

BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM

I.3. Capital Planning and Budget Committee

Thursday, June 5, 2014
UW-Milwaukee Union
Milwaukee, Wisconsin

8:30 a.m. Meeting of the Capital Planning and Budget Committee – Ballroom West

- a. Approval of the Minutes of the April 10, 2014 Meeting of the Capital Planning and Budget Committee
- b. UW-Milwaukee Presentation: Building an Engaged, Top-Tier Research University
- c. UW-La Crosse: Approval of the Design Report and Authority to Construct the West Campus Chilled Water Plant Project
[Resolution I.3.c.]
- d. UW-Platteville: Approval to Accept a Gift-in-Kind of 30.0 Acres of Land with Improvements of a Swine Center Facility
[Resolution I.3.d.]
- e. UW-Stevens Point: Authority to Purchase Two Parcels of Land Located in Stevens Point at (1) 209 Division Street and (2) 210 Isadore Street For Parking Purposes
[Resolution I.3.e.]
- f. UW System: Authority to Construct Various Classroom Renovation/Instructional Technology Improvement Projects
[Resolution I.3.f.]
- g. UW System: Authority to Construct Various Maintenance and Repair Projects
[Resolution I.3.g.]
- h. Discussion: Master Planning and Building Projects – Part II
- i. Report of the Associate Vice President

Approval of the Design Report and
Authority to Construct the West Campus
Chilled Water Plant Project,
UW-La Crosse

CAPITAL PLANNING AND BUDGET COMMITTEE

Resolution:

That, upon the recommendation of the UW-La Crosse Chancellor and the President of the University of Wisconsin System, the Design Report of the West Campus Chilled Water Plant project be approved and authority be granted to construct the project for an estimated total cost of \$8,433,000 (\$4,300,830 General Fund Supported Borrowing and \$4,132,170 Program Revenue Supported Borrowing).

THE UNIVERSITY OF WISCONSIN SYSTEM

**REQUEST FOR
BOARD OF REGENTS ACTION
JUNE 2014**

INSTITUTION: UW-La Crosse

REQUEST: Approval of the Design Report of the West Campus Chilled Water Plant project and authority to construct the project for an estimated total cost of \$8,433,000 (\$4,300,830 General Fund Supported Borrowing and \$4,132,170 Program Revenue Supported Borrowing).

PROJECT DESCRIPTION:

This project will construct a west campus chilled water plant to augment the capacity of the existing campus chilled water system. The plant will be located on university property between the Health Sciences Center and Angell Hall. The project will install two 1,200-ton electrically powered centrifugal chillers and ancillary equipment in a new building of approximately 7,000 GSF. The building and infrastructure have been sized to accommodate a third 1,200-ton chiller or a thermal storage system to satisfy future campus cooling loads.

Direct-buried piping will be installed to connect the plant to the existing chilled water distribution system and to extend services to the future site of the 2013-15 enumerated Student Center and Cowley Science building projects. City water, storm, and sanitary services will be extended into the building to meet plant needs. In addition to new chiller plant controls, existing chilled water plant equipment controls and water metering systems will be upgraded or modified to facilitate integrated dispatching of new and existing chilled water equipment. Chilled water meters will be installed in existing campus buildings that are not presently monitored. The plant electrical service will be fed from the existing 15kv substation located just east of the central heating plant. At the chiller plant, new outside switchgear and a transformer will be installed to meet chiller plant electrical demands. Electrical, fiber optic, and telecommunication concrete duct bank and cabling will be installed between the plant and existing campus hubs to support plant operations.

PROJECT JUSTIFICATION:

Analysis of existing chiller operating data and archived plant instrumentation trends shows that the campus peak cooling demand exceeds the capacity of the existing chiller plant. Also, on days when the existing chiller plant is producing at its full capacity, the chilled water distribution mains near the plant are at maximum recommended velocities. Based on predesign estimates for the 2013-15 enumerated Student Center and Cowley Science building projects, an additional 1,200 tons of chilling capacity will be required to meet those cooling loads (the substantial completion date for the Student Center is June of 2016). In addition, new building projects and increasing demand to cool existing buildings is estimated to require an additional 1,800 tons of chilling capacity over the next ten years based on the 2005 campus master plan, as updated with current campus planning information. An engineering study was concluded in January 2013 that investigated the most cost effective and

efficient means to add cooling capacity on campus. In general, the study centered on the feasibility and life cycle cost analysis of four different alternatives to increase campus cooling capacity including a stand-alone west campus chilling plant, a chiller plant within the 2013-15 enumerated Student Union, and geothermal and thermal storage evaluations of each location. The study also included conceptual engineering and design analysis to optimize plant sizing, location and configuration. The study recommended the construction of a new 2,400-ton chiller plant on the west side of campus with plant space for additional 1,200 tons of chilling capacity as the lowest first cost and life-cycle cost option.

BUDGET/SCHEDULE:

Construction	\$6,893,000
Design	573,000
DFD Mgt.	301,000
Contingency	601,000
Equipment	0
Other Fees	65,000
TOTAL	\$8,433,000

SBC Approval	June 2014
A/E Selection	Nov 2013
Design Report	May 2014
Bid Opening	Dec 2014
Start Construction	Apr 2015
Substantial Completion	Sep 2016
Final Completion	Mar 2017

PREVIOUS ACTION:

August 23, 2012
Resolution 10101

Recommended enumeration of the Utility Improvements project at an estimated total project cost of \$28,857,000 (\$10,427,800 General Fund Supported Borrowing, \$10,291,200 Program Revenue Supported Borrowing, \$32,000 PR-Cash, and \$106,000 Gifts/Grants). The West Campus Chilled Water Plant, which is estimated at a total project cost of \$8,433,000 (\$4,300,830 General Fund Supported Borrowing and \$4,132,170 Program Revenue Supported Borrowing) is a portion of that project.

