BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM

I.3. Capital Planning and Budget Committee

Thursday, April 5, 2018 9:00 a.m. - 10:30 a.m. Gordon Dining and Event Center 770 West Dayton Street, 2nd floor Concerto Room Madison, Wisconsin

- a. Approval of the Minutes of the February 8, 2018 Meeting of the Capital Planning and Budget Committee
- b. UW-Madison: Authority to Increase the Budget of the Chemistry Building Addition and Renovation Project [Resolution I.3.b.]
- c. UW-Madison: Authority to Increase the Budget of the Babcock Hall Dairy Plant and Center for Dairy Research Addition Project [Resolution I.3.c.]
- d. UW-Madison: Authority to Increase the Budget of the Meat Science and Muscle Biology Laboratory Project
 [Resolution I.3.d.]
- e. UW-Superior: Authority to Reimburse the City of Superior, Wisconsin, for Assessable Improvements
 [Resolution I.3.e.]
- f. UW System: Authority to Increase the Budget of the UW-River Falls Dairy Plant Remodel Project
 [Resolution I.3.f.]
- g. UW System: All Agency Maintenance and Repair Projects [Resolution I.3.g.]
- h. Report of the Associate Vice President
 - 1. State Building Commission Actions
 - 2. Other Updates

Authority to Increase the Budget of the Chemistry Building Addition and Renovation Project, UW-Madison

CAPITAL PLANNING AND BUDGET COMMITTEE

Resolution:

That, upon the recommendation of the UW-Madison Chancellor and the President of the University of Wisconsin System, authority be granted to increase the budget of the Chemistry Addition and Renovation project by \$29,300,000 (\$5,300,000 Program Revenue-Cash and \$24,000,000 Gifts) for a revised estimated total cost of \$123,100,000 (\$86,200,000 General Fund Supported Borrowing, \$11,072,000 Program Revenue-Cash, and \$25,828,000 Gifts).

04/06/18 Agenda Item I.3.b.

REQUEST FOR BOARD OF REGENTS ACTION APRIL 2018

INSTITUTION: University of Wisconsin-Madison

REQUEST: Authority to increase the budget of the Chemistry Addition and Renovation

project by \$29,300,000 (\$5,300,000 Program Revenue-Cash and \$24,000,000 Gifts) for a revised estimated total cost of \$123,100,000 (\$86,200,000 General

Fund Supported Borrowing, \$11,072,000 Program Revenue-Cash, and

\$25,828,000 Gifts).

PROJECT DESCRIPTION:

The project, as currently funded, consists of the design and construction of a ten level, 103,890 ASF/188,442 GSF undergraduate chemistry teaching tower, and the replacement of critical HVAC and exhaust systems serving the existing research and teaching labs in the Daniels and Mathews chemistry buildings. The previous approval did not have funds to finish floors four, seven, and eight of the tower, or to complete the renovation of the Daniels building's teaching lab floors.

The originally enumerated project allowed for a new tower to be constructed on the southwest corner of University Avenue and Mills Street. The new tower consists of ten levels including a basement, sub-basement, and a two-story mechanical floor. As originally enumerated, floors four and eight were to be constructed as shell space to meet future needs when funding would be available.

This request to add additional funding and authority to construct seeks to renovate 30,387 ASF/57,398 GSF of teaching labs in the Daniels building. This work will include modernizing six undergraduate teaching labs original to the 1964 building and providing additional classrooms, student study spaces, and offices for undergraduate chemistry staff. The renovation of Daniels also includes portions of the basement, first and second floors, mechanical systems in the sub-basement and on the roof above the second floor (Floors B, 1, and 2 in the existing Daniels building previously deferred). The additional funding will finish construction of six more undergraduate teaching labs on floors seven and eight in the new tower. These floors were left as unfinished in previous approval requests due to funding constraints.

PROJECT JUSTIFICATION:

The UW-Madison chemistry complex is comprised of the Mathews and Daniels buildings completed in the late 1960s and the Shain Research Tower completed in 2000. The complex (224,180 ASF/409,079 GSF) houses all administrative, instructional, and research functions of the Department of Chemistry, as well as the Chemistry Library and Chemistry Learning Center.

The quality of facilities for Chemistry's instructional program has been a problem for 25 years. The department has investigated a series of solutions to address facility needs off-site and implemented instructional changes to reduce demand for instructional space. Architectural and engineering

04/06/18 Agenda Item I.3.b.

consultants were hired in the fall of 2010 to examine the condition of the existing building and define a scope and budget, as well as phasing options, for a new addition and renovation of existing space. Predesign was completed in the fall of 2011 that served as the basis for both enumeration and project design, which began in early 2015.

The project was enumerated in the 2015-17 Capital Budget, Act 55 at an amount of \$107,760,000 with a funding split of \$86,200,000 GFSB and \$21,560,000 Gifts/Grants. Since the previous approval, the campus has been able to raise additional funds totaling \$29,300,000 to complete the previously deferred scope items for a total project of \$123,100,000. The additional funding will build out floors seven and eight in the new tower, and renovate floors B, 1, and 2 in the existing Daniels building.

