

BUILDING matters

"DREAM NOBLE DREAMS, AND BUILD WELL"

WELCOME TO BUILDING MATTERS

Welcome to *BUILDING matters*, an annual publication distributed by the Facilities Management Division (FMD) to provide planning and construction activity updates on the changing face of the University of Saskatchewan campus.

We are continually striving to improve the infrastructure, operating procedures, and services that keep the campus running efficiently. While many might not notice what's going on in the background, let me assure you, this is one busy place!

Please take a moment to review *BUILDING matters*. We hope it will provide some valuable insights into the knowledge, skills, hard work, and vision that make this one of the greatest campuses in North America.



Looking around at the hustle and bustle of planning and construction activity on campus, I am reminded of a quotation from one of U of S President Peter MacKinnon's Convocation addresses: "Dream noble dreams, and build well." As you'll see from the photos and vignettes on the following pages, we're transforming dreams into reality.

The capital and operating resources for these projects are carefully considered through the various planning processes. The continuing physical development of the campus will reflect the strategic priorities of the university and convey a sense of pride of place. We're building futures.

– **Paul Becker**
*Associate Vice-President,
Facilities Management Division,
University of Saskatchewan.*



THINKING THE WORLD OF OUR FUTURE
Campaign for the University of Saskatchewan

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.



COMPLETED CONSTRUCTION

The past few years have brought a flurry of construction activity to our vibrant campus. These changes are injecting new life into old buildings and giving birth to state-of-the-art facilities where research and learning will flourish. Among the most extensive of the recent projects was the multi-faceted Thorvaldson Project.

A succession of additions and modifications to the Thorvaldson Building began in 1998. The changes addressed issues relating to overall health and safety, increased space requirements, and improved quality of laboratories. This ambitious project eventually saw the relocation and consolidation of five major departments—Chemical Engineering, Computer Science, Chemistry, Pharmacy and Nutrition, and Biology—and the creation of a new research institution.

Construction of the new **Spinks Addition**, named for a former Department Head and University President, was completed in August 2003 at a cost of \$30M. Beneath the beautiful collegiate Gothic stone façade of this five-storey structure lies an amazing science building with 140 fume hoods and a vast high-tech infrastructure to support modern chemistry teaching and research. Three floors are dedicated to the Department of Chemistry, while the remaining two floors house a portion of the Department of Computer Science.

The renovation and refurbishment of the historic **1924 Wing** of the Thorvaldson Building brings the entire Department of Computer Science under the same roof for the first time in 20 years. Completed in December 2004 at a cost of \$7M, the restored space houses modern computer research laboratories and a variety of faculty and staff offices and support areas.

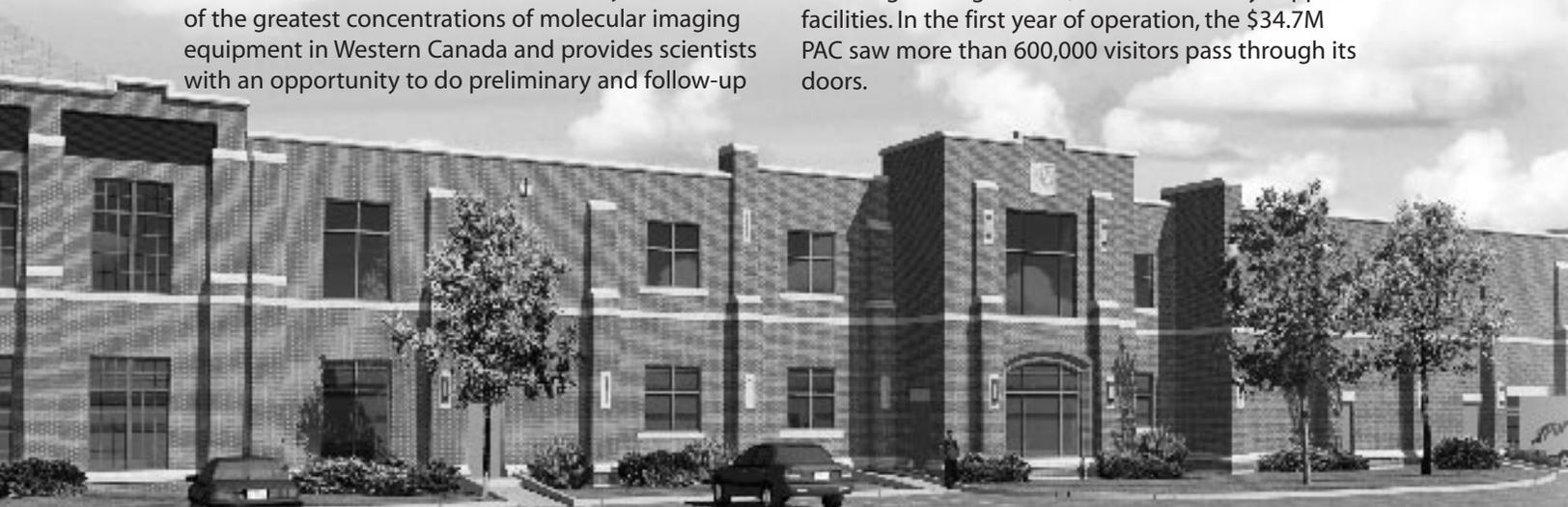
Located in the Thorvaldson Annex, the **Saskatchewan Structural Sciences Centre** (SSSC) is a multidisciplinary research centre that complements the Canadian Light Source (CLS) and will benefit researchers from universities, government, and the private sector who require structure-determination services. The \$4.6M facility houses one of the greatest concentrations of molecular imaging equipment in Western Canada and provides scientists with an opportunity to do preliminary and follow-up

