MEMORANDUM

To: Board of Regents

From: Board Office

Subject: Register of University of Iowa Capital Improvement Business Transactions for Period of September 19, 2002, Through October 16, 2002

Date: November 4, 2002

Recommended Action:

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

Executive Summary:

Requested Approvals

Permission to proceed with project planning and architectural selection of Rohrbach Carlson, Iowa City, Iowa, for the **Bowen Science Building—Remodeling for Biochemistry Cores 4-300, 4-600 and 4-700** project which would remodel approximately 15,000 square feet of laboratory space in the building for the Department of Biochemistry of the College of Medicine (see page 3).

Project descriptions and budgets:

Mayflower Residence Hall—Replace Piping project ($15,000,000) which would replace the galvanized domestic water piping and upgrade the heating, ventilating and air conditioning (HVAC) piping systems for the building (see page 4).

Currier Residence Hall—Renovate Restrooms—Phase 3 project ($1,059,900) which would complete the renovation of restroom areas for the facility (see page 6).

University Hospitals and Clinics—Elevated Heliport project ($983,000) which would construct a replacement elevated heliport structure for University Hospitals (see page 7).

Pentacrest—Install Water Main project ($587,000) which would improve the water distribution service to the Pentacrest and Jefferson Street facilities (see page 8).

Parklawn Residence Hall—Upgrade Fire Protection project ($536,000) which would replace the building's obsolete fire protection system (see page 9).

Campus Electrical Distribution System Electrical Load Transfer

project ($430,000) which would install a high voltage cable to transfer a portion of the west campus electrical distribution service to the east campus electrical substation (see page 10).

Board ratification of the **Power Plant Biomass Project** ($660,000) which would provide modifications to the material handling system at the Power Plant to burn alternative fuels and reduce energy costs (see page 11).

Architectural agreements and amendments with:

OPN Architects, Cedar Rapids, Iowa ($469,639) for detailed programming and schematic design services for the **University Hygienic Laboratory** project which would construct a modern laboratory facility that would allow the Hygienic Laboratory to better meet the demand for environmental and public health laboratory services (see page 12).

OPN Architects, Cedar Rapids, Iowa ($360,288) for the remaining design services for Phase 2, and full design services for Phases 3 and 4, for the **Old Capitol—Fire Restoration and Building Improvements** project (see page 14).

HDR Architecture, Des Moines, Iowa ($99,310) for the **UIHC Magnetic Resonance Imaging (MRI) Master Plan Study** project which would provide a feasibility study for the expansion of the UIHC MRI Suite (see page 16).

Brooks Borg and Skiles, Des Moines, Iowa ($76,500) for the **UIHC Pathology Administrative Office Development** project which would renovate space in the General Hospital to consolidate the administrative functions of the Department of Pathology (see page 17).

Brooks Borg and Skiles, Des Moines, Iowa ($72,500) for the **UIHC Health Care Information Systems Office Expansion** project which would renovate space in the General Hospital to provide additional office areas for the information systems functions (see page 18).

Rohrbach Carlson ($222,500) for design modifications for the **Roy J. and Lucille A. Carver Biomedical Research Building** project (see page 19).

Background and Analysis:

Bowen Science Building—Remodeling for Biochemistry Cores 4-300, 4-600 and 4-700

Project Summary

	Amount	Date	Board Action
Permission to Proceed		Nov. 2002	Requested
Architectural Selection (Rohrbach Carlson, Iowa City, IA)		Nov. 2002	Requested

Background

One component of the Health Sciences Campus Plan is the remodeling of space in the Bowen Science Building to provide upgraded research facilities for the College of Medicine.

To date, the University has undertaken renovation projects for the Department of Biochemistry in the Bowen Science Building totaling approximately $3.5 million.

- The majority of the laboratory areas for the Biochemistry Department had not been renovated since construction of the building in 1970.

Project Scope

The project would continue the upgrade of research laboratory space for the Department of Biochemistry and would remodel approximately 15,000 square feet of space in the 4-600, 4-700, and a portion of the 4-300 cores of the Bowen Science Building.