Approval to Accept a Gift-in-Kind of
30.0 Acres of Land with Improvements of
a Swine Center Facility, UW-Platteville

CAPITAL PLANNING AND BUDGET COMMITTEE

Resolution:

That, upon the recommendation of the UW-Platteville Chancellor and the President of the University of Wisconsin System, approval be granted to accept a gift-in-kind of 30.0 acres of land and improvements, which include a Swine Center, a Swine Compost Shed, a Swine Mortality Shed, and a Criminal Justice House (previously referred to as “Forensic Laboratory House”), all of which is valued at approximately \$1,278,630 million.

THE UNIVERSITY OF WISCONSIN SYSTEM

REQUEST FOR BOARD OF REGENTS ACTION FEBRUARY 2014

INSTITUTION: UW-Platteville

REQUEST: Request approval to accept a gift-in-kind of 30.0 acres of land and improvements, which include a Swine Center, a Swine Compost Shed, a Swine Mortality Shed, and a Criminal Justice House (previously referred to as “Forensic Laboratory House”), all of which is valued at approximately \$1,278,630 million.

PROJECT DESCRIPTION:

The Swine Center Facility is comprised of 29.0 acres of land and improvements including the Swine Center (31,768 GSF), Swine Compost Shed (5,400) and Swine Mortality Shed (206 GSF). The Criminal Justice House is a 3,072 GSF residential scale structure and is located on one acre of land. The facilities are located at 29200 College Farm Road in the Township of Elk Grove, Lafayette County, adjacent to the UW-Platteville Pioneer Farm, which is approximately five miles southeast of Platteville, Wisconsin. The Swine Center Facility was constructed in 2004 by the UW-Platteville Foundation and leased to UW-Platteville by terms of a lease agreement from January 2005 to the present. Construction of the Criminal Justice House was completed in 2010 per waivers authorized by the state Building Commission in June 2009.

The new Swine Center Facility was designed and constructed specifically to meet the needs of the UW-Platteville School of Agriculture, and completely replaced the 1968 swine facility. The Swine Center Facility is used for undergraduate education, undergraduate research, and public demonstration. The facility has a front office, sterile room, restroom and shower room, walk-in demonstration area, as well as views to the various production rooms to accommodate firsthand observation of how the facility design, technology, and management practices work to solve key issues in the swine industry. The facility houses a 70-sow herd that is group penned, and 1,400 piglets that are raised wean-to-finish each year.

The Criminal Justice House was built to meet the educational objectives of several academic programs at UW-Platteville including Building and Construction Management, Criminal Justice, and Ornamental Horticulture.

PROJECT JUSTIFICATION:

By the terms of the lease agreement, the university has utilized the Swine Center Facility and assumed all operating and maintenance costs since 2005. The lease agreement cites that the UW-Platteville Foundation would yield possession of the land and improvements to the university once all

construction cost obligations have been satisfied by the UW-Platteville Foundation. As of April 2014, all construction cost obligations have been satisfied, and the UW-Platteville Foundation wishes to transfer the property and improvements as a gift to the university. An environmental audit has been completed and demonstrates no major environmental risks.

The Swine Center Facility is heavily and exclusively used by UW-Platteville's College of Business, Industry, Life Sciences and Agriculture's School of Agriculture, and is critical to the mission of the university. The School of Agriculture has grown 200% in student enrollment from 2004 to 2013 (Fall 2013 enrollment of 815 students). The Swine Center Facility supports the School of Agriculture's majors of Agribusiness, Agricultural Education, Animal Science, and Soil and Crop Science and the minors of Agribusiness, Animal Science, Soil and Crop Science, and the pre-professional program of Pre-Veterinary Medicine.

The planning and development of the Swine Center Facility began in May 2000 with Governor Thompson announcing a major initiative geared toward improving the learning and research associated with agriculture, one of Wisconsin's principal industries. This initiative was developed in partnership between state government, including the Department of Agriculture, Trade and Consumer Protection (DATCP) and the Department of Natural Resources (DNR), various entities of the University System, and the agricultural industry. The Initiative had three components: the Pioneer Agricultural Stewardship Farm at UW-Platteville, the Discovery Farms, which is a network of private commercial farms where applied research and demonstration projects would take place, and basic research projects done at various UW campuses.

In 2000, an A/E consultant firm was hired to develop the then-proposed Swine/Dairy Improvements project program statement and complete design documents for bidding and construction. During the preliminary investigations and visits to other university and private agricultural facilities, space requirements were established, bio-contamination hazards and manure waste disposal systems noted, and many other aspects examined to determine the most efficient design of the Swine Center. As a result, the construction of a patented two-floor-level swine/composting facility was selected. This patented design utilizes a specially constructed lower floor which forces air up through a mixture of dry organic material and the animal waste to produce compost. The biggest drawback of the patented design is its construction cost, being 30% to 40% greater than a single level production facility.

In addition, in 2001 the preliminary planning related to the inadequacies of the Dairy Center indicated that the cost to expand and improve the existing milking parlor and freestall barn would far exceed the original cost estimate and would not result in an acceptable facility. To serve this important dairy program and manage the funding dilemma related to the higher cost of replacing the Dairy Center, the UW-Platteville Foundation provided the opportunity to use all existing funds for the Dairy Center Replacement project by assuming full responsibility for design, construction, and funding of the Swine Center complex on its own land.

As a result of the commitment by the UW-Platteville Foundation, the Swine Center was constructed in 2004 and then leased to the university from 2005 to the present.

