

PHYSICAL PLANT June 2020 Operations Report

While working on summer construction and renovation projects, Physical Plant is busy making preparations in support of the campus Smart Restart program. These preparations include conducting potable water system flushing; optimizing heating, air-conditioning, and ventilation (HVAC) systems; and modifying custodial procedures focusing on cleaning high-touch areas and constructing physical barriers.



MAJOR PROJECT HIGHLIGHTS

Animal Care: Heating Control Valves

Work is underway for December 2020 completion of assessment and replacement of 836 heating control valves across thirty-nine animal housing/holding rooms for the VCRGE and the All Campus Animal Planning and Advisory Committee (ACAPAC). This work will mitigate potential high temperatures.

Status Summary

Assessment	17%
Awaiting Material	3%
Construction	13%
Complete	67%

Classroom Locking

Doors identified by UWPD are receiving upgraded door hardware. Upgrades provide internal classroom security locking capabilities in selected classrooms for enhanced protection in the event of an active threat situation.

Phase I: (General Assignment Classrooms) 331 of 348 classrooms complete; the remaining classrooms have historic architecture, fire doors, existing electronic access control systems, or ongoing construction in-progress.

Phase II: (Departmental, Housing, and Other Classrooms) 140 of these are complete or in progress and an additional eighty-five are being scheduled with the respective departments.

CAMPUS MAIL CONSOLIDATION

Physical Plant–Campus Services is working to improve efficiency of mail services across campus. This includes absorbing the bulk mail metering services currently performed by UW Extension Mail Services.

Campus Services runs the Campus Mail Department which delivers Interdepartmental mail to over 180 stops and US Mail to 47 campus stops. The addition of the former UW Extension mail service adds 800 new campus customers and 25 new stops. Reducing duplicate efforts and streamlining mail services will help improve operational efficiency and provide a one-stop shop for campus mail customers.

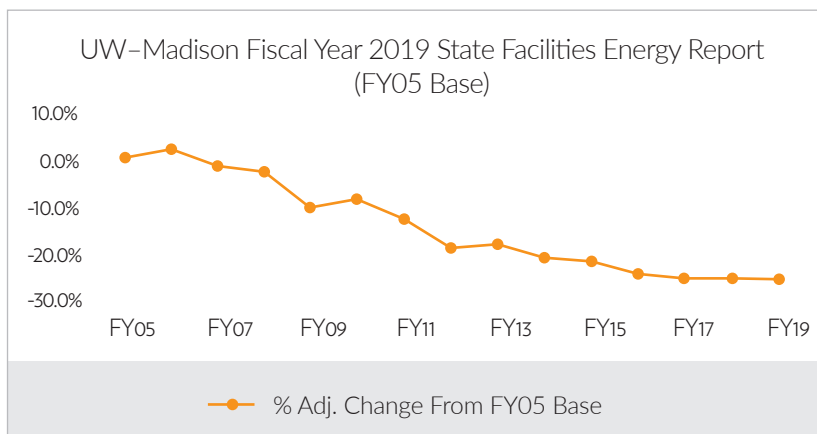


REDUCING CAMPUS CARBON FOOTPRINT: ENERGY CONSUMPTION

Facilities Energy Report

Physical Plant Utilities makes continuous operational improvements to achieve a more efficient use of energy and reduce overall consumption. At right is a look at year-over-year performance.

Adjusted for weather, UW–Madison has reduced campus energy consumption by 25 percent since fiscal year 2005. Measured as British thermal units per gross square feet (BTU/GSF), energy intensity is an industry measure used to track the efficiency of the campus as a whole while taking into consideration changes in campus size (new buildings being added) and changes in climatic conditions.



Facilities Energy Report

UW–Madison has **reduced** facilities energy consumption **by 25%** since FY05.

This industry measure considers weather and changes in campus size.

Arboretum: McKay Center Solar Array Installation



Construction of a 24 kW photovoltaic (PV) system is underway for the McKay Center at the Arboretum.

Upon completion in late August, this PV system is projected to produce 32,300 kWh per year. This will lead to a savings of approximately \$161,000 over its expected life.

Over the course of the system's thirty-year life, the energy produced will offset 700 tons of carbon dioxide that would have otherwise been generated by conventional utilities.

SUMMER 2020 PROJECT STATUS

Over the past two months, the design team and the planning and estimating teams made up significant lost time from the initial quarantine, COVID-19 response, and project construction pause.