BUDGET:

	As Enumerated	Previously Approved Funding	Current Request	
Construction	\$89,824,000	\$74,715,000	\$98,912,000	
A/E Fees	\$6,557,000	\$7,395,000	\$8,356,000	
DFDM Mgt	\$3,783,000	\$3,228,000	\$4,291,000	
Contingency	\$4,761,000	\$5,978,000	\$7,913,000	
Equipment	\$2,246,000	\$1,900,000	\$3,000,000	
Other Fees	\$589,000	\$584,000	\$628,000	
Total Project Cost	\$107,760,000	\$93,800,000	\$123,100,000	

[&]quot;Other Fees" includes Environmental Impact Statement work and third-party commissioning.

SCHEDULE:

BOR/SBC Approval	Apr 2018
Submission of Documents for Final Review	May 2018
Bid Opening	Jul 2018
Construction Start Tower	Sep 2018
Substantial Completion/Occupancy (Tower)	Nov 2020
Substantial Completion/Occupancy (Daniels)	Oct 2022

PREVIOUS ACTION:

The project was enumerated in 2015 Wisconsin Act 55 for \$107,760,000 (\$86,208,000 General Fund Supported Borrowing and \$21,552,000 Gifts).

August 21, 2014 Resolution 10393	Recommended that the Chemistry Addition and Renovation project at an estimated total project cost of \$107,760,000 General Fund Supported Borrowing be submitted to the Department of Administration and the State Building Commission for enumeration as part of the 2015-17 Capital Budget request.
December 8, 2016 Resolution 10806	Approved the Design Report of the Chemistry Addition and Renovation project be approved and granted authority to construct the project for a total cost of

be approved and granted authority to construct the project for a total cost of \$93,800,000 (\$86,200,000 General Fund Supported Borrowing, \$5,772,000 Cash, and \$1,828,000 Gift Funds).

Authority to Increase the Budget of the Babcock Hall Dairy Plant and Center for Dairy Research Addition Project, UW-Madison

CAPITAL PLANNING AND BUDGET COMMITTEE

Resolution:

That, upon the recommendation of the UW-Madison Chancellor and the President of the University of Wisconsin System, authority be granted to increase the project budget for the Babcock Hall Dairy Plant and Center for Dairy Research Addition project by \$12,500,000 (\$6,250,000 Ex-General Fund Supported Borrowing and \$6,250,000 Cash) for a revised estimated total cost of \$46,920,000 (\$15,959,000 General Fund Supported Borrowing, \$6,250,000 Ex-General Fund Supported Borrowing, \$18,461,000 Gifts and \$6,250,000 Cash).

04/06/18 Agenda Item I.3.c.

REQUEST FOR BOARD OF REGENTS ACTION APRIL 2018

INSTITUTION: University of Wisconsin-Madison

REQUEST: Authority to increase the project budget for the Babcock Hall Dairy Plant

and Center for Dairy Research Addition project by \$12,500,000 (\$6,250,000 Ex-General Fund Supported Borrowing and \$6,250,000 Cash) for a revised estimated total cost of \$46,920,000 (\$15,959,000 General Fund Supported

Borrowing, \$6,250,000 Ex-General Fund Supported Borrowing,

\$18,461,000 Gifts and \$6,250,000 Cash).

PROJECT DESCRIPTION:

This project will construct a three-story addition and remodel portions of Babcock Hall to house the Center for Dairy Research. The project will demolish 2,770 GSF of space within Babcock Hall, demolish the 3,200 GSF Science House, construct an approximately 48,569 GSF addition to the west of the existing building, and renovate approximately 28,905 GSF of space in the existing building. The renovation and addition will provide a state-of-the-art production, teaching, and research facility for both the Department of Food Sciences' Dairy Plant and the Center for Dairy Research (CDR).

PROJECT JUSTIFICATION:

The project will address infrastructure deficiencies and functional issues within the Dairy Plant, as well as provide additional research and instructional space to serve the expanding programs within the Center for Dairy Research. This project will provide a much needed modernization of the 1950s era research and processing facility, which has not been renovated since its original construction. The facility no longer meets current health code standards and regulations for dairy plant construction and operation. This non-compliance puts the plant in danger of being closed by regulators in the near future if deficiencies are not corrected.

There are also functional problems that compromise health and safety. Currently, the raw milk storage tanks and processing equipment are on the open floor. Modern standards of dairy plant design require storage tanks to be physically separated to minimize the risk of pathogenic bacteria from the raw milk cross-contaminating finished dairy products and causing consumer illness and potential product recalls. There currently is no ability to separate research projects from the consumer product manufacturing area, which therefore also poses the potential risk for cross-contamination. Plant security is also an issue with too many poorly secured access points. The work area for accommodating short course participants is unsafe due to crowded conditions as well as exposure to steam lines, corroded electrical outlets, and chemicals.

04/6/18 Agenda Item I.3.c.

