# **BUILDING matters**

"DREAM NOBLE DREAMS, AND BUILD WELL"

The flurry of construction activity continues on our vibrant campus. Whether we are injecting new life into old buildings, giving birth to stateof-the-art facilities where research and learning will flourish, or simply making our workplaces safer and more efficient, we continually strive to improve this place where we work and learn.

Keeping an eye toward the future, several major capital projects are being considered: the Murray Building/Main Library transformation project in conjunction with the new Learning Centre, the University of Saskatchewan Students' Union (USSU) expansion, the Graduate Students' Association (GSA) Commons, and the Fine and Performing Arts Centre.

Capital and operating resources for all projects are carefully considered through the various stages of planning and development. The continuing physical development and maintenance of the campus will reflect the strategic priorities of the University and convey a sense of pride of place. We're building futures.









On May 27 and 28, 2006, more than 40 unique and interesting Saskatoon buildings will open their doors to the public. With five buildings on campus participating—the Little Stone School House, the Diefenbaker Canada Centre, the Faculty

Club, St. Thomas More Chapel, and the newly restored College Building—the University of Saskatchewan is very proud to be a part of the second annual Doors Open Saskatoon.

The Doors Open concept is simple—buildings of architectural or historical significance, or those with a unique purpose, open their doors to visitors. The aim is to facilitate people's understanding and enjoyment of their local architectural environment while

encouraging awareness of our built heritage. Many groups provide guided tours, special exhibits, and displays, while others just let visitors wander about.

As we honour Saskatoon's 100<sup>th</sup> anniversary in 2006, Doors Open is a wonderful opportunity to celebrate our built heritage.

For more information about Doors Open and a full list of the participating buildings, go to www.doorsopensaskatoon.ca.



## COMPLETED CONSTRUCTION

## COLLEGE BUILDING RESTORATION AND RENOVATION

The restoration, renovation, and expansion of the College Building, one of the first buildings on campus, is almost complete. This University landmark—a provincial and national historic site—once again welcomes students, staff, and the public to its corridors and cultural spaces. The centrepiece of this project is Convocation Hall, restored to its original glory. The building is also home to University governance and Student and Enrolment Services.

### RESEARCH ANNEX PHASE II

The renovation of the west half of the Research Annex on Maintenance Road, referred to as Phase II, was completed in September 2005. Occupants have moved into the new development and the reallocated space in the east side of the building. The redevelopment of the Annex created office space to alleviate some of the University's increasing space demands. New occupants include the Department of Health, Safety, and Environment, the Department of Art and Art History's sculpture program, and the Canadian Cooperative Wildlife Health Centre.

## PULSE CROP EXPANSION TO THE CROP SCIENCE FIELD LABORATORY

The construction of a 1,330-square-metre addition to the Crop Science Field Laboratory (CSFL) was completed last summer. The addition will accommodate the Crop Development Centre's pulse research program. This expansion, which includes a field laboratory for pulse crop pathology and crop physiology, now provides the necessary space for all aspects of the pulse breeding program. The University of Saskatchewan is grateful to the Saskatchewan Pulse Growers for funding this project. Operation of the project has been assumed by the College of Agriculture.

Rendering of the Pulse Crop Expansion

## **CONSTRUCTION COST ESCALATION**

The University of Saskatchewan, like most owners engaged in capital construction, is facing significant increases in capital construction costs.

Construction escalation has been influenced by many factors, including a 60% increase in construction activity in Western Canada. As well, the supply of some materials, equipment, and labour are increasing construction costs. To make matters more challenging, 2005 was one of the worst weather seasons on record for North America. Rebuilding efforts in the southern United States as a result of hurricanes Katrina and Rita compounded building cost escalations and material shortages experienced in 2005.

All of these factors have had a significant impact both on projects currently under construction and projects still in the planning stages. In order to estimate total project costs as accurately as possible in such a volatile construction market, the U of S has gathered information about annual construction cost market inflationary factors from a variety of sources. These factors will be applied to all current and future projects. The U of S will continue to monitor these inflationary factors and adjust the model as required.

The final cost of all projects currently in development and budget forecasting phases will be assessed individually based on the market inflationary scenario that best fits that project. The chosen scenario will balance the strategic need of the project with the risk and uncertainty of the construction market. For example, the scenario being used for the InterVac project (p. 5), which is still in the design phase, derived a final cost estimate of \$110M

compared to its pre-inflationary budget of \$85M.

