

MEMORANDUM

To: Board of Regents

From: Board Office

Subject: Register of Iowa State University Capital Improvement Business Transactions for Period of April 19, 2002, Through May 16, 2002

Date: May 6, 2002

Recommended Action:

Approve the Register of Capital Improvement Business Transactions for Iowa State University.

Executive Summary:

Requested
Approvals

Permission to proceed with project planning:

Environmental Health and Safety/Regulated Materials Facility

project which would construct a new facility in the West Pammel Court area to consolidate the University's Environmental Health and Safety regulated materials handling operations, laboratories, offices, and classroom space (see page 3).

MacKay Hall—Food Science and Human Nutrition Laboratory Renovation—Phase 3 project which would complete the upgrade of the laboratory areas to provide modern instructional facilities (see page 6).

Union Drive—Suite Building 2 project which would construct the second of three suite-style residence facilities for the Union Drive Neighborhood (see page 7).

- Approval is subject to resolution of the issues raised at the April Board meeting relative to residence system rate increases.

Project description and budget for the **Curtiss Hall—Elevator Modernization** project (\$300,000) which would upgrade the elevator to comply with current building codes (see page 10).

Architect/engineer agreements with:

RDG Sports, Des Moines, Iowa (\$678,650) for the **Indoor Multipurpose Use and Training Facility** project which would construct a facility near Jack Trice Stadium to provide additional space to accommodate a number of University and community activities, including athletic programs (see page 11).

Alvine and Associates, Omaha, Nebraska/Iowa City, Iowa (\$340,000) for the **Telecommunications—Inside Plant Systems Upgrade—Phase 3** project which would continue telecommunications upgrades for 18 additional campus buildings (see page 12).

Lerch Bates and Associates, Minneapolis, Minnesota, for the **Pearson Hall—Replace Elevator** project (\$25,700) and the **College of Design—Elevator Modernization** project (\$24,500), which would upgrade the elevators to comply with current building codes (see pages 13 and 14).

Architectural Amendment #5 (\$85,637) with Brooks Borg and Skiles, Des Moines, Iowa, for the **Beardshear Hall Remodeling** project which would provide for a number of design modifications and design services for an expanded project scope (see page 15).

Background and Analysis:

Environmental Health and Safety/Regulated Materials Facility

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		May 2002	Requested

Background

The University's regulated materials are currently managed at the 6,750 square foot Chemical Waste Handling Facility (CWHF) located on North Scholl Road near the Applied Sciences Complex northwest of the main campus. (See Attachment A for map.)

The CWHF was constructed primarily as a storage facility in two phases (1979 and 1985), and therefore it does not have appropriate containment, ventilation, spill control and other features that have subsequently become regulatory requirements for this type of facility.

The facility has a number of fire and life safety and environmental deficiencies that require corrective action.

- The fire safety deficiencies include an inadequate fire suppression system; the absence of a sprinkler water collection system, chemical hazard segregation, and spark-proof electrical system; and a leaking roof in a building storing water reactive chemicals.
 - The 1999 State Fire Marshal's report strongly recommended construction of a new waste handling facility, since the modifications required to bring the existing facility up to current fire codes would be too numerous and cost prohibitive.
- The life safety deficiencies include inadequate ventilation; lack of climate control; inadequate locker, restroom and shower facilities; and the absence of a secondary building exit for emergency response vehicles.
- The environmental deficiencies relate to the manifesting requirements of the Environmental Protection Agency (EPA), which strictly regulates hazardous waste management.
 - Because the CWHF is located on property that is not contiguous with the main campus, the University must generate a Uniform Hazardous Waste Manifest prior to transporting waste materials to the facility.
 - The University has received notices of violations from the EPA

following review of these manifests.

The University's Environmental Health and Safety functions are currently scattered over several University locations, resulting in numerous inefficiencies.

Project Scope

The project would construct a facility of approximately 41,500 gross square feet to house all Environmental Health and Safety staff and facilities for processing and storing hazardous waste materials for all on-campus, extension and research farm activities of the University.

The facility would include the Department of Environmental Health and Safety staff offices, administrative support laboratories, shop and classroom space, and regulated materials operations.

- One location would provide program and cost efficiencies and would free up space which could be more effectively utilized for the University's academic programs.
- The consolidation of these functions in one facility would require the design of certain safety features, such as fire walls and doors, to provide proper separation between the office areas and the waste management operations.
- Key building features for the regulated materials handling operations component would include spill and fire water containment; an enclosed loading dock for most material receiving and shipping; explosion relief panel (which would direct an explosion away from a populated area); high density sprinkler systems; specialized ventilation system; emergency power system; and building access control system.

The proposed project scope is based on a November 2001 feasibility study completed by Rietz Consultants.