research for their CLS experiments. The renovation provides a stable structural and infrastructure platform to support the more than \$7M worth of new lasers, microscopes, and X-ray equipment which will advance research in areas such as agricultural biotechnology, pharmaceuticals, materials science, environmental sciences, health sciences, and mining.

The amalgamation of Chemical Engineering with the other disciplines in the College of Engineering resulted in its relocation into the new **Chemical Engineering Addition** to the Engineering Building. Completed in 2002, the \$13.8M, two-storey building houses all teaching, research, and support spaces for the college. A final phase of construction will occur in Spring 2005 when departmental offices will be renovated.

A more publicly visible addition to the university landscape was the new **Stadium Parkade** on College Drive. It was built to address the growing parking needs in the South East Precinct as identified in the 2000 U of S Parking study. With a \$14.2M price tag, the parkade features 866 parking stalls over five levels and provides abundant parking for visitors to the campus, particularly those attending events at Griffiths Stadium and the College of Kinesiology.

The **Physical Activity Centre** (PAC) opened in August 2003. It was designed not only to house the College of Kinesiology, but to provide programs and fitness services to all U of S students, staff, and faculty, as well as to support programs offered to the general public. This three-storey building features a triple-size gymnasium, pool facilities, classroom and lecture theatres, research laboratories, fitness and weightlifting centres, and all necessary support facilities. In the first year of operation, the \$34.7M PAC saw more than 600,000 visitors pass through its doors.



A major expansion of the **Vaccine and Infectious Disease Organization** (VIDO) facility, completed in August 2003, included the construction of a three-storey laboratory complex featuring a series of open concept laboratories, offices, and meeting and conference areas. The \$14.9M project was designed to support VIDO's research into new and emerging infectious diseases and the measures to counteract these diseases for both humans and animals. An additional \$4M was spent on world-class equipment and support technologies.



PROJECT GOVERNANCE MODEL

A new project governance model for the University of Saskatchewan was approved by the Board of Governors in December 2003. Its primary objective is to assure effective planning, prioritization, approval, management, and delivery of major projects. This model will also ensure projects support, protect, and enable the strategic directions of the university.

Within the structure of this governance model, an executive sponsor, as chair of the steering committee, coordinates each project. A number of working groups, under the direction of the steering committee and project leaders, may develop specific components of the project. An academic/administrative program coordinator and physical requirement coordinators are also appointed for each project.

A project planner from the Facilities Management Division helps to define projects in principle and ensures their adherence to the strategic directions of the university. The planner also follows projects throughout their life to ensure they remain consistent with the changing planning environment in which they exist.

One of the most significant changes with the new structure is the reduction of board-approval steps from five to two—at the end of the pre-design and design phases. The project review and approval processes applied to all projects during these phases include detailed analysis of all operating costs and funding sources.