When final costs are anticipated to be higher than the original budget for projects that began prior to the recent market increases, the scope of the project must be reduced, components eliminated, or additional funding found. The Western College of Veterinary Medicine expansion and renovation (p. 7) is a project that has required reductions in scope as well as increases in funding.

## **PRIMARY COST DRIVERS**

- Increased commodity prices
- Increased labour costs
- Increased material and equipment costs
- Surge in construction activity

For more information about the construction escalation package phone Regina Pratchler at 306-966-2291 or email regina.pratchler@usask.ca.

## **PROJECTS IN PROGRESS**

## ACADEMIC HEALTH SCIENCES COMPLEX

Design Phase

The Academic Health Sciences project is essential to maintain and strengthen the health sciences colleges and programs at the University of Saskatchewan and within the Province of Saskatchewan. The integrated facility will encourage the interaction of students, faculty, and researchers from a wide array of health-science programs

through interdisciplinary programs and problem-solving research initiatives. The result will be improved provincial health services.

The proposed facility will respond to emerging teaching techniques and ensure students are exposed to contemporary and innovative health care practices. In addition to renovations of the existing Health Sciences Building, two new sites will be constructed to appropriately accommodate the various needs of health sciences professionals and students.

The University is very grateful to the Province of Saskatchewan for the tremendous support of this exciting and critical project.

## PLACE RIEL TRANSIT HUB

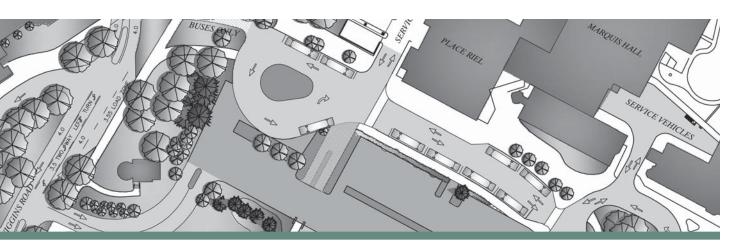
## Design Phase

The City of Saskatoon has requested that the University implement improvements to the Place Riel Transit Hub in order to support the city's efforts to enhance strategic, city-wide transit services. An aggressive schedule has been requested by the city to adhere with city-wide implementation.

The transit hub will be located on the section of Campus Drive immediately in front of Place Riel, between Bottomley Road and Wiggins Avenue, and should to be operational by July 2006. To create a safe, functional transit hub that provides the best access for students while reducing congestion and potential conflicts between pedestrians and vehicles, access to this area will be restricted to transit, emergency, and service vehicles. Redeveloped drop-off and pickup zones for private vehicles will be created at the west and east ends of the hub.

Due to the complex nature of this project, as well as other projects currently being considered in this part of the campus, the transit hub development is being proposed in two phases. The short-term plan will accommodate the city's changes to their transit system services, but a longer-term study will result in a well-conceived redevelopment of this area of campus. It is anticipated that the short-term solution will be in place for approximately 18 to 36 months, followed by long-term redevelopment, potentially involving university residences and associated services.

The transit hub (short-term plan) is primarily funded by the City of Saskatoon. It supports the sustainability, safety, and transportation issues identified in the University's transportation study, a sub-section of the Core Area Master Plan. Long-term plans for this area will consider synergies with other projects and buildings in the precinct, and will solve any safety and function concerns related to pedestrian traffic and vehicular activities.



#### **GRIFFITHS STADIUM UPGRADES**

#### **Construction Phase**

Originally proposed as a result of the successful bid for the 2006 Vanier Cup, the Griffiths Stadium project will result in a series of upgrades that will begin to bring the stadium and support spaces to a level typical of an institution of the University of Saskatchewan's caliber.

Renovations will take into consideration the needs of the University's athletic programs as well as the Vanier Cup and community priorities. The result will be a facility that will serve not only the needs of the University, but will be available to community and

provincial partners. The development of this facility will permit the University and the city/province to bid on the hosting of other national events.

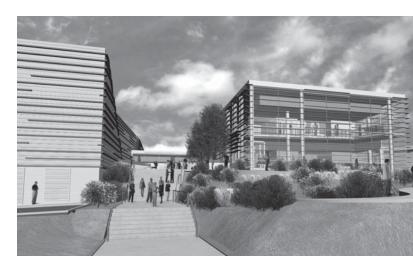
Stadium upgrades will include replacement of the existing main field with artificial turf; installation of improved lighting and an aluminum grandstand; expansion of the media box; construction of a new team building, washrooms, and a concession building; and renovation of the existing team building and classroom/office building (under the current grandstand).

