

**A PRESENTATION OF THE SCHEMATIC DESIGN FOR THE HONORS PROGRAM BUILDING PROJECT WILL TAKE PLACE AT THE JULY BOARD MEETING**

ISU B-1

**MEMORANDUM**

**To:** Board of Regents

**From:** Board Office

**Subject:** Register of Iowa State University Capital Improvement Business Transactions for Period of June 16, 2000 through July 20, 2000

**Date:** July 7, 2000

**Recommended Action:**

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

**Executive Summary:**

Iowa State University requests approval of the schematic design, project description and budget (\$2,000,000), amendment to the schematic design agreement with Smith Metzger Architects (\$29,555), and agreement for additional design services with Smith Metzger Architects (\$197,275) for the **Honors Program Building** project which will construct a new facility for the Honors Program.

Representatives of the University and the project architects, Architects Smith Metzger, will attend the Board meeting to present the design for the project. A booklet outlining the design is included with the Board's docket materials.

The University requests permission to proceed with project planning for the following projects:

**Jack Trice Stadium—South End Zone Expansion** project which will increase the seating capacity of the stadium and construct an indoor practice facility for use by University basketball and volleyball teams; and

**North Campus Child Care Facility** project which will construct a replacement child care facility, with an increased capacity, in the north campus area.

The University requests approval of the following items for the **Engineering Teaching and Research Complex** project: revised program statement for Hoover Hall, agreement with Brooks Borg and Skiles (\$1,240,000) for design services for the revised building program, and revised project budget (\$63,400,000). The revised program statement reflects a reduced project scope for Hoover Hall, and the revised project budget includes additional costs for the Howe Hall project and anticipated construction cost increases for the Hoover Hall project.

The University requests approval of the program statement for the **Carver Co-Laboratory** project which will construct a 30,000 gross square foot facility, which will function as the center of research activities for the Plant Sciences Institute, established by the Board in September 1999.

The University requests approval of the project description and budget (\$950,000) and agreement with Baldwin White Architects (\$129,900) for **The Knoll Renovations 2000** project which will provide a major renovation of food service facilities, dining area, site improvements, elevator access, and reconstruction of the garage at The Knoll, the home of the University president. Procedural Guide §9.06 E. requires the University to obtain Board approval prior to initiating any renovation, modification, or improvement to the official state-owned residence of an institutional head if the cost is expected to exceed \$10,000. Periodic project updates, including the schematic design, should be provided to the Board Office.

The University requests approval of a revised project budget (\$281,100) for the **University Student Apartment Complex—Storage Building** project to allow completion of the site work for the relocated storage building.

**Background and Analysis:**

Honors Program Building

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		March 1999	Approved
Architectural Agreement—Pre-Design Through Schematic Design Services (Architects Smith Metzger)	\$ 24,000	June 1999	Approved
Program Statement		Sept. 1999	Approved
Schematic Design		July 2000	Requested
Project Description and Total Budget	2,000,000	July 2000	Requested
Architectural Amendment #1	29,555	July 2000	Requested
Architectural Agreement—Design Development Through Construction (Architects Smith Metzger)	197,275	July 2000	Requested

This project will construct a facility of approximately 7,400 gross square feet to house the functions of the University's Honors Program which will relocate from its current location in approximately 2,200 square feet of inadequate space in the Osborn Cottage. The project goal is to provide an environment that will enable motivated and gifted students to pursue and stimulate their interests, skills and curiosity, and to develop a strong sense of community and personal responsibility.

The site for the facility is an area north of Curtiss Hall and south of the Horticulture Building in the northeast area of the central campus (**MAP**). The main level consists of approximately 2,800 gross square feet of space for academic and social activities, and a smaller second level of approximately 1,260 gross square feet of space for faculty and staff office areas. The remaining area includes restrooms, building support areas and circulation space.

### Main Level

This level includes three classroom areas totaling approximately 1,500 gross square feet. Two classrooms are located adjacent to each other along the north wing; these areas are separated by a movable wall partition which will allow the space to be converted to one large classroom. The third classroom, a computer laboratory, a resource room with kitchenette, and restroom areas, are located along the east wing of the building. The reception/lounge area, consisting of approximately 750 gross square feet, is centrally located and adjacent to both wings. This area will be used for relaxation and study after hours, and will also serve as a welcoming space for prospective students and their parents. All areas of the main level will be directly accessible from a central corridor.