As the project proceeded to the final design and bidding phase, the complexity of the project's scope became more defined than at the design report stage. This resulted in some additional review and re-design activities requiring more time to satisfy the vision for the project. Additionally, the complexity of the project, its high standard for specialized construction of the dairy research laboratory space, and the current bidding climate led to the cost increase that was reflected in the bids. This increase will allow DFDM to accept bids received on March 27, 2018, and re-establish an appropriate post bid contingency to accommodate any unforeseen conditions that may occur during construction.

BUDGET/SCHEDULE:

	Dec 9, 2015	April 11, 2018
Construction	\$21,559,000	\$38,942,600
Design	\$2,033,500	\$3,293,500
DFDM Mgt	\$946,300	\$1,647,700
Contingency	\$2,096,700	\$2,251,700
Equipment	\$7,165,500	\$165,500
Other Fees	\$619,000	\$619,000
TOTAL	\$34,420,000	\$46,920,000

SBC Approval	April 2018
A/E Selection	Nov 2013
Design Report	Dec 2015
Bid Opening	Mar 2018
Start Construction	May 2018
Substantial Completion	Nov 2020
Final Completion	Jan 2021

PREVIOUS ACTION:

The project was enumerated in 2013 Wisconsin Act 20 for \$31,920,000 (\$15,960,000, GFSB and \$15,960,000, Gifts).

August/23/2012 Resolution 10101	Recommended that the Babcock Hall Dairy Plant Renovation and Center for Dairy Research Addition project be submitted to the Department of Administration and the State Building Commission for enumeration as part of the 2013-15 Capital Budget Request.
December 1, 2015 Resolution 10584	Approved the Design Report of the Babcock Hall Dairy Plant Renovation and Center for Dairy Research Addition project and granted authority to (a) increase the project budget by \$2,500,000 Gift Funds and (b) construct the project for an estimated total cost of \$34,420,000 (\$15,959,000 GFSB and \$18,461,000 Gift Funds).

Authority to Increase the Budget of the Meat Science and Muscle Biology Laboratory Project, UW-Madison

CAPITAL PLANNING AND BUDGET COMMITTEE

Resolution:

That, upon the recommendation of the UW-Madison Chancellor and the President of the University of Wisconsin System, authority be granted to increase the project budget for the Meat Science and Muscle Biology Laboratory project by \$3,700,000 (\$1,500,000 General Fund Supported Borrowing and \$2,200,000 Cash) for a revised total cost of \$49,477,000 (\$24,377,000 General Fund Supported Borrowing, \$22,900,000 Gifts and \$2,200,000 Cash).

04/06/18 Agenda Item I.3.d.

REQUEST FOR BOARD OF REGENTS ACTION APRIL 2018

INSTITUTION: University of Wisconsin-Madison

REQUEST: Authority to increase the project budget for the Meat Science and Muscle

Biology Laboratory project by \$3,700,000 (\$1,500,000 General Fund Supported Borrowing and \$2,200,000 Cash) for a revised total cost of \$49,477,000 (\$24,377,000 General Fund Supported Borrowing,

\$22,900,000 Gifts and \$2,200,000 Cash).

PROJECT DESCRIPTION:

This project constructs a new 37,308 ASF/67,540 GSF building for the Meat Science program at UW-Madison. The new facility will house a meat laboratory, a lecture/demonstration suite, a BSL2 laboratory suite, teaching and research laboratories as well as office and support spaces. It will also demolish the 17,750 GSF Seed Facility.

PROJECT JUSTIFICATION:

Construction on this project began in January of 2017. During the site excavation stage of the project, unanticipated expenses arose, necessitating a significant drawdown of contingency funds. Most notably, excavation of the site revealed that cinders from the old coal-fired plant, which dates back a century or more, were used extensively as fill. The cinders had to be removed to certified landfills because they are classified as unsuitable soil, and new structural soil was installed. Although some unsuitable soil was expected, the sheer volume of material exceeded the anticipated amount, resulting in higher transportation costs and tipping fees.

BUDGET/SCHEDULE:

	Feb 10, 2016	April 11, 2018
Construction	\$34,732,000	\$36,636,000
Design	\$2,797,500	\$3,076,000
DFDM Mgt	\$1,490,800	\$1,544,800
Contingency	\$2,763,200	\$3,760,000
Equipment	\$3,554,000	\$3,800,000
Other Fees	\$440,000	\$660,200
TOTAL	\$45,777,000	\$49,477,000

SBC Approval	Feb 2016
A/E Selection	Jan 2013
Design Report	Feb 2016
Bid Opening	Sept 2016
Start Construction	Dec 2016
Substantial Completion	Jan 2019
Final Completion	Sep 2019

04/06/18 Agenda Item I.3.d.

PREVIOUS ACTION:

This project was enumerated in 2013 Wisconsin Act 20 for \$42,877,000 (\$22,877,000 GFSB and \$20,000,000 GIFTS).

August 23, 2012 Recommended that the Meat Science Laboratory project be submitted to the Department of Administration and the State Building Commission for enumeration as part of the 2013-15 Capital Budget Request at an estimated total project cost of

\$42,877,000 (\$22,877,000 General Fund Supported Borrowing and

\$20,000,000 Gift Funds).