This year, projects were selected based on a collective effort that included representatives from SMPH, L&S, CALS, VCRGE, CoE, and School of Education. The ad-hoc team collaboratively prioritized projects and identified the ones that would have the greatest impact on the university's mission and would benefit from reduced summertime campus occupancy.

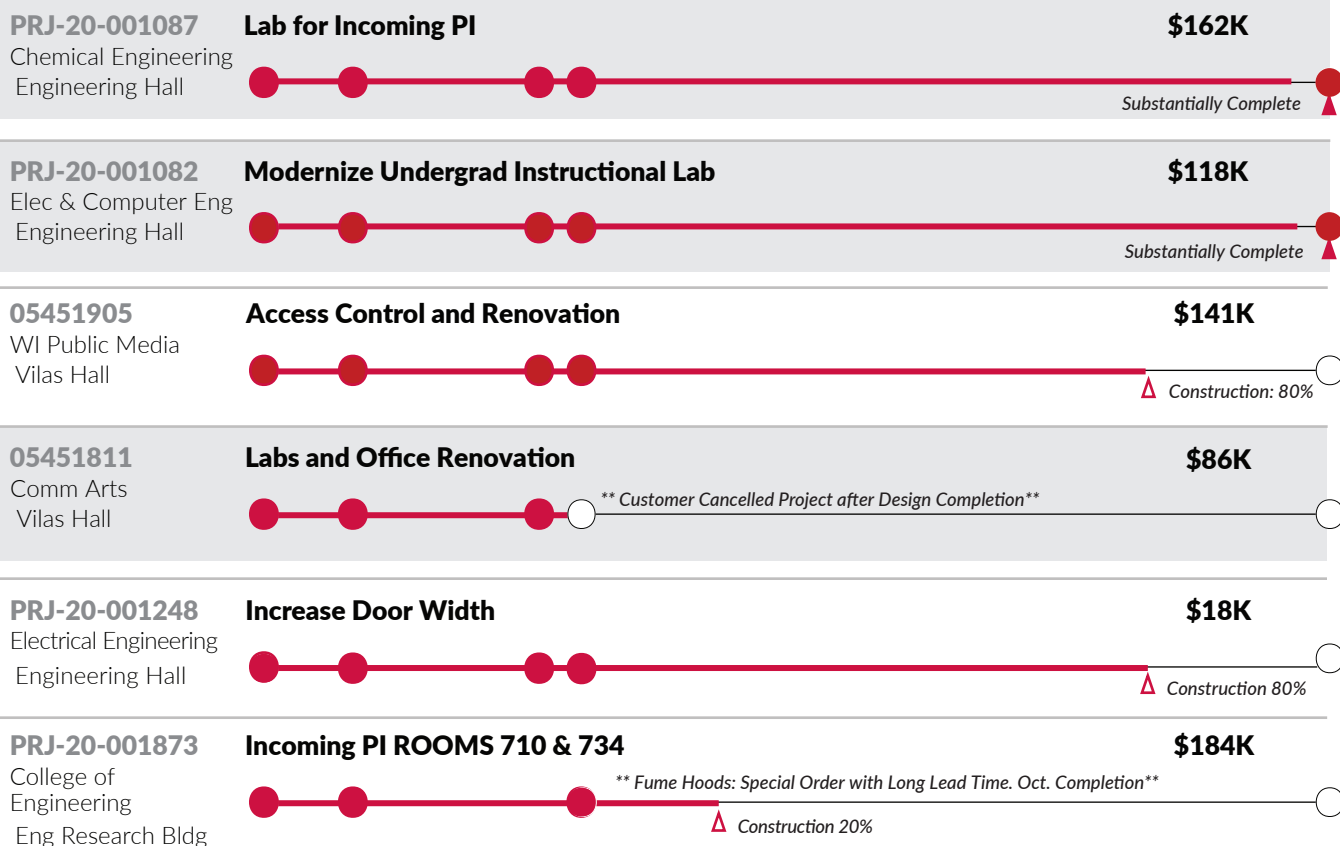
Status Summary

Design	0 (complete)
Estimating	0 (complete)
Construction	18
Substantially Complete	5
Withdrawn	3

