

Contact: John Nash

REGISTER OF IOWA STATE UNIVERSITY
CAPITAL IMPROVEMENT BUSINESS TRANSACTIONS

Action Requested: Consider recommending to the Board approval of the:

1. Permission to proceed with project planning for the **Utilities – Chilled Water West Distribution Improvements** project, including the design professional selection process.
2. Permission to proceed with project planning for the **Utilities – Increase Chilled Water Capacity** project, including the selection of Sebesta, Inc. as the design professional.
3. Revised project description and budget (\$6,100,000) for the **Forker Building – Kinesiology Renovation** project.

Executive Summary:

The University requests permission to proceed with project planning, including the design professional selection process, for the **Utilities – Chilled Water West Campus Distribution Improvements** project which would install a large underground chilled water distribution piping system on the west side of campus (see Attachment A). The estimated project cost of \$5 million would be funded by utility funds.

The University requests permission to proceed with project planning, including the selection of Sebesta, Inc. as the design professional, for the **Utilities – Increase Chilled Water Capacity** project, which would install additional chilled water capacity to the campus (see Attachment B). The project includes new chilled water mains, a new underground 15 kV electrical feed, and new chilled water equipment. The estimated project cost of \$22 million would be funded by utility revenue bonds and utility funds.

In 2015, Sebesta Inc. completed an initial study of this issue to evaluate chiller/cooling tower options, reviewed existing mechanical and electrical distribution systems, recommended routing modifications, evaluated options such as free cooling or thermal energy storage, designed a conceptual layout, and developed a cost estimate. Thus, the University requests the selection of Sebesta Inc. as the design professional for the project.

The University requests approval of a revised project description and budget (\$6,100,000, an increase of \$570,000) for the **Forker Building – Kinesiology Renovation** project. The graduate student work area was redesigned during the bid phase resulting in an increased scope of work and costs. The revised budget would cover additional construction costs in the redesigned area, the associated design professional fees and additional project contingency.

Details of the Projects:

Utilities – Chilled Water West Campus Distribution Improvements

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed with Project Planning		June 2016	Requested

Due to additional new buildings and renovation projects in the southwest campus area, the University is experiencing minor operational problems with the chilled water system during periods of peak cooling demand. Further development of the chilled water distribution system, including the installation of larger piping, would correct the operational problems and better prepare the University for future campus development. The new chilled water distribution piping would run along Bissell Road and connect to existing chilled water piping to the north at Osborn Drive and to the south at Union Drive.

Utilities – Increase Chilled Water Capacity

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed with Project Planning		June 2016	Requested
Selection of Design Professional Sebesta, Inc. (Cedar Rapids)		June 2016	Requested

Due to increasing chilled water demand from new building and renovation projects across campus, the University needs additional chilled water capacity to meet campus cooling demands by 2018. The new chilled water equipment would be installed in the North Chilled Water Plant. The underground chilled water mains would extend to the west from the North Chilled Water Plant. The underground 15 kV electrical service would run east from the North Chilled Water Plant to the Power Plant.

Forker Building – Kinesiology Renovation

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed with Project Planning		Feb. 2015	Approved
Initial Review and Consideration of Capital Project Evaluation Criteria		Feb. 2015	Received Report
Design Professional Agreement Invision Architecture (Des Moines)	\$ 393,000	Aug. 2015	Not Required *
Program Statement		Oct. 2015	Not Required *
Schematic Design		Dec. 2015	Approved
Project Description and Budget	5,530,000	Dec. 2015	Approved
Final Review and Consideration of Capital Project Evaluation Criteria		Dec. 2015	Received Report
Construction Contract Award Henkel Construction Company (Mason City)	4,054,000	Mar. 2016	Not Required *
Revised Project Description and Budget	6,100,000	June 2016	Requested