February 5, 2018 Approved the Design Report of the Meat Science Laboratory project and granted authority to: (a) demolish the Seed Building, (b)

increase the budget by \$2,900,000 Gift Funds, and (c) construct the project at a total cost of \$45,777,000 (\$22,877,000 General Fund

Supported Borrowing and \$22,900,000 Gift Funds).

Authority to Reimburse the City of Superior, Wisconsin, for Assessable Improvements, UW-Superior

CAPITAL PLANNING AND BUDGET COMMITTEE

Resolution:

That, upon the recommendation of the UW-Superior Chancellor and the President of the University of Wisconsin System, authority be granted to: (a) pay an estimated \$165,000 (\$115,500 General Fund Supported Borrowing-Utility Repair and Renovation and \$49,500 Program Revenue-Cash) municipal assessment to the Wisconsin Department of Transportation and the City of Superior, Wisconsin, for street and utility improvements on US Highway 2/Belknap Street per Wis. Stat. § 66.0705(2); and (b) transfer the approved General Fund Supported Borrowing All Agency allocation to the UW Infrastructure Maintenance appropriation.

4/06/18 Agenda Item I.3.e.

REQUEST FOR BOARD OF REGENTS ACTION APRIL 2018

INSTITUTION: University of Wisconsin-Superior

REQUEST: Authority to: (a) pay an estimated \$165,000 (\$115,500 General Fund

Supported Borrowing-Utility Repair and Renovation and \$49,500 Program Revenue-Cash) municipal assessment to the Wisconsin Department of Transportation and the City of Superior, Wisconsin, for street and utility improvements on US Highway 2/Belknap Street per Wis. Stat. § 66.0705(2); and (b) transfer the approved General Fund Supported Borrowing All Agency allocation to the UW Infrastructure Maintenance appropriation.

DESCRIPTION: This assessment request stems from roadway improvements that will reconstruct US Hwy 2/Belknap Street. The project reconstructs the intersection between the state highway and Belknap Street at the UW-Superior main entrance. This assessment will also remediate petroleum contaminated soils from an old gas station that was located on Board of Regents-owned property within the state's easement.

JUSTIFICATION: This project directly benefits the campus by providing upgraded and safe pedestrian and vehicular traffic facilities along the main university entrance. The existing roadway and sidewalks are in poor condition. The City of Superior and Wisconsin DOT will replace the street sidewalk as well as the curb and gutter, construct two new campus entry signs, and a new main intersection to campus that will help to define and enhance the main entrance to campus. The assessment is based on the direct costs of the work to be completed. Timing for this project is crucial as this portion of the project will be completed by the end of the 2018 construction season.

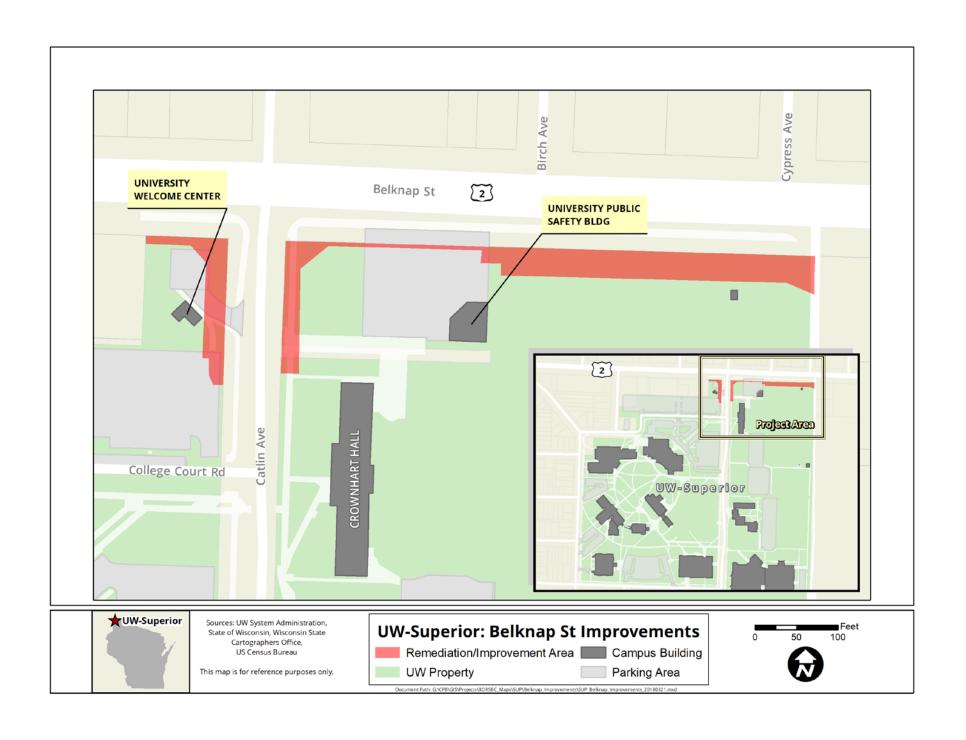
BUDGET:

Not applicable.

PREVIOUS ACTION:

None.

04/06/18 Agenda Item I.3.e.