The female restroom will house three toilet fixtures and one lavatory. The male restroom will house one toilet fixture, one urinal, and one lavatory. The University has indicated that the number of fixtures is consistent with building code requirements based on the proposed occupancy of the various areas of the facility.

### Second Level

This smaller level will be constructed in the central area of the building and will house the faculty and staff office areas. The separation of these areas from the academic areas below will provide the necessary security for the faculty and staff office areas since the building will be open 24 hours a day. The second level covers approximately one-half of the lounge area below; the remainder of the lounge space is open to the second level. The design for this area unifies the student and faculty spaces, and exterior windows on both levels will provide natural light.

The building was designed to have a strong relationship to the central campus area without infringing upon it. Accordingly, the reception/lounge area and circulation spaces face the central campus, while the classroom and other areas are located along the building perimeter to provide the necessary privacy. The building will be accessible from the central campus with building entrances at the south and west at each wing, and at the northeast corner. The elevator and stairway connecting the two levels will be located near the northeast entrance.

The building was designed in response to various site constraints. Included are high voltage electrical lines to the east and west which cannot be relocated within the project budget. In addition, the location of the Horticulture Greenhouses to the north and the Farm House to the south further limited use of the site so views to and from the central campus area could be preserved. As a result of these constraints, a one-story building could not be designed to accommodate all of the functions programmed for the facility. An elevator and stairway needed to be incorporated into the resulting two-story design; the inclusion of this additional, non-assignable space reduced the net-to-gross ratio for the building.

The limitations of the selected site also required additional pre-design and schematic design services for the building. Amendment #1 in the amount of \$29,555 will provide the additional compensation to the project architects for the additional services.

The selected materials for the building will replicate the materials from several buildings in the central campus area, including the English Office Building, Morrill Hall, Sloss House and Catt Hall. The base of the facility will be constructed of cast stone materials, with brick masonry on the upper area of the exterior walls.

The following is a space summary of the various components of the facility:

	<u>Square Feet</u>
Academic/Social Spaces	
Classrooms	1,546
Reception/Lounge	747
Resource Room/Kitchenette	241
Computer Laboratory	<u>265</u>
Total Net Square Feet	2,799
Staff/Faculty Spaces	
Office Areas	791
Workroom	<u>467</u>
Total Net Square Feet	1,258
<b>Total Net Assignable Space</b>	<b>4,057</b>
Total Non-Assignable Space	3,360
(Maintenance, Mechanical/Telecommunications, Restrooms, Circulation)	
<b>Total Gross Square Feet</b>	<b>7,417</b>
Net-to-Gross Ratio	54.7 percent

Subject to approval of the schematic design, the University requests approval to enter into an agreement with Architects Smith Metzger to provide standard architectural and engineering services from design development through construction. The agreement provides for a fee of \$197,275, including reimbursables.

Project Budget

Construction Costs	\$ 1,464,300
Professional Fees	354,800
Movable Equipment	82,800
Project Contingency	<u>98,100</u>
 TOTAL	 <u>\$ 2,000,000</u>
Source of Funds:	
ISU Foundation	\$ 1,000,000
Income from Treasurer's Temporary Investments	<u>1,000,000</u>
	<u>\$ 2,000,000</u>

Jack Trice Stadium—South End Zone Expansion

Source of Funds: Private Funds

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		July 2000	Requested

This project will install additional seating in the south end zone of Jack Trice Stadium, and will construct, as a component of the project, a practice facility for use by the men's and women's basketball and volleyball teams. The estimated cost of the project is \$14 million, which will be funded from private sources.

The seating expansion project will provide approximately 7,400 new seats and additional restroom facilities to accommodate the increased seating. In addition, the project will address accessibility to the concourse area of the stadium and seating for persons with physical disabilities.

The expansion will increase the permanent seating capacity of the stadium to approximately 50,000 to accommodate the increasing ticket demand for football games. The additional seating will also serve to increase game revenues. The project supports the University's commitment to the development of the Cyclone football program within the Big Twelve Conference.

The practice facility will house two collegiate-sized wood courts and locker room facilities for both men's and women's varsity basketball and volleyball teams. The facility is needed to provide the teams with a permanent practice location. The teams currently utilize Hilton Coliseum when it is available; however, they are often forced to practice elsewhere due to the many events held at the Coliseum. The alternate sites change frequently due to the use of these facilities for other University purposes. A new practice site will provide the student athletes with a consistent, permanent location for their scheduled practices. The facility will also be available for the athletes' use on their own time to develop further their abilities.