Before any project can proceed to Project Governance, it must pass the **Major Project Planning Process**. This process has four stages:

1. Project Request & Review
2. Project Pre-Planning & Brief
3. Project Approval, Review, & Decision
4. Project Governance, Full-Approvals, & Execution

For more information about Project Governance call Colleen Macdonald at 306-966-2565 or email colleen.macdonald@usask.ca.

PROJECT INCEPTION

- secure funding
- appoint executive sponsor
- assign planning and design managers
- present to Council/Committees



PRE-DESIGN

- feasibility study
- consultant selection



BOARD I APPROVAL

DESIGN

- schematic design
- provincial government approvals
- proceed to tender



BOARD II APPROVAL

CONSTRUCTION

- project under construction
- site inspections and regular reports to AVP, Board of Governance, Committees, and Executive Sponsor



POST-CONSTRUCTION

- performance checks
- coordinate occupancy

ACADEMIC HEALTH SCIENCES COMPLEX

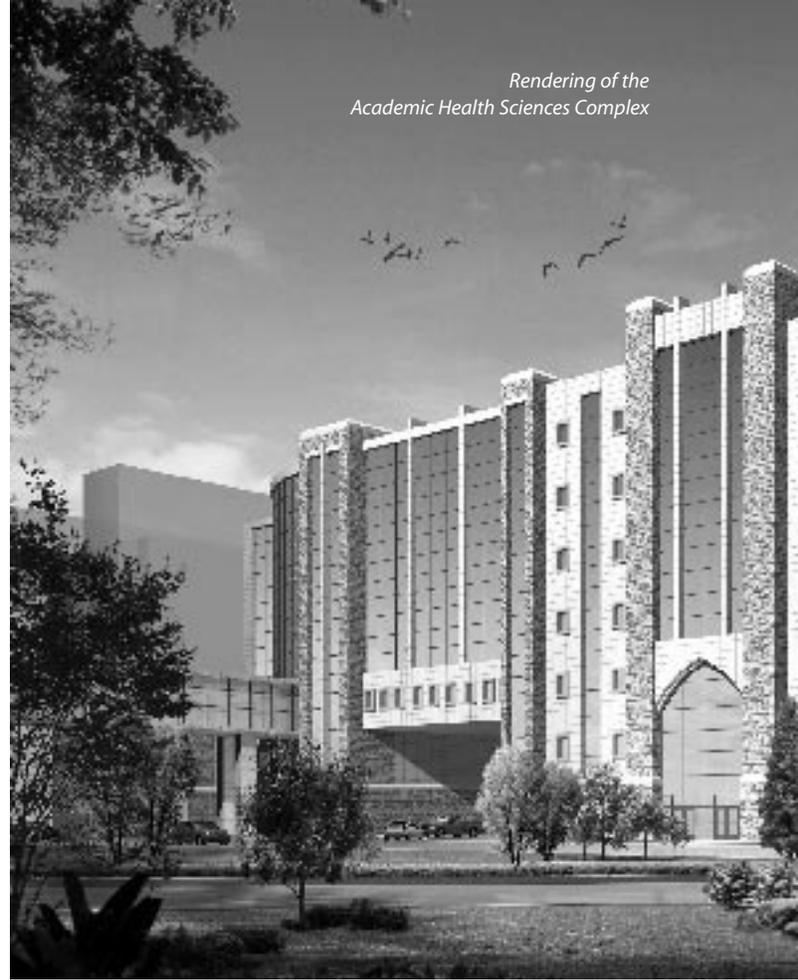
Pre-Design Phase

The proposed development of an integrated Academic Health Sciences Complex will address the need for greater interdisciplinary study, the integration of science and societal considerations, and development of stronger connections between learning, research, and practice.

In addition to replacing existing facilities that do not conform to current standards and mandatory requirements, this project will significantly reduce or eliminate current space deficiencies for the colleges of Medicine, Nursing, Dentistry, and Pharmacy and Nutrition, as well as the School of Physical Therapy.

Space will be renovated in the Health Sciences Building, Dental Clinic, and Medical Research Building for the integration of administrative offices and a classroom theatre, as well as for teaching and research laboratory functions. New construction will provide space for integrated and interdisciplinary teaching and research facilities, including an animal research facility, a clinical learning resources centre, a 500-seat lecture theatre, and a new health sciences library.