## **INTERVAC**

## Design Phase

The new International Vaccine Centre (InterVac) will be the first laboratory in Western Canada to allow research on both animal and human health for current and emerging infectious diseases. The centre is being developed collaboratively by the Vaccine and Infectious Disease Organization (VIDO), the College of Medicine, and the Western College of Veterinary Medicine. When completed, the bio-containment facility will be one of the largest vaccine research laboratories in North America and will lead Canada into world leadership in vaccine research and development for diseases as diverse as hepatitis C, SARS, HIV, tuberculosis, and avian influenza.

A containment facility of this nature requires strict monitoring in all areas of construction, certification, and operation. As a result, almost 75% of the 12,134-square-metre facility will be used for complex building support systems. In order to create the airtight rooms and environments necessary for



the research, facilities of this type have very strict parameters for construction.

Funding for this world-class facility comes from the Canadian Foundation for Innovation, the Province of Saskatchewan, the Government of Canada, the City of Saskatoon, and the University of Saskatchewan. Once started, construction will take approximately 28 months to complete.

## **COLLEGE OF LAW EXPANSION**

## Design Phase

With the support of staff, students, faculty, and alumni, the College of Law is undertaking an ambitious campaign to return to pre-eminence in Canadian legal education. This campaign has four pillars: the implementation of a strategic plan, the improvement of student services, the growth and strengthening of the faculty complement, and the expansion and modernization of the physical premises.

The expansion will address serious overcrowding, modernize facilities, and address function and accessibility deficiencies. The expansion will meet the present needs of students, faculty, and staff, and will allow for future growth of the college.

The construction of approximately 2,411 square metres of new space will provide an opportunity

for the college to "backfill" and renovate vacated spaces within the existing Law Building to accommodate new functions. The Native Law Centre, currently located in the Diefenbaker Centre, and the renovation to the law library have been included in the project's design.

The College of Law will be the first Leadership in Environmental and Energy Design (LEED) certified building at the University of Saskatchewan. LEED is a systematic process to guide the design and construction of buildings that balance environmental responsibility, resource efficiency, occupant comfort and well-being, community development, and the economics of building construction and operation. Adopting LEED is one critical element in the movement toward sustainability at the University of Saskatchewan.

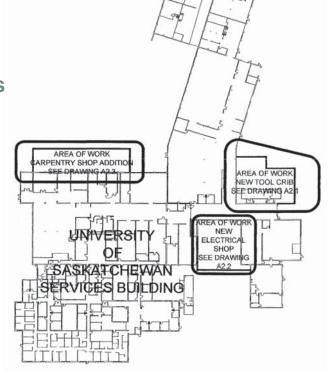


## UNIVERSITY SERVICES BUILDING SAFETY AND EFFICIENCY RENOVATIONS

### **Construction Phase**

To ensure that the workplace of the operations and maintenance trades personnel complies with all code and safety regulations identified by Occupational Health and Safety, and to address space and layout deficiencies, the University Services Building (formerly Maintenance Building) is being reconfigured.

The carpentry shop, electrical shop, and tool crib will occupy space in a new addition. Space made available by these moves will be reconfigured to accommodate FMD's safety and environment employees, much-needed meeting space, and a training facility. Also included within the renovated space will be an information technology services (ITS) server room, which will house new computer network servers, operations servers, and new research clusters.



## **CHILLER ADDITION**

## **Construction Phase**

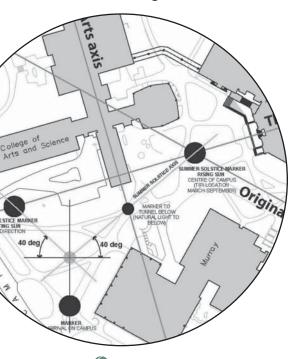
Construction has begun on an addition to the heating plant to accommodate the new chiller required to cool the expanding infrastructure on the University campus. Chiller #4 will be the first new capacity added to the plant since 1988. The building

addition will allow space and provisions for a future chiller #5, which is not anticipated to be required until some time after 2015.

All new motors driving pumps, cooling tower fans, and other ancillary equipment associated with chiller #4 will be very high efficiency with variable speed controllers to minimize energy consumption. Remaining equipment and installation will be re-tendered in the fall when more competitive prices will hopefully be realized.

## ABORIGINAL STUDENT SPACE

Pre-Design Phase



Planning continues for the development of an Aboriginal student space. The vision for this project is to provide resources and amenities for Aboriginal students while engendering knowledge and understanding of Aboriginal history and culture for non-Aboriginal students and the campus community.