Inclusion of the Criminal Justice House and its additional acre of land completes the gift-in-kind of 30.0 acres of land and improvements adjacent to the Pioneer Farm in support of the mission of UW-Platteville. The facility is also used by university, local, county, state, Tri-State police, and

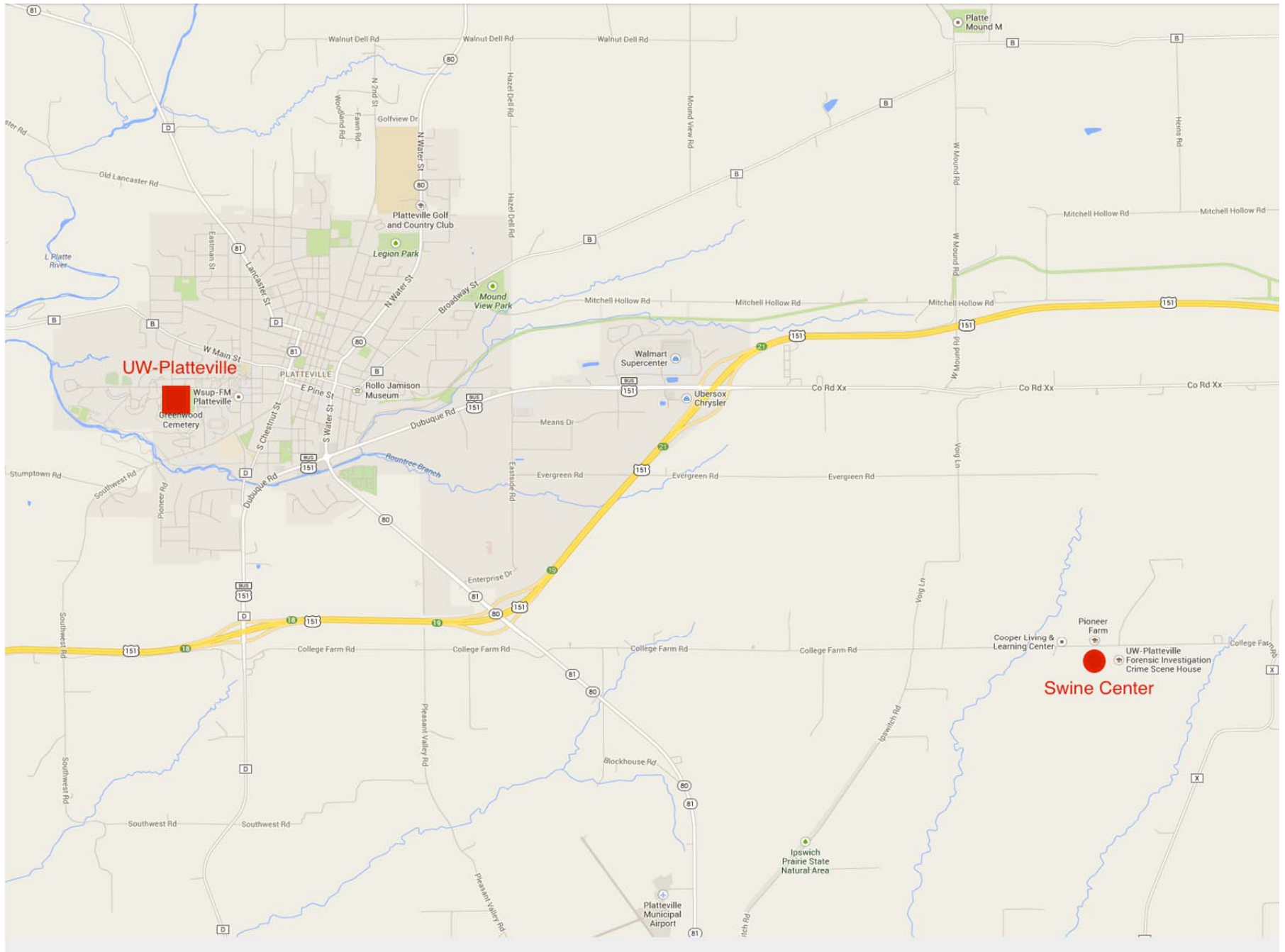
public safety personnel for required continuing education training relating to tactics, response, crime scene, and emergency incidents.

BUDGET/SCHEDULE:

Not applicable.

PREVIOUS ACTION:

- | | |
|--|---|
| <p>June 5, 2009
Resolution 9649</p> | <p>Granted authority to construct a forensic laboratory house at the UW-Platteville Farm for a total estimated project cost of \$140,000 Agency Funds and seek a waiver of Wis. Stat. § 16.855 under provisions of Wis. Stat. § 13.48 (19) to allow for construction by UW-Platteville Building Construction Management students and selected subcontractors.</p> |
| <p>June 7, 2002
Resolution 8554</p> | <p>Granted conceptual approval to accept a gift of a new Swine Center site and facility that will be constructed and funded by the UW-Platteville Foundation, and granted authority to use the \$1,736,000 General Fund Supported Borrowing enumerated for the Swine/Dairy Center Improvements project to fund a revised Dairy Center Replacement project.</p> |
| <p>August 25, 2000
Resolution 8175</p> | <p>Recommended that the Swine Center/Dairy Improvements project, which was a portion of the Governor's Agriculture Initiative, be submitted to the Department of Administration as part of the 2001-03 Capital Budget request at an estimated total project cost of \$1,736,000 GFSB. The project was subsequently enumerated as described.</p> |



Authority to Purchase Two Parcels of
Land Located in Stevens Point at (1) 209
Division Street and (2) 210 Isadore
Street For Parking Purposes,
UW-Stevens Point

CAPITAL PLANNING AND BUDGET COMMITTEE

REVISED Resolution:

That, upon the recommendation of the UW-Stevens Point Chancellor and the President of the University of Wisconsin System, authority be granted to: (a) amend the campus boundary to include the approximately 0.60-acre balance of a parcel located at 209 Division Street, (b) purchase the entire 1.11-acre parcel and improvements located at 209 Division Street, Stevens Point, for a total of \$606,750 Program Revenue-Cash, (c) raze the improvements on the parcel after approval of required demolition documents; and (d) purchase a 0.225-acre parcel and improvements located at 210 Isadore Street, Stevens Point, when it becomes available, based upon the average of two independent appraisals or less, using Program Revenue-Cash. The current assessed value is \$158,100.

