

UNIVERSITY OF MINNESOTA

BOARD OF REGENTS

Facilities Committee

Thursday, December 13, 2007

2:30 – 4:00 p.m.

600 McNamara Alumni Center, West Committee Room

Committee Members

David Metzen, Chair
Dallas Bohnsack, Vice Chair
Anthony Baraga
Maureen Cisneros
David Larson
Patricia Simmons

Student Representatives

Jim Irrgang
Nathan Olson

A G E N D A

1. Schematic Plans - Review/Action - K. O'Brien/K. Martin (pp. 2-8)
 - A. Civil Engineering Building, Duluth Campus
2. Update: Twin Cities Campus Master Plan – K. O'Brien/J. Martin (pp. 9-10)
3. Consent Report - Review/Action - K. O'Brien (p. 11)
4. Information Items - K. O'Brien (p. 12)



**UNIVERSITY OF MINNESOTA
BOARD OF REGENTS**

Facilities Committee

December 13, 2007

Agenda Item: Schematic Plans

review review/action action discussion

Presenters: Vice President Kathleen O'Brien
Chancellor Kathryn A. Martin

Purpose:

policy background/context oversight strategic positioning

In accordance with Board of Regents Policy: *Reservation and Delegation of Authority*, review and take action on schematic plans for the Civil Engineering Building on the Duluth campus.

Outline of Key Points/Policy Issues:

The project schematic plans will be presented at the committee meeting. The attached project data sheet addresses the basis for request, project scope, cost estimate, funding, and schedule. A map locating the facility on the campus is also attached.

Civil Engineering Building

The College of Science and Engineering identified several reasons for adding a Civil Engineering program at the University of Minnesota Duluth:

- Demand for civil engineers by Duluth regional industries and public agencies;
- The loss of civil engineering students who leave the state to attend out-of-state universities and who never return;
- Proven track record of UMD's current Engineering programs to supply successful engineers at the undergraduate and graduate levels to local, regional, national and international organizations.

The objective of the Civil Engineering program is to produce graduates qualified for employment in a wide variety of organizations, both public and private, including design, material testing and manufacturing, construction, transportation, natural resources development and energy.

Background Information:

The project was included in the 2007 Six-Year Capital Plan approved by the Board of Regents in May 2007.

Planning and design funds in the amount of \$1,500,000 for the project are included 2008 Capital Budget approved by the Board of Regents in June 2007.

The 2008 State Capital Request approved by the Board of Regents in October 2007 includes \$10,000,000 for the project. The State Capital Request will be matched with a \$3,000,000 gift from the James I. Swenson Family plus \$2,000,000 from Duluth Administration Resources.

If funded the project will be included in the Fiscal Year 2009 Capital Budget scheduled for Board of Regents approval in June 2008.

President's Recommendation for Action:

The President recommends approval of the schematic plans and of the appropriate administrative officers proceeding with the award of contracts for the development of construction documents and construction for the Civil Engineering Building on the Duluth campus.

**Civil Engineering Building
Duluth Campus
Project No. 03-535-07-1330, Capital Budget No. 2933**

1. Basis for Request:

The College of Science and Engineering identified several reasons for adding a Civil Engineering program at University of Minnesota Duluth:

- Demand for civil engineers by Duluth regional industries and public agencies;
- The loss of civil engineering students who leave the state to attend out-of-state universities and who never return;
- Proven track record of UMD's current Engineering programs to supply successful engineers at the undergraduate and graduate levels to local, regional, national and international organizations.

The objective of the Civil Engineering program is to produce graduates qualified for employment in a wide variety of organizations, both public and private, including design, material testing and manufacture, construction, transportation, natural resources development, and energy.

The Bachelor of Science in Civil Engineering (BSCE) program is a natural expansion for the UMD Engineering program and will fill a need among companies and communities across Northern Minnesota. The BSCE compliments the existing strengths in mechanical design found in UMD's Bachelor of Sciences in Mechanical Engineering and Industrial Engineering programs while complementing the fluid mechanics, heat transfer and controlled chemical systems aspects of the Bachelor of Science in Chemical Engineering within the College of Science and Engineering. Additionally, it will provide needed skills for the core business of mining and infrastructural maintenance this is essential to a healthy and viable environment and economy for northern Minnesota.

2. Scope of Project:

The project is a two-story addition of Voss-Kovach Hall located at 1305 Ordean Court on the University of Minnesota Duluth campus. The proposed construction is approximately 33,300 gross square feet and wraps around the northwest and northeast sides of the Voss-Kovach Hall is being designed to achieve LEED Silver certification.