Because of the complex nature of this project, it will be completed in phases over eight years. Assuming the project is approved this spring, occupancy of some areas will be possible as early as January 2007.



RESEARCH ANNEX PHASE II

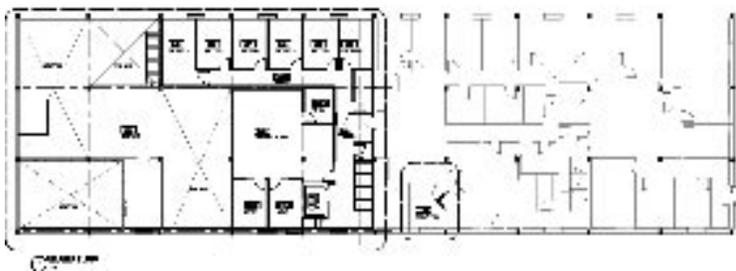
Construction Phase

Further development to the Research Annex on Maintenance Road is currently in the planning and design stages and should be ready for occupancy by September 2005.

Formally known as the SRC Annex, this building was used as a warehouse and experiment area. Because of its proximity to the campus core, where space is not readily available, the reallocation of the Research Annex will help alleviate some of the university's increasing space demands. This will be an interim measure until appropriate facilities can be developed within respective departments.

This project involves the development of the west half of the Research Annex (Phase II) and reallocation of space in a portion of the east half of the building. Renovations will create generic, interim office space equivalent to the Research Annex Phase I renovations completed in 2002. The new office space will provide affordable and flexible accommodations for various occupants over time.

A facility will also be developed in the Annex within which to relocate the Department of Art and Art History's sculpture program.



Floor plan for the Research Annex Phase II



WCVM EXPANSION AND RENOVATION

Construction Phase

In order to meet national and international accreditation standards, the Western College of Veterinary Medicine (WCVM) is in the process of expanding and renovating its facilities. 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. In addition to this \$37M project, upgrades are planned for the teaching and academic areas of the college, and the university is investigating options to replace the incinerator housed in the building.

Ensuring that the college's existing operations, the Small and Large Animal Clinics and the Prairie Diagnostic Service, can continue to function throughout construction has created a complicated schedule. The project team is using a construction management model that allows for flexibility and ongoing planning and design during the initial construction phases.

While preserving the architectural style of the building, both inside and out, this project will also make every effort to consider sustainability issues. For example, mature vegetation has been relocated from the expansion areas to the meridian of the newly constructed East Road. Many salvageable materials will be reclaimed during construction, and procurement will take environmental impacts into account.

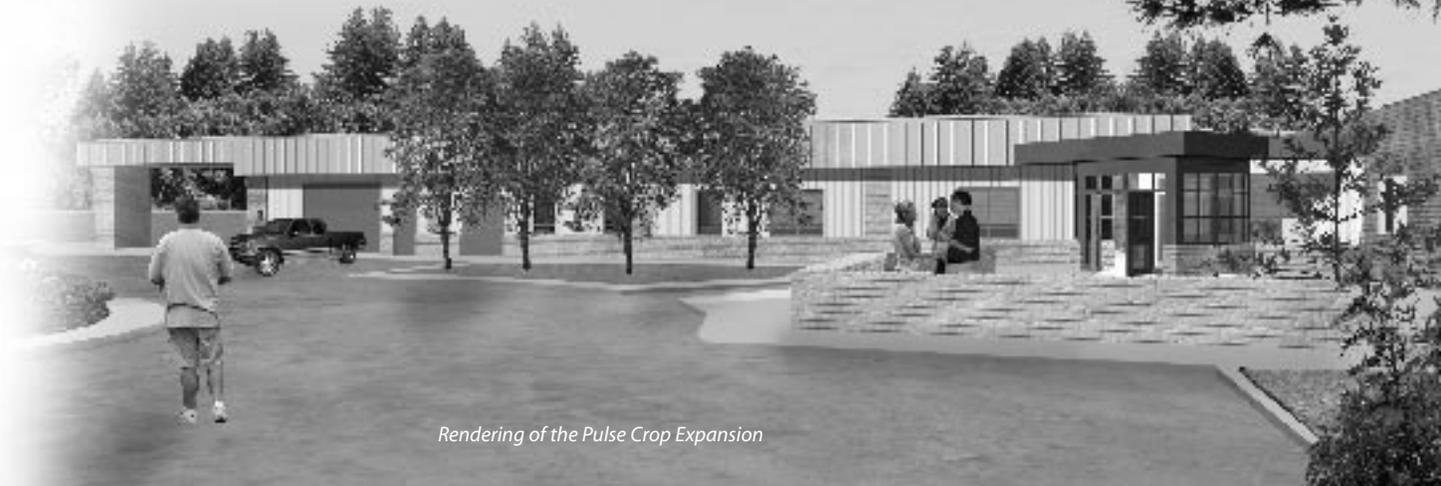
Construction began in October 2004 and the majority of the project should be completed by spring 2008.