THE UNIVERSITY OF WISCONSIN SYSTEM

**REQUEST FOR
BOARD OF REGENTS ACTION
JUNE 2014**

INSTITUTION: UW-Stevens Point

REQUEST: Authority to: (a) amend the campus boundary to include the approximately 0.60-acre balance of a parcel located at 209 Division Street, (b) purchase the entire 1.11-acre parcel and improvements located at 209 Division Street, Stevens Point, for a total of \$606,500 Program Revenue-Cash, (c) raze the improvements on the parcel after approval of required demolition documents; and (d) purchase a 0.225-acre parcel and improvements located at 210 Isadore Street, Stevens Point, when it becomes available, based upon the average of two independent appraisals or less, using Program Revenue-Cash. The current assessed value is \$158,100.

PROJECT DESCRIPTION:

This project will acquire a 1.11-acre parcel located at 209 Division Street, city of Stevens Point located on the west side of campus immediately north of existing campus parking Lot PV (see attached map). The property is improved with a 14,400 GSF 42-room motel of average quality, wood frame construction with steel support constructed in three phases between 1961 to 1976 (6500 GSF in 1961 and a separate two-story 7,900 GSF expansion built in two sections in 1965 and 1976). The purchase price of \$606,500 is based on the average of two independent commercial market appraisals of \$680,000 and \$533,500. There are no relocation costs associated with this acquisition. The motel will be closing prior to the time of purchase and will be vacant. The owners are willing to sell the parcel and have signed an Option to Purchase. An environmental audit for the property found no evidence of questionable contaminants or unacceptable environmental hazards.

The 0.225-acre parcel and improvements located at 210 Isadore Street will be purchased as it becomes available using PR-Cash. The purchase will be at or below its fair market value as determined by the average of two independent appraisals. The parcel is currently assessed at a value of \$158,100. The completion of an environmental audit with acceptable findings will be accomplished prior to the purchase. There will be no relocation costs associated with the acquisition. After closing, the Department of Administration will receive notification of all purchase compliance details.

PROJECT JUSTIFICATION:

UW-Stevens Point completed a master plan update in November 2007 which recommended boundary changes to support the long-term academic, research, open space, and parking needs

outlined in the plan. A minor modification of the previously-approved boundary is needed to include the entire parcel at 209 Division Street. The parcel at 209 Division has been offered for sale from cooperative sellers at its determined fair market value. The motel business operations have been modest and would require a significant capital investment to remain competitive. The owners intend to close the motel business in summer 2014 rather than improve the property.

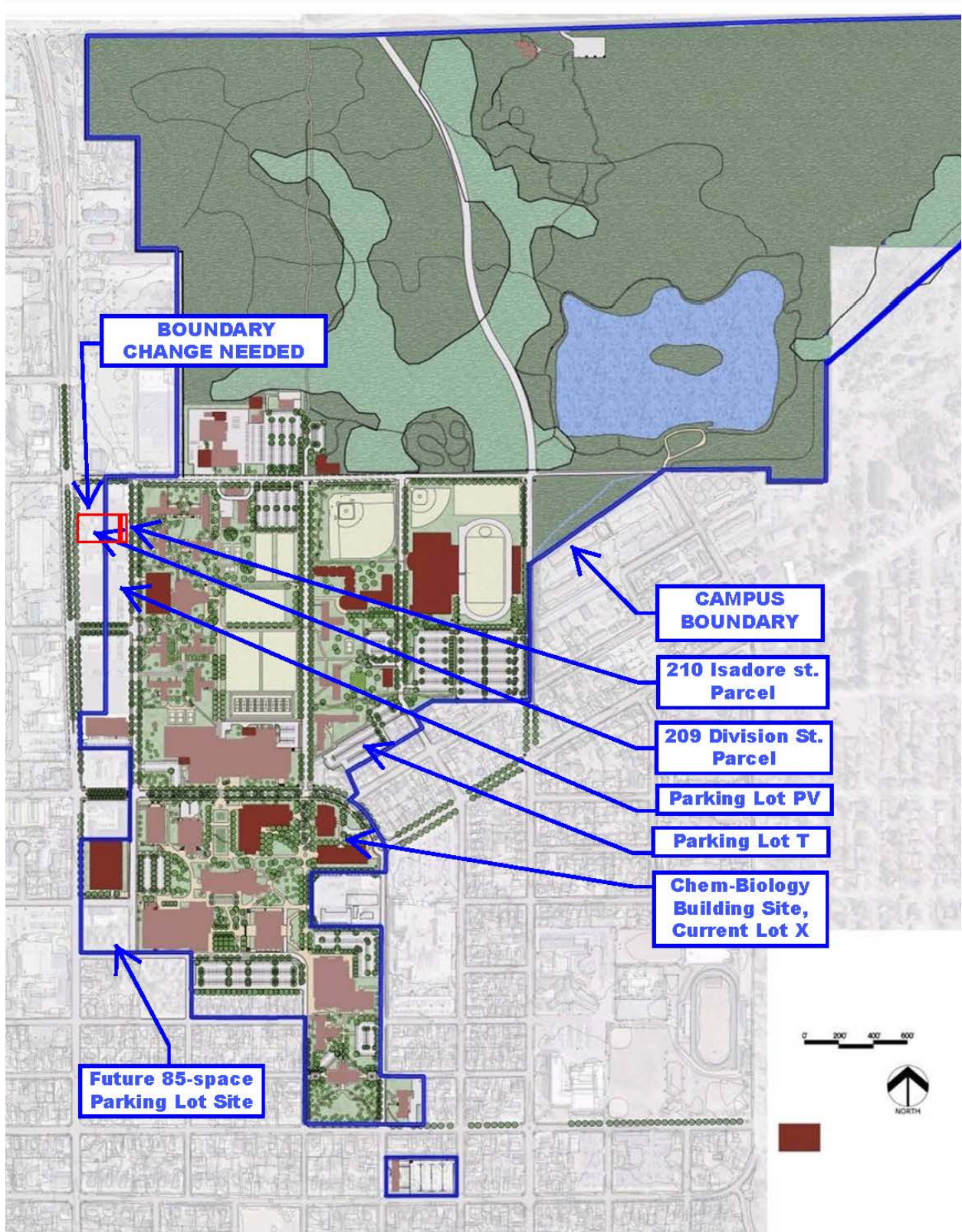
Creating new metered parking is needed in the center of campus to replace a 343-stall metered parking lot that will become the site for a new Chemistry and Biology Science facility with an anticipated construction start in summer 2015. The university operates a large 368-stall permit parking lot (Lot PV) immediately south of the 209 Division Street parcel that could be expanded northward. The buildings at 209 Division Street will be razed and the land converted to an estimated 100-stall surface parking lot connected to Lot PV. In combination with conversion of some permit spaces to metered-spaces, the new lot and another proposed 85-space metered lot now in design to the south, these changes will allow the campus to avoid or delay the high cost of constructing a four-level parking garage.