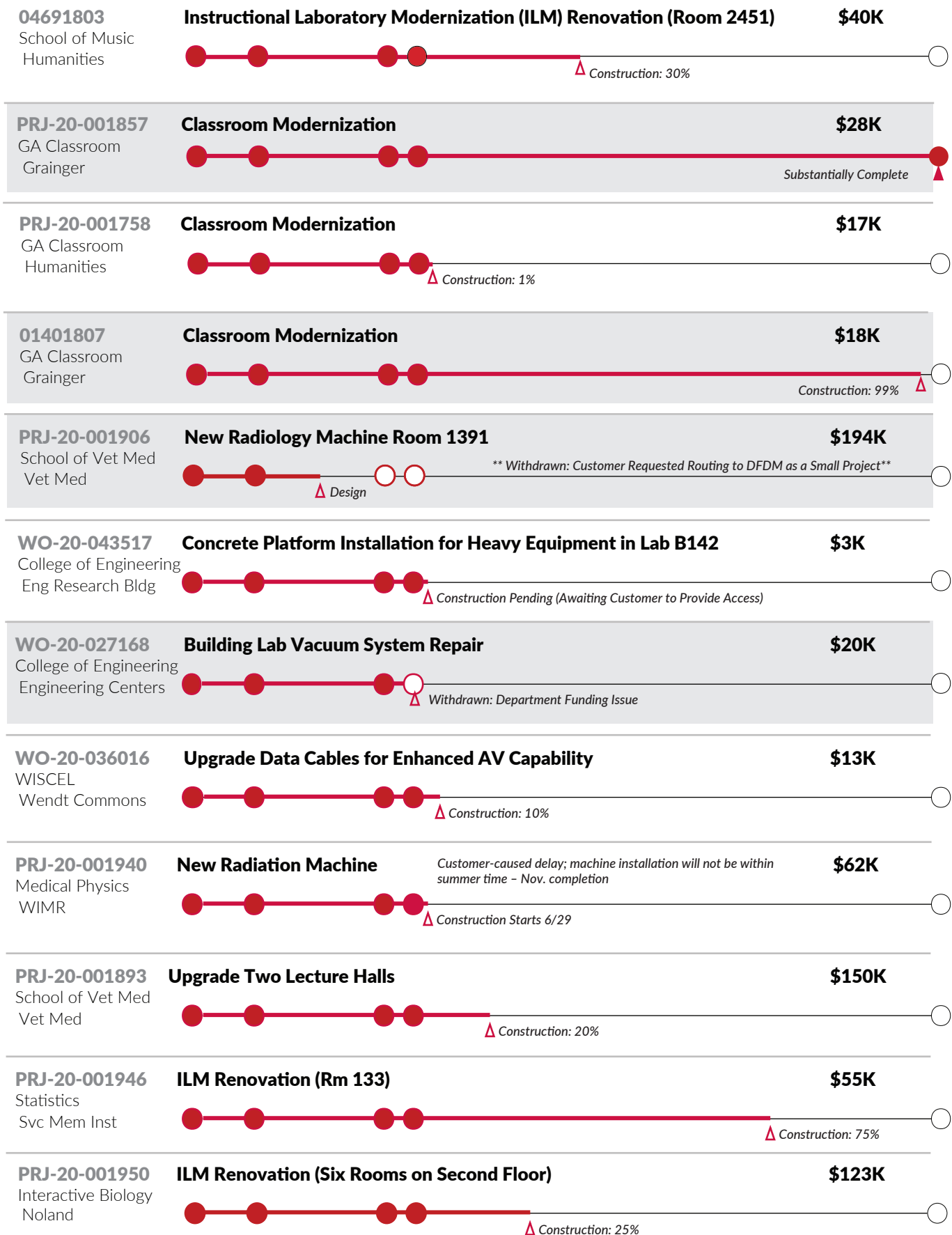
KEY

Project Milestones / Progress

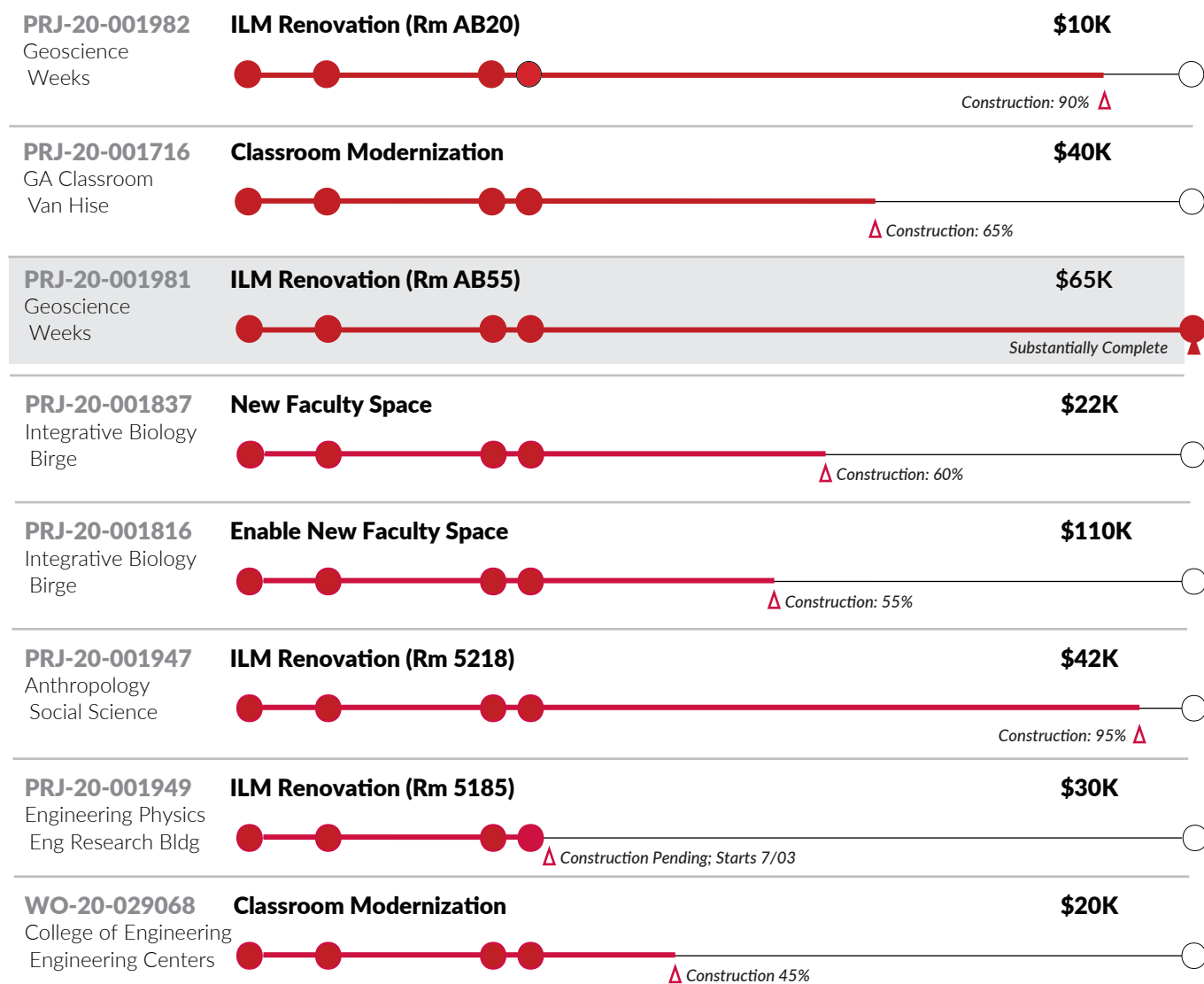
Projects generally follow a series of standard milestones as we work with the customer to clarify scope, design, and the details; and conduct detailed work planning, order materials, and execute construction.



SUMMER 2020 PROJECT STATUS (cont.)



SUMMER 2020 PROJECT STATUS (cont.)



ADDITIONAL PROJECTS COMPLETED DURING JUNE 2020

Twenty-one projects (worth \$1M) reached substantial completion over the past month.

Project Number	Building	Description	Value
00331901	Bock Laboratories	Renovations for New Microscope	\$90K
PRJ-20-001091	Bascom Hall	Room Renovation	\$14K
PRJ-20-001119	Chamberlin Hall	Install Dropped Ceiling with Lights	\$29K
01021901	Henry Mall	Classroom Remodel	\$103K
PRJ-20-001252	Grainger Hall	New Glass Doors	\$9K