Authority to Increase the Budget of the UW-River Falls Dairy Plant Remodel Project, UW System

CAPITAL PLANNING AND BUDGET COMMITTEE

Resolution:

That, upon the recommendation of the President of the University of Wisconsin System, authority be granted to increase the project budget of the UW-River Falls Dairy Plant Remodel project by \$1,000,000 Existing General Fund Supported Borrowing to accept bids for a revised estimated total cost of \$1,940,000 (\$915,000 General Fund Supported Borrowing; \$1,000,000 Existing General Fund Supported Borrowing; and \$25,000 Cash).

04/06/18 Agenda Item I.3.f.

REQUEST FOR BOARD OF REGENTS ACTION APRIL 2018

INSTITUTION: University of Wisconsin-River Falls

REQUEST: Authority to increase the project budget of the UW-River Falls Dairy

Plant Remodel project by \$1,000,000 Existing General Fund Supported Borrowing to accept bids for a revised estimated total cost of \$1,940,000 (\$915,000 General Fund Supported Borrowing; \$1,000,000 Existing

General Fund Supported Borrowing; and \$25,000 Cash).

PROJECT DESCRIPTION:

The scope of this project expands the dairy pilot plant by annexing the adjacent, underutilized, fruit/vegetable pilot plant, and renovates the space to accommodate donated modern dairy processing equipment. A collaborative fundraising program led jointly by The College of Agriculture, Food and Environmental Sciences (CAFES) and the UWRF Foundation has secured the donation of fixed process equipment, process piping, and special moveable equipment for the processing of raw milk, making cheese, and making ice cream.

PROJECT JUSTIFICATION:

CAFES has actively demonstrated a commitment to providing hands-on education in dairy processing and manufacturing for nearly 40 years. In 1975, faculty and staff set up a temporary dairy processing facility in the former food service facilities in the Emogene Nelson Building. A new food science and processing facility was built and dedicated in 1982, with the food pilot plants beginning operation in 1983. With more than 30 years of continuous use in academic programming, the dairy pilot plant is in need of significant updating and renovation. The plant regularly serves numerous students in a variety of introductory and advanced courses each semester. In addition, 20 students each semester are employed part-time in the plant as part of an internship program or to complete their apprenticeship requirements for a Wisconsin Cheese Maker's License. The dairy pilot plant also accommodates outreach programming in conjunction with the dairy industry as well as housing research in dairy product development and processing.

Bids for this project were opened on March 8, 2018. This request raises the total project cost to \$1,940,000 to allow the Division of Facilities Development to accept the lowest, qualified bid, provide an appropriate contingency, and complete the approved scope of the project.

04/06/18 Agenda Item I.3.f.

BUDGET/SCHEDULE:

	As Enumerated	Per Request
Construction	\$563,000	\$1,354,800
Design	\$50,000	\$230,000
DFDM Mgt.	\$27,000	\$66,000
Contingency	\$113,000	\$250,000
Other Fees	\$30,000	\$40,000
Equipment	\$157,000	
TOTAL	\$940,000	\$1,940,000

SBC Approval	June 2014
A/E Selection	April 2015
Bid Opening	Mar 2018
Start Construction	June 2018
Subs. Completion	Nov 2018
Final Completion	Dec 2018

PREVIOUS ACTION:

The Classroom Renovation and Improvements Program was enumerated in 2013 Wisconsin Act 20 for \$10,000,000 GFSB.

August 23, 2012 Resolution 10101

Recommended that the Classroom Renovation/IT Improvements project \$10,000,000 GFSB be submitted to the Department of Administration and the State Building Commission for enumeration as part of the 2013-15 Capital Budget request at an estimated total project cost of \$10,000,000 General Fund Supported Borrowing.

June 6, 2014 Resolution 10375 Approved the allocation of the Classroom Renovation IT Improvements project Granted authority to increase the budget to \$14,377,600 (\$10,000,000 General Fund Supported Borrowing, \$4,069,600 General Fund Supported Borrowing-All Agency Programmatic Remodeling and Renovation Funds, and \$308,000 Institutional Funds); and allocated \$940,000 (\$650,300 General Fund Supported Borrowing; \$264,700 General Fund Supported Borrowing-All Agency Programmatic Remodeling and Renovation Funds; and \$25,000 Cash) to be used for the UW-River Falls Dairy Plant Remodel project.

Authority to Construct All Agency Maintenance and Repair Projects, UW System

CAPITAL PLANNING AND BUDGET COMMITTEE

Resolution:

That, upon the recommendation of the President of the University of Wisconsin System, authority be granted to construct various maintenance and repair projects at an estimated total cost of \$31,145,800 (\$16,195,500 General Fund Supported Borrowing; \$12,394,400 Program Revenue Supported Borrowing; and \$2,555,900 Agency Cash).

04/06/18 Agenda Item I.3.g.

REQUEST FOR BOARD OF REGENTS ACTION APRIL 2018

INSTITUTION: University of Wisconsin System

REQUEST: Authority to construct various maintenance and repair projects at an

> estimated total cost of \$31,145,800 (\$16,195,500 General Fund Supported Borrowing; \$12,394,400 Program Revenue Supported

Borrowing; and \$2,555,900 Agency Cash).

