



Every summer, Physical Plant teams complete additional work to ready the campus for another academic year. While this summer has included significant efforts to prepare and adjust procedures for COVID-19 mitigations, we have also continued the important work of maintaining the safe functioning of facilities and infrastructure. Over the past month, behind-the-scenes work has included floor care, deep cleaning, window washing, construction and renovation projects, painting and corrosion control, masonry repairs, roof repairs, major maintenance of utilities distribution systems, road and parking striping, pavement repairs, and building system preventive maintenance (see [Page 2](#)).

Maintaining and operating our facilities requires dedication, 24-hours per day, 365 days a year. Your Physical Plant staff is committed to understanding your requirements, to active stewardship, and to continuously learning about their responsibilities including facilities, property, and assets.

It is our pleasure to support you in accomplishing your research and education mission this year.



Plumbers retrieve a composite flow-weighted sampling unit from a campus wastewater manhole. UW-Madison is monitoring campus wastewater as part of a statewide SARS-CoV-2 wastewater surveillance network.

BREAKDOWNS AND FAILING FACILITY CONDITIONS

Here are a few examples of major equipment failures from August 2020, all of which demanded significant unplanned efforts.

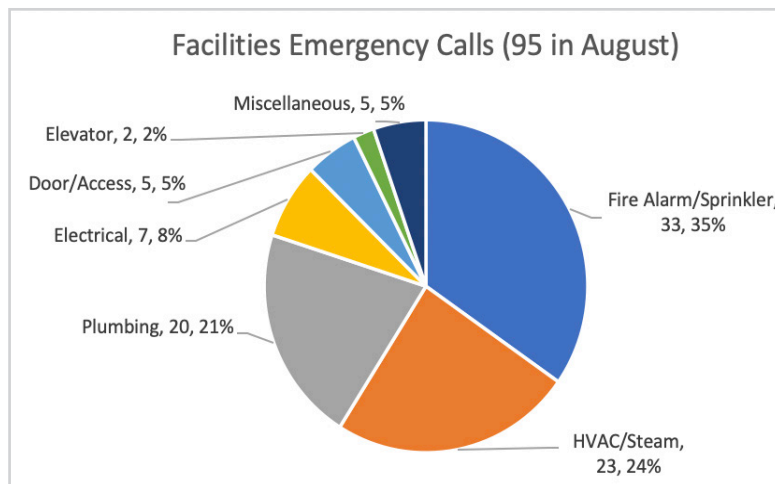
Lowell Center Chiller (August 17) was non-operational due to a bearing failure. Designated as a facility that would be vital to the COVID-19 mitigation plans, a temporary chiller was secured and installed three days later. Plans for the repair are still in development.

- Age of this chiller: 33 Years
- Expected life of a chiller: 25 Years

Electrical Substation Switchgear Failure (August 26). A breaker malfunction resulted in damage to the substation and an outage for several buildings on east campus. Power has been temporarily rerouted to all affected facilities while repairs are planned and initiated. This also disrupted the Charter Street Heating & Cooling Plant and caused a temporary disruption to campus chilled water.

- Age of the breakers: 24 Years
- Expected service life: 20–30 Years

Linden Drive Electric Utility Damage (August 8). Utility project activities caused underground electric conduit and cable damage. The Electric Shop mitigated the immediate electrical hazard, and power was routed to other circuits ensuring no major power outages. The 1960s sub-standard conduit construction is being rectified and new cables are being installed in coordination with the general contractor.



SUMMER 2020 BY THE NUMBERS



SAFETY & LOGISTICS



1,000 BUCKETS
of disinfectant
wipes filled for instructional spaces

600 fume hoods tested

500 instructor safety kits distributed

500 hand sanitizer stands assembled,
filled, and distributed for use

157 mail pickups for 27 locations unable
to receive mail during lockdown



BUILDING EXTERIORS

288,686 SQ
FT
of asphalt replaced

27,700 tons of pavement crack filling

16,500 linear ft of exterior caulking

8,585 sq ft of masonry maintenance and
repair



135 windows
replaced



49 major roof repairs
19 roofs replaced

7 buildings' windows washed



500
re-usable
wood pallets recovered

114 tons of scrap metal hauled
for recycling

92 tons of yard compost hauled

30 dumpsters repainted and
color-coded



ROADWAYS, WALKWAYS, & PARKING



19,915 SQ FT
of sidewalk replaced

18,480 ft of pavement
striping/painting

3,189 campus transportation
requests fulfilled

932 ft of curb replaced

600 miles of road swept

58 surface lots swept



CAMPUS UTILITIES & MAINTENANCE



275,000 SQ
FT
of interior and exterior
painting



4,400 linear ft of pipe
insulated



400 floors stripped and
waxed



390 pump overhauls



125 doors added to access control
100 doors replaced

1.06 million linear feet of data cable



OUTDOORS



40,000 ANNUAL
PLANTS

grown from seed or cutting

24,000 square feet of rose beds
maintained

10,500 blooming flowers planted

9,000 sq ft of display beds maintained

580 perennials planted

337 shrubs planted



12 acres of lawn over-seeded

9 planting beds designs
installed

2 irrigation systems installed

86 trees tagged

85 acres of lawn
mowed weekly



42 new trees
planted

28 acres of lawn
aerated



47 humanely
relocated
creatures



17
raccoons



13
rabbits



11
chipmunks



5
squirrels



1
skunk

SUMMER 2020 PROJECT STATUS

As the summer quickly ends, we are closing in on the complete of the last of the Summer 2020 projects.

