

A PRESENTATION OF THE SCHEMATIC DESIGN FOR THE UTILITIES—NORTH CAMPUS CHILLED WATER PLANT PROJECT WILL BE MADE AT THE SEPTEMBER BOARD MEETING

G.D. 18b

MEMORANDUM

To: Board of Regents

From: Board Office

Subject: Register of Iowa State University Capital Improvement Business Transactions for Period of July 19, 2002, Through September 19, 2002

Date: September 9, 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 for the **General Classrooms and Auditoriums** project which would upgrade instructional facilities in LeBaron Hall, Physics Hall, and various other campus buildings (see page 3).

Program statement and schematic design for the **Utilities—North Campus Chilled Water Plant** project, which will construct a new chilled water plant to support projected campus growth (see page 4).

- Representatives of the University and SVPA Architects will present the schematic design at the September Board meeting.
- The schematic design booklet is included with the Board's docket materials.

Program statement and architectural agreement with Baldwin White Architects, Des Moines, Iowa (\$118,000) for the **MacKay Hall—Food Science and Human Nutrition Laboratory Renovation—Phase 3** project which would complete the remodeling of antiquated food laboratories and support spaces in the building (see page 7).

Project descriptions and budgets:

2003 Institutional Roads—Union Drive/Knoll Road Intersection Reconstruction project (\$980,000) which would reconstruct and realign the intersection of Union Drive and Knoll Road near the site of the Gerdin Business Building (see page 9).

Lakeside Laboratory—Mahan Hall and MacBride Laboratory Remodel project (\$390,000) which would upgrade the buildings to provide modern instructional facilities (see page 10).

Utilities—Power Plant—Generator #5 2002 Overhaul project (\$350,000) which would overhaul one of the primary turbine generators at the University Power Plant (see page 12).

Architect/engineer agreements with:

OPN Architects, Des Moines, Iowa (\$972,200) for the **Union Drive—Suite Building 2** project which would construct the second of three suite-style residence facilities for the Union Drive Neighborhood (see page 13).

Architects Smith Metzger, Des Moines, Iowa (\$120,000) for the **Environmental Health and Safety/Regulated Materials Facility** project which would construct a new facility to consolidate the University's Environmental Health and Safety regulated materials handling operations, laboratories, and offices (see page 15).

Lerch Bates and Associates, Minneapolis, Minnesota (\$20,100) for the **Curtiss Hall—Elevator Modernization** project which would upgrade the elevator to comply with current building codes (see page 17).

Stott and Associates, Ames, Iowa (\$99,370) for the **University Dining Services Feasibility Study** which would evaluate the need and provide recommendations for new dining services for the Richardson Court and Towers residential neighborhoods, and improvements to the Memorial Union dining areas (see page 18).

Architectural Amendment #3 (\$49,950) to the agreement with Baldwin White Architects for the **Union Drive Neighborhood—Community Center** project (see page 13).

Construction Change Order #2 (not to exceed \$200,000) to the construction contract with HPC, L.L.C., for the **Roy J. Carver Co-Laboratory** project (see page 20).

Background and Analysis:

General Classrooms and Auditoriums

Project Summary

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

Background The University currently operates and maintains a total of 233 classrooms, including 13 auditoriums.

- Undergraduate students have a number of their classes in these classrooms and auditoriums.

These facilities do not provide the necessary capacity, media technology, space flexibility and specialized classroom components for modern instructional programs.

In addition, the facilities suffer from accessibility and mechanical/electrical deficiencies.

Project Scope The remodeling would provide air conditioning, improved lighting and lighting control, and classroom furniture, to create an environment that supports instructional technology.

The project would include the following:

- Removal of the LeBaron Hall auditorium (214 seats) and construction of a new lecture hall (400 seats);
- Replacement of the LeBaron Hall heating, ventilating and air conditioning systems;
- Remodeling of Rooms 3 and 5 (a total of 388 seats) in Physics Hall; and
- Remodeling and installation of media technology in various existing general classrooms.

In addition, the relocation of College of Business functions from Carver Hall to the Gerdin Business Building (scheduled for November 2003) may allow existing office space in Carver Hall to be renovated for classroom use.