Anticipated Cost/Funding

Approximately $3.2 million. Of this amount, the sum of $1.6 million would be funded by a grant from the National Institutes of Health; the University anticipates that the additional funds would be provided by the Carver College of Medicine gifts and grants.

Design Services

Regent Policy Manual §9.05 A.2.a. requires the convening of the University Architectural Selection Committee for projects with budgets over $1 million.

The University requests approval of the selection of Rohrbach Carlson to provide design services for the project, without convening the University Architectural Selection Committee.

- The firm has provided design services for previous laboratory renovation projects in the Bowen Science Building for the Departments of Biochemistry, Physiology and Pharmacology.

The University recommends the selection of Rohrbach Carlson based on the firm's successful performance on the previous renovation projects, its familiarity with the Bowen Science Building and its mechanical systems, and its strong working relationship with the Biochemistry Department and the College of Medicine.

The University would return to the Board for approval of the negotiated agreement.

Mayflower Residence Hall—Replace Piping

Project Summary

	Amount	Date	Board Action
Mayflower Residence Hall—Replace Domestic Water Piping			
Permission to Proceed		Jan. 2002	Approved
Engineering Agreement—Full Design Services (Rohrbach Carlson, Iowa City, IA)	$ 667,000	June 2002	Approved
Mayflower Residence Hall—Replace Heating, Ventilating and Air Conditioning (HVAC) Piping System			
Permission to Proceed		April 2002	Approved
Mayflower Residence Hall—Replace Piping (combined projects)			
Project Description and Total Budget	15,000,000	Nov. 2002	Requested
Engineering Selection (Rohrbach Carlson, Iowa City, IA)		Nov. 2002	Requested

Background

The Mayflower Residence Hall was constructed in 1966 and acquired by the University in 1983.

The University plans to undertake a project to replace the building's galvanized domestic water piping and to upgrade the building's heating, ventilating and air conditioning (HVAC) piping system.

- The galvanized domestic water piping is experiencing serious leaks and requires extensive maintenance.

- The HVAC piping system, which is original to the building's construction, has exceeded its maximum life expectancy of 25 years and is in need of replacement.

Project Scope

The University proposes to combine the piping improvements into a single project to increase efficiency and minimize disruption to the building occupants.

Combining the work into one project would require only one set of construction documents; this would more clearly define the coordination efforts between the two components, which would frequently share common mechanical pathways, and optimize the construction schedule.

Design Services

Since an agreement was approved with Rohrbach Carlson to provide engineering services for replacement of the domestic water piping, the University requests approval of the selection of Rohrbach Carlson to also provide engineering services for the upgrade of the HVAC piping system component of the project.

The University would return to the Board for approval of the negotiated agreement.

Funding

Dormitory Revenue Bonds.

Project Budget

Construction	$ 12,440,000
Design, Inspection and Administration	
Consultants	881,400
Design and Construction Services	434,600
Contingency	1,244,000
TOTAL	$ 15,000,000

Currier Residence Hall—Renovate Restrooms—Phase 3

Project Summary

	Amount	Date	Board Action
Architectural Agreement (Rohrbach Carlson, Iowa City, IA)	$ 95,500	Sept. 2002	Approved
Project Description and Total Budget	1,059,900	Nov. 2002	Requested

Background

The University has been proceeding with a phased program to renovate the restrooms in the residence halls.

The Phase 1 and 2 projects included the renovation of restrooms in the north and east wings.

Project Scope

This project, which would complete the restroom upgrade for Currier Residence Hall, would renovate a total of four restrooms (3,650 square feet) on four floors of the south wing.

The new restroom areas would be fully accessible and would provide the required number of plumbing fixtures to meet building code requirements.

Funding

Residence System Improvement Funds.