North Campus Child Care Facility

Source of Funds: Income from Treasurer's Temporary Investments

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		July 2000	Requested

This project will construct a new, modern child care facility in the University Village student apartment (family housing) community north of campus to replace the aging child care facilities located in West Pammel Court. It is anticipated that the majority of the child care programs currently located in Pammel Court, including the University Community Child Care, Center for Child Care Resources, and Comfort Zone (Sick Child Care Program), will be located in the new facility.

The relocation of the facility will improve the accessibility of child care services to the University community. The project will also provide a larger facility with greater capacity in an effort to meet the University's increasing demand for child care services. (The current maximum capacity of the existing facility is 80 children.) In addition, the relocation of the child care facilities will allow the Pammel Court facilities to be razed to accommodate future development at the site.

The University anticipates that the project budget will total approximately \$1.8 million with funding to be provided by Income from Treasurer's Temporary Investments.



Engineering Teaching and Research Complex

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		May 1993	Approved
Planning Funds	\$ 2,190,700	July 1996	Approved
Program Statement—Phases 1 & 2		June 1994	Approved
Architectural Agreements			
Schematic Design for Phases 1 & 2 and Design Development for Phase 1 (Brooks Borg and Skiles)	1,600,000	June 1994	Approved
Phase 1 Construction Services (Brooks Borg and Skiles)	748,000	Nov. 1996	Approved
Phase 2 Design Development Through Construction Services (Brooks Borg and Skiles)	1,325,000	Sept. 1997	Approved
Schematic Design—Phases 1 & 2		May 1995	Approved
Phase 1 Revised Project Budget	33,763,869	July 1996	Approved
Phase 2 Revised Project Budget	25,066,393	July 1996	Approved
Total Revised Project Budget	61,020,962	Sept. 1997	Approved
Hoover Hall Revised Program Statement		July 2000	Requested
Hoover Hall Architectural Agreement— Schematic Design through Construction (Brooks Borg and Skiles)	1,240,000	July 2000	Requested
Total Revised Project Budget	63,400,000	July 2000	Requested

The revised program statement for Hoover Hall reflects a reduction in square footage for the facility from 109,145 gross square feet to 66,527 gross square feet, a decrease of approximately 39 percent. The project scope was decreased in response to budgetary constraints due to additional costs for the construction of Howe Hall, which is now complete. The additional costs for this portion of the project resulted primarily from upgrades to the Howe Hall auditorium for incorporation of a virtual reality media system, and additional design services to accommodate changes in the user groups of the facility. Additional funding was not available to maintain the original project scope for Hoover Hall.

The change in users groups for Howe Hall has also resulted in a corresponding change in the users and functions of Hoover Hall, which was originally envisioned to serve as a general classroom/office building for the College of Engineering. The revised program for Hoover Hall reflects the final users of the facility, and the inclusion of laboratory space in addition to the classroom and office areas, as outlined below.

	<u>Square Feet</u>
Materials Science and Engineering	
Faculty/Staff Offices	6,540
Research Laboratories	5,000
Teaching Laboratories	<u>3,635</u>
TOTAL	15,175
University General Classrooms	8,800
Mechanical Engineering/Industrial and Manufacturing Systems Engineering	
Faculty/Staff Offices	6,746
Miscellaneous Areas	5,060
Engineering Computer Support Services	
Classrooms	4,000
Faculty/Staff Offices	<u>135</u>
TOTAL	4,135
<b>Total Net Assignable Space</b>	<b>39,916</b>
<b>Total Gross Square Feet</b>	<b>66,527</b>
Net-to-Gross Ratio	60 percent

The detailed program booklet is on file in the Board Office.

Subject to approval of the revised program document, the University will proceed with development of the revised schematic design for Hoover Hall. The University requests approval to enter into an agreement with Brooks Borg and Skiles to provide all standard architectural and engineering services from schematic design through construction services at a fee of \$1,240,000, including reimbursables. The previous agreement with Brooks Borg and Skiles for the original Phase 2 design services, approved in September 1997, will be canceled. The University will return to the Board at a future date for approval of the revised schematic design for Hoover Hall.

The University also requests approval of a revised project budget in the amount of \$63,400,000, an increase of \$2,379,038, which reflects additional costs for the Howe Hall (Phase 1) project. The increase will be funded by private funds from the ISU Foundation.