* Approved by Executive Director, consistent with Board policies

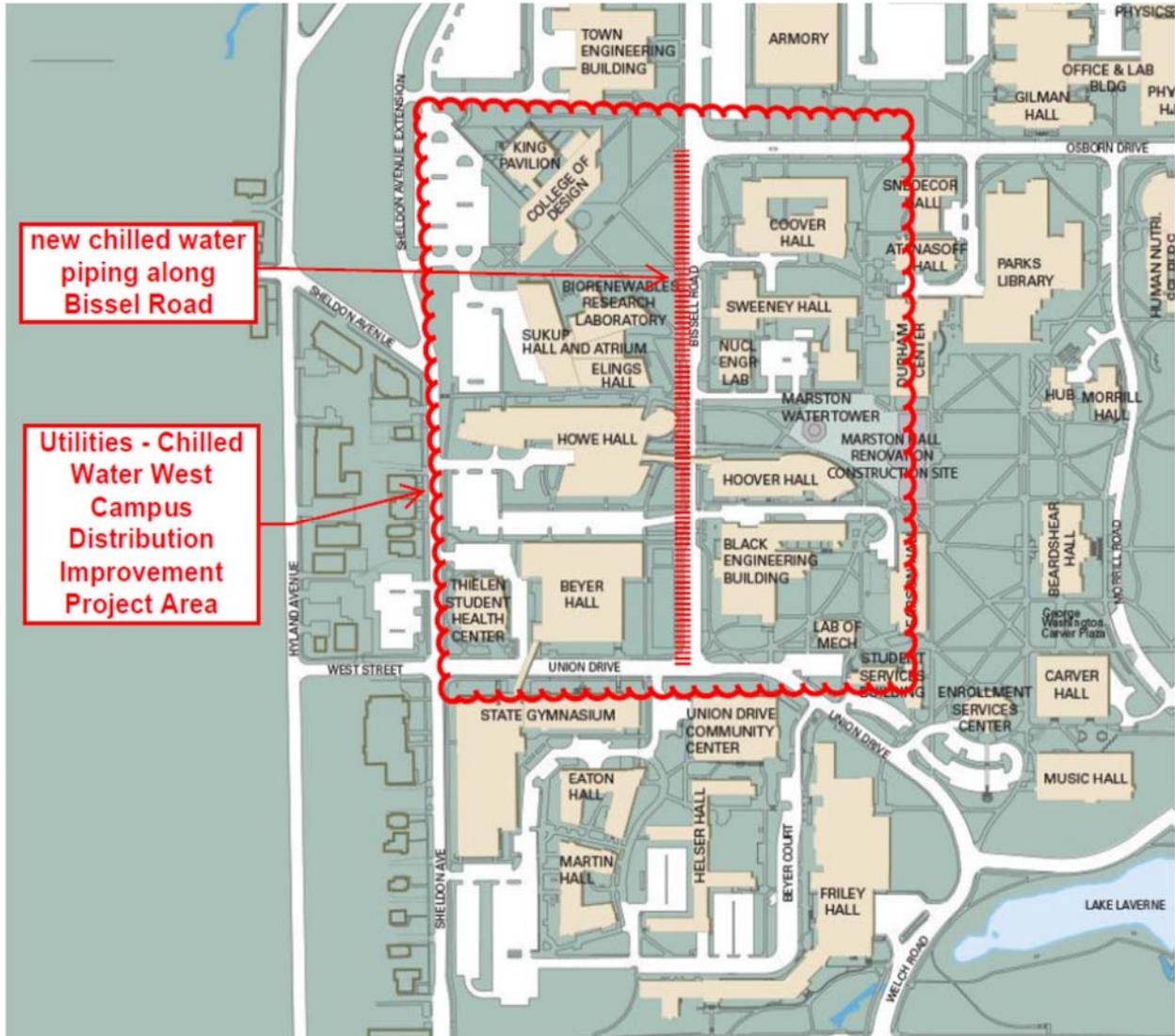
The primary objective of this project is to renovate the underutilized men’s locker room space on ground floor of the Forker Building to help alleviate an 81% growth in the Department of Kinesiology’s enrollment since 2007. The improvements would create new and additional faculty offices, graduate student open offices and restrooms, and replace the exterior windows in the renovated area. A mezzanine floor would be installed over the gym for new mechanical equipment. Also, the automatic fire sprinkler system would be extended throughout the original building built in 1940. The project would be funded by University funds and General University – Capital Renewal funds.

Revised Project Budget

	<u>Initial Budget (previous) (Dec. 2015)</u>	<u>Revised Budget (June 2016)</u>
Construction	\$ 4,301,500	\$ 4,784,670
Planning, Design & Management	816,600	880,200
Furniture & Equipment	239,500	240,000
Contingency	<u>172,400</u>	<u>195,130</u>
TOTAL	<u>\$ 5,530,000</u>	<u>\$ 6,100,000</u>

Source of Funds: University Funds and
General Fund - Capital Renewal Funds

IOWA STATE UNIVERSITY
UTILITIES – CHILLED WATER WEST CAMPUS
DISTRIBUTION IMPROVEMENTS MAP



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UTILITIES – CHILLED WATER WEST CAMPUS
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