Project Budget

Construction	$ 830,400
Design, Inspection and Administration	
Consultants	109,000
Design and Construction Services	35,500
Contingency	85,000
TOTAL	$ 1,059,900

University Hospitals and Clinics—Elevated Heliport

Project Summary

	Amount	Date	Board Action
Engineering Agreement (Shive-Hattery, Iowa City, IA)	$ 79,000	Sept. 2002	Approved
Project Description and Total Budget	983,000	Nov. 2002	Requested

Background

The current heliport, located on the Carver Pavilion roof, lacks a required safety zone for aircraft ingress and egress.

The roof includes mechanical equipment that conflicts with safe aircraft landing and take-off operations.

This problem is exacerbated at night and during times of reduced visibility.

Project Scope

The project would include construction of an elevated framework approximately 6 to 8 feet above its current level, relocation of the fuel-dispensing system, and replacement of portions of the roofing system.

Funding

University Hospitals Building Usage Funds.

Project Budget

Construction	$ 788,000
Professional Fees	79,000
Planning and Supervision	37,000
Contingency	79,000
TOTAL	$ 983,000

Pentacrest—Install Water Main

Project Summary

	Amount	Date	Board Action
Project Description and Total Budget	$ 587,000	Nov. 2002	Requested

Background — The buildings of the Pentacrest and surrounding areas are in need of improved water distribution service for fire protection and potable water.

Project Scope — The project would install a new 12 inch water main from the intersection of Clinton Street and Iowa Avenue on the east side of the Pentacrest, to the intersection of Washington and Madison Streets at the southwest corner of the Pentacrest.

The water line would include connections to Jessup Hall, the Old Capitol, and Jefferson Street facilities located to the north of the Pentacrest.

Funding — Utilities Enterprise Improvement and Replacement Funds.

Project Budget

Construction	$ 427,000
Design, Inspection and Administration	
Consultants	70,000
Design and Construction Services	47,000
Contingency	43,000
TOTAL	$ 587,000

Parklawn Residence Hall—Upgrade Fire Protection

Project Summary

	Amount	Date	Board Action
Engineering Agreement (Design Engineers, Cedar Rapids, IA)	$ 40,500	Oct. 2002	Approved
Project Description and Total Budget	536,000	Nov. 2002	Requested

Background

The Parklawn Residence Hall is located west of the Levitt Center on the University's north campus.

The facility, which houses 141 students, was converted from apartment units to a residence hall with the fall 2002 semester in response to increased underclass enrollment.

The existing fire protection system in the building is obsolete and difficult to maintain.

The living units contain kitchen and related food preparation equipment which increases the risk of a fire.

The University wishes to upgrade the fire protection system, consistent with the project scope developed for fire protection upgrades in other residence system facilities.

Project Scope

The project would install new fire suppression and addressable fire detection systems, and new emergency and exit lighting throughout the facility.

Funding

Dormitory Revenue Bonds.

Project Budget

Construction	$ 423,500
Design, Inspection and Administration	
Consultants	40,500
Design and Construction Services	29,000
Contingency	43,000
TOTAL	$ 536,000

Campus Electrical Distribution System Electrical Load Transfer

Project Summary

	Amount	Date	Board Action
Project Description and Total Budget	$ 430,000	Nov. 2002	Requested

Background

The campus Electrical Substation U, which is located southeast of Carver-Hawkeye Arena and serves the west campus buildings, is nearing 100 percent of its expansion capacity during peak summer loads.

The campus Electrical Substation L, which is located on South Capitol Street and serves the east campus buildings, has excess capacity.

Project Scope

The project would transfer a portion of the west campus electrical distribution service from Substation U to Substation L to increase the reliability of the west campus system.

The project would install a new 15KV high voltage cable to connect Substation L with a number of west campus buildings through existing ductbanks.

The buildings to be connected to Substation L include the Hydraulics Laboratory, Boyd Law Building, Rienow, Slater and Quadrangle Residence Halls, Pharmacy Building, UIHC Pomerantz Family Pavilion, and the Field House.

Funding

Utilities Enterprise Improvement and Replacement Funds.