The revised budget includes additional costs which were incurred in the design and construction of Howe Hall. Included are the additional design costs to accommodate the various user changes previously referenced.

The revised budget also reflects the inclusion of a media system for the Howe Hall auditorium. The system, which will be capable of delivering three-dimensional images with surround sound, will be connected via high-speed fiber optics connections to the C6 virtual reality environment in the Howe Hall atrium and the C2 virtual reality environment in Black Engineering Building. The system will allow the auditorium audience to view the three-dimensional images being displayed in the virtual reality environments. To take advantage of the most current media system technologies, the development of the system was delayed until construction of the auditorium was complete. With this equipment, the auditorium will provide a world class, state-of-the-art facility.

Finally, the budget increase reflects increased construction costs for Howe Hall and anticipated construction cost increases for Hoover Hall. These include inflationary adjustments for labor and materials, and additional costs resulting from a tight construction market and schedule changes.

	<u>Project Budget</u>	Revised Budget <u>Sept. 1997</u>	Revised Budget <u>July 2000</u>
Construction Costs		\$ 48,353,529	\$ 49,648,100
Professional Fees		5,427,650	7,367,000
Movable Equipment		7,239,783	6,233,700
Relocation		0	48,500
Contingency		<u>0</u>	<u>102,700</u>
TOTAL		<u>\$ 61,020,962</u>	<u>\$ 63,400,000</u>
Source of Funds:			
Federal Aviation Administration Grant		\$ 1,500,000	\$ 1,500,000
Capital Appropriations		31,900,000	31,900,000
ISU Foundation		<u>27,620,962</u>	<u>30,000,000</u>
TOTAL		<u>\$ 61,020,962</u>	<u>\$ 63,400,000</u>

Carver Co-Laboratory

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		Dec. 1999	Approved
Project Description and Total Budget	\$ 7,000,000	Dec. 1999	Approved
Architectural/Engineering Agreement— Schematic Design & Site Planning (Brooks Borg and Skiles)	150,000	March 2000	Approved
Revised Project Budget	9,200,000	June 2000	Approved
Architectural Amendment #1 (Brooks Borg and Skiles)	48,000	June 2000	Approved
Program Statement		July 2000	Requested

The co-laboratory will provide a facility where scientists from Iowa State University, private industry, and the world can meet in a collaborative and interactive environment to conduct state-of-the-art plant research and address critical issues in plant science. The co-laboratory will emphasize and promote interdisciplinary collaboration within the plant sciences and other core areas of the University, such as molecular biology, plant physiology, classical plant breeding, molecular genetics, physics, and mathematics.

The Plant Sciences Institute currently consists of eight centers, each focused on a specific area of the plant sciences. The centers are currently located in various campus buildings. The Carver Co-Laboratory will house some of the scientists of the Plant Sciences Institute, particularly those working in plant genomics. The building will consist of state-of-the-art laboratories, research space for visiting scientists, and small laboratories for industry incubators.

The following is the space summary for the various components of the Carver Co-Laboratory:

	<u>Square Feet</u>
Plant Research Laboratory	6,650
Laser/Biochemistry Laboratory	4,220
Research Centers Laboratories	2,640
Research Offices	1,540
Administration	1,350
Shared Laboratory Support	1,220
Building Support	<u>380</u>
<b>Total Net Assignable Space</b>	18,000
<b>Total Gross Square Feet</b>	30,000
Net-to-Gross Ratio	60 percent

The detailed program booklet is on file in the Board Office.

The Knoll Renovations 2000  
Source of Funds: Private Funds

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 950,000	July 2000	Requested
Architectural Agreement—Schematic Design through Construction (Baldwin White Architects)	129,900	July 2000	Requested

This project will be undertaken to improve the efficiency of The Knoll to accommodate the various functions which are held there. The funding for the project is private contributions through the ISU Foundation.

Over 9,000 visitors are recognized or honored annually at receptions, dinners, and other functions held at The Knoll. The facility is also used extensively in the University's external fundraising programs.

The proposed improvements are consistent with a master plan study of the residence completed in 1997, which identified several elements which would improve the facility. In the spring of 1998, the University completed the first of these improvements with reconstruction of the front entrance to accommodate persons with mobility impairments.