PULSE CROP EXPANSION TO THE CROP SCIENCE FIELD LABORATORY

Construction Phase

Approximately 1,330 square metres has been added to the Crop Science Field Laboratory (CSFL) to accommodate the Crop Development Centre's pulse research program. The expansion will provide the necessary space for all aspects of the pulse breeding program, including a field laboratory for pulse crop pathology and crop physiology. The addition will also accommodate an expanded lunch/meeting room and provide additional washrooms to be shared by all CSFL staff. Funding for the \$3M project was provided by the Saskatchewan Pulse Growers. Operating costs will be assumed by the College of Agriculture.

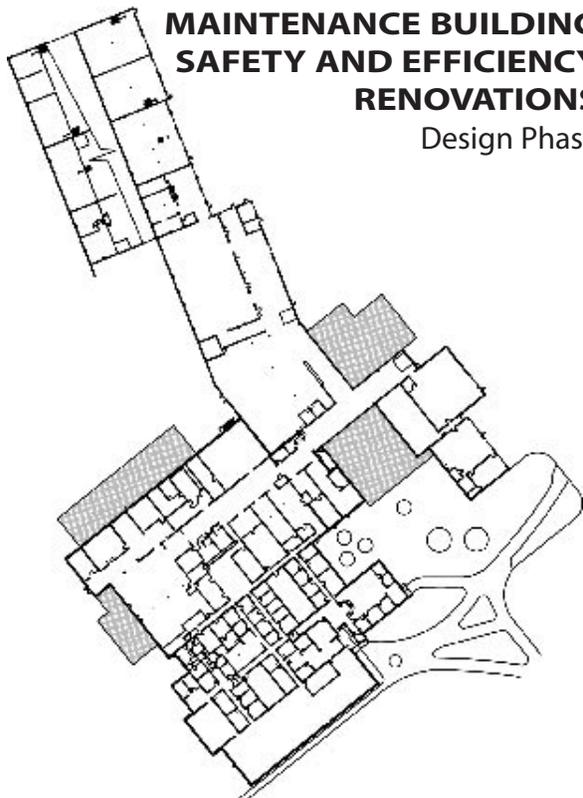
The expansion should be completed this summer.



Rendering of the Pulse Crop Expansion

MAINTENANCE BUILDING SAFETY AND EFFICIENCY RENOVATIONS

Design Phase



Skilled trades personnel are the backbone supporting the university's infrastructure. Over time, the work of these various people, and the safety regulations governing their work, have changed. To ensure their workplaces comply with new safety regulations, and to address space and layout deficiencies, the Maintenance Building will soon be overhauled. Provisions will also be made to give certain office staff access to trades personnel without putting themselves at risk.

The electrical shop addition will accommodate a well designed electrical maintenance shop with room to service all types of equipment. It will also provide proper office space for supervisors.

The north shop addition will have room for a safe, well-organized carpentry shop where the flow of material into the shop and the flow of completed work out of the shop will be more efficient.

The tool crib addition will create a central location to house tools that are common to multiple trades. It will also accommodate offices for stores staff and bring vital support personnel closer to the stores area.

With more space made available by these additions, existing shops will be renovated to provide office space for trades supervisors. The reallocation of space will also assist in situating trades who work together frequently in closer proximity to each other and will allow for the consolidation of some material and equipment.

