Farm are urbanizing, including the construction of the River Falls High School on the south side of Cemetery Road. The campus has reported that no serious trespassing on the Campus Laboratory Farm has yet occurred, but nearby residential uses may limit future agricultural uses of the laboratory farm.
Building Profiles

Campus Facilities recently updated building profiles for every structure on campus. These building profiles are snapshot summaries of how each facility functions given its current use and its physical rating.

The majority of campus structures serve their assigned functions well and are in adequate physical condition. Generally, structures have similar function and physical ratings. A few outliers:

- Agricultural Engineering Addition (Physical i, Functional C): The building is in good physical condition, but the labs do not meet contemporary agriculture engineering technology needs and should be reconfigured.
- Maintenance and Central Stores Building (Physical i, Function C): The buildings are in good physical condition, but are significantly undersized for the number of maintenance services and employees they serve.
- Knowles Physical Education and Recreation Center (Physical i, Function D): Functional issues will be addressed in the south campus sports and recreation complex project.
- Greenhouse (Physical ii, Function D): Although there is sufficient growing space, there is a lack of headhouse space for plant preparation/analysis and demonstration.

Six structures are in poor physical condition and their future within the campus master plan must be considered.

- Hagestad Hall (Physical iv, Functional D): The structure is in poor condition and partially vacant. A $4.0 million project to remodel 25% of the building for enrollment services has been enumerated. An additional $2.6 million in improvements have been scheduled to convert space to technology services and to improve thermal performance.
- Agriculture Science (Physical iv, Functional D): While the structure is the hub of the College of Agriculture, Food, and Environmental Sciences, the labs do not meet contemporary laboratory instruction needs, floor loading is very limited, and low ceiling heights limit visibility. A comprehensive renovation will be needed.
- Centennial Science Hall (Physical iv, Functional D): A comprehensive renovation will be needed to change laboratory sizes and configuration. Labs do not support group work or computer technology. Building systems and equipment are outdated and worn.
- Ramer Field/Athletic Fields (Physical iv, Functional D): Physical and functional issues will be addressed in the south campus sports and recreation complex project.
- North Hall (Physical v, Functional C): Although functioning well, this 96 year old heritage building requires a complete renovation to replace multiple systems.
- Rodli Hall (Physical v, Functional I): Reuse of this partially abandoned structure is a focus of the campus master plan.

Two facilities (Emogene A. Nelson Building and R.A. Karges Center) are scheduled for demolition. Both structures are currently used by the Health and Human Performance department, and their functions will be replaced in the south campus sports and recreation complex project. Residence Life staff are concerned that after these structures are demolished, no interior recreational space will be available near residence halls.

Building Profile ratings are based on Postsecondary Education Facilities Inventory and Classification Manual (FICM): 2006 Edition.

Physical Ratings

i. Minimal Renovation (Good): Suitable for continued use with normal maintenance. The approximate renovation cost is less than 5 percent of building replacement cost.

ii. Limited Renovation (Satisfactory): Requires restoration to present acceptable conditions. The approximate cost of restoration is 5-15 percent of building replacement cost

iii. Moderate Renovation (Fair): Requires updating or restoration. The approximate updating or restoration cost is 16-30 percent of building replacement cost. The physical conditions may have an effect upon building operations.

iv. Significant Renovations (Poor): Requires significant updating or restoration. The approximate restoration cost is 31-45 percent of building replacement cost. The physical conditions adversely affect building operations.

v. Major Renovations (Unsatisfactory): Requires major restoration with possible need to overhaul
building subsystems. The approximate restoration cost is 46-60 percent of building replacement cost. Consideration of actual restoration requirements may lead to classifying the facility as being in need of replacement.

vi. Replace/Demolition: Should be demolished or abandoned because the building is unsafe and/or structurally unsound, irrespective of the need for the space or the availability of funds for a replacement. Additionally, this category takes precedence over categories i-v. If a building is scheduled for demolition, its condition is reported in this category, regardless of its actual condition.

vii. Termination: Planned termination or relinquishment of occupancy of the building for reasons other than unsafeness or structural unsoundness, such as abandonment of temporary units or vacating of leased space. Additionally, this category takes precedence over categories i-vi. If a building is scheduled for termination, its condition is reported in this category, regardless of its actual condition.