Anticipated Cost	\$14,300,000, as follows: <ul style="list-style-type: none"> LeBaron Hall Auditorium and systems upgrade - \$5,800,000; Physics Hall Rooms 3 and 5 - \$1,800,000; and General classroom remodeling/media enhancement - \$6,700,000.
Design Services	The University anticipates that design services for the three components of the project would be provided by a combination of outside consultant(s) and in-house design staff. Outside consultants would be used for the LeBaron Hall and Physics Hall projects.
Funding	Capital appropriations authorized by the 2002 General Assembly.

Utilities—North Campus Chilled Water Plant

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		Feb. 2001	Approved
Project Description and Total Budget	\$ 13,000,000	Feb. 2001	Approved
Engineering Agreement (Sebesta Blomberg and Associates) Roseville, MN)	823,300	March 2002	Deferred
Engineering Agreement (Sebesta Blomberg and Associates, Roseville, MN, engineering services; SVPA Architects, West Des Moines, IA, architectural design services)	823,300	April 2002	Approved
Program Statement		Sept. 2002	Requested
Schematic Design		Sept. 2002	Requested

Background This project will be undertaken in accordance with a 1993 Chilled Water Master Plan which was completed to project the growth in University chilled water requirements. The Master Plan indicated the need to construct additional chilled water production capacity by the year 2003. (Subsequent delays with some new building projects extended this deadline by approximately one year.)

The existing chilled water production equipment is housed in the University Power Plant. There is insufficient space at the Plant to expand the chilled water facilities, and construction of an addition to the Plant would not be cost effective.

Therefore, the Master Plan recommended the construction of a satellite chilled water plant to satisfy the University's future chilled water capacity

requirements.

Project Scope The plant would be constructed to house two chillers and would ultimately contain 8,000 tons of chilled water capacity; this would satisfy the University's chilled water needs past the year 2010.

Only one of the two chillers would be installed initially; the remaining chiller would be added as required by the University's growth.

Project Site The North Campus Chilled Water Plant would be constructed in the northern area of campus at the site located west of Stange Road and directly east of the Printing and Publications Building, south of the existing Union Pacific railroad tracks. (A map indicating the proposed location for the facility is included as Attachment A.)

The site is currently used for outdoor storage, which is being relocated to the Southwest Athletic Complex area of campus.

This site had been reserved for a future chilled water plant in the University's Campus Master Plan.

Building Program The building would house two 4,000 ton capacity chillers and the mechanical and electrical equipment necessary to support and maintain the chilled water plant operation.

The building will normally be unoccupied; the chillers will be remotely monitored and operated via control systems from the Power Plant by existing staff who will visit the water plant for equipment monitoring and maintenance.

The following table shows the square footage of the building functions.

Detailed Building Program

	<u>Building Program</u>	
Mechanical/Electrical Space	13,087	
Maintenance Storage	940	
Control Room	146	
Unisex Toilet	64	
Communications/Data Closet	30	
Janitor's Closet	<u>30</u>	
	14,297	square feet
Total Gross Square Feet	17,400*	

* Estimate of total gross square feet; actual building dimensions may vary slightly to accommodate selected chiller equipment.

Schematic Design

The following are highlights of the **exterior design**:

The chilled water plant has been designed with an architectural façade that the University believes would be compatible with the future, planned development in the north area of campus.

The building would be constructed primarily of brick, consistent with the existing buildings in this area of campus.

The exterior would also feature pre-cast architectural accents and wall openings to allow natural light into the building interior.

While the plant would initially have a significant visual presence in this area, it has been sited and designed to serve as a background building in the University's campus master plan for future development in the area.

Roof

The majority of the roof area would consist of a standing seam metal roof system with a sloped design.

The remaining roof areas, where the roof meets the east and west exterior walls, would be rubber membrane material with a low-sloped design.

The roofing materials were selected for their durability and life expectancy (in excess of 25 years for the metal material and approximately 20 years for the rubber membrane material).

Cooling Towers

The plant site includes space to the east of the building to house the two cooling towers. (Only one tower will be constructed initially to serve the first chiller.)

The dimensions of each cooling tower are approximately 30 feet wide by 96 feet long by 28 feet high.

An architectural screen wall, consistent with the building façade, would be constructed to the south of the cooling towers to provide visual and sound screening; landscaping on the east side of the site would provide visual screening from Stange Road.

The building design would also accommodate future installations at the site including a regional emergency generator for the northern portion of campus, a relocated substation, and a steam to hot water converter to serve new development on the north side of the railroad tracks.

The following are highlights of the **interior design**:

The building would consist of two levels, a main operating level and a basement level.