LITH ITY REPAIR AND RENOVATION

INST	PROJ. NO.	PROJECT TITLE	GFSB	PRSB	CASH	GIFT/GRANT	TOTAL
LAX	17C1E	Parking Lot C5 Reconstruction			\$ 601,900		\$ 601,900
MSN	16E1D	Johnson St. Steam/Condensate Renv	\$ 3,319,600		\$ 1,491,400		\$ 4,811,000
MSN	16B1C	Limnology Force Main/Lift Station Repl	\$ 584,400		\$ 262,600		\$ 847,000
PLT	16I1C	Parking Lots 1/11/19 Reconstruction		\$ 1,154,500	\$ 200,000		\$ 1,354,500
		Heating Plant	Fuel Reliability	Requests			
OSH	17G1N	Heating Plant Fuel Reliability Upgrade	\$ 2,266,900	\$ 2,178,000			\$ 4,444,900
PLT	17F1E	Heating Plant Fuel Reliability Upgrade	\$ 2,765,300	\$ 2,172,800			\$ 4,938,100
STO	17E3B	Heating Plant Fuel Reliability Upgrade	\$ 2,192,100	\$ 1,523,300			\$ 3,715,400
STP	17G1M	Heating Plant Fuel Reliability Upgrade	\$ 2,559,100	\$ 1,778,400			\$ 4,337,500
SUP	17F1D	Heating Plant Fuel Reliability Upgrade	\$ 2,508,100	\$ 1,235,400			\$ 3,743,500
	•	URR SUBTOTALS	\$16,195,500	\$10,042,400	\$ 2,555,900	\$ 0	\$28,793,800

PROGRAMMATIC REMODELING AND RENOVATION

IN	ST	PROJ. NO.	PROJECT TITLE	GFSB	PRSB	CASH	GIFT/GRANT	TOTAL
R'	VF	16E1C	McMillan Hall Restrooms Renovation		\$ 2,352,000			\$ 2,352,000
	PRR SUBTOTALS		\$ 0	\$ 2,352,000	\$ 0	\$ 0	\$ 2,352,000	

	GFSB	PRSB	CASH	GIFT/GRANT	TOTAL
APRIL 2018 TOTALS	\$16,195,500	\$12,394,400	\$ 2,555,900	\$ 0	\$31,145,800

PROJECT DESCRIPTION:

Utility Repair and Renovation Requests

<u>LAX - Parking Lot C5 Reconstruction (\$601,900)</u>: This project reconstructs commuter parking lot C5. The parking lot, lighting, and adjacent turf and landscaped areas will be evaluated to identify deficiencies, develop design solution alternatives, and recommend appropriate corrective measures that include new storm water management features. Project work includes reconstructing approximately 52,000 SF of asphalt pavement and gravel parking lot into a new cohesive asphalt pavement surface, augmenting the parking lot lighting as necessary, and construction and/or implementation of new storm water management features where and to the most practical extent possible. The new parking lot design will provide the most efficient use of

04/06/18 Agenda Item I.3.g. space while also limiting the loss of parking stalls to accommodate the new storm water management features and improved landscaping.

The asphalt pavement portion of the parking lot, approximately one-third of the entire lot surface, was constructed 30 years ago. Annual crack sealing maintenance was performed, but due to the age and condition of the pavement, those procedures are no longer effective in maintaining the parking lot surface. The other two-thirds of the parking lot surface is gravel base, which is difficult to maintain and service, especially during the winter months. Although the parking lot lighting is new, it may not provide adequate and consistent light levels in all areas. Installing enhanced landscaping features will make this parking lot more appealing to visitors and prospective students. UW-La Crosse is permitted by the Wisconsin Department of Natural Resources as a municipal storm water utility operator, which requires the campus to reduce the amount of suspended solids entering the storm sewer system. The City of La Crosse has also established a storm water utility that assesses fees based on the amount of storm water entering their sewer system from impervious areas. Consequently, this project intends to reduce the amount of storm water leaving the site by constructing storm water mitigation amenities for this parking lot.

MSN - Johnson St. Steam/Condensate Renovation (\$4,811,000): This project renovates high-pressure steam (HPS), low-pressure steam (LPS), pumped condensate return (PCR), and compressed air (CA) utilities from the southeast corner of Charter Street and Johnson Street, crossing Johnson Street north toward University Avenue along Charter Street. Project work includes replacing steam pit 18/11 and ~230 LF of concrete box conduit with an accessible utility tunnel from steam pit 18/11 to the north terminating at a location suitable for connection to the future Chemistry Instructional Facility. The utility tunnel work includes replacement of the 18-inch HPS, 20-inch LPS, 8-inch PCR, and 3-inch CA piping, insulation, and support systems. The 18-inch HPS will be increased in size to a 20-inch HPS. Adjacent to the box conduit, signal pit 7S03 will be demolished and replaced. Miscellaneous project scope items include detailed traffic controls phasing drawings, utility relocates, asbestos abatement of the steam pit and box conduit piping insulation (as required), and complete restoration of the site to pre-construction conditions, including roadways and gutters, pedestrian walkways, landscaping features, and site structures.