Functional Ratings

- Highly Suited, Excellent, A: Highly suited or optimally matched to the original design intent and configuration of the space. The architectural features of the space support the use/activity. Appropriate building infrastructure and services are easily and readily available to support the use.
- Satisfactory, B: Suitable for continued use and provides adequate support for program delivery. Although the space is not optimal for the use, minor modification may be desired to improve the suitability.
- Conditional, C: Requires limited renovation to support the use on a continued basis. The cost of renovation to optimize program delivery would not exceed 25 percent of the replacement cost of the space.
- Development Required, D: Requires significant renovation to support the assigned use on a continuing basis. The space significantly inhibits program delivery. The cost of renovations to optimize the fit between the assigned use and the space would range between 25 percent and 50 percent of the replacement cost of the space.
- Unsatisfactory, F: Is unsatisfactory for the assigned use. Renovating the space to fit the use would not be cost-effective. Renovation costs would exceed 50 percent of the replacement value of the space.
- Inappropriate, I: Not appropriate for current use but may be appropriate for other uses. It may be appropriate to relocate the activity to another location and use this space for more suitable activity.
Open Space

There is a significant amount of open space on campus, in the forms of a natural river bed, a manicured mall, recreational space, athletic and intramural fields, and active farmland. More than anything, the campus open spaces define the campus identity.

The largest area of open space is Campus Laboratory Farm. With the exception of the stand of pine trees, the entire open space is actively farmed as part of courses and faculty research.

The athletic and intramural fields are all located south of the river. The east residential cluster rings an open turf area that is heavily used by campus residents. The west residential cluster is adjacent to open space associated with the South Fork Kinnickinnic River, but this residential area does not have usable recreation space. Campus recreational staff prefer recreational facilities and open spaces to be very near residence halls to encourage physical activity. (The open turf area south of Lot O will be reduced in size with the expansion of parking related to the South Fork Suite addition project.)

The floodplain and wetlands associated with the South Fork Kinnickinnic River are the most natural open spaces on campus. The river open space is adjacent to many campus buildings, although no building is located in the 100-year floodplain. The University Center is the first building to take advantage of this visual and physical proximity. There is great opportunity for further integrating the river and its floodplain into the campus character, ecology, and activity.

The campus mall is a pedestrian-only zone that is the center of campus life, circulation, and image. The small parking lots within the campus core detract from the campus identity and the comfort of pedestrians. The Campus Mall Plan proposes the removal of some mall parking lots, improving pedestrian linkages, and improving the campus identity.

The Cascade Avenue corridor is the primary campus edge. The south setback of Cascade Avenue is important since it constitutes the community’s image of the campus. However, except for pedestrian circulation on the lawns between North Hall and South Hall, the Cascade Avenue setback lawns do not directly support campus activities. The lack of open space in and around Lot Q presents a negative first impression for campus visitors.

Recreational trails flank the South Fork Kinnickinnic River and connect to Campus Laboratory Farm. The trails are popular with students for walking within campus, and with campus and community residents for recreation.
Pedestrian/Bicycle Circulation

The campus core is highly walkable. A dense sidewalk network connects all campus core buildings and the east and west residential neighborhoods. Students appreciate the compact nature of campus.

Pedestrian/vehicular conflicts are a significant concern. A major campus and community concern is the crossing of students across Cascade Avenue, whether destined for classrooms and offices in North Hall, off-campus parking, or private student housing. Within the campus, some sidewalks pass through parking lots, particularly through Lots B (south of South Hall) and T (south of Rodli Hall). Third Street and Sixth Street pass through the center of campus, presenting unexpected vehicular intrusion across the pedestrian campus mall. Pedestrian/vehicle conflicts also result when students must walk within campus roadways, particularly on the roadway between the Regional Development Institute and Rodli Hall.

The South Fork Kinnickinnic River is a major barrier for pedestrian, bicycle, and vehicle circulation. There are three pedestrian-only bridges at Third Street, Sixth Street, and south of George R. Field South Fork Suites. The few river crossings limit parts of campus south of the river that are within a reasonable walking distance. The Hunt/Knowles complex and Lot W are considered by many to be too far to walk.

Campus Laboratory Farm is beyond a reasonable walking distance. Most users of Campus Laboratory Farm report they drive from central campus to the laboratory farm using city streets.

On campus bicycles and pedestrians share the same sidewalk network, creating conflicts in some locations.

Students are increasingly using trails along the river when walking between Hunt/Knowles complex and the east residential cluster. After the south campus sports and recreation complex and George R. Field South Fork Suites Addition projects are constructed, it is expected that this use will increase. The trails have no lighting and no emergency call boxes, are not regularly patrolled, and are not maintained in the winter.

The campus is relatively flat and there have been few complaints about wheelchair accessibility outside the buildings. There is no municipal or campus transit service available.
Vehicular Circulation

Vehicular circulation is disjointed and confusing for the campus visitor.

North of the river, Cascade Avenue provides the connection between three disconnected internal campus roadways. Campus police and maintenance staff request road connections internal to campus to reduce traffic on Cascade Avenue and speed response time. The connection between Sixth Street and Third Street is the beginning of an internal roadway network. The George R. Field South Fork Suites Addition includes a roadway between Lot O and I, connecting east campus to central campus.