The main level would house the chiller and ventilation equipment, maintenance and storage spaces, electrical equipment and control rooms, unisex toilet, and janitor's closet.

The basement level would house auxiliary equipment to support the chiller operation (piping, pumps, condensers, air compressor, etc.).

Two sets of stairs would provide access between the levels.

Project Schedule The University plans to receive bids for the chiller equipment in October 2002. Since detailed design services cannot commence until the equipment is selected, the University anticipates the project would be bid in April 2003. Equipment startup activities are anticipated to begin in April 2004, and performance testing of the equipment and operation of the plant are estimated to commence in June 2004.

Funding Utility Enterprise Funds.

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	Approved
Project Description and Total Budget	\$ 1,100,000	June 2002	Approved
Program Statement		Sept. 2002	Requested
Architectural Agreement—Schematic Design through Construction Phases (Baldwin White Architects, Des Moines, IA)	118,000	Sept. 2002	Requested

Background 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.

- 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.

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.

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.

The University has been proceeding with the project in phases as funding has become available.

- Project Scope** 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, and install new heating, ventilating and air conditioning, and telecommunications equipment.
- Building Program** The project would provide two remodeled food preparation laboratories, an equipment room, library/conference room, sensory evaluation booth and support services for food storage, dishwashing, and laundry.

Detailed Building Program

Program Teaching Areas			
Teaching Laboratories	3,100		
Laboratory Equipment Room	185		
Sensory Booth	500		
Library/Conference Room	<u>185</u>		
		3,970	nsf
Program Support Areas			
Support Services	600		
Store Keeper's Office	120		
Dry Storage Room	<u>160</u>		
		<u>880</u>	<u>nsf</u>
Total		4,850	nsf
Total Gross Square Feet		5,500	gsf
Net-to-Gross Ratio = 89 percent			

Design Services Expressions of interest to provide design services were received from seven firms.

Three 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 Baldwin White Architects, Des Moines, Iowa, to provide design services for the project.

The firm was selected based on its understanding of the key issues, its level of project and team management and design creativity, its exuberance to complete the project, and its experience on other University projects.

The agreement with Baldwin White Architects would provide full design services for a fee of \$118,000, including reimbursables.

2003 Institutional Roads—Union Drive/Knoll Road Intersection Reconstruction

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 980,000	Sept. 2002	Requested

Background The pavement at the intersection of Knoll Road and Union Drive, near the site of the Gerdin Business Building, has deteriorated beyond repair.

Construction traffic at the site has accelerated the deterioration of the roadway.

Project Scope The project will reconstruct and realign 600 linear feet of roadway at the intersection of Knoll Road and Union Drive.

The realignment would shift the intersection to the south and west of its existing location to address potential grade problems at the site.

The new alignment will also provide an improved campus entrance drive, consistent with the University’s Campus Master Plan.

The project also includes the reconstruction of sidewalks in the area, and the replacement of street lighting and the Knoll Road culvert over College Creek.

Funding	Institutional Roads Funds.	
		<u>Project Budget</u>
	Construction Cost	\$ 815,520
	Professional Fees	151,380
	Contingency	<u>13,100</u>
	TOTAL	<u>\$ 980,000</u>

Lakeside Laboratory—Mahan Hall and MacBride Laboratory Remodel

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 390,000	Sept. 2002	Requested

Background

Mahan Hall is the largest classroom/lecture space at the Lakeside Laboratory; it is used by large classes, visiting university and high school classes and other groups, and for a variety of public programs.

- The facility was constructed in the early 1960s and its antiquated teaching facilities are serious impediments to the improvement, diversification, and expansion of Lakeside’s educational programs.
- Renovation of Mahan Hall is needed to improve facilities for the summer teaching and public outreach programs, and the environmental education programs during the academic year.

Macbride Laboratory is one of four main teaching laboratories/classrooms constructed in 1935 – 1936 by the Civilian Conservation Corps.

- The buildings, which have not been renovated or modernized since their construction, provide antiquated and substandard teaching facilities.
- The renovation of the laboratories will also enable Lakeside Laboratory to continue to develop and expand as a year-round environmental education center consistent with its long-range strategic plan.

Project Scope Renovations to the Mahan Hall would create two unequal rooms: a computer laboratory, and a large state-of-the-art classroom/lecture hall, which would accommodate approximately 60 people.