The new Civil Engineering Building builds on and reinforces the existing circulation patterns that are part of the UMD campus. The building creates two new entrances into campus. The primary entrance is located at the east corner of the building and replaces one of the entries to Voss Kovach Hall. The other entrance is at the intersection of Library Circle and Library Drive. In addition, the new construction creates a loop connecting the new addition to both Voss-Kovach Hall and the Engineering Building greatly improving circulation at the northeast end of campus.

The architectural program identified the teaching, laboratory, and administrative space needs to support the new Civil Engineering program, as follows.

CIVIL ENGINEERING		QUANTITY	NET SQUARE FEET	
			EACH	TOTAL
ASSIGNABLE SQUARE FEET (ASF)				
A	Faculty			
	Faculty Offices	10	120	1,200
B	Staff			
	Department Head	1	120	120
	Administrative Office	1	360	360
	Work Room	1	90	90
	Conference Room	1	300	300
C	Research			
	Graduate Students	2	300	600
	Instructor/Post Doctoral	4	240	960
D	Instructional			
	Classrooms	2	1,280	2,560
	Structural Laboratory	1	1,500	1,500
	Hydraulic Power/Control Room	1	100	100
	Hydraulics Laboratory	1	6,000	6,000
	General Project Laboratory	1	2,400	2,400
	Transportation Laboratory	1	1,000	1,000
	Soils Laboratories	1	600	600
	Construction Material Laboratory	1	900	900
	Climate Material Laboratory	1	150	150
	Laboratory Storage	1	498	498
	Survey Instruments	1	150	150
	Model Shop	1	600	600
ASF SUBTOTAL				20,088

The hydraulics/general projects laboratory and the structures laboratory are two story spaces that all require ceiling heights of 20+ feet.

In addition, the building contains approximately 13,200 square feet devoted to building support spaces, such as custodial, mechanical, electrical, and telecommunication rooms, restrooms, as well as circulation. The building is designed with a 60 percent efficiency factor typical for laboratory teaching facilities.

The Civil Engineering Building is intended to highlight construction systems and site systems related to the field of study. The exterior of the building was developed in response to:

- Using exterior materials that are part of the existing campus buildings
- Using locally available materials from excavation and mining industry in the area (taconite, copper)
- Displaying structural construction systems (cast in place concrete, metal trusses, precast concrete elements)
- Displaying site drainage and storm water management as part of the education piece (scupper, permeable pavers, French drain)
- Maintaining a connection to the outdoors
- Retaining usable wall space within the teaching laboratories

The exterior materials include:

- Gabion “cages” filled with rock and stone excavated locally – ie taconite (for the French Drain system)
- High performance curtainwall system
- High performance windows
- Cor-ten steel cladding system over CMU backing)
- Cast-in-place and precast concrete

In addition, the building displays several stormwater and sustainable building strategies including an intensive green roof, an extensive green roof and a reflective roof. The landscape design for the project focuses on on-site stormwater infiltration via stormwater gardens that use plant materials and stone native to northern Minnesota. The design will include a French Drain for storm-water retention on the north side of the building. This area will retain stormwater from the site as well as from the building roof.

3. Variance to the Master Plan or Precinct/District Plan:

The project is consistent with the 2000 Duluth Campus Master Plan.

4. Environmental Issues:

A stormwater pollution prevention plan will be developed to protect the West Branch of Ticsher Creek watershed and Oregon Creek watershed. The project will include a sedimentation and erosion control plan to reduce pollution by controlling waterway sedimentation.

Asbestos and lead-based paint will be abated in those parts of the existing Voss-Kovach Hall that are impacted by construction of the addition.

5. Cost Estimate:

Construction Cost	\$12,500,000
Non Construction Cost	<u>2,500,000</u>
Total Project Cost	\$15,000,000

6. Capital Funding:

2008 State Capital Request	\$10,000,000
James I. Swenson Family	3,000,000
Duluth Administration Resources	<u>2,000,000</u>
Total Capital Funding	\$15,000,000

7. Capital Budget Approvals:

In anticipation of a 2008 Legislative Appropriation for the project, the capital budget for the project will be included in the FY2009 Capital Budget.

8. Annual Operating and Maintenance Cost and Source of Revenue:

Annual operating and maintenance cost are anticipated to be \$437,000 in Fiscal Year 2011 when the addition is expected to open.

9. Time Schedule:

Complete working drawings	May 2008
Advertise for bids	June 2008
Receive bids	July 2008
Award contracts	August 2008
Begin construction	September 2008
Complete construction	January 2010

The project delivery method is design/bid/build.