Proposed Project Site	<p>The proposed site for the facility is located in the West Pammel Court area in the University's north campus. (See Attachment B for map.)</p> <ul style="list-style-type: none">• This area was selected due to its proximity to the main campus and major traffic routes.• Construction of a new facility on the main campus would eliminate the need for EPA-required manifesting.• The University reports that the building design parameters and quantity shipping limitations would allow the facility to be operated within an acceptable risk to the neighboring campus facilities.• The proposed location is in general conformity with the University's 2000 campus master plan update, which recommends the location of new research facilities on the campus perimeter.• The University envisions that the character of the building would be consistent with the buildings currently existing or planned for the area including the Administrative Services and Library Storage buildings, and the Extension 4-H Youth Building.• Proposed site improvements would be limited to areas immediately adjacent to the building and would include the extension of Daley Drive to the west, and the development of secondary access roads to serve the facility.• The new facility would be served by the existing utilities in the area and would be connected to campus steam and chilled water when available at a future date.
Anticipated Cost	\$10,000,000.
Anticipated Funding	<p>A combination of Overhead Use of Facilities funds and revenue bonds.</p> <ul style="list-style-type: none">• The University anticipates that an enterprise-type operation, which charges operating units for waste handling and other services, would be established to meet the debt service requirements of the bonds.• The University will work with the Board's bond and legal counsel and Board Office staff to determine an adequate operating and financial plan for the project.• The Board Office recommends that the University report to the Board on the financing plan for the project prior to or with the presentation of the program document.

MacKay Hall—Food Science and Human Nutrition Laboratory Renovation—Phase 3

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		May 2002	Requested

Background	<p>The University has undertaken the first two phases of work to upgrade the antiquated space in the Food Science and Human Nutrition Laboratory in MacKay Hall.</p> <ul style="list-style-type: none"> The Laboratory is located in the west wing of MacKay Hall, which was constructed in 1911; the last major renovation of the building occurred in the 1950s. <p>Work has included the remodeling of two laboratories and associated support spaces, and the installation of new heating, ventilating and air conditioning systems, and kitchen and telecommunications equipment.</p> <p>The improvements were based on a 1997 feasibility study which indicated the need to renovate the laboratory areas to provide modern, safe teaching facilities, utilizing state-of-the-art equipment and teaching technologies.</p> <p>The University has been proceeding with the project in phases as funding has become available.</p>
Project Scope	<p>The Phase 3 project, the final phase of the laboratory renovation, would remodel approximately 5,500 gross square feet of teaching, research and support space on the second floor of MacKay Hall.</p>
Anticipated Cost	<p>\$1,100,000.</p>
Funding	<p>General University Funds, Private Giving, and/or Agriculture Experiment Station.</p>

Union Drive Neighborhood

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		Feb. 1999	Approved
Agreement for Validation of Master Plan, Development of Building Program and Schematic Design (Baldwin White Architects, Des Moines, IA)	\$ 1,142,000	July 1999	Approved
<u>Suite Building 1 and Utility Infrastructure</u>			
Design Development through Construction— Suite Building 1 (Baldwin White Architects)	1,070,000	Nov. 2000	Approved
Engineering Agreement—Utility Infrastructure (Baldwin White Architects)	544,500	Nov. 2000	Approved
Program Statement and Design Documents		Dec. 2000	Approved
Project Description and Total Budget	23,716,200	Dec. 2000	Approved
Construction Contract Award— (Henkel Construction Company)	16,447,400	March 2001	Ratified
Architectural Amendment #1 (Baldwin White Architects)	55,592	Jan. 2002	Approved
<u>Community Center</u>			
Architectural Agreement (Baldwin White Architects)	1,140,250	Nov. 2000	Approved
Program Statement and Design Documents		Dec. 2000	Approved
Project Description and Total Budget	15,000,000	Dec. 2000	Approved
Revised Design Documents		Oct. 2001	Approved
Revised Total Project Budget	15,440,000	Oct. 2001	Approved
Architectural Amendment #1 (Baldwin White Architects)	250,000	May 2001	Approved
Architectural Amendment #2 (Baldwin White Architects)	55,000	April 2002	Approved
<u>Suite Building 2</u>			
Permission to Proceed		April 2002	Deferred
Permission to Proceed		May 2002	Requested

April 2002 Board Meeting The Board deferred granting permission to proceed with the Suite Building 2 project at the April 2002 meeting, subject to the resolution of issues related to residence system rate increases.

A meeting to discuss these issues with Board members, University officials, and Board Office staff, was held on Friday, May 3.

A report of this meeting, and the status of the project as it relates to these issues, will be made at the May Board meeting.

Background Development of the Union Drive Neighborhood, as envisioned by the University, includes the construction of three suite-style residence halls, each housing 320 students, and a Community Center facility, in the southwest area of campus. Renovations to Friley Hall would also occur after completion of new construction.