The adjacent parcel to the east at 210 Isadore Street is a narrow 49-foot deep lot, but is still sufficient to allow extending the proposed parking area by an estimated 25 additional spaces. The owner of 210 Isadore Street has been contacted, however is not interested in selling at this time.

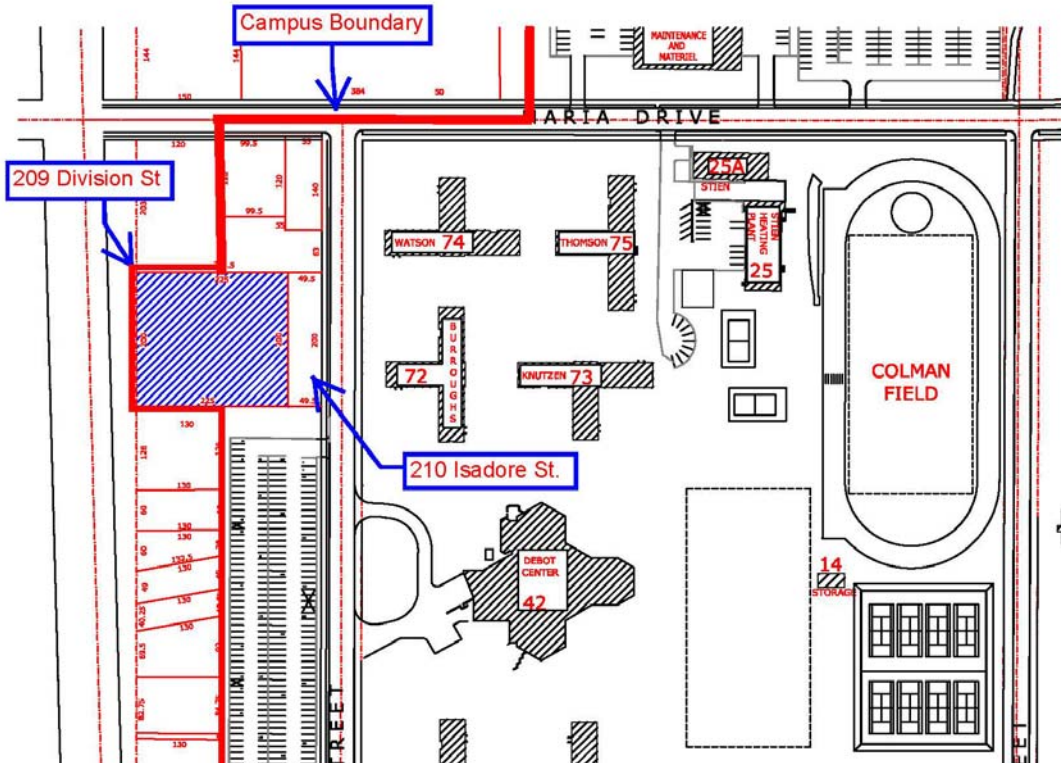
BUDGET: \$764,600 Program Revenue-Cash

PREVIOUS ACTION:

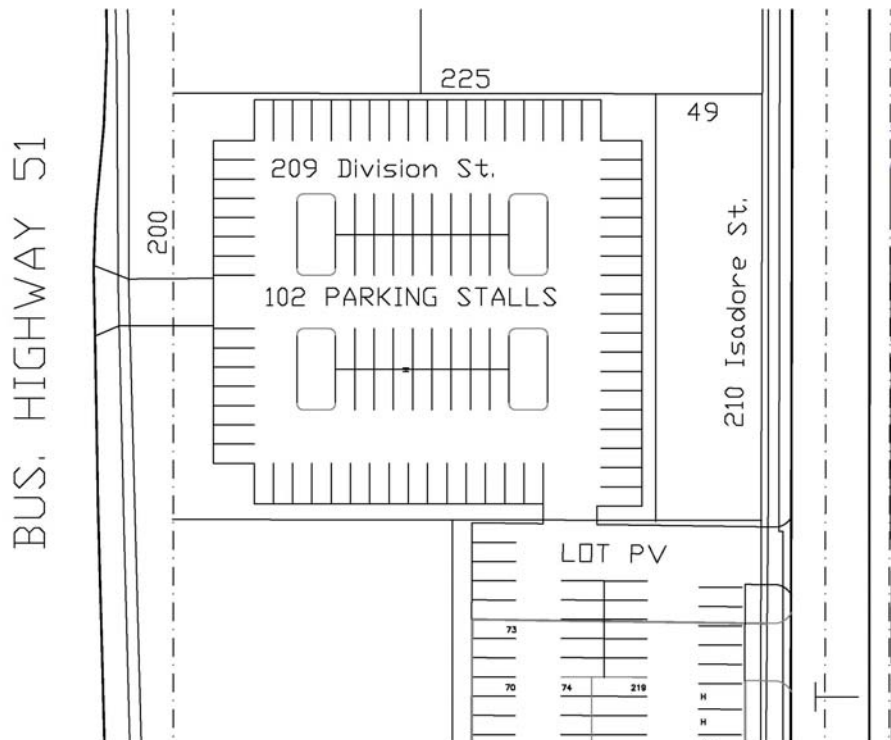
March 09, 2007 Granted authority to: (a) amend the campus boundary to extend one parcel
Resolution 9305 west of existing campus land on Portage Street west of Isadore Street in the
 City of Stevens Point, and (b) purchase a 0.143 acre parcel of land and
 property improvements located at 1730 Portage Street, Stevens Point, at an
 acquisition cost of \$112,000, using Program Revenue-Cash.