Project Budget

Construction	$ 390,000
Design, Inspection and Administration	10,000
Contingency	30,000
TOTAL	$ 430,000

Power Plant Biomass Project

Project Summary

	Amount	Date	Board Action
Engineering Agreement (Stanley Consultants, Muscatine, IA)	$ 65,000	Sept. 2002	Approved
Project Description and Budget	660,000	Nov. 2002	Ratification

Background

The University plans to burn oat hulls and other biomass fuels to reduce energy costs.

To burn these fuels, modifications are needed to the Power Plant material handling system.

Project Scope

This project would install biomass material handling equipment (fuel storage, conveyors and controls) and provide boiler modifications.

Since test burns of the biomass fuel determined that modifications to Boiler #11 were needed, the University requested Executive Director approval of the project budget to allow the modifications to be completed while the boiler was off line for annual maintenance prior to the winter heating season.

Funding

Utilities Enterprise Improvement and Replacement Funds.

Project Budget

Construction	$ 478,000
Design, Inspection and Administration	
Consultants	152,000
Design and Construction Services	10,000
Contingency	20,000
TOTAL	$ 660,000

University Hygienic Laboratory

Project Summary

	Amount	Date	Board Action
Permission to Proceed		March 2002	Approved
Architectural Selection (OPN Architects, Cedar Rapids, IA)		Sept. 2002	Approved
Negotiated Architectural Agreement (OPN Architects, Cedar Rapids, IA)	$ 469,639	Nov. 2002	Requested

Background

The University Hygienic Laboratory was founded in 1904 to provide statewide environmental and public health laboratory services.

The Laboratory is located in Oakdale Hall, which was constructed in 1917 as a tuberculosis hospital, on the University's Oakdale Campus.

- The Hygienic Laboratory facility is the oldest state public health laboratory facility in the United States; it does not meet the functional and safety requirements for a modern public health laboratory.

The Hygienic Laboratory has been designated as Iowa's only C level laboratory by the National Centers for Disease Control and Prevention.

- The C level designation indicates that the laboratory can identify relatively sophisticated categories of biohazards with rapid identification.

- The only facility with a higher designation, D level, is the National Centers for Disease Control and Prevention in Atlanta, Georgia.

Services of Iowa Hygienic Laboratory

The Laboratory's statewide public service responsibilities include monitoring air and water quality, disease tracking, investigation of food borne outbreaks, radiation response, and testing of Iowa babies for treatable inborn errors of metabolism.

The Laboratory's responsibilities have increased steadily over the years and expanded further during the recent war on terrorism and testing for the West Nile virus.

Facility Needs	The Hygienic Laboratory's existing facilities are inadequate to meet the present and future demand for environmental and public health laboratory services, particularly those related to bioterrorism. Construction of a new Hygienic Laboratory facility would provide: • Improved protection for Iowa's homeland security infrastructure; • Greater flexibility and access to information, and rapidity of response to changing health and environmental challenges; • Additional external funding opportunities, contributing to Iowa's economic development; and • Improved productivity and more efficient use of limited operating resources.
Anticipated Cost	$15,000,000 to $25,000,000.
Design Agreement	The negotiated agreement with OPN Architects would provide detailed programming and schematic design services for a fee of $469,639, including reimbursables. An agreement for the remaining design and construction administration services would be negotiated upon completion and approval of the schematic design.