10. Architect:

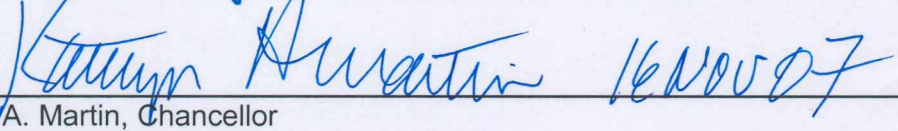
Architect-of-Record: Stanius Johnson Architect, Duluth, MN
Design Architect: Ross Barney Architects, Chicago, IL

11. Recommendation:

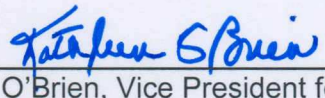
The above described project scope of work, cost, funding, and schedule is appropriate:

 11/30/07

Richard Pfitzenreuter, Vice President and Chief Financial Officer

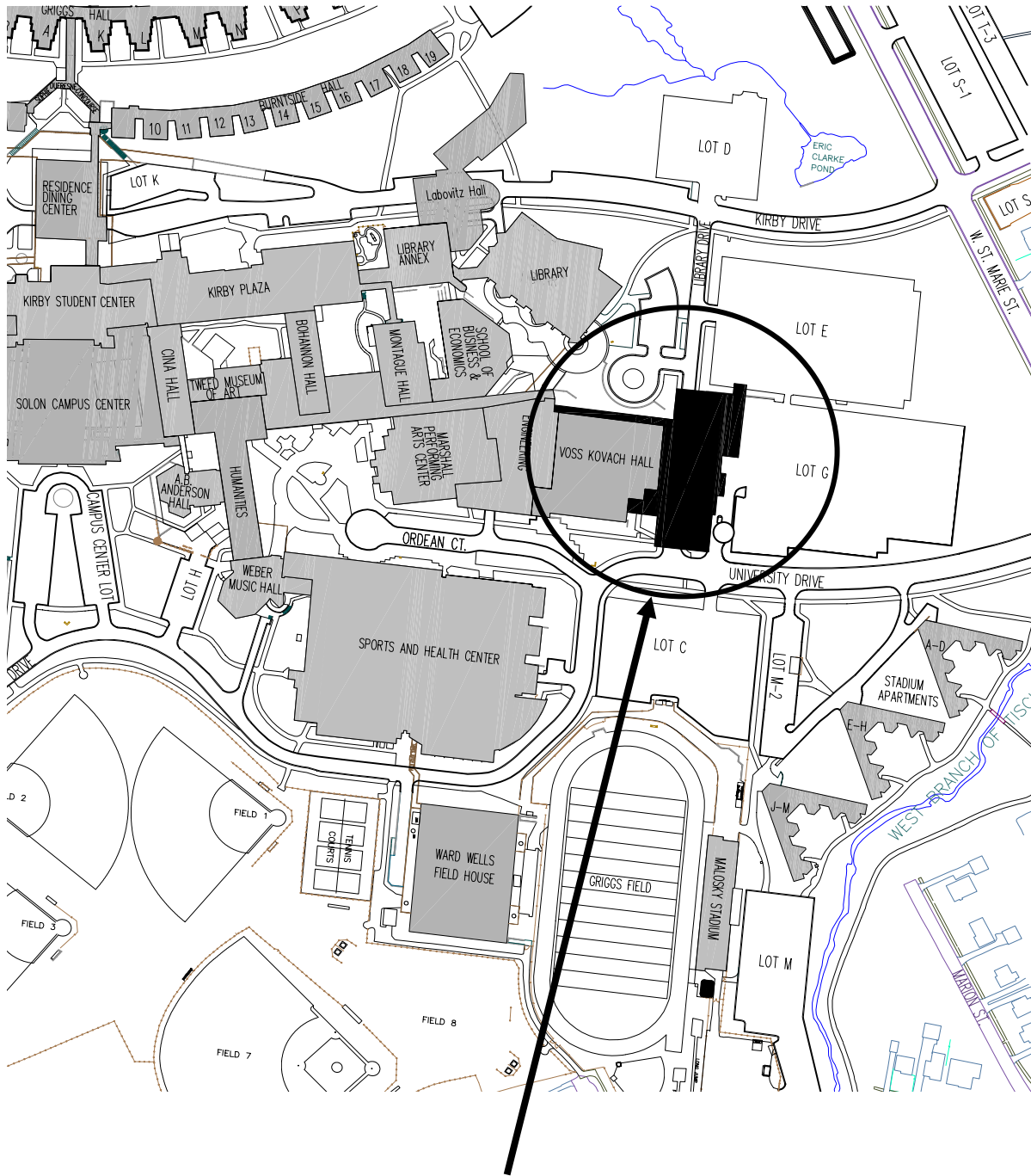
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Kathryn A. Martin, Chancellor

 11/29/07

Kathleen O'Brien, Vice President for University Services

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**CIVIL ENGINEERING BUILDING
UNIVERSITY OF MINNESOTA DULUTH**



UNIVERSITY OF MINNESOTA BOARD OF REGENTS

Facilities Committee

December 13, 2007

Agenda Item: Update: Twin Cities Campus Master Plan

review review/action action discussion

Presenters: Vice President Kathleen O'Brien
Professor Judith Martin

Purpose:

policy background/context oversight strategic positioning

To update the Board as to the University's progress in updating the Twin Cities Campus Master Plan.