Map 1: Campus Boundary and Parcels



Map 2: Existing site



Map 3: Conceptual site plan

Authority to Construct Various
Classroom Renovation/Instructional
Technology Improvement Projects,
UW System

CAPITAL PLANNING AND BUDGET COMMITTEE

Resolution:

That, upon the recommendation of the President of the University of Wisconsin System, the allocation of the Classroom Renovation/Instructional Technology Improvement Program funds be approved and authority be granted to:

- (a) increase the program budget by \$4,377,600 (\$4,069,600 General Fund Supported Borrowing-All Agency Programmatic Remodeling and Renovation Funds, and \$308,000 Institutional Funds);
- (b) construct the related projects at an estimated total cost of \$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 allow the Division of Facilities Development to transfer balances, adjust individual project budgets and add or substitute other high-priority Classroom Renovation/Instructional Technology projects within authorized funding.

THE UNIVERSITY OF WISCONSIN SYSTEM

**REQUEST FOR
BOARD OF REGENTS ACTION
JUNE 2014**

INSTITUTION: University of Wisconsin System

REQUEST: Approval of the allocation of the Classroom Renovation/Instructional Technology Improvement Program funds; and authority to:

- (a) increase the program budget by \$4,377,600 (\$4,069,600 General Fund Supported Borrowing-All Agency Programmatic Remodeling and Renovation Funds, and \$308,000 Institutional Funds); and
- (b) construct the related projects at an estimated total cost of \$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 allow the Division of Facilities Development to transfer balances, adjust individual project budgets and add or substitute other high-priority Classroom Renovation/Instructional Technology projects within authorized funding.

PROJECT DESCRIPTION:

This request will provide funding to continue the UW System Classroom Renovation/Instructional Technology Improvement Program. The funding will be utilized to update existing general assignment classroom and laboratory instructional environments including associated furnishings and equipment to improve instructional technology. Due to the costly nature of comprehensive renovations and technology as well as the high demand for funding under this program, \$4,069,600 of General Fund Supported Borrowing-All Agency Programmatic Remodeling and Renovation funds are being added to the \$10 million of General Fund Supported Borrowing already specifically enumerated for this program. Some institutions contributed supplemental funding to achieve a maximum benefit and address additional unmet, high-priority instructional needs. At this point, institutions have committed \$308,000 for that purpose, which will be used on an as-needed basis.

A proposal form for each project was submitted to the Division of Facilities Development. These stated the purpose and scope, estimated budget, funding source(s), and anticipated construction timeline. Each submittal included movable and special equipment lists.

Based on campus proposals, it is anticipated that the requested level of funding will result in 32 appropriately sized and equipped instructional spaces totaling approximately 77,000 assignable square feet. The scope of projects varies from campus to campus. Instructional technology will

include equipment such as video/data projectors, document cameras, multi-media computers, video player/recorders, audio visual controls, and assisted listening systems. Various maintenance improvements in the learning environments will be undertaken such as lighting, flooring, HVAC, acoustics, and seating. In some cases, work may include reconfiguration to improve sight lines, support a variety of teaching models, improve ADA accessibility, and/or modify the space to meet class size needs.

Many of the proposals will create active learning environments. These technology-enhanced instructional spaces enable students to work both individually and in groups, fully engaging in a variety of learning strategies in one setting. Active learning leads to improved understanding and retention of information as well as development of problem solving and critical thinking skills. The benefits of active learning environments are leading to a greater demand for these instructional spaces.

Based upon the foregoing, 2013-15 Classroom Renovation/Instructional Technology Improvements proposals will be funded for the following institutions as shown below:

DFD Project Number	Institution	Classroom/IT and All Agency-Programmatic Remodeling and Renovation GFSB	Institutional Funds	Total
14E2L	Eau Claire	\$ 782,000	\$ 70,000	\$ 852,000
14E2K	Extension	198,200		198,200
14E2J	Green Bay	1,003,000		1,003,000
14E2I	La Crosse	869,000		869,000
14E2H	Madison Group A	1,681,400		1,681,400
14E2G	Madison Group B	1,160,800		1,160,800
14E2F	Milwaukee	1,720,000	150,000	1,870,000
14E2E	Oshkosh	279,800		279,800
14E2B	Parkside	1,289,000		1,289,000
14E2C	Platteville	1,083,400		1,083,400
14E2A	River Falls Group A	513,000	63,000	576,000
14E1Z	River Falls Group B	915,000	25,000	940,000
14E1Y	Stevens Point	814,000		814,000
14E1X	Stout	860,000		860,000
14E1W	Superior	705,000		705,000
14E1V	Whitewater	196,000		196,000
	TOTAL	\$14,069,600	\$308,000	\$14,377,600

PROJECT JUSTIFICATION:

This project continues the Classroom Renovation/Instructional Technology Improvements Program, which began in the 1995-97 Capital Budget to complete in-building wiring at several institutions and provide classroom renovation, technology improvements, and teleconferencing upgrades. The State Building Commission recommended continuation and enumeration of this program at \$10 million as part of the 2013-15 Capital Budget and it was subsequently enumerated at that amount.

Over the past nine biennia, approximately \$67 million has been authorized to implement projects under the Classroom Renovation/Instructional Technology Improvements Program, including telecommunications cabling. That figure includes over \$3 million of gift, grant, and institutional funds that were provided to augment this essential program. This funding has provided a wide spectrum of improvements in nearly 600 instructional environments.