Old Capitol—Fire Restoration and Building Improvements

Project Summary

	Amount		Date	Board Action
Permission to Proceed			Jan. 2002	Ratified*
Architectural Selection (OPN Architects, Cedar Rapids, IA)			Jan. 2002	Ratified*
Authorization for Executive Director to Approve Negotiated Agreement with OPN Architects			Jan. 2002	Approved
Architectural Agreement—Research Study Study (OPN Architects)	$ 101,440		March 2002	Ratified**
Architectural Agreement—Fire Restoration—Phase 1 and Phase 2 Schematic (OPN Architects)	665,000	(est.)	March 2002	Approved
Master Plan and Schematic Design			May 2002	Approved
Architectural Amendments #1 and #2	41,330			Not Required***
Phase 1—Dome, Cupola and Roof Replacement				
Project Description and Total Budget	4,455,000		May 2002	Approved
Construction Contract Award (Knutson Construction Services Midwest)	1,630,000		Sept. 2002	Approved
Architectural Amendment #3	50,545		Oct. 2002	Approved
Architectural Agreement—Phase 2 Remaining Design Services and Phases 3 and 4 Full Design Services (OPN Architects)	360,288		Nov. 2002	Requested

* Approved by Executive Director in accordance with Board procedures.
** Approved by Executive Director as authorized by Board at January 2002 meeting.
*** Approved by University in accordance with Board procedures.

Background

The Old Capitol was severely damaged by fire on November 20, 2001.

- The exterior dome and tower were destroyed, and the interior walls, ceilings, floors, and furnishings sustained water and smoke damage.

The University plans to proceed with the restoration in a manner consistent with the building's status as a National Historic Landmark.

Project Phases

Phase 1 of the reconstruction project, which is currently underway, will reconstruct the dome, cupola and bell tower, replace the roof, demolish the heating, ventilating and air conditioning system equipment, and install a new air handling unit.

Phase 2 would reconstruct the interior fire damaged areas (floors, walls, ceilings and spiral staircase), upgrade the building infrastructure (fire alarm and suppression systems, electrical and lighting upgrades, elevator improvements), and enhance the building's lower level.

Phase 3 would recondition portions of the building exterior, including restoration of the west portico and wood trim, exterior masonry, and west stairs, and window replacement and repairs.

Phase 4 would restore the site and would include landscape and walkway improvements and west terrace repairs.

Design Agreement

The proposed agreement with OPN Architects would provide design services from design documents through construction administration for Phase 2, and from schematic design through construction administration for Phases 3 and 4.

The agreement provides for a fee equal to 12 percent of actual construction costs for an estimated fee of $285,288, plus reimbursables not to exceed $75,000, for a total estimated fee of $360,288.

Future Phases Costs/Funding

Cost estimates for Phases 2 through 4 will be further developed under the proposed design agreement.

Anticipated source of funds for these phases include insurance proceeds, gifts, various University sources, grants, and other sources of revenue.

University of Iowa Hospitals and Clinics—Magnetic Resonance Imaging (MRI) Master Plan Study

Project Summary

	Amount	Date	Board Action
Feasibility Study Agreement (HDR Architecture, Des Moines, IA)	$ 99,310	Nov. 2002	Requested

Background

The current patient volume of the UIHC Magnetic Resonance Imaging (MRI) Suite, located in the lower level of Colloton Pavilion, exceeds its capacity.

The University wishes to undertake a feasibility study for renovation of the MRI Suite to accommodate current and future patient volume.

Feasibility Study

The feasibility study would develop a master plan for the MRI Suite that would address expansion options, review existing equipment and state-of-the-art MRI technology, and develop phasing plans, schedules and cost estimates.

The agreement with HDR Architects would provide the feasibility study for a fee of $99,310, including reimbursables.

- Approval is requested in accordance with Policy Manual §9.05 A.4., which requires Board approval of agreements for feasibility studies for which the fee exceeds $50,000.

University of Iowa Hospitals and Clinics—Pathology Administrative Office Development

Project Summary

	Amount	Date	Board Action
Project Description and Total Budget	$ 950,000	Sept. 2002	Approved
Architectural Agreement (Brooks Borg and Skiles, Des Moines, IA)	76,500	Nov. 2002	Requested

Background

UIHC wishes to consolidate the administrative and support offices of the Department of Pathology in one location for operational efficiencies.

- They are currently located on the sixth level of the Carver Pavilion and the first level of the Medical Research Center and Medical Laboratories Building.

In addition, the current locations have inadequate temperature controls due to the age of the building systems and the lack of central air conditioning.