In 2006, the campus studied options for a road corridor between Spruce Street and Third Street. The engineering study produced three alternatives: building a road on the existing pedestrian path south of the Agricultural Engineering Addition, bridging the South Fork Kinnickinnic River in two locations, and redirecting the river to remove an oxbow. Constructing a road on the pedestrian path was the preferred alternative, however no campus consensus emerged and road planning has not progressed.

South of the river, vehicular access to the Hunt/Knowles complex is only via Main Street, and drivers must use Main/Cemetery or South Wasson to access Campus Laboratory Farm. The south campus sports and recreation complex project includes a potential vehicular connection to Cemetery Road via Sixth Street. Small campus maintenance and delivery vehicles use the pedestrian river crossings, but the pedestrian bridges cannot accommodate larger maintenance vehicles and emergency vehicles. Large maintenance, delivery, and emergency vehicles must use public streets to access disconnected portions of campus. This indirect circulation contributes to congestion on adjacent streets and at intersections.

Campus refuse and recycling relies on collection in large dumpsters, which must be placed near major vehicle entry points to serve refuse and recycling vehicles. The grouped dumpster locations do not contribute to a positive impression for those entering the campus.

The campus does have an effective campus vehicular gateway. Most campus stakeholders describe the intersection of Cascade and Main as the main gateway. However this is not a welcoming gateway since only a large sign designates the campus, campus buildings face away from the intersection, and landscaped berms block views into campus. The Hunt/Knowles complex entry road at Main Street is not an effective gateway since roadways do not connect to main campus. Others have suggested that Sixth could become a campus gateway after Cascade Avenue is reconstructed.

Cascade Avenue is currently a state route and driver delay on Cascade Avenue during class change periods can be significant. In 2008, the campus, the City of River Falls, and the Wisconsin Department of Transportation prepared a concept plan for Cascade Avenue between Main Street and Wasson Lane. The concept removes on-street parking, creates a landscaped median that more forcefully designates intersections to direct pedestrian crossings, and adds bike lanes. The plan includes roundabouts at Third Street, Sixth Streets, and Wasson Lane. Roundabouts are often not friendly to pedestrians. On-street parking is moved to expanded off-street lots north of Cascade Avenue at Third Street (the street is removed) and south of Cascade Avenue between Sixth Street and Wild Rose Avenue. After road reconstruction, the state highway designation will move to Cemetery Road. The city is currently leading preliminary engineering for the initial phase.
Vehicle Parking

Students, faculty, staff, and visitors driving to UW-River Falls park in approximately 27 parking lots throughout campus, with students generally parking in large lots around the edges of campus and staff parking in smaller lots within the campus core adjacent to most academic and administrative buildings. Commuter student parking is near Ramer Field and Sports Complex off Main Street well south of the campus core. Parking for on-campus residents is located near each residence hall. Visitor parking is provided mostly in Lot Q, which is north of Cascade Avenue while most visitor destinations are south of Cascade Avenue.

There are approximately 2,377 parking spaces on campus. With about 6,443 on-campus students and about 687 on-campus faculty/staff, there are approximately three students and employees per space, resulting in a on-campus parking supply ratio of 0.33, which equals the national average suburban university parking supply ratio.

In addition to on-campus parking, nearly 1,000 students and faculty/staff utilize on-street (off-campus) parking spaces in surrounding neighborhoods to the north and east of campus during peak parking hours. When these 1,000 parking spaces are added to the available on-campus parking, a total parking supply ratio of 0.56 results. This ratio is much higher than the national average demand ratio, which is between 0.30 and 0.32, indicating that the students, staff, and faculty at UW-River Falls drive to campus at a higher rate than is common on other suburban campuses. Approximately 80 percent of students hold a job during the school year and often travel directly to their jobs from campus creating more demand for each student to have their own car on campus. In addition, the relatively high residential population (40 percent), the relative isolation of the city, and the proximity to the Twin Cities combine to encourage students to park on campus for the whole week and leave on weekends.

The high demand for near on-street parking impacts the arrival pattern of students, faculty, and staff. Faculty and staff arrive very early each morning to park in on-street parking spaces on 6th Street, which is a city street within the campus. Students arrive hours before classes to park on Cascade Avenue, and some reportedly sleep in their cars waiting for their first class time.

Special events on campus that draw additional visitors from surrounding communities include athletic events at Ramer Field and Hunt Multipurpose Arena and performances and lectures primarily in the E.H. Kleinpell Fine Arts building but also in University Center and occasionally North Hall. Performance and lecture audiences travel from surrounding community locations and generally expect to park within a short walking distance of the event location. The largest theatre in E.H. Kleinpell Fine Arts has 400 seats, creating a parking demand of approximately 125 parking spaces. This volume of parking can largely be accommodated in the Q Lot metered parking, which is often 50% occupied in the evenings. Lots A, C, and F (as well as most other faculty/staff lots) are free for community use and underutilized during evening hours. Improved signage and advertising is necessary to promote community use of Lots A, C, and F during evening events.