The proposed project hinges on securing capital funds to develop three components totaling approximately 1,140 square metres. While separate, the following three components will build upon each other to create stronger relationships and increased opportunities:

 space for students, coordinated through the Indigenous Students' Council, which will include a lounge, resource room, computer lab, and student offices

- Aboriginal Students' Center/Student and Enrolment Services offices and facilities for student advisors/ counselors, including space for Aboriginal elders
- space for the Native Studies
   Department to house faculty and graduate student offices, support space, and modest teaching facilities

Wiggins Court, the chosen site for this project, will allow the facility to be linked to the Lower Arts/Place Riel Tunnel and allow for future growth and expansion in that area.



### WCVM EXPANSION AND RENOVATION

#### **Construction Phase**

Work continues on the expansion and renovation of the Western College of Veterinary Medicine (WCVM). The improvements, including upgrades to facilities for teaching, research, diagnostic, and clinical purposes, were necessary in order to meet national and international accreditation standards. The diverse nature of this project has brought funding from various sources, including Agriculture and Agri-Food Canada, the Province of Saskatchewan, and a WCVM capital fundraising campaign.

Ensuring that the college's operations could continue throughout construction created a complicated schedule. Construction of a new loading dock and a new food animal clinical sciences building is complete. The expanded

animal care unit, including the new animal holding facilities, is nearing completion, and work continues on the expansions to both the veterinary teaching hospital and the research wing. A major addition to the diagnostics area, including additional space for Prairie Diagnostic Services, will begin this spring. In addition, numerous retrofits and renovations within the building will address bio-security and safety issues within the small and large animal clinics to assure that the college mandate of teaching and hands-on experience are properly supported.

It is anticipated that the majority of the project should be complete by spring 2008, however, some smaller elements will continue until fall.



## TOXICOLOGY CENTRE AQUATIC TOXICOLOGY EXPANSION

#### Construction Phase

The University's 2003–07 Integrated Plan identified northern ecosystems toxicology as an area for new initiatives. To that end, an expansion of the Toxicology Centre began in January 2006 to provide the additional space needed for the construction of the aquatic toxicology facility. This additional research capacity will allow the Toxicology Centre to expand and develop. It will provide the necessary space for Canada Research Chair activities and other potential toxicology initiatives, such as Canadian Foundation for Innovation activities.

Beyond additional research areas and storage spaces, various areas within the interior of the existing building will be modified to accommodate new offices, graduate student spaces, and other administrative functions.

### UNIVERSITY RESIDENCE PROJECT

## Pre-Design Phase

Over the last two years, the University has investigated the potential for developing a student residence complex to address the existing student housing shortage and to assist in the recruitment and retention of undergraduate and graduate students.

A number of scenarios are being considered. One of these is the development of a dormitory and suite-style residence at Cumberland Avenue and College Drive (south campus) that would include a mix of services, as well as retail and other developments in combination with the residences.

The project's steering committee recently directed that consideration be given to locating the project in the Place Riel area of campus. This proposal includes the addition of new dormitory housing adjacent to Place Riel in the campus core. As

part of this scenario, significant revisions to Campus Drive and the transit hub, parking lot requirements, as well as aesthetic and functional aspects would need to be considered.

In the core area proposal, potential exists for commercial

(USSU) space, and graduate student offices.

To date, response to the core area proposal from various student groups has been very favourable. Further planning efforts will ensure the project responds to the directions



space on the lower levels, as well as space for several other projects currently being considered, such as the Student Wellness Centre, redeveloped Food Services, University of Saskatchewan Students' Union outlined in the enrolment plan and the strategic directions of the University. The University will continue to consult with the community and campus stakeholders as planning proceeds.



Several of the building projects featured in this publication are being funded in part through the Thinking the World of our Future campaign. We are grateful for the generous gifts from members of the campus community, alumni, and friends of the University of Saskatchewan in support of these new facilities.

For more information about the campaign or to make a contribution to these exciting initiatives, please go to www.usask.ca/campaign or call the campaign office at 306-966-5186.



BUILDING matters is an annual publication of the Facilities Management Division (FMD) intended to provide planning and construction activity updates on the changing face of the U of S campus. Information included in this publication was accurate as of May 1, 2006.

If you have questions or comments about this publication, call Val Szydlowski, Manager, Communications and Divisional Services, FMD, at 306-966-8844, or email val.szydlowski@usask.ca.

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