The project would renovate 5,900 gross square feet of space on the sixth level of the General Hospital to house, in one location, the Department's administrative and support functions.

Design Services

The agreement with Brooks Borg and Skiles would provide full design services for a fee of $76,500, including reimbursables.

University of Iowa Hospitals and Clinics—Health Care Information Systems Office Expansion

Project Summary

	Amount	Date	Board Action
Architectural Agreement (Brooks Borg and Skiles, Des Moines, IA)	$ 72,500	Nov. 2002	Requested

Background	The functions of the UIHC Department of Health Care Information Systems are currently housed in multiple locations throughout University Hospitals. UIHC wishes to expand the Department's General Hospital location to consolidate staff for operational efficiencies.
Project Scope	This project would renovate approximately 5,300 gross square feet of space immediately to the east of the Department's current location on the first floor of the General Hospital. This space formerly housed the DeGowin Blood Center, which has relocated to the second floor of the General Hospital.
Design Services	The agreement with Brooks Borg and Skiles would provide full design services for a fee of $72,500, including reimbursables.

Roy J. and Lucille A. Carver Biomedical Research Building

Project Summary

	Amount	Date	Board Action
Permission to Proceed		Nov. 1999	Approved
Architectural Selection (Rohrbach Carlson, Iowa City)		May 2000	Approved
Architectural Agreement (Rohrbach Carlson, Iowa City)	$ 2,416,700	July 2000	Approved
Program Statement		Feb. 2001	Approved
Schematic Design		March 2001	Approved
Architectural Amendment #1 (Rohrbach Carlson, Iowa City)	103,000	June 2001	Approved
Project Description and Budget	40,731,000	March 2002	Approved
Architectural Amendment #2 (Rohrbach Carlson, Iowa City)	159,457	March 2002	Approved
Architectural Amendment #3 (Rohrbach Carlson, Iowa City)	270,000	Oct. 2002	Approved
Architectural Amendment #4 (Rohrbach Carlson, Iowa City)	222,500	Nov. 2002	Requested

Background

This project would provide a facility with 131,500 gross square feet (74,400 net square feet) of additional biomedical research space as an extension to the Medical Education and Biomedical Research Facility. (The project was formerly known as Building B.)

The building would house research facilities to accommodate the current and anticipated growth in the College of Medicine's research activities and the administrative functions of the College of Medicine.

In November 2001, the Board approved the naming of the building after Roy J. and Lucille A. Carver in recognition of a $10 million gift from the Roy J. Carver Charitable Trust to support capital development of the University of Iowa College of Medicine.

The building would consist of seven levels, with the administrative units of the College of Medicine on Level 1 and research laboratory space on the remaining levels.

- The construction contract was bid on October 10, 2002, with the construction of Level 3 as shell space; completion of the space was bid as an alternate.
- Favorable bids were received for the construction contract which will allow completion of the Level 3 laboratory space.
- The project will also demolish the remainder of the Steindler Building and construct a portion of the tunnel link to Westlawn. (The remainder of the tunnel will be constructed with the Health Sciences Campus—Westlawn Tunnel Replacement project.)

Architectural

Amendment #4 ($222,500) would provide compensation for design

Amendment modifications to the biological safety level 3 (BL3) laboratory to be located on Level 4, extension of interior building utility services to the individual laboratories throughout the facility, and modification of the building's exterior wall back-up system.

- The design of the BL3 laboratory was modified in response to revised BL3 laboratory regulations and requirements following the events of September 11, 2001.

- The extension of utility services to individual laboratory areas will provide greater flexibility to adapt the laboratories to changing research requirements.

- The modification of the back-up wall system from concrete to steel would improve the constructability and integrity of the building's exterior walls.

Included in the University's capital register for Board ratification are five project budgets under $250,000, one engineering agreement approved by the Executive Director, seven architect/ engineer amendments approved by the University, one construction contract awarded by the Executive Director, and the acceptance of three completed construction contracts. 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

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