E.H. Kleinpell Fine Arts requires a convenient drop-off location for limited-mobility patrons. Athletic event parking will be addressed as part of the south campus sports and recreation complex project improvements.
A number of physical amenities that help to ensure a pleasant and safe parking experience for students, staff, and visitors are lacking on campus. Students and staff have commented that lighting in parking lots and along paths between lots and campus destinations is inadequate. Path and sidewalk lighting should be improved to encourage on-campus parking as well as increase safety for students walking from student lots, especially the athletic campus lots. In addition, visitor parking signage is confusing and deficient. General and special event visitor parking plans should be created to ensure easy navigation for those visiting campus.

High student occupancy data indicates that additional parking near or around the core of campus for students would be beneficial in the short term and will be essential in the future as campus grows. To ensure parking rates in adjacent neighborhoods do not increase, any additional growth in student enrollment (and therefore faculty and staff) will require additional parking on campus. The campus must consider whether to provide parking near the de facto current rate of 0.56 spaces per student/faculty/staff, provide parking near the current campus average of 0.33, or at lower rate combined with transportation demand management strategies to reduce the need for on-campus and off-campus parking.
Natural Features

SOUTH FORK KINNICKINNIC RIVER

The South Fork Kinnickinnic River is the dominant natural feature on campus. The South Fork Kinnickinnic River flows west to join the Kinnickinnic River west of the dam near Cascade Avenue. The Kinnickinnic River ultimately joins the St. Croix River within Kinnickinnic State Park, approximately 11 miles west of campus. As it passes through campus, the river is relatively slow moving and laden with sediment. However, flow velocities are higher in narrow sections upstream from campus and the stream is supportive of a trout population.

The river is a source of flooding in lower portions of the campus. Lots N and K are located at least partially within the 100-year floodplain. Flooding has damaged vehicles in one of these lots in the past and previous studies suggest that there is the potential for damage in the other lot. The presence of this floodplain limits the development potential of approximately 47 acres of the campus and the southern expansion of the campus core.

Both the campus community and the greater River Falls community are concerned about water quality in the South Fork Kinnickinnic River and its contribution to the Kinnickinnic River. Nearly the entire campus is within the watershed of the South Fork Kinnickinnic River. The South Fork Kinnickinnic River is a Class II Trout Stream. The Kinnickinnic River is a Class I Trout Stream and a Wisconsin Outstanding Water Resource. The river is a tremendous regional resource to the university, the community, and the greater natural environment and should be protected and preserved.

The river has been the focus of a number of enhancement and research initiatives. The first of these initiatives occurred in 1994 when the UW-River Falls Campus Committee applied for an EPA grant to mitigate adverse impacts of a storm water drainage ditch on stream water quality. This application also proposed constructing three wetland areas in the river floodplain on campus. The application was not successful and the project was shelved.

In 2000, state funding was provided to evaluate alternatives for a project within the river floodplain intended to reduce the flood risk, improve stream quality, and create or enhance wetlands. The report recommended terminating use of or raising the two parking lots to reduce the flood risk associated with overbank flooding. Secondly, the report suggested constructing a series of three wetlands with ground water cooling capabilities to improve water quality and provide a “living laboratory” for students. The report suggested that construction of physical storm water treatment devices may supplement water quality treatment provided by the wetlands. These recommendations have not been implemented due, in part, to concerns expressed by regulatory agencies.

Areas adjacent to the delineated wetlands have soils that may indicate wetland conditions. Field wetland delineations should be performed prior to any planned development in these areas to determine development potential and permit requirements.

OTHER NATURAL FEATURES

Steep slopes (those over 12 percent) are present on both sides of the river and in isolated locations on campus, but are not considered an impediment for potential building sites. The east-west orientation of the campus mall optimizes the daylighting and passive cooling opportunities for campus buildings.

WETLANDS

The majority of the river floodplain is currently classified as wetlands or “potential wetlands” by WisDNR and U.S. Army Corps of Engineers. Wetlands are primarily classified as Forested (T3K), Scrub/Shrub (S3K), or emergent/wet meadow (E1K), according to the Wisconsin Wetland Inventory. The presence of these wetlands provides a valuable resource for buffering the impacts of storm water runoff to the South Fork Kinnickinnic River and provides learning and recreational opportunities. Federal and state laws require that any future campus development avoid these areas.

The river and floodplain have been incorporated into classroom activities and research, but are not the site of student activities.
Utility Assessment

The accompanying map shows existing utility corridors. Thicker lines indicate that multiple utilities are placed within the corridor, and thus relocation will be more difficult. Future development projects should either avoid existing utility corridors or incorporate the removal and replacement of those utilities within the project budget. Movement of some utilities such as steam and community-serving sanitary sewer will be cost-prohibitive to move.