The University now wishes to proceed with the next priority of the master plan which will focus primarily on food service function improvements. To accommodate these improvements, it will also be necessary to reconstruct the existing garage. The area of new and remodeled space will total approximately 3,700 square feet.

The existing kitchen will be upgraded and reconfigured to provide a commercial-level facility to meet the needs for dining/banquet functions. The new kitchen will allow preparation of meals for small to medium size groups (5-30 people), and serving of meals for large groups (75-100 people). The layout of the kitchen will be modified to improve efficiency and new commercial-grade equipment will be installed. The space currently occupied by the family dining area will be absorbed into the new kitchen area, and the dining function will be relocated to the second floor.

The project will also reconfigure the north end of The Knoll to provide improved circulation for guests, family, and kitchen supplies. To accomplish this reconfiguration, the existing garage must be reconstructed approximately 20 feet north of its current location. The stairway will be reoriented and a small elevator installed to provide accessibility to all levels of the building for mobility-impaired persons. The reconstruction of the garage will also allow improvements to the north entrance for use by family and as a secondary entrance for guests, and creation of a dedicated service entrance for the kitchen. On the second level above the new garage, a new family room will be created with a small family kitchen and dining area to replace the dining area that will be lost with the kitchen renovation. The project will also include site grading and paving to complete the new kitchen service entrance.

The University anticipates that the construction project will begin this fall. The University plans to defer as long as possible the selection of interior finishes for the living areas to allow, if feasible, input from the new University president. Due to the magnitude of the project, it is recommended that periodic project updates, including the schematic design, be provided to the Board Office.

The University requests approval to enter into an agreement to provide design services for the project with Baldwin White Architects, the firm which completed the master plan for renovation of the facility. The agreement provides for a fee of \$129,900, including reimbursables, and will include the services of a kitchen design consultant.

Permission to proceed with the project was not required since the project budget does not exceed \$1,000,000.

Project Budget

Construction Costs	\$ 727,500
Professional Fees	183,500
Project Contingency	<u>39,000</u>
TOTAL	<u>\$ 950,000</u>



Iowa State Center—Parking Lot Bus Terminal

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 275,000	April 2000	Approved
Architectural Selection—Schematic Design through Construction (Conway+Schulte Architects)	51,838	July 2000	Requested

This project will construct a bus terminal at the Iowa State Center parking lot for use by student, faculty and staff commuters who travel to campus from the Iowa State Center commuter parking lot via the Cy-Ride bus system.

The University requests Board approval to enter into an agreement with Conway+Schulte Architects to provide design services for the project. The agreement will provide all standard architectural and engineering services from schematic design through construction. The agreement provides for a fee of \$51,838, including reimbursables.

University Student Apartment Complex—Storage Building  
Source of Funds: Dormitory System Surplus Funds

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 248,800	June 1999	Exec. Dir. *
Construction Contract (Jensen Builders)	206,000	May 2000	None Required**
Revised Total Project Budget	281,100	July 2000	Requested

\* Approved by the Executive Director in accordance with Board procedures for projects under \$250,000.

\*\* Approved by University in accordance with Board procedures for projects under \$250,000.

This project will dismantle an existing steel frame storage building located near the site of the Hawthorn Court Development project. The building will be reconstructed in the University Village Housing Complex for continued use by the Residence Department. The project also includes the extension of utilities to the building, construction of a driveway and parking areas, and landscaping.

The revised budget will allow the University to add to the construction contract the work bid as Alternate #1, which will provide asphalt paving for the driveway and parking areas. The work will be incorporated into the construction contract via a change order which will be approved by the University in accordance with Board procedures.

Project Budget

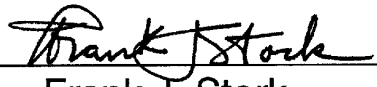
	<u>Initial Budget June 1999</u>	<u>Revised Budget July 2000</u>
Construction Costs	\$ 215,800	\$ 249,747
Professional Fees	30,000	27,900
Contingency	<u>3,000</u>	<u>3,453</u>
TOTAL	<u>\$ 248,800</u>	<u>\$ 281,100</u>

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Included in the University's capital register for Board ratification are six project budgets under \$250,000, two amendments which were approved by the University in accordance with Board procedures, four construction contracts awarded by the Executive Director, the acceptance of seven completed construction contracts, and one final report. These items are listed in the register prepared by the University and are included in the Regent Exhibit Book.

  
Sheila Lodge

Approved:

  
Frank J. Stork