

Capital Project Stage Gate II: Owen Hall Repairs

BACKGROUND

The Owen Hall Repairs project is a response to flooding damage to the building and is not on the Capital Forecast, though the improvements to the classrooms and the alarms upgrade are included in the aggregate of the E&G Capital Improvement and Renewal (CIR) Systems Renewal projects in the 10-Year Capital Forecast. At its April 2021 meeting, the Finance & Administration Committee advanced the Owen Hall Repairs project to the design development phase, which is now complete. The following information is provided for the committee's consideration of advancing this project to construction phase pursuant to the [Approval of Capital Projects policy](#).

PROJECT SUMMARY

 <p>Owen Hall classroom damage</p>	Gross square feet/ affected area	63,167/ 20,025
	Estimated project budget	\$5,000,000
	Estimated Insurance Reimbursement	\$2,000,000
	Capital Renewal Funds	\$3,000,000
	Carbon Impact	Negligible
	Deferred maintenance reduction	\$2,200,000
	Estimated project completion	Fall Term 2021
	Location	SW Campus Way

On June 27, 2020, Owen Hall sustained significant water damage from a failed cooling water connection on a research apparatus. The flooding occurred on the fourth floor and damaged the three floors beneath including a clean room, a computer lab, office space, the main IT room and two general purpose classrooms. Estimates of the necessary repairs are approximately \$2.0M, consisting of replacement of the clean room surfaces, as well as flooring, walls, ceilings, lighting fixtures and repairing other damage.

The damaged general-purpose classrooms, as well as the two other adjacent classrooms, were already scheduled to be renovated in the summer 2022 to improve accessibility associated with the sloped concrete floor, update the pedagogy configuration and renew the general condition after 35 years of service. Renovation of the classrooms will cost an additional \$3.0M above the water damage. CIR funds have previously been allocated for this project.

The project will also include a fire alarm system upgrade, as the original system is past its expected life, as well as a new Distributed Antenna System (DAS) for first responders.

For cost and schedule efficiency, the classroom renovation and safety system upgrades will be accomplished within the same project as the building repair.

Removal of damaged material has already occurred, and additional construction activities related to the repair are proceeding to make the space useable for the current occupants.

ADVANCING OSU'S STRATEGIC GOALS

Goal 1 Preeminence in Research, Scholarship and Innovation	Goal 2 Transformative Education That is Accessible to All Learners	Goal 3 Significant and Visible Impact in Oregon and Beyond	Goal 4 A Culture of Belonging, Collaboration and Innovation
The Owen Hall clean room, laboratories, computer room and support spaces are a vital component of the College of Engineering's research and education ecosystem.	The tiered and rigidly configured classrooms will be reconstructed as flat-floor learning environments, fully accessible to all, to be more flexible and responsive to current and future challenges.	In continuous use since 1988, thousands of OSU students and faculty have benefitted from the Owen Hall clean room. Work in the facility has led to numerous advances in science and technology, as well as industrially relevant discoveries such as transparent transistors and next generation photoresist. Multiple Oregon-based companies have prospered from foundational work carried out in the facility.	The project will modernize Owen Hall's classroom pedagogy to reflect how teaching and learning transpires now and aspires to progress in the future as more accessible, more flexible and more collaborative.

IDENTIFICATION OF RISKS AND MITIGATION STRATEGIES

The following risks have been identified for the project. Given these risks, the owner and design contingencies have been set at 10% and 5%, respectively. As the construction will be through a firm fixed-price contract, the construction contingency is at the bidder's discretion and will be within the price offered.

Risks	Consequences	Mitigation Strategy
<i>Insurance reimbursement</i>	Approximately 40% of the funding is expected to come from OSU's property insurers. OSU faces a financial risk should costs associated with water damage not be fully reimbursed. Insurers	OSU and its contractors are working closely with the insurance adjuster to ensure that the scope of work is understood, any differences resolved and agreed to, and that

	will reimburse for covered costs that are reasonable, necessary, and thoroughly documented.	costs are substantiated and documented.
<i>Undiscovered conditions</i>	Renovations and remediations carry an inherent risk of the actual construction or conditions being different from archived documents or even explorative inspection and testing. Unexpected conditions could present a risk to final cost, schedule, and/or the quality and scope of the project.	Water-damaged surfaces have been exposed and removed. The contingencies noted above will be in place to cover unexpected costs.
<i>Labor and materials availability</i>	Availability of resources presents risk to cost, schedule, and possible scope, especially given potential impacts of the COVID-19 pandemic.	This risk is mitigated by the contingencies stated above through contractual language that allows COVID-related schedule changes without incurring additional costs.
<i>Higher than expected construction market escalation</i>	This risk is based on national/regional economics more than labor availability (above), but these risks are similar and interconnected. Cost estimates and bids will include cost implications related to the COVID-19 pandemic.	This risk is mitigated by an annual escalation factor 3.5% to midpoint of construction.
<i>Project delay</i>	Funding, permitting, logistical, contractual, or any reason for substantial delays in construction present not only schedule vulnerability, but also subject the project to further escalation in materials and labor costs. Stretching the construction period would likely increase the cost for the contractor to manage the project and pay for general conditions.	This risk is mitigated by having a team in place that considers critical activities, appropriate timelines, and measures to avoid and accommodate delays.
<i>COVID-19 Effects</i>	Construction delays due to possible disruption to supply chain, construction inefficiencies from worker availability, and physical distancing requirements.	OSU is working with contractors on physical distancing practices during construction. OSU project managers, designers, and the contractor will make extra efforts to mitigate supply chain disruptions by being flexible with alternate materials and schedule.

TOTAL COST SUMMARY

The estimated project costs for the Owen Hall Repairs project are summarized in the following table.

Forecasted Total Cost Owen Hall Repairs	
ITEM	COST
Total Project Cost	\$5,000,000
Capital Renewal	\$3,000,000
Estimated Insurance Reimbursement	\$2,000,000
Total Cost Avoidance	(\$2,200,000)
Removal of Deferred Maintenance	(\$2,200,000)

RECOMMENDATION

Staff recommend that the Finance & Administration Committee recommend to the Board approval of a total capital project budget of \$5,000,000 for the Owen Hall Repairs project and advancing of the project to the construction phase.