Existing utility corridors could impact several potential campus development projects:

- A significant utility corridor runs south of Rodli Hall, with a steam line the furthest north and primary/signal just south of the steam. Additions to the south face of Rodli Hall would impact this corridor and thus would be cost prohibitive.
- The storm and sanitary utilities south of University Center and Maintenance and Central Store serve not only the campus but also adjacent neighborhoods.
- A minor duct bank runs through the Hagestad Hall site. When this site is redeveloped, these minor utilities should be moved into existing corridors either north or south of the site.

Electrical Power Distribution System

Emergency power is provided in most buildings to provide emergency egress illumination, power to critical telecommunications systems, and in some cases to elevators. Standby power is provided for all telecommunications systems through limited battery-type supplies and in some cases, through motor-driven generators. It is the campus's intent to provide standby power for all components of the telecommunications plant.

The River Falls Municipal Utility provides 12,470V electrical power to one major campus multi-building service/substation location and four single building locations on the main campus. All services are fed from the municipal utility South Fork substation located approximately 1,200 feet south of the central heating plant. The main service location is a switchyard south of the central heating plant which serves all major facilities north of the South Fork Kinnickinnic River except the chiller plant. The chiller plant is fed by a second service. A third service feeds Hunt Multipurpose Arena and Ramer Field, and a fourth service feeds Knowles Center.

The main campus multi-building service is comprised of one nominal 5,000 kVA, 12470-4160V utility owned transformer cabled to a university owned sheltered aisle switchgear unit with one 2,000A main and seven 1200A distribution circuit breakers. A second nominal 5,000 kVA utility transformer is located in the switchyard as a spare unit ready for cabling to the university switchgear should the primary transformer fail. Feeders #1 – #6 serve buildings and feeder #7 is connected to a university owned capacitor bank. All feeder cables are 4/0 in size and are routed underground in a concrete encased ductbank and manhole system. The building feeders are arranged in east campus and west campus cable loop networks with exterior pad mount and building located sectionalizing switchgear. This network does not have adequate normal configuration capacity and single feeder failure configuration capacity to serve the current and proposed facilities. An additional feeder will need to be extended from the main switchgear to the north central campus area where the proposed Science Hall and West Residence Hall are to be constructed. Also the east campus loop is only partial in coverage leaving the facilities on the far eastern portion of campus without a backup feeder. A new ductbank with feeder cables should be extended from the main switchgear east to the far end of the existing ductbank serving the George R. Field South Fork Suites to provide a complete east campus loop circuit.

The campus switchgear and feeder cables were replaced in 1987. The useful life of this type distribution equipment is approximately thirty years. Therefore replacement of the switchgear equipment will be needed about the same time that the additional feeder will be required for the new buildings. The replacement switchgear should contain additional distribution circuit breaker capacity for new feeders. At that time, it would be appropriate to look at a substation design concept which includes two switchgear lineups fed from separate utility transformers with a tie buss between lineups for redundancy.

The utility service for the campus chiller plant has adequate capacity for future full build-out of the plant from 1,000 tons of capacity to 2,000 tons of capacity.

The utility services for current and future buildings on the south campus are also adequate. However, the
power distribution for the south campus should be consolidated into one service with the construction of the south campus sport and recreation complex.

Building transformer capacity and standby power capacity for the Chalmer Davee Library may eventually be exceeded as the campus Data Center power requirements grows over the next decade.

**SIGNAL DISTRIBUTION SYSTEM**

The campus signal distribution system is comprised of the following four discrete sub-systems. A fiber optic cable backbone system provides computer network services from the main hub facility in Chalmer Davee Library to all campus facilities. A telephone system provides telephone service to all facilities from a telephone company vault located north of May Hall and provides service to all campus buildings. A campus video distribution system provides TV signal to all facilities from the Fine Arts Building. A fourth subsystem provides control signals to each building from the Maintenance Building for control of exterior campus lighting and other miscellaneous control needs. All signal system cables are routed in concrete encased ductbank except for direct buried cable from a manhole at Agriculture Science to the Hunt/Knowles complex on the south campus and from Crabtree Hall to C.H.I.L.D. Center located on the east end of campus.

The fiber optic cable backbone system was installed in the early 1990s. Multimode fiber cable was pulled between the library main hub and each radial building with fiber count determined by building size. Ten fiber single mode cable was pulled to each building but not terminated for future use. Over time this single mode fiber has been terminated and extended in various locations to allow higher data rates on various network links. A project to re-tip the outdated “ST” connectors with “LC” connectors will extend the life of much of the fiber cable plant. It is anticipated that a project to install laser optimized 50 micron fiber to connect the campus nodes and other facilities requiring higher data rates will be needed in the near future. At that time consideration should be given to loop fiber to the main academic buildings for redundancy, or establish a second sub-site for the aggregation of secondary data links.