The steam distribution system in the scope of this project was installed when the Charter Street Heating Plant (CSHP) was constructed in 1958. This is one of three primary high-pressure steam services and the only primary low-pressure steam service to the campus from CSHP. There have been several condensate leaks along this section of the distribution system. The concrete ceiling of steam pit 18/11, located primarily under the Johnson Street and Charter Street intersection, has begun to delaminate exposing the structural steel rebar of the roof system. The poor structural condition of this steam pit is a cause for concern due to traffic on Johnson Street and should be replaced. In addition, this project will provide LPS, PCR, and CA utility connections for the future Chemistry Instructional Facility.

MSN - Limnology Force Main/Lift Station Replacement (\$847,000): This project replaces the associated the four-inch force main and the adjacent four-inch domestic water service to the building. The lift station, force main, and domestic water service will be evaluated to identify deficiencies, develop design solution alternatives, and recommend appropriate corrective measures. Project work includes identifying deficiencies and regulatory requirements for the

sanitary sewer and domestic water services to Limnology, developing design solution alternatives, recommending appropriate corrective measures, and developing a project budget and schedule. Modifications to the building structure and plumbing systems in the mechanical room are to be included in this project. Alternatives must include potential impacts on the other utility services lines serving Limnology and other buildings in the area. Design and construction administration services will be provided after the pre-design report and construction funding are approved.

The sanitary sewer lift station and force main were originally installed in 1961 and the force main was subsequently relocated in 1968 with the construction of Helen C. White Library. The lift station is currently located in the basement of the building and needs to be renovated or replaced because it is unreliable and excessive maintenance is required to keep it operational. The lift station contains one 50 gallon pneumatically actuated ejector pump with a capacity of 50 GPM which is simple to operate and, when in good condition, would be low maintenance and seldom clog. However, this original pump is in poor condition due to age, and requires constant maintenance. Many of its replacement parts are not commercially available and require custom fabrication. It is critical to have continuous and reliable operation for the building and to prevent any potential environmental damage that would be caused by a system failure. The force main is reaching its design life and requires periodic repairs. The adjacent water main was constructed of sand cast pipe and parallels the force main. Sand cast pipe is notoriously brittle and this specific water main has collapsed in the past when it has been disturbed. The force main and water main are located so close together that there is a high potential of damaging the water main during the force main replacement, therefore this project will replace both pipes simultaneously.

<u>PLT - Parking Lots 1, 11, & 19 Reconstruction (\$1,354,500):</u> This project resurfaces or reconstructs parking lots 1, 11, and 19. This project will improve accessible parking and traffic patterns, resolve parking capacity issues, and make safety improvements to reduce or eliminate the amount of pedestrian-vehicle interactions. Project work includes pulverizing and paving all areas within Parking Lot 1, the Center for the Arts loading dock (combined 50,000 SF), and the drive aisle of Parking Lot 19 (40,000 SF); and reconstructing Parking Lot 11 (19,000 SF). Pavement markings, signage, and lighting will be augmented, replaced, or re-installed as required. Work associated with Parking Lot 11 will be coordinated with the Williams Fieldhouse Addition (14K1G) so that the pedestrian mall has a continuous flow through this area of campus.

Parking Lot 1 has transverse, longitudinal, and alligator cracking as well as wheel ruts from parked cars. Accessible parking is distributed across the lot and does not provide an adequate accessible route to some of the adjacent buildings. There are multiple areas with pedestrian/vehicle interactions, due to the absence of pedestrian walkways and the presence of drop off and pick-up zones and a loading dock. Parking Lot 11 has severe distress with extensive loss of surface integrity. Water weeps out of the asphalt in the spring and during extended rain events. There is also a significant pedestrian/vehicle issue with pedestrians walking up the drive aisles. Parking Lot 19 has extreme longitudinal cracking in the drive aisle. Crack filling procedures can no longer address the severity of the issue.

<u>Heating Plant Fuel Reliability Upgrades:</u> These five projects provide on-site fuel oil storage, burner redundant capacity, and associated equipment in the Heating Plant to allow 72 hours of weekend boiler operation at the historical peak usage rate in the event of a natural gas outage or

curtailment with the largest boiler unavailable for service in accordance with the Department of Administration (DOA) and UW System Administration (UWSA) Risk Management requirements.