- Work to be accomplished would include: partitioning the building into two rooms; insulating the facility; upgrading the electrical system and installing a heating/cooling unit; constructing bathrooms; installing a new ceiling and lighting; removing and replacing the asbestos walls; and providing accessibility improvements for the building entrance.

Work in the Macbride Laboratory would include installing heating and cooling systems; insulating the roof; repairing or replacing windows; upgrading electrical, plumbing and lighting systems; installing safety showers and eye washes, modern laboratory benches and storage cabinets, and a fume hood; and constructing an accessible restroom.

Funding Capital appropriations authorized by the 2002 General Assembly.

Project Budget

Construction Cost	\$ 311,740
Professional Fees	67,980
Contingency	<u>10,280</u>
TOTAL	<u>\$ 390,000</u>

Utilities–Power Plant–Generator #5 2002 Overhaul

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 350,000	Sept. 2002	Requested

Background	<p>Generator #5 was installed at the Power Plant in 1968 and is one of the primary turbine generators used to supply electricity to campus.</p> <p>The generator, which operates over 50 weeks per year, was last overhauled in 1997.</p> <p>The generator is due for overhaul based on operating hours and guidelines provided by the University's insurance carrier.</p>
Project Scope	The project will provide a major overhaul of the generator including disassembly, inspection and repairs, and reassembly.
Funding	Utility Repair Funds.

Project Budget

Construction Cost	\$ 320,000
Professional Fees	6,000
Contingency	<u>24,000</u>
TOTAL	<u>\$ 350,000</u>

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
Architectural Amendment #3 (Baldwin White Architects)	49,950	Sept. 2002	Requested
<u>Suite Building 2</u>			
Permission to Proceed		April 2002	Deferred
Permission to Proceed		May 2002	Approved
Project Description and Total Budget	16,304,000	June 2002	Approved
Architectural Agreement—Pre-Design through Construction Phases (OPN Architects, Des Moines, IA)	972,200	Sept. 2002	Requested

Background	<p>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.</p>
Phase 1	<p>The Phase 1 project included the recently-completed Suite Building 1, the Community Center, which is currently under construction with an estimated completion date of July 2003, and utility and infrastructure improvements to serve the new facilities in the area.</p>
Suite Building 2	<p>The construction of Suite Building 2 is the first component of the Phase 2 project.</p> <p>The project would construct a second, four-story, 320 bed suite-style residential facility of approximately 84,000 gross square feet.</p> <ul style="list-style-type: none">• 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, and conference and computer rooms. <p>Suite Building 2 would be constructed on the site directly south of Suite Building 1.</p>
Funding	<p>Dormitory System Revenue Bonds.</p>
Suite Building 2 Design Services	<p>Expressions of interest to provide design services for Suite Building 2 were received from 14 firms.</p> <p>Four firms were selected for interviews with the University Architectural Selection Committee, in accordance with Board procedures for projects of \$1 million or more.</p> <p>The University recommends the selection of OPN Architects, Des Moines, Iowa, to provide design services for the project.</p> <p>The firm was selected based on its successful record on projects at the University of Iowa and Iowa State University, its superior design and management capabilities, and its knowledge and enthusiasm for this project.</p> <p>The architectural agreement with OPN Architects would provide full design services for a fee of \$972,200, including reimbursables.</p>

Community Center Architectural Amendment Amendment #3 (\$49,950) to the agreement with Baldwin White Architects would provide compensation for the preparation of bid documents for add alternates to the construction contract and furniture design and selection services.

Environmental Health and Safety/Regulated Materials Facility

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		May 2002	Approved
Architectural Agreement—Pre-Design Phase (Architects Smith Metzger, Des Moines, IA)	\$ 120,000	Sept. 2002	Requested

Background The University’s regulated materials are currently managed at the 6,750 square foot Chemical Waste Handling Facility (CWHF) located near the Applied Sciences Complex northwest of the main campus.

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 1999 State Fire Marshal’s report strongly recommended construction of a new waste handling facility.
- The environmental deficiencies relate to the manifesting requirements of the Environmental Protection Agency (EPA), which strictly regulates hazardous waste management.

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.

- 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 facility would require specialized building features for the regulated materials handling functions, and other safety features to provide proper separation between the office areas and the waste management operations.

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

Proposed Project Site

The proposed site for the facility is located in the West Pammel Court area in the University's north campus.

- This area was selected due to its proximity to the main campus and major traffic routes, which 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.