Fiber optics on the South campus to the main campus is very light. Hunt Multipurpose Arena and Knowles Physical Education and Recreation Center are connected through a damaged cable to the main campus from Agriculture Science and the Green House. This cable will have to be replaced when the south campus sport and recreation complex is constructed. This upgrade will need to include high speed data access to Ramer Field and other athletic outdoor fields. A new “sub-station” hut established on the south campus with redundant feeds to campus would be a good step forward in supporting the expansion on that side of the river.

In addition, the campus has a desperate need for connecting campus Lab Farm One with the main campus through single mode and/or 50-micron fiber optics cabling to support academic, research and administrative functions for each Farm building site.

Finally, the Mann Valley farm (located NW 3 miles of the campus) is connected with a 80 Ghz radio link that is affected by precipitation. When it rains or is foggy the classrooms are off line. In addition there is no data inter-connections between the buildings on the farm. The campus needs to address the needs of the classrooms, research and administrative needs of this site by installing fiber optic cabling from the main campus to the site. A partnership with the City and the City owned fiber optic network may be possible for a portion of that distance. Local telecoms are now installing new services along the I-35 corridor and will be passing nearby the campus, a partnership may be possible there as well.

The campus telephone service cables, provided by AT&T, enter campus from man hole S-2, located north of May Hall and run through the center of campus to the east end. The multipair telephone trunk cables are run in a radial fashion to all campus buildings on the main campus. Phone service to facilities on the south campus is provided directly from the local phone company system in nearby city streets. In addition to the AT&T system, the university owns a phone trunk cable system that distributes in a similar fashion to most main campus buildings, as well as there are direct pairs to the Hunt/Knowles complex but not the Campus Laboratory Farm on South Campus. In early 2000’s the campus requested a project to move to VOIP that was denied by DOA. The campus wishes to address this technology again as a very viable means for emergency notification, advance call processing in our administrative units, addressing aging end user and infrastructure technology, replacing
antiquated service offerings and a lack of FTE to maintain the telecommunications plant on campus.

This will allow removal of trunk cables since the phone service will be carried on the fiber backbone. Removal of phone cable will free signal ductbank space for new fiber optic cable.

The video distribution system is comprised of hard-line coaxial cable connecting all campus buildings from television system head-end at Hagestad Hall that is fed from a fiber optic transceiver in E.H. Kleinpell Fine Arts building out to hard-line cable through out campus and is tee-taped in each manhole and then routed to each building. In 1999 parts of the system had been abandoned during an upgrade of the Residence Halls systems. In summer of 2011 the remainder of the campus distribution system will be abandoned. The cables can now be removed from the duct banks to free additional duct bank space. There are two hard lines in the duct banks, an A and B system. The original intent was campus television and campus security cameras would be on these systems. Both of these systems can be removed.

Not all campus buildings have generators and not all buildings have generators that can support the communications systems for the campus. Many of the buildings have a Main Distribution Frame (MDF) and an Intermediate Distribution Frame (IDF) rooms. Some MDF’s have a generator circuit in them only for the emergency alert system paging system. To best support fire alarm systems, emergency communications and other critical communication services we need all campus MDF and IDF rooms to be on standby generator services.

The campus energy management control system primarily used fiber optics cable for communication between buildings. The original multi-conductor 600V cable is still in place but lightly used.

Electrical Recommendations:
1. Replace the electrical switchgear equipment with new equipment with additional distribution capability to serve current and future loads. Consider installing two switchgear lineups for redundancy. Also install a new ductbank and campus feeder from substation yard to east terminus of ductbank serving George R. Field South Fork Suites for east campus primary service redundancy.
2. Extend a new campus feeder to the site of the new Science Building and new Residence Hall.
3. Relocate the primary and signal ductbank north of the Walker D. Wyman Education Building to allow construction of the building addition. At that time reconstruct and add signal conduits between Chalmer Davee Library and signal pit S8.
4. Improve fiber optic distribution infrastructure, connectors and an optic loop to all major academic buildings, south campus and the Mann Valley Laboratory Farm.
5. Address campus wide availability of generators to MDF and IDF’s in each building to support data network communications switching systems.

DOMESTIC WATER DISTRIBUTION SYSTEM

The domestic water system on the main campus is served from the municipal water system 8” main on Cascade Avenue and from an 8” connection from the south. It is generally comprised of a loop of minimum 6” pipe that routes along the southern portion of the main campus with intermediate cross campus ties to the Cascade Ave main along 4th street and 6th street. Building laterals are served from the Cascade main, campus loop or campus cross tie lines depending on proximity.

