

# PHYSICAL PLANT

# UNIVERSITY OF WISCONSIN-MADISON November 2020 Operations Report

### From the Director's desk....

As we approach the end of an exceptional year, my personal, heartfelt thank you goes out to the hard-working Physical Plant team members who pour their energy and passion into everything they do to keep our campus operating 24 hours per day, 365 days a year.

Through the many challenges thrown at them—when the only constant this year has been change—they came through to make sure that our toilets flush, the lights stay on, and our facilities are cleaned and disinfected.

We couldn't have done it without their dedication and attention to detail.

Please note: This is the last Operations Report of 2020. The December and January reports will be combined in order to give the production staff some well-deserved time off over the winter holidays.



Physical Plant Steamfitters Kevin Corcoran (pictured) and Kevin Luginbuhl conduct an emergency repair of the 12-inch chilled water line where it enters the McArdle Building.

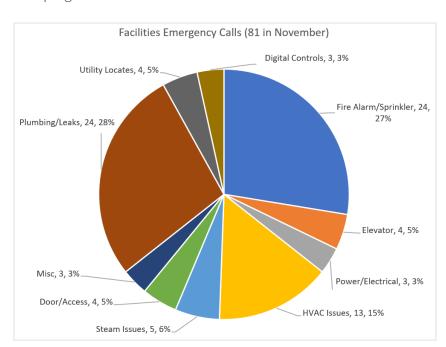
#### BREAKDOWNS AND FAILING FACILITY CONDITIONS

There were two major equipment failures in November 2020 which demanded significant unplanned efforts and increased the risk to UW-Madison's operations and programs.

Chilled Water Outage: A flange on a chilled water line failed where it enters the McArdle Building, causing outages in six buildings. Physical Plant steamfitters initiated immediate repairs, excavating and locating the extent of the damage. Physical Plant is coordinating temporary cooling while the repairs are underway.

# **Chilled Water Distribution Line Leak:**

Construction work at Sellery Hall identified an unexposed leak in the chilled water line connecting the building to the distribution system. While this did not immediately cause operational issues, the apparent leak is expected to be deep and under ductbanks, which will result in a complex and costly repair.



# PROJECTS SUBSTANTIALLY COMPLETED AND CLOSED OUT-NOVEMBER 2020

Eight projects (worth \$544K) reached substantial completion during the past month.

Project Number	Building	Description	Value
PRJ-20-001940	Wisconsin Institutes for Medical Research	Renovate laboratory	\$54K
PRJ-21-002127	Computer Science	Hallway renovation	\$10K
1241902	30 N. Mills Street	New exterior door	\$10K
PRJ-20-001132	Van Vleck Hall	New office and reception area	\$90K
791902	Steenbock Memorial Library	Remodel conference room	\$25K
05451814	Vilas Hall	Remodel several spaces	\$190K
PRJ-20-001541	Van Vleck Hall	Restroom upgrades	\$95K
PRJ-20-001838	Engineering Centers Building	New coiling door	\$70K
Total Approved Construction Service Agreement (Final Amount TBD)			\$544K

#### **SMALL PROJECTS UPDATE**

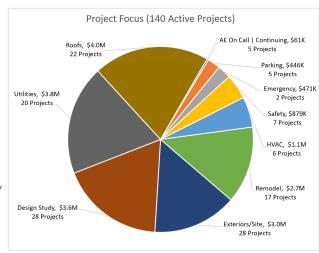
Physical Plant is currently managing 140 projects for a total of \$21.7 million across the project lifecycle.



The chart at bottom-right breaks this effort down by the intended benefit for campus facilities and infrastructure. It shows that \$8.1 million is dedicated to improving the reliability and resiliency of facilities (roofs, exterior/site, and HVAC systems) and \$3.8 million to improve utilities infrastructure. In the current fiscal year, emergency projects were initiated for the Primate elevator repair and flooding in Waisman that resulted in unacceptable conditions. The Primate elevator project is entering construction; final review for the Waisman study is expected to be provided this month.

The Facilities Specialist team is responsible for identifying and submitting repair jobs for General Fund Supported Borrowing (GFSB) funded projects and assisting campus departments when a Small Project is the right delivery method for remodeling work. Other campus groups also submit Small Projects, such as Campus Planning (Design Studies), Utilities, and Transportation Services (Parking).

We are entering the time of year when most of our repair projects are identified and submitted. We can expect the facilities/utilities team to submit an additional 10-20 projects by the end of the fiscal year. The overall volume of Small Projects is dependent in part upon the overall campus remodeling activity, which we expect to be depressed in FY 2021.



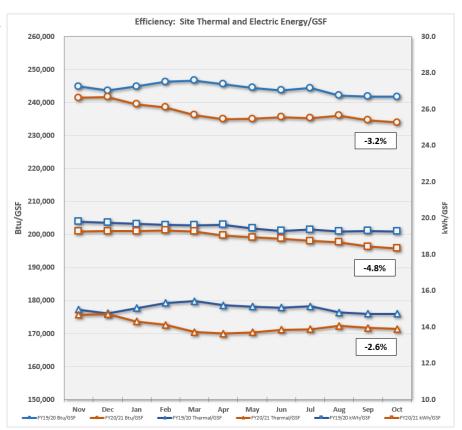
# **FACILITIES ENERGY REPORT**

Physical Plant Utilities & Energy Management (UEM) tracks campus energy intensity on a continual basis, looking for trends due to changes in weather, campus size, and energy consumption.

Adjusted for weather, UW-Madison has reduced campus total energy consumption by 25.4 percent in fiscal year 2020 as compared to the base fiscal year 2005.

On a monthly basis, we measure thermal energy (BTU/GSF) and electric energy measured in kilowatt-hours per gross square feet (kWh/GSF). Both measures are tracked and compared over a rolling 12-month period. At the end of October, overall energy consumption was down 3.2 percent compared to the previous 12 months.

This can be attributed to lower campus energy consumption due to COVID-19 measures and warmer than normal fall temperatures.



#### POLICY CORNER: ATTIC STOCK

Maintenance, Repair, and Operations (MRO) materials, also known as *attic stock*, is the inventory used to keep infrastructure and equipment in good working order. It includes spare parts and products such as nuts, bolts, paint, lubricants, janitorial supplies, lighting fixtures, batteries, motors, pneumatics, plumbing supplies, parts leftover from capital projects, and other parts that are included in the calculation of labor burden rates.

Physical Plant is responsible for establishing physical safeguards and other internal controls over MRO inventory to minimize the risk of theft, fraud, errors, inaccurate reporting, and inefficiencies. Accounting for all items on-hand, acquisitions, and subsequent activity/transactions in the perpetual inventory is conducted through the use of controlled warehouses and by maintaining detailed transaction records in the Integrated Work Management System.

The UW System MRO policy mainly supports the accounting standards that comply with federal grant requirements, transparency, and accountability in operations and fair cost allocation. Of interest is section 6 (A) Tier 2, "... MRO inventory leftover from capital projects." The policy makes strict standards for inventorying attic stock, and clearly indicates that the facilities management organization (Physical Plant) is responsible for tracking and managing these resources.

Historically, most of the excess material purchased at the completion of capital projects is wasted due to deterioration, loss, and damage. Tracking and managing attic stock is both expensive and labor-intensive. In seeking to be stewards of state and university resources, the Physical Plant generally advises against projects seeking to require significant amounts of attic stock. In additional, all MRO that is acquired through a project will be controlled by the Physical Plant.

For more details, consult UW Administrative Policy 323 [Maintenance, Repair, and Operations Inventory]