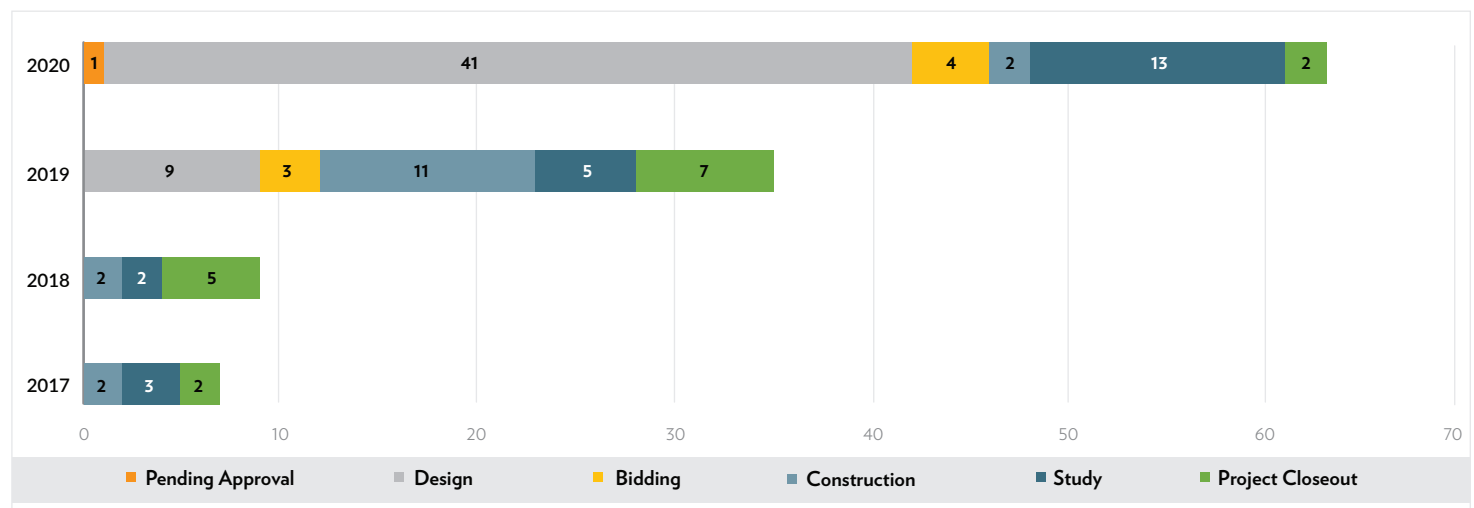
PROJECTS COMPLETED DURING JUNE 2020 (cont.)

Project Number	Building	Description	Value
01541902	Educational Science	Suite Remodel	\$9K
01541901	Educational Science	Renovate Multiple Rooms	\$22K
01561901	Atmospheric, Oceanic, Space Science	HVAC Upgrades	\$41K
PRJ-20-001093	Engineering Hall	Lab Remodel	\$155K
PRJ-20-001136	Medical Science Center	HVAC Upgrades	\$15K
PRJ-20-001657	Medical Science Center	Room Renovation	\$62K
PRJ-20-001758	Humanities Building	Lighting Upgrades	\$17K
04811903	Engineering Centers Building	Stair Upgrades	\$12K
PRJ-20-001369	Weeks Hall	Lab Remodel	\$29K
PRJ-20-001982	Weeks Hall	Room Remodel	\$10K
02121901	Wisconsin Institute for Discovery	Lab Remodel	\$45K
PRJ-20-001134	Engineering Research	Lab Renovations	\$18K
05451815	Vilas Communication Hall	Room Renovations	\$135K
Total Approved Construction Service Agreement (Final Amount TBD)			\$814K

CONTRACTED REPAIRS

Four additional contracted repair projects were approved this month and received State funding. This includes the emergency elevator repair project for the Primate Center that was highlighted last month. As illustrated below, our team has been extremely successful in developing and negotiating with UWSA and DFDM for these projects. There is significant work ahead to coordinate the construction efforts.

Contracted Repair Projects



UNEXPECTED: BREAKDOWNS

Chilled Water Outage

A chilled water outage caused by a construction contractor that drilled into a 42-inch chilled water line affected west central campus. The team quickly identified critical animal care centers and placed interim equipment to assist the contingency contractor with the placement of temporary chillers (pictured right) at eight buildings while identifying a repair strategy.



Flooding in Science Hall

Science Hall experienced flooding on June 10 due to a sewer backup, resulting in a new insurance claim of approximately \$30,000. The backup occurred due to an antiquated air-conditioning system that is building up lime in the pipes, significantly impacting the system's ability to handle the water flow.

Cooling in Environment, Health & Safety Building

The HVAC system at the Environmental Protection & Safety Building continues to provide insufficient cooling. A combination of aging equipment and increased building occupation have progressively decreased the ability to provide adequate cooling. A long-term solution to switch the building to campus chilled water is in development. Physical Plant is working many "band-aid" solutions to keep the system nominally adequate.