The domestic water system on the southern campus is served from the municipal water system and the main campus distribution system. A 6” line extends from Orange Street to the area near Knowles Center and a 6” line extends from the campus loop near the Greenhouse to the area northeast of Ramer Field. Another 6” line located along the north edge of Ramer Field and along the east side of Hunt Multipurpose Arena ties the 6” service lines together to form a south campus loop. All laterals are served from this loop.

SANITARY SEWER SYSTEM

The sanitary sewer system on the main campus is a gravity flow system to the municipal system. The campus system is connected to the Cascade Ave main near Parker Hall then loops to the south running parallel to the domestic water line and then runs west connecting the municipal system west of South Main Street and north
of Park Street. The sanitary sewer loop pipe size increases from 12” at Cascade Ave to 18” at South Main Street. The sanitary waste from all facilities except North Hall, May Hall, Nelson Hall, Johnson Hall, Prucha Hall and Stratton Hall flows to the campus sanitary system. Waste from the aforementioned facilities flows to a Cascade Avenue main.

Sanitary sewer system on the south campus is a gravity flow system to the municipal system. Hunt Multipurpose Arena, Knowles Center, and Ramer Field flow to a common 8” line which is connected to the municipal system at South Main Street and Johnson Street.

STORM SEWER SYSTEM
Storm water collection on the main campus is comprised of a network of drainage structures and lines which direct water to outfalls at the South Fork Kinnickinnic River. All facilities and surrounding properties are drained to this system except for North Hall and Chalmer Davee Library which drain to a storm main in Cascade Avenue. Municipal storm sewers that direct storm water flow from the city north of campus to the river cut through the campus in three locations. A 24” line runs between Johnson Hall and Emogene A. Nelson Hall in the western portion of campus. A 6’ – 7” by 10’ – 8” concrete duct runs between E.H. Kleinpell Fine Arts and Centennial Science Hall in the central portion of campus. A 36” line runs between Grimm Hall and Parker Hall in the eastern portion of campus.

Civil Recommendations
1. Relocate 8” water main north of the Wyman Education Building to allow a north building addition to be constructed.
2. Continue to monitor sewer conditions by televising lines as opportunities arise.

CENTRAL HEATING PLANT AND STEAM DISTRIBUTION
The central heating plant (built in 1964) supplies steam to each building on the main campus at 100 psi, through an underground piping distribution and condensate return system. The main east/west distribution system was built in 1964 and 1965. Selective sections of the distribution system were replaced in 2010. The steam supply piping to North Hall and the Greenhouse is planned to be replaced in 2012.

The central heating plant is comprised of two 45,000 lb/hr boilers that can be fired with natural gas, coal or fuel oil and one 20,000 lb/hr boiler that can be fired with natural gas or fuel oil.

Coal is supplied to the central heating plant by semi trailer trucks hauling from the Mississippi River Docks in St. Paul. Up to 14 days of winter fuel supply can be stored within the central heating plant coal bunker. Street access to the coal dock must be maintained as long as the Plant has the capability to burn coal as a fuel.

Natural gas is supplied from St. Croix Gas Company through an 8” gas main under Sixth Street.

Fuel oil is stored on site in a 20,000 gallon, double walled underground storage tank.

The steam is primarily used for building and domestic water heating. Other uses for the steam include sterilizers, humidifiers, distillers, cloths dryers, pasteurizers and culinary equipment.

The central heating plant and steam distribution systems are in generally good condition.

The peak steam load for the campus in recent years has been 48,000 lb/hr, which is the upper limit of one boiler out put. Peak firm plant capacity is considered to be 65,000 lb/hr (one large boiler and one small boiler on line, with one large boiler on standby).

The additional net increase in building space that is identified in the master plan is not expected to push the main campus demand over the firm capacity of the central heating plant. Depending upon the future decisions regarding coal fired operation at State Facilities, there may be an opportunity to install new, higher efficiency gas boilers or biomass fuel boilers.

SOUTH CAMPUS HEATING
Currently, the heating needs at Hunt Multipurpose Arena, Knowles Center, and the Locker Room Addition are supplied by three individual natural gas fired boilers. It is expected that a small central plant boiler, with biomass and natural gas firing capabilities will be constructed as part of the new south campus sport and recreation complex building that will heat the new building as well as the existing south campus buildings.
BUILDING COOLING

Main Campus buildings are cooled by a combination of stand alone chillers (Agriculture Science Complex, University Center, Rodli Hall, George R. Field South Fork Suites, and Walker D. Wyman Education Building), DX condensing units (North Hall, Hagestad Hall, RDI, and Maintenance) and Central Chilled Water Plant (Centennial Science Hall, E.H. Kleinpell Fine Arts, Chalmer Davee Library, and South Hall).

Plans are underway to connect Rodli, George R. Field South Fork Suites, and its addition to the Central Plant in 2012. Additionally, North Hall, Wyman Education Building, and its addition would be expected to be connected in the future.