The Phase 1 project includes:

- Suite Building 1, a four story, 320 bed suite-style residential facility of approximately 84,000 gross square feet.
 - The facility is currently under construction and is expected to be completed for occupancy by the fall 2002 semester.
- Community Center, a three-story facility of approximately 58,900 gross square feet featuring a multiple service point food service and dining area and community-centered program space to serve the needs of the Union Drive Neighborhood.
 - The University plans to begin construction of the facility in the summer of 2002; the estimated completion date is winter 2003.
- Extensive utility and infrastructure improvements to serve the new facilities in the area.

Suite Building 2 The University now wishes to proceed with the first component of the Phase 2 project, construction of Suite Building 2.

The project would construct a second, four-story, 320 bed suite-style residential facility of approximately 84,000 gross square feet.

- The residential suites would consist of two double occupancy bedrooms that share a common bathroom.
- The facility would also provide residential staff housing, dens, kitchenettes, study space, laundry rooms, trash rooms, conference and computer rooms.

Suite Building 2 would be constructed on the site directly south of Suite Building 1. (See Attachment C for map.)

Project Schedule The University plans to begin construction of the facility in the spring of 2003; the estimated completion date is June 2004.

- The University reports that this schedule has been coordinated with the other Union Drive construction projects.
 - Construction of the Community Center is expected to be essentially complete when construction of Suite Building 2 is initiated.

Anticipated Cost \$16,300,000.

Funding Residence System Revenue Bonds.

Curtiss Hall—Elevator Modernization

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 300,000	May 2002	Requested

Background	The Curtiss Hall elevator, which was installed in 1978, has a number of code deficiencies.		
Project Scope	The project would rebuild the elevator cab and make other repairs for conformance with current building codes.		
Funding	Building Repair Funds.		
Additional Information	Permission to proceed with the project is not required since the project budget does not exceed \$1 million.		

Project Budget

Construction Cost	\$ 226,680
Professional Fees	63,470
Contingency	<u>9,850</u>
TOTAL	<u>\$ 300,000</u>

Indoor Multipurpose Use and Training Facility

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		Jan. 2002	Approved
Architectural Agreement—Pre-Design Through Construction Phase Design Services (RDG Sports, Des Moines, IA)	\$ 678,650	May 2002	Requested

Background Iowa State University wishes to construct an indoor multipurpose use, training and practice facility for use by a number of University, student, community, and state activities, including varsity football and other field-sports programs.

The proposed facility would include:

- 92,000 gross square feet of space with a regulation-size NCAA football field and appropriate safety zones with artificial turf.
- A portable flooring system to accommodate large events such as pre- and post-game events for up to 6,000 people, job fairs, convocations and graduations, Veishea events, Iowa Games, Special Olympics, and Shrine Bowl.

The estimated project cost is approximately \$9 million, with anticipated funding from private gifts.

Project Site The facility would be located in the general proximity of Jack Trice Stadium, possibly over the existing artificial turf practice field located west of Parking Lot 85; the specific location would be finalized during project planning.

Project Design The exterior would be designed to minimize the visual impact of the space and to be compatible with existing building forms in the stadium complex and adjacent residential neighborhood.

Design Services Expressions of interest to provide design services for the project were received from 15 firms.

Five firms were selected for interviews with the University Architectural Selection Committee, in accordance with Board procedures for projects of \$1 million or more.

The University recommends the selection of RDG Sports, Des Moines, Iowa, to provide design services for the project.

The firm was selected based on its excellent understanding of the key

issues associated with the project, its team management and design creativity, and its extensive successful experience on University projects. The architectural agreement with RDG Sports would provide full design services for a fee of \$678,650, including reimbursables.

Telecommunications—Inside Plant Systems Upgrade—Phase 3

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 4,200,000	March 2002	Approved
Engineering Agreement—Pre-Design through Construction Phase Design Services (Alvine and Associates, Omaha, NE/ Iowa City, IA)	340,000	May 2002	Requested

Background The University is undertaking the upgrade of the communications infrastructure in a number of campus buildings.

The work includes correction of various deficiencies such as the location of equipment entrances into the buildings, system security issues, outdated wiring that will not support current technology, and the lack of video and backup power systems.

The University has identified and prioritized the various deficiencies associated with the communications infrastructure for each campus building, with the work to be undertaken as funding is available.

The Phase 3 project would address 18 campus buildings and would replace voice and data cables, renovate equipment rooms to comply with current industry standards, and provide environmental systems, security access controls, raceway systems, and outlets.

Funding Telecommunications Improvement and Extension Funds.

Design Services The engineering agreement with Alvine and Associates would provide full design services for a fee of \$340,000, including reimbursables.