COLLEGE BUILDING RESTORATION AND RENOVATION

Construction Phase

The College Building, one of the first to grace the campus, is still a landmark. In fact, it has been designated a provincial heritage site and a national historic site. After being closed for several years, work is now well underway to restore the building to its original glory.

This \$20.5M restoration, renovation, and expansion project will soon accommodate Student and Enrolment Services programming, including Recruitment and Admissions, Student Record Services, Student Financial Aid, Disability Services for Students, and a three-storey atrium that will house Student Central.

The restored building will also be home to a number of cultural facilities, such as the Museum of Antiquities and the university art collection, complete with administrative offices and two new galleries.

University governance will be located on the first floor, which will include a

COLLEGE OF LAW EXPANSION

Pre-Design Phase

Major projects arise from a number of sources, including the colleges themselves. The College of Law initiated the construction of an addition to support the college's teaching activity and transform its library. The 1,160 square metre expansion could potentially create new classroom space, a research laboratory, academic and administrative offices, student space, and house the Native Law Centre (currently in the Diefenbaker Centre). The renovations would also improve overall building accessibility and utilization.

This project is still in the planning stage with a desired completion date of August 2007.

UNIVERSITY NEIGHBOURHOOD

Pre-Design Phase

Additional student housing is needed on campus to address the current shortage, as well as to assist in the recruitment and retention of undergraduate and graduate students.

Currently in the pre-design phase, discussions include the development of space for 600 to 1,100 beds, in addition to the retention of some or all of the existing core campus residences. This new University Neighbourhood will likely be located near the corner of Cumberland Avenue and College Drive in the South Campus precinct.

The university is considering four- to six-storey buildings, all interconnected, with a grade-separated link across College Drive. These would house dormitory and apartment-style accommodations as well as food services venues. It is hoped that consolidation of residences, food services, and the bookstore will also address other space issues in the campus core.

Some occupancy is projected for fall 2008.

new Board of Governors boardroom. Other spaces include an emeriti and retirees reading room and a social centre/green room.

Convocation Hall will be restored, complete with its original skylight, and will be the new home of the University of Saskatchewan's Amati instruments.

This project will be completed this summer.

ABORIGINAL STUDENT SPACE

Pre-Design Phase

The long-awaited development of an Aboriginal Student Space, funded largely through a donation from NOVA Chemicals, is now well underway. The facility will provide space for a lounge, a resource room, a computer lab, student offices, and an Aboriginal Student Centre, which will house Elders and administrative staff.

The vision for this project is to provide resources and student

amenities for Aboriginal students, while engendering knowledge and understanding of Aboriginal history and culture for non-Aboriginal students and the campus community.

The chosen site for the project is Wiggins Court, between the Murray Library and the Arts Tower. The 1,010 square metre facility will be accessible from a public entrance in Lower Place Riel and the Arts Tunnel.



INTERVAC Pre-Design Phase

Fifty percent of all human diseases, and 79 percent of new or re-emerging diseases, have a link to animals.

The new International Vaccine Centre (InterVac) will assist in both animal and human health research on current and emerging infectious diseases. It is being developed collaboratively by the Vaccine and Infectious Disease Organization (VIDO), the College of Medicine, and the Western College of Veterinary Medicine. When it is completed in 2009, the bio-containment facility will be one of the largest vaccine research laboratories in North America.

A containment facility of this nature requires strict monitoring of all areas of its construction,

certification, and operation. As a result, much of the facility will be used for complex building support systems, such as HEPA filtration systems to ensure a safe workplace for staff in the facility and for the surrounding environment, and disposal technologies for liquid and solid waste from the facility.

Located in the Research South precinct, between the Canadian Food Inspection Agency (CFIA) facility and the POS Pilot Plant, the facility will be connected to the existing VIDO facility via an overhead link.

POTENTIAL CAPITAL CAMPAIGN PROJECTS

On an preliminary basis, the University of Saskatchewan is currently assessing and considering various potential major capital projects that will be vetted through the Major Project Planning Process. These include Campus Core Revitalization, the

University of Saskatchewan Students' Union (USSU) Centre expansion, the Murray Building–Main Library transformation, the Fine and Performing Arts Centre, and Griffiths Stadium expansion.



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 April 1, 2005.

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