The Central Chilled Water Plant was not designed to handle the western third of the campus. As plans develop for the new Science Building and the new Residence Halls, a strategy for cooling the new buildings as well as the Agriculture Science complex will need to be developed.

HVAC Recommendations

1. Build a central boiler and chilled water plant to serve the south campus as part of the south campus sport and recreation complex project.
2. Based on the extent of future use of Hagestad Hall, make a decision on connecting it to the Central Chilled Water Plant.
3. Determine the best location for a new west campus chilled water plant with potential for looping with the existing plant distribution system.
4. Determine if the University Center should be connected to the Central Chilled Water Plant in the future.
5. Evaluate future available fuel sources for the central heating plant and make changes accordingly.
Campus Wide Space Needs Analysis

Paulien and Associates prepared a campus wide space utilization and space needs analysis.

As part of the team led by JJR, Paulien & Associates, Inc. conducted space needs planning in support of the University of Wisconsin – River Falls Campus Master Plan. Specifically, Paulien & Associates provided an analysis of the quantities and types of spaces required at the current student enrollment and two projected planning horizons.

The space needs analysis reviews the existing facilities and quantifies the space requirements for the University of Wisconsin – River Falls. An identification of the space needs was made in relation to the existing facilities for the base year (Fall 2009) and two projected future enrollment and staffing levels (2015/2016 and 2025/2026). The analysis was completed at a campus-wide as well as a college/school and an administrative unit level for the first planning horizon of 2015/2016 and at the campus-wide level for 2025/2026.

See full report and recommendations in “Space Needs Analysis for the Campus Master Plan” under separate cover.
### Campuswide Space Needs Analysis

**University of Wisconsin • River Falls**

<table>
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<tr>
<th>SPACE CATEGORY</th>
<th>Fall 2009</th>
<th>2015/2016</th>
<th>2025/2026</th>
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<td>Existing ASF</td>
<td>Guideline ASF</td>
<td>Surplus/Deficit (%)</td>
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<td><strong>Academic Space</strong></td>
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<tr>
<td>Classroom &amp; Service</td>
<td>65,321</td>
<td>78,790</td>
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<td>Teaching Laboratories &amp; Service</td>
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<td><strong>Academic Support Space</strong></td>
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<td>Administrative Offices &amp; Service</td>
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<td>Library</td>
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<tr>
<td>Student Center</td>
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<td>Inactive/Conversion Space</td>
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<td>Child Care Center</td>
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ASF =Assignable Square Feet

APPENDIX 173
Acknowledgements

Campus Master Plan Steering Committee

The Chancellor’s Executive Cabinet served as the Master Plan Steering Committee. The Executive Cabinet guided the entire master planning process, providing strategic guidance and making ultimate policy decisions.

- Dean Van Galen, Chancellor
- Fernando Delgado, Provost and Vice Chancellor for Academic Affairs
- Joseph Harbouk, Vice Chancellor for Administration and Finance
- Gregg Heinselman, Associate Vice Chancellor for Student Affairs
Master Plan Advisory Committee

The Advisory Committee provided discussion, reactions, and guidance for the Steering Committee and Master Planning Team.

- Dean Van Galen, Chancellor
- Fernando Delgado, Provost
- Blake Fry, Special Assistant to the Chancellor
- Brad Caskey, Interim Dean of the College of Arts and Sciences
- Dale Gallenberg, Dean of the College of Agriculture, Food and Environmental Sciences
- Faye Perkins, Interim Dean of the College of Education and Professional Studies
- Glenn Potts, Dean of the College of Business and Economics
- Doug Johnson, Interim Associate Vice Chancellor for Academic Affairs and Director of Graduate Studies
- Alan Tuchtenhagen, Associate Vice Chancellor for Enrollment Services
- Gregg Heinselman, Associate Vice Chancellor for Student Affairs
- Kristen Hendrickson, Director of Integrated Planning and Budget Officer
- Daniel McGinty, Interim Executive Director of University Advancement
- Craig Morris, Chief Diversity Officer
- Stephen Reed, Chief Information Officer
- Donna Robole, Director of Human Resources

Many more university faculty, staff, and students and City staff and elected officials provided input and feedback throughout the planning process.

The master planning process was supported by the dedicated assistance of Dale Braun (Campus Planner), Mike Stifter (Director of Facilities Management) of UW-River Falls, Kate Sullivan and Jeff Kosloske of UW System, and Russ Van Gilder of the Division of State Facilities.

Campus Master Planning Team

JJR, LLC – Madison, Wisconsin and Ann Arbor, Michigan
Paulien & Associates – Denver, Colorado
River Architects – LaCrosse, Wisconsin
Henneman Engineering – Madison, Wisconsin

Photos by JJR and River Architects and Jens Gunelson, UWRF Campus Photographer