A PRESENTATION OF THE SCHEMATIC DESIGN FOR THE MCCOLLUM SCIENCE HALL ADDITION WILL TAKE PLACE AT THE DECEMBER MEETING

UNI B-1

MEMORANDUM

To: Board of Regents
From: Board Office
Subject: Register of University of Northern Iowa Capital Improvement Business Transactions for Period of October 19, 2000 through November 15, 2000
Date: December 4, 2000

Recommended Action:

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

Executive Summary:

The University of Northern Iowa requests approval of the schematic design and project description and budget ($16,900,000) for the McCollum Science Hall Addition project, which would construct an addition to the facility to provide needed laboratory, classroom, research and office space for the science departments, particularly the Department of Biology. Representatives of the University and the project architects, BWBR Architects, will attend the Board meeting to present the design for the project. A booklet outlining the building design is included with the Board’s docket materials.

Background and Analysis:

McCollum Science Hall Addition
Source of Funds: Capital Appropriations

<table>
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<tr>
<th>Project Summary</th>
<th>Amount</th>
<th>Date</th>
<th>Board Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permission to Proceed Architectural Agreement (BWBR Architects, St. Paul, MN)</td>
<td>$1,290,000</td>
<td>July 2000</td>
<td>Approved</td>
</tr>
<tr>
<td>Program Statement</td>
<td></td>
<td>Oct. 2000</td>
<td>Requested</td>
</tr>
<tr>
<td>Schematic Design Project Description and Total Budget</td>
<td>16,900,000</td>
<td>Dec. 2000</td>
<td>Requested</td>
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</tbody>
</table>
This project would construct an addition totaling 64,643 gross square feet (38,052 net square feet) to McCollum Science Hall. The project would address the demand for additional space for the University's science programs in response to student enrollment growth and the increase in general education classes in the sciences. The addition would provide modern classroom and laboratory facilities to enhance the University's science programs and provide more efficient and functional spaces.

The addition would consist of a three-story structure which would connect with the three levels of McCollum Science Hall to the east. A map, which indicates the location of the addition relative to the existing facility, is included as Attachment A.

**Building Exterior**

The building exterior would feature brick masonry, consistent with the existing brick of McCollum Science Hall, with a number of internal and external window areas. The west perimeter glass curtain wall would extend the full height of the building to provide daylight for the three levels. The large window area has been designed to compensate for the windowless exterior of McCollum Science Hall, to encourage the display of scientific activities, and to provide well-lighted laboratory areas. Windows would also be provided for the laboratory areas along the north wall.

Daylight from the window wall would filter through glass areas in the interior office walls and into the adjacent corridor and laboratory windows. The University believes that the open design of the corridor and the use of windows for the laboratories would allow the light to flow into these spaces and would offer a sense of community among the faculty by visually connecting the areas. In addition, the laboratory windows would further enhance the display of scientific activities.

In addition to the connections to McCollum Science Hall, access to the addition would be provided via two exterior building entrances located along the south wall adjacent to the glass curtain wall, and in the northwest area of the building.

The roof design and roofing material, which would consist of a single-ply rubber membrane, are consistent with the existing roof of McCollum Science Hall. The University has determined that the estimated performance and cost-effectiveness of the rubber membrane material would best meet the roofing requirements for the facility. In addition, a mechanical penthouse would be constructed on the roof of the addition.
Building Interior

The new facility would include instructional, laboratory and office areas on all three levels, and the general layout of the spaces would be similar on each floor. The laboratory areas have been designed for instructional use as well as undergraduate, graduate and faculty research. The University has indicated that these spaces reflect a generic laboratory design, which would allow flexibility in their use in response to changing technologies, course offerings, and student demand. As a result, the laboratories have not been assigned for specific instructional or research purposes.

A separate animal care facility would be constructed as an addition to the existing greenhouse facility, which is located to the west of McCollum Science Hall. (The greenhouse facility and proposed addition are also indicated on the attached map.) The animal care area would provide a Biological Safety Level 2 facility, which the University has indicated is a relatively low and appropriate safety level to support its existing programs. The University reports that the existing animal care facility in the Biological Research Center is designated as a Biological Safety Level 1 facility and is not sufficient to support its current programs. The project would also construct a fully-accessible tunnel between McCollum Science Hall and the animal facility which would provide a critical link for transferring experiments between the facilities.

The majority of the laboratory spaces, which total approximately 70 percent of the net assignable square feet, would be located in the central core area and along the north wall of the building. A total of four lecture classrooms would be located along the south wall, and the faculty office areas would be located along the west perimeter glass curtain wall which would curve to connect with the south wall of the building. A corridor area, which would be partially open between the first and second floors, would be located between the office and the laboratory spaces. Open and informal student study areas would be provided along this corridor.

The building would include a total of six fully-accessible restroom areas (three male and three female); one set of restrooms would be located on each floor. The restrooms would provide a total of 15 female toilet fixtures, three male toilet fixtures, six urinals, and six male and six female lavatories. The University has indicated that the number of restroom fixtures exceeds the State Building Code based on total occupancy of the building.
The following table compares the October 2000 and the revised (December 2000) space summaries for the McCollum Science Hall Addition:

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<tr>
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<tbody>
<tr>
<td>Laboratory Space</td>
<td>30,700</td>
<td>27,454</td>
<td>(3,246)</td>
</tr>
<tr>
<td>Classroom Space</td>
<td>5,100</td>
<td>7,570</td>
<td>2,470</td>
</tr>
<tr>
<td>Office Space</td>
<td>6,200</td>
<td>3,028</td>
<td>(3,172)</td>
</tr>
<tr>
<td>Total Net Assignable Space</td>
<td>42,000</td>
<td>38,052</td>
<td>(3,948)</td>
</tr>
<tr>
<td>Total Non-Assignable Space</td>
<td>28,000</td>
<td>26,591</td>
<td>(1,409)</td>
</tr>
<tr>
<td>(Maintenance, Mechanical/Electrical, Restrooms, Circulation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Gross Square Feet</td>
<td>70,000</td>
<td>64,643</td>
<td>(5,357)</td>
</tr>
<tr>
<td>Net-to-Gross Ratio</td>
<td>60 percent</td>
<td>59 percent</td>
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The University reports that the increase of 2,470 net square feet of classroom space and the decrease of 3,172 net square feet in office space results from the decision to maintain additional office areas in McCollum Science Hall rather than placing these offices in the addition. According to the University, the decrease of 3,246 net square feet of laboratory space from the program estimate is attributable to the efficient layout of the laboratory spaces within the facility. The University reports that the total amount of laboratory space (27,454 net square feet) would meet the program requirements for the laboratory areas.

**Project Budget**

- Contracts/Purchase Orders: $13,500,000
- Consultant/Design Services: 1,695,000
- Furnishings and Equipment: 945,500
- Art Work: 84,500
- Contingency: 675,000

**TOTAL**: $16,900,000

The project budget would be funded from state appropriations.

The University plans to begin construction in the fall of 2001, with an estimated completion date of fall 2003.
Included in the University's capital register for Board ratification are three completed construction contracts. These items are listed in the register prepared by the University and is included in the Regent Exhibit Book.

Sheila Lodge

Approved: Frank J. Stork

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