Alvine and Associates has provided engineering services for the previous two phases of the project. The Phase 2 design team will be used for this project.

Pearson Hall—Replace Elevator

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 399,070	April 2002	Approved
Engineering Agreement—Pre-design through Construction Phase Design Services (Lerch Bates and Associates, Minneapolis, MN)	25,700	May 2002	Requested

Background The Pearson Hall elevator was installed in 1962 and has exceeded its useful life.

The elevator requires frequent repairs, and parts are no longer available.

The project would replace the elevator jack, controls, drives, fire alarm and car interior; the rebuilt elevator system will conform to current building codes.

Funding Building Repair Funds.

Design Services The University requests approval to enter into a design agreement with Lerch Bates and Associates of Minneapolis, Minnesota.

- To the best of the University’s knowledge, Lerch Bates is the only architectural/engineering firm that specializes in elevator and conveying systems design. (There are no specialized elevator consultants in the state of Iowa.)
- The University has been utilizing the services of the firm for several years, and recommends all architectural consultants use Lerch Bates as a subconsultant on projects with elevators.

The agreement with Lerch Bates and Associates would provide full design services for a fee of \$25,700, including reimbursables.

College of Design—Elevator Modernization

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 350,000	March 2002	Approved
Engineering Agreement—Pre-design through Construction Phase Design Services (Lerch Bates and Associates, Minneapolis, MN)	24,500	May 2002	Requested

Background The two elevators in the College of Design building are approximately 24 years in age, do not conform to current codes, and require an increasing number of repairs.

The project would rebuild and replace the elevator drive systems and controls, and reconfigure the car interiors to comply with accessibility requirements.

Funding Building Repair Funds.

Design Services The University requests approval to enter into a design agreement with Lerch Bates and Associates of Minneapolis, Minnesota.

- To the best of the University’s knowledge, Lerch Bates is the only architectural/engineering firm that specializes in elevator and conveying systems design. (There are no specialized elevator consultants in the state of Iowa.)
- The University has been utilizing the services of the firm for several years, and recommends all architectural consultants use Lerch Bates as a subconsultant on projects with elevators.

The agreement with Lerch Bates and Associates would provide full design services for a fee of \$24,500, including reimbursables.

Beardshear Hall-Remodeling

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		July 1998	Approved
Project Description and Total Budget	\$ 5,750,507	July 1998	Approved
Architectural Agreement through Schematic Design (Brooks Borg and Skiles)	80,390	Oct. 1998	Approved
Construction Contract—Replace Roofs A, E and F (Wood Roofing Company)	200,650	March 1999	Ratified
Program Statement		June 1999	Approved
Schematic Design		July 1999	Approved
Architectural Agreement through Construction Services (Brooks Borg and Skiles)	621,720	July 1999	Approved
Amendments #1-3 (Brooks Borg and Skiles)	66,412		Approved*
Construction Contract - General Construction (HPC, L.L.C.)			
Revised Project Budget	3,552,000	July 2000	Ratified
Construction Contract - Telecommunications (Wiring by Design)	6,076,707	Oct. 2000	Approved
	266,000	Feb. 2001	Ratified
Revised Project Budget	7,996,807	June 2001	Approved
Change Orders (Estimated Amount)	777,200	June 2001	Approved
Architectural Amendment #4 (Brooks Borg and Skiles)	10,319	July 2001	Approved
Architectural Amendment #5 (Brooks Borg and Skiles)	85,637	May 2002	Requested

*Approved by the University in accordance with Board procedures.

Background	<p>This project will remodel space in Beardshear Hall to consolidate various student-related functions in one central campus location.</p> <p>The project will also relocate and consolidate other administrative offices within the building, and address building code, accessibility, and life safety deficiencies.</p>
Funding	<p>Income from Treasurer's Temporary Investments, General University/ Building Repair Funds, Business and Finance Endowment Administrative Reserve Funds, Telecommunications Improvement and Extension Funds, ISU Foundation, and Unrestricted Gifts.</p>

Architectural
Amendment

Amendment #5 (\$85,637) to the agreement with Brooks Borg and Skiles would provide design modifications for an emergency generator relocation, telecommunications and office revisions, moisture barrier installation under the front stair landing, and internal signage revisions consistent with accessibility requirements.

The amendment would also provide design services for an expanded project scope, approved by the Board in June 2001, to include restoration of the dome and central rotunda area, painting of the atrium space, replacement of stair tread stone, and lighting upgrades.

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Included in the University's capital register for Board ratification are four project budgets under \$250,000, two construction contracts awarded by the Executive Director, the acceptance of one completed construction contract, and three final reports. These items are listed in the register prepared by the University and are included in the Regent Exhibit Book.


Sheila Lodge

Approved: 
Gregory S. Nichols