Outline of Key Points/Policy Issues:

In accordance with Board of Regents policy, the approval of campus master plans is reserved by the Board. Such master plans for the physical campus are driven by the University's academic program.

In September 1996, the Board of Regents approved *A Livable Campus: University of Minnesota Twin Cities Campus Master Plan*, and directed that it be used to guide the future development of the campus. The policy components of 1996 Master Plan consist of guiding principles, structure plan elements and associated policies, and precinct plans. This plan is now ten years old and is in need of revisiting and updating.

In February 2006, President Bruininks convened a faculty/staff steering committee, co-chaired by Vice President Kathleen O'Brien and Professor Judith Martin to begin the process of updating the 1996 Master Plan. The steering committee was charged with considering the following key issues as part of their work:

1. Align and integrate the Master Plan with University core processes such as strategic positioning, academic planning, and funding;
2. Take full advantage of the major initiatives scheduled for the next decade;
3. Focus on "growing a campus" rather than building buildings;
4. Instill the principles of sustainability, so that the new plan leaves the campus better for future students, staff, and faculty;
5. Optimize the distinction of being the largest research University that bridges the Mississippi River; and
6. Increase ownership of the Master Plan by the University community, and ensure broad and meaningful consultation with key constituencies.

In February 2007, the Steering Committee established the following five work teams, based upon the guiding principles of the 1996 plan, to update components of the plan:

- Enhancing the Campus
- Natural Features and Open Spaces
- Movement and Access
- Community Connections, Collaborative Ventures, and Safety
- Design and Preservation

These teams, consisting of faculty, staff, students and other key stakeholders are working to develop components of the plan. Rather than utilizing a national consulting firm to develop the plan as in 1996, the University is using internal expertise to develop the recommended policies and guidelines. The work teams have conducted campus-wide forums and engaged stakeholders in listening sessions to receive input into the process.

The following is the timeline for completing the work:

February 1, 2007	Kick off the work of the work teams
Winter – Summer 2007	Work teams explore issues; consult with stakeholders; refine work plans; review with Steering Committee
Spring 2007	Facilities Committee update Open Forums
Fall 2007 –Spring 2008	Teams continue work as necessary Community Connections team listening sessions Steering Committee coordinates work of the teams Facilities Committee update
Spring – Summer 2008	Steering Committee pulls work of the teams together into draft update; update Board of Regents
Fall 2008	Final consultation with key constituencies.
Winter 2008	Review with and seek approval of Board of Regents

Background Information:

Per Board of Regents Reservation and Delegation of Authority, section VIII, subdivision 4, "The Board reserves to itself authority to approve campus master plans and amendments thereto."

In 1992 the Chair of the Board of Regents and the President of the University appointed a Master Plan Steering Committee to "design and recommend a set of principles which will discipline and inspire the development of a master planning process."

In 1993, the Board of Regents adopted the following four Campus Master Planning principles as developed by the Master Plan Steering Committee:

- The principle of creating and maintaining a distinctive and aspiring vision for the physical development of each campus;
- The principle of enriching the experience of all who come to the campus;
- The principle of maximizing the value of existing physical assets while responding to emerging/changing physical needs;
- The principle of an inclusive, accountable, and timely process for creating and implementing a master plan vision.

In September 1996, the Board of Regents adopted a resolution directing the campus master plans reviewed earlier in the year to be used to "guide the future development of the campuses in accordance with the four planning principles and the policies, procedures, and strategies therein will be the basis for all future master planning decisions."

Since June 2006, the Facilities Committee has received periodic updates as to the progress of the process to update the campus plan.

This agenda item corresponds with the following priority on the 2007-2009 Board of Regents Workplan – Thinking Long Term: Concentrate on the vision for the University's future, including its role as a regional and statewide resource.



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Facilities Committee

December 13, 2007

Agenda Item: Consent Report

review review/action action discussion

Presenters: Vice President Kathleen O'Brien

Purpose:

policy background/context oversight strategic positioning

Outline of Key Points/Policy Issues:

There are no consent items this month.

Background Information:



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December 13, 2007

Agenda Item: Information Items

review review/action action discussion

Presenters: Vice President Kathleen O'Brien

Purpose:

policy background/context oversight strategic positioning

Outline of Key Points/Policy Issues:

There are no information items this month.

Background Information:

Information items are intended to provide the Board of Regents with information needed for them to perform their oversight responsibilities.