- 1. OSH Heating Plant Fuel Reliability Upgrade (\$4,444,900): Project work includes installation of new fuel oil burners for the coal/gas-fired boilers; approximately 40,000 gallons of fuel oil storage tanks; spill containment; and associated equipment and controls. All existing coal and ash handling equipment will be removed, including the baghouse and economizer. The coal-fired boilers were installed in 1965 with sidewall natural gas burners. UW-Oshkosh currently has 25,000 gallons of fuel oil storage capacity and approximately 30 hours of run time.
- 2. PLT Heating Plant Fuel Reliability Upgrade (\$4,938,100): Project work includes installation of new fuel oil burners for the coal/gas-fired boilers; increasing the boiler capacity from 48,000 pounds per hour (PPH) to 60,000 PPH through installation of a new economizer and associated equipment and controls; installation of 48,000 gallons of fuel oil storage tanks, spill containment, and associated equipment and controls. All existing coal and ash handling equipment will be removed. The non-functional combustion make-up air handling unit will be replaced. Stub stacks will be provided for summer boilers to allow isolation of larger boilers for inspection and repair as needed. The coal-fired boilers were installed in 1964 with sidewall natural gas burners. UW-Platteville currently has no fuel oil storage capacity and consequently no run time. This project will provide a new fuel source capability on campus.
- 3. STO Heating Plant Fuel Reliability Upgrade (\$3,715,400): Project work includes installation of new fuel oil burners for the coal/gas-fired boilers; 40,000 gallons of fuel oil storage tanks; spill containment; and associated equipment and controls. All existing coal and ash handling equipment will be removed. The coal-fired boilers were installed in 1965 with sidewall natural gas burners. UW-Stout currently has 10,000 gallons of fuel oil storage capacity and 14 hours of run time.
- 4. <u>STP Heating Plant Fuel Reliability Upgrade (\$4,337,500):</u> Project work includes installation of new fuel oil burners for the coal/gas-fired boilers; approximately 40,000 gallons of fuel oil storage tanks; spill containment; and associated equipment and controls. All existing coal and ash handling equipment will be removed, including the baghouse and economizer. The coal-fired boilers were installed in 1965 with sidewall natural gas burners. UW-Stevens Point currently has 25,000 gallons of fuel oil storage capacity and approximately 25 hours of run time.
- 5. <u>SUP Heating Plant Fuel Reliability Upgrade (\$3,743,500):</u> Project work includes installation of new fuel oil burners for the coal/gas-fired boilers; 36,000 gallons of fuel oil storage tanks; spill containment; and associated equipment and controls. All existing coal and ash handling equipment will be removed. The coal-fired boilers were installed in 1970 with sidewall natural gas burners. UW-Superior currently has no fuel oil storage capacity and consequently no run time. This project will provide a new fuel source capability on campus.

The Department of Administration, in conjunction with UWSA Risk Management, requires that each heating plant have on-site storage of emergency boiler fuel to allow 72 hours of operation at the historic peak weekend steam usage rate in order to sustain operations in the event of an extended primary fuel disruption or curtailment. Coal is being phased out as a central heating plant fuel source for all UW institutions. The current coal supplier, the only bidder on the

current coal contract, is operating in bankruptcy. These five projects will provide additional fuel storage capacity for UW-Oshkosh, UW-Platteville, UW-Stevens Point, UW-Stout, and UW-Superior. The 72-hour standard is derived from the scenario of a natural gas supply interruption during a winter weekend starting on a Friday and an inability to obtain a fuel oil delivery until the following Monday morning. Without adequate back-up fuel inventory maintained on-site, heating outages of even short duration during extreme cold may occur requiring closure of and freeze damage to campus buildings, harm to research animals, and disruption of campus instruction, food service, and events. Uncertain availability of coal beyond the expiration of the current coal supply contract in June 2020 and environmental concerns preclude the use of coal as a long term secondary fuel. DOA has determined it is not cost-effective to replace existing coal boilers with new gas/oil boilers. Doing nothing would expose the facilities to unacceptable risk of winter heating loss.

Programmatic Remodeling and Renovation Requests

<u>RVF – McMillan Hall Restrooms Renovation (\$2,352,000):</u> This project resolves maintenance issues and improves the functionality and aesthetics of the restrooms (approximately 5,500 GSF). Project work includes selective demolition and replacement of partition walls and building infrastructure systems; creation of new individual shower and drying rooms, toilet rooms, and common lavatory spaces; and installation of new room finishes and accessories.

McMillan Hall (50,761 GSF constructed in 1967) provides housing for up to 240 students. With the exception of replacing broken floor and wall tiles, no significant renovations have occurred in the restrooms. Drain, waste, and vent plumbing systems are corroded and failing. Domestic water supply systems are corroded with valves failing. The ventilation system does not meet contemporary standards for the number of air changes per hour. Each restroom/shower complex uses a gang shower, which is not preferred by students.

PROJECT JUSTIFICATION:

UW System Administration continues to work with each institution to develop a comprehensive campus physical development plan, including infrastructure maintenance planning. After a thorough review and consideration of All Agency Project proposals and infrastructure planning issues submitted, as well as the UW All Agency Projects Program funding targets set by the Division of Facilities Development, this request represents high priority University of Wisconsin System infrastructure maintenance, repair, renovation, and upgrade needs. This request focuses on existing facilities and utilities, targets the known maintenance needs, and addresses outstanding health and safety issues. Where possible, similar work throughout a single facility or across multiple facilities has been combined into a single request to provide more efficient project management and project execution.

BUDGET AND SCHEDULE:

General Fund Supported Borrowing	\$ 16,195,500
Program Revenue Supported Borrowing	
Agency Cash	

Total Requested Budget\$ 31,145,800

PREVIOUS ACTION: None.