More than \$1.3M of work has been completed for these 21 projects that were identified as essential to the operations of the university.

See Page 4 for the list of completed projects.

Current Status Summary

Design	0
Estimating	0
Construction	3
Complete	18
Customer Withdrawn/Postponed	5

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.

Milestones



05451905

WI Public Media
Vilas Hall

Access Control and Renovation

Delay due to coordination of camera placement.
Estimated completion: September 4.

\$141K



Construction: 85% ▲

PRJ-20-001873

College of
Engineering
Eng Research Bldg

Incoming PI ROOM 710 & 734

Awaiting delivery of special-order fume hood.
Estimated completion: October 21.

\$184K



Construction: 85% ▲

PRJ-20-001816

Integrative Biology
Birge

Enable New Faculty Space

Awaiting long-lead countertop material.
Estimated completion: September 18.

\$110K



Construction: 90% ▲

SUMMER 2021 PLANNING...READY, SET, GO!

Now is the time to start your planning for next summer's construction effort. The plan is to continue with a refinement of this year's process, selecting projects based on a collective effort that included representatives from SMPH, L&S, CALS, VCRGE, and COE (with additional representatives based on the quantity of requests).

This ad-hoc team will collaboratively prioritize projects and identify the ones that would have the greatest impact on the university's mission and would benefit from reduced summertime campus occupancy.

Planned Milestones for Summer 2021 Project Planning

- December 1:** Customer requests due to Physical Plant Customer Service
- January 12:** First prioritization discussion
- January 15:** Second prioritization discussion (Share draft with S/C/D Facility Managers)
- January 21:** Third prioritization discussion (Share draft with Deans and Directors)
- Mid-February:** Publish confirmed project list

SUMMER 2020 PROJECTS COMPLETED

College of Engineering		
Engineering Hall	Lab for Incoming PI (Room 2111)	\$165K
Engineering Hall	Modernize Undergrad Instructional Lab (Room 1438)	\$118K
Engineering Hall	Increase Door Width (Room B550)	\$18K
School of Music		
Humanities Hall	Instructional Laboratory Modernization (ILM) (Room 2451)	\$40K
General Assignment Classrooms		
Grainger Hall	Classroom Modernization (Room 1190, 1280, 2170, 2270)	\$28K
Grainger Hall	Classroom Modernization (Room 1170, 1175)	\$18K
Humanities	Classroom Modernization (Room 1641, 1651)	\$17K
Van Hise Hall	Classroom Modernization (Room 582, 586, 590, 595, 599)	\$40K
Van Vleck Hall	Classroom Modernization (Room B102)	\$20K
College of Letters & Science		
Service Memorial Institute	Instructional Laboratory Modernization (ILM) (Room 133)	\$55K
Noland Hall	Instructional Laboratory Modernization (ILM) (Room 215, 223/A, 226, 267, 567, 577)	\$123K
Weeks Hall	Instructional Laboratory Modernization (ILM) (Room AB20)	\$10K
Weeks Hall	Instructional Laboratory Modernization (ILM) (Room AB55)	\$65K
Birge Hall	New Faculty Space (Room 446)	\$22K
Social Sciences	Instructional Laboratory Modernization (ILM) (Room 5218)	\$42K
Helen C. White	Instructional Laboratory Modernization (ILM) (Room 5185)	\$30K
School of Veterinary Medicine		
Veterinary Medicine	Upgrade Lecture Halls (Room 2530, 2360)	\$150K
Wisconsin Collaboratory for Advanced Learning (WiSCEL)		
Wendt Commons	Upgrade Data Cables for Advanced AV Capability	\$13K

ADDITIONAL PROJECTS COMPLETED DURING AUGUST 2020

Eight additional projects (worth \$358K) reached substantial completion over the past month.

Project Number	Building	Description	Value
561804	Ingraham Hall	Renovate Room	\$180K
PRJ-20-001765	Law Building	Remodel Office	\$16K
PRJ-20-001880	Helen C. White Hall	Paint & Carpet	\$34K
181804	Helen C. White Hall	Sound Attenuation	\$10K
4821810	Van Hise Hall	Remodel Studio	\$13K
511802	South Hall	AV Upgrades	\$20K
5261801	Primate Center	Fume Hoods & Biosafety Cabinets	\$70K
PRJ-20-001447	Weeks Hall	Pump Relocation	\$15K
Total Approved Construction Service Agreement (Final Amount TBD)			\$358K

WATER QUALITY TESTING AND FLUSHING

The Physical Plant teamed up with Environment, Health & Safety (EHS) to proactively address water quality during the limited occupancy on campus this summer. Reduced water movement in buildings can increase the risk of bacterial and other water quality issues. A Water Management Program Team was formed to develop strategies to ensure safe water across campus.

These included:

- Weekly operation of all plumbing fixtures in all facilities
- Enhanced flushing of higher-risk buildings
- Flushing of the water distribution system
- Testing for Free Chlorine Residual

Nearly 800 Free Chlorine Residual tests in 42 buildings have been conducted since the end of May. These 42 buildings were selected for testing based on CDC guidelines.

Free Chlorine Residual testing was used to assess the effectiveness of flushing efforts as well as serve as the initial test to determine if enhanced flushing or additional testing is needed. One hundred percent of these tests were negative, indicating safe water.

The team will continue to test and address any other water quality issues as occupancy increases. They will also review new research related to water quality and COVID-19 and develop appropriate strategies.