Anticipated Cost

\$10,000,000.

Anticipated Funding

A combination of Overhead Use of Facilities funds and revenue bonds.

- 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.

Design Services

Expressions of interest to provide design services were received from

15 firms.

Four 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 Architects Smith Metzger, Des Moines, Iowa, to provide design services for the project.

The firm was selected based on its significant University experience, its understanding of the key issues, and its enthusiasm for the project.

The initial agreement with Architects Smith Metzger would provide pre-design services to define the project scope for a fee of \$120,000, including reimbursables.

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	Approved
Engineering Agreement—Pre-design through Construction Phase Design Services (Lerch Bates and Associates, Minneapolis, MN)	20,100	Sept. 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 to conform with current building codes.

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 its 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 fixed fee of \$20,100.

University Dining Services Feasibility Study

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Feasibility Study (Stott and Associates, Ames, IA)	\$ 99,370	Sept. 2002	Requested

Background The feasibility study for the University dining services would provide recommendations for the following:

- The distribution and development of new/replacement dining locations on campus.
 - Included would be recommendations for the expansion of existing and/or construction of new dining facilities in the Richardson Court residential neighborhood.
 - Also included would be recommendations for the dining functions in the Towers residential neighborhood.
- Improvements to the Memorial Union retail dining areas.

Approval of the agreement for the feasibility study is requested in accordance with Board procedures, which require Board approval of agreements for feasibility studies which exceed \$50,000.

Agreement

The agreement with Stott and Associates would provide architectural, engineering, and food service design services.

The firm was chosen based on its demonstrated management skills and design ability on several University projects over the last several years.

Ricca Planning Studio of Englewood, Colorado, which specializes in food service design, will serve as a consultant to Stott and Associates.

- The Ricca firm has served as a consultant on several University food service projects over the past several years; the firm's involvement in the current study would maintain continuity among the University's food service projects.
- There are no firms within the state of Iowa that offer specialized food service design services.

The agreement provides for a fee of \$99,370, including reimbursables.

Roy J. 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	Approved
Schematic Design		Oct. 2000	Approved
Revised Project Budget	9,500,000	Oct. 2000	Approved
Architectural/Engineering Agreement— Design Development through Construction (Brooks Borg and Skiles)	519,000	Oct. 2000	Approved
Revised Project Budget	12,750,000	May 2001	Approved
Architectural Amendment #1 (Brooks Borg and Skiles)	264,000	June 2001	Approved
Construction Contract Award—General Construction (HPC, L.L.C.)	7,570,000	Oct. 2001	Ratified
Architectural Amendment #2 (Brooks Borg and Skiles)	36,840	Nov. 2001	Approved
Architectural Amendment #3 (Brooks Borg and Skiles)	17,941	March 2002	Approved
Construction Contract—Electrical/ Telecommunications Utility Extensions (Meisner Electric)	382,443	June 2002	Ratified
Construction Contract—Mechanical Utility Extensions (Ames Trenching & Excavating)	174,600	June 2002	Ratified
Revised Project Budget	18,498,000	June 2002	Approved
Architectural Amendment #4 (Brooks Borg and Skiles, Des Moines, IA)	56,135	June 2002	Approved
Construction Change Order #1 (HPC, L.L.C.)	55,000 (est)	June 2002	Approved
Construction Change Order #2 (HPC, L.L.C.)	200,000 (est)	Sept. 2002	Requested

Background The Roy J. Carver Co-Laboratory will construct a new 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 would emphasize and promote interdisciplinary collaboration within the plant sciences and other core areas of the University.

The building, under construction in the northwest area of campus, includes state-of-the-art laboratories, research space for visiting scientists, and small laboratories for industry incubators.

The revised budget (\$18,498,000) approved in June 2002 included the costs for finishing 4,500 square feet of the basement level of the building to provide additional laboratory and laboratory support space, including research equipment, and office space.

Construction Change Order Change Order #2 (not to exceed \$200,000) would provide for the addition of a second elevator for the building and all related structural and utility work.

The second elevator was requested by the building users to serve the laboratory functions to be housed in the additional finished space in the basement level.

The elevator will be used for "dirty" research operations (the transport of plants, soil and plant materials) to isolate these functions from the laboratory circulation areas.

Included in the University's capital register for Board ratification are two project budgets under \$250,000, five construction contracts awarded by the Executive Director, the acceptance of six completed construction contracts, and four 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