General assignment classrooms and instructional labs serve the needs of virtually every school and college in the UW System, especially undergraduate programs. The majority of these essential instructional spaces have not been updated since originally constructed, resulting in the need for some degree of renovation and upgrading or addition of equipment.

The purpose of the program is to provide appropriate instructional environments that utilize contemporary learning and teaching methodologies. Based on guidelines, the institutions submitted high-priority projects proposed for implementation under this program during the 2013-15 biennium. To a significant degree, priority was given to those proposals that: focus on remodeling, resizing, and upgrading technology in instructional spaces that are heavily scheduled for undergraduate instruction; involve space that has not been updated during the past 15 to 20 years; and support classroom demand analyses results.

PREVIOUS ACTION:

August 23, 2012
Resolution 10101

Recommended that the UW System Classroom Renovation/Instructional Technology Improvements project be submitted to the Department of Administration and the State Building Commission as part of the UW System 2013-15 Capital Budget at a cost of \$10 million General Fund Supported Borrowing. The project was subsequently enumerated as described.

Authority to Construct Various
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 \$5,130,500 (\$2,831,000 General Fund Supported Borrowing; \$970,900 Program Revenue Supported Borrowing; and \$1,328,600 Program Revenue Cash).

THE UNIVERSITY OF WISCONSIN SYSTEM

**REQUEST FOR
BOARD OF REGENTS ACTION
JUNE 2014**

INSTITUTION: University of Wisconsin System

REQUEST: Authority to construct various maintenance and repair projects at an estimated total cost of \$5,130,500 (\$2,831,000 General Fund Supported Borrowing; \$970,900 Program Revenue Supported Borrowing; and \$1,328,600 Program Revenue Cash).

FACILITY MAINTENANCE AND REPAIR

INST	PROJ. NO.	PROJECT TITLE	GFSB	PRSB	CASH	GIFT/GRANT	TOTAL
MIL	13H2F	Union Parking Ramp Maint/Repr	\$ -	\$ -	\$ 502,500	\$ -	\$ 502,500
MSN	14E1O	Chadbourne/Barnard Kilchen Roof Repl	\$ -	\$ -	\$ 359,000	\$ -	\$ 359,000
MSN	14E1N	Cole Hall/Sullivan Hall Roof Repl	\$ -	\$ -	\$ 391,000	\$ -	\$ 391,000
FMR SUBTOTALS			\$ -	\$ -	\$ 1,252,500	\$ -	\$ 1,252,500

UTILITY REPAIR AND RENOVATION

INST	PROJ. NO.	PROJECT TITLE	GFSB	PRSB	CASH	GIFT/GRANT	TOTAL
MSN	13E4S	Linden Dr/Observatory Hill Steam Renv	\$ 2,625,100	\$ 970,900	\$ -	\$ -	\$ 3,596,000
MSN	13G1S	Lorch Court Utility/Road Repl	\$ 205,900	\$ -	\$ 76,100	\$ -	\$ 282,000
URR SUBTOTALS			\$ 2,831,000	\$ 970,900	\$ 76,100	\$ -	\$ 3,878,000

	GFSB	PRSB	CASH	GIFT/GRANT	TOTAL
JUNE 2014 TOTALS	\$ 2,831,000	\$ 970,900	\$ 1,328,600	\$ -	\$ 5,130,500

PROJECT DESCRIPTION:

Facility Maintenance and Repair

MIL – 13H2F – Union Parking Ramp Maintenance and Repairs (\$502,500): This project performs maintenance and repair work on the Union Parking Ramp concrete structure and replaces the traffic membrane. Project work includes repairing the spalling conditions on beams and columns, as well as delamination on sections of the deck, the main stair, and the bottoms of joists, beams, or pans. Loose concrete material will be removed and replaced using a trowel or shotcrete application method. The project will also repair the corroded east bay exterior concrete wall section and replace the traffic bearing membrane.

Delamination of the deck surface in some areas, along with beam and column spall (likely caused by leaking expansion joints) should be repaired before further structural damage occurs. The main stair delamination must also be addressed to avoid similar structural issues and potential liability related to its heavy pedestrian use. Repairing the delaminated columns and joists is necessary to protect pedestrians and vehicles from falling debris. Delamination of the east bay exterior wall could lead to a major structural deficiency at this location, and should be remediated immediately. The traffic bearing membrane(s) in the structure are reaching the end of their expected life cycle, and should be resurfaced or replaced before they fail to protect the

structural elements below. The issues addressed in this project are not structural in nature, but timely remediation is necessary to avoid pending structural damage and each of these conditions presents an opportunity for infiltration of damaging chloride contaminated water to the structural elements of the facility. Delay of these repairs will result in exponential increases in terms of both scope of damage and cost to repair.

MSN – 14E1O – Chadbourne Hall/Barnard Hall Central Kitchen Roof Replacement (\$359,000):

This project replaces roof coverings and completes all other associated ancillary work to maintain the building envelope integrity and prevent damage to the building and its contents. This project will address numerous roof issues at the Chadbourne and Barnard kitchen. This roof replacement is more complicated than most due to the heavy maintenance traffic and quantity of curbs, ducts, and exhaust motors on this roof. Project work includes replacing ~18,365 SF of roof coverings and associated flashing; removing and reinstalling all ductwork and motors to properly flash and seal; repairing ductwork spray foam; and installing rubber pavers to provide access for operational maintenance routines throughout the project duration.

The roof sections are approximately 5 years old. A review of roof warranties was conducted for the past year and it was determined that University Housing will be responsible for the replacement of this roof in its entirety. This roof continues to require patching several times a year. A leaking roof on a food production area can lead to a number of sanitary issues and potentially require the facility be shutdown. This building is the primary dining location and shutting it down for any length of time is not an option. It is imperative that this roof is replaced as soon as possible to eliminate the risk of any possible shutdown.

MSN – 14E1N – Cole Hall and Sullivan Hall Roof Replacements (\$391,000): This project replaces roof coverings and completes all other associated ancillary work to maintain the building envelope integrity and prevent damage to the building and its contents. Project work includes replacing ~19,690 SF of stone ballasted EPDM roofs and associated flashing. Roofing work must be coordinated around electrical conduits running across the roofing surface, mechanical equipment curbs, and other roof penetrations.

The roof sections are approximately 20 years old. Recent site inspections by the Physical Plant staff and the Division of Facilities Development (DFD) determined these roof sections require replacement to address current leaking, weathered, worn, and/or damaged sections. These repairs will extend the life of the roof sections and prevent moisture from penetrating the building envelope. The roofs at Cole Hall and Sullivan Hall have been patched to extend service life and are now in need of full replacement. Some flashing materials on both buildings are starting to pull away from the walls and will need to be replaced.

Utility Repair /Renovation

MSN – 13E4S – Linden Drive/Observatory Hill Steam Utility Renovation (\$3,596,000): This project renovates steam, condensate, and compressed air utilities in two locations on campus. Along Linden Drive, between the Stock Pavilion and the Seed Building, four steam pits will be demolished and reconstructed, one steam pit will be demolished and replaced with box conduit, and three steam pits will be renovated. On the east end of Linden Drive, the concrete box conduit and associated steam, condensate, and compressed air services between steam pits 85-10

and 86-10, and from steam pit 86-10 to Washburn Observatory and Observatory Hill Office, will be partially demolished and replaced.

Linden Drive steam pits, 18-9, 22-9, 32-9 and 78-9, will be removed in their entirety, including the pit structure, piping, valves, anchor/support steel, expansion joints, traps, sump pumps, lighting, and service power. The pits and associated mechanical, structural, and electrical systems will be reconstructed in the same location and the pits will be enlarged to provide improved access for future maintenance and operation work. Steam pit 21-9 will be removed in its entirety, including all mechanical and electrical components, and replaced with box conduit so that the steam and condensate piping system between pits 22-9 and 18-9 will exist as one continuous run.

Steam pits 79-9, 73-9, and 81-9 will be renovated to address age and wear-related structural, mechanical, and electrical issues. Pit 79-9 piping systems, valves, expansion joints, steam traps, and insulation systems will be removed and replaced. Pit 81-9 lighting, insulation systems, and steam/condensate isolation valves will be removed and replaced.

Observatory Hill work includes replacing ~400 LF of low pressure steam (LPS), pumped condensate return (PCR), and compressed air (CA) piping currently routed between steam pits 85-10 and 86-10, and from steam pit 86-10 to Washburn Observatory and Observatory Hill Office. The concrete box conduit and steam/condensate piping systems will be replaced with new direct-buried coated steel conduit piping systems. Pit 86-10 will be removed in its entirety along with select sections of the box conduit so as to not disturb monuments located in the project site. The new pit 86-10 will continue providing steam/condensate services for both buildings including 4-inch LPS, 2-inch PCR, and 1-inch CA piping. Pit 85-10 will receive minor renovation work.

Steam pits 18-9, 22-9, 32-9, and 78-9 were first installed between the late-1940s and mid-1950s during the expansion of steam distribution services to west campus buildings. Many of these steam pits are original and require removal and replacement due to condition issues, inadequate size, and associated safety concerns related to service and maintenance access and clearances. Pit 21-9 is of a similar vintage and can be eliminated and replaced with box conduit due to the current system configuration. Steam pits 79/9, 73/9 and 81/9 were installed prior to 1950 and were replaced and/or repaired at different points in their history. These steam pits are adequately sized and are in good condition structurally but require mechanical and electrical system renovation due to age and wear related condition issues. Much of the concrete box conduit system connecting to the eight referenced pits is relatively new and does not require any work.

The condensate return and compressed air services to/from the Washburn Observatory building and Observatory Hill Office have failed and therefore are isolated and no longer functional. A temporary compressed air service has been routed through the deteriorated box conduit system to keep building control systems operable and the condensate is being dumped to building drains. The piping systems need to be replaced as described to facilitate return of condensate to the central Heating Plants and to ensure that building pneumatic control systems remain functional in the future. The box conduit systems were installed prior to the mid-1960s and have exceeded their normal life expectancy.

MSN – 13G1S – Lorch Court Utilities and Roadway Replacement (\$282,000): This project replaces underground utilities and repaves the asphalt drive, curb, gutter, and sidewalk in Lorch Court to address physical condition issues and useful life concerns. Project work includes excavation and removal of roadway pavement, curb, gutter, and sidewalk to replace 64 LF of storm sewer piping, 250 LF of water main piping, and 225 LF of sanitary sewer piping. Utility laterals to surrounding buildings will also be replaced. Two sanitary access pits, two storm access pits, two storm inlets, and six domestic water isolation valves will be installed. New pedestrian walkways, curb, gutter, and 5-inch asphalt road surface will be constructed. The project will include all traffic control, emergency access to buildings, site restoration, and line stripping for parking and pedestrian walkways.

The underground utilities were originally constructed in the early 1930s and are in need of replacement. In the last five years, three water breaks have occurred and undermined the roadway base, making this surface unsafe for pedestrian and vehicular traffic. Examination of the storm sewer and sanitary sewer shows signs of cracks in pipes and leaks into the surrounding soil. Current water line valves do not allow individual buildings to be shut off while maintaining services to surrounding buildings.

PROJECT JUSTIFICATION:

UW System Administration and the Division of Facilities Development (DFD) continue 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, and the UW All Agency Projects Program funding targets set by DFD, 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.....	\$ 2,831,000
Program Revenue Supported Borrowing.....	970,900
Program Revenue Cash.....	<u>1,328,600</u>

Total Requested Budget\$ 5,130,500

PREVIOUS ACTION: None.