Capital Project Stage Gate II: Graf Hall

BACKGROUND

The Graf Hall Interior Renovation was originally planned as a $2.75M deferred maintenance removal project with the College of Engineering (COE) contributing an additional $1.67M in gift funding for programmatic improvements for a total project cost of $4.42M. This expected project cost was under the $5M threshold for Board stage gate review under the Approval of Capital Projects policy

In October 2020, the COE was approached with an additional gift opportunity specific to expanding the scope for the Collaborative Robotics and Intelligent Systems Institute in Graf Hall. This additional funding would bring the project total to $6.0M, triggering Board review. Given the earlier budget estimates, the project was moved from design development, and project plans are complete for the original project and ready to bid with the additional scope added.

The following information is provided to assist the Finance & Administration Committee in developing a recommendation to the Board on the approved capital project budget and whether the project should advance to construction (State Gate II review).

PROJECT SUMMARY

Graf Hall from NW Monroe Avenue

Gross square feet renovated	**30,000**
Estimated project budget	**$6,000,000**
State-paid CIR bonds	$3,000,000
Gift funds	$3,000,000
Deferred maintenance reduction	**$3,500,000**
Estimated project completion	**Winter Term 2022**
Location	**1680 NW Monroe Ave. Corvallis**

Graf Hall was constructed in 1920 as an engineering laboratory. In 2015, the main laboratory bay was improved to support OSU's renowned robotics program. The remainder of the building has not had significant improvements.

Planned deferred maintenance improvements for Graf Hall include new accessible restrooms on each floor (there is currently only one women's restroom in the building). Access to all floors of Graf Hall will be achieved via accessibility improvements to the Rogers Hall elevators and connecting sky bridges. Deferred maintenance improvements also include upgrades to mechanical, plumbing, and electrical systems, the loading dock, and circulation spaces.

Graf houses OSU's premier robotics program, which supports student capstone projects in engineering, education and research from four different engineering schools. Gift funds will fund

much of the needed programmatic improvements, such as research and student laboratories, work spaces, offices and study spaces. These improvements will create a space that enables students and faculty to flourish and engage in innovative research.

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**
This project will substantially improve the student experience at OSU, and provide access to premier engineering research labs, particularly in the expanding and prestigious OSU robotics program.	Graf Hall does not currently meet the university's desired accessibility standards. The project will provide full access to the upper floors of the building as well as accessible restrooms on all floors.	OSU's robotics program is ranked in the top four in the country. The researchers are globally recognized and the program attracts visitors from all over the world. Having space that matches this premier program will have a significant positive impact on OSU's reputation.	An improved historic building with an improved interior configuration creates a sense of place and belonging, while supporting innovative and collaborative teaching and research.

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 7% and 10%, 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
Undiscovered conditions	Renovations 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 scope of the project.	Studies were conducted by consultants to assess existing conditions and acknowledge the age of the building. The contingencies noted above will be in place to cover unexpected costs.
Labor and materials availability	Availability of resources presents risk to cost, schedule, and possible scope, especially given potential impacts of COVID.	This risk is mitigated by the contingencies stated above through contractual language that allows COVID-related schedule changes without incurring additional costs.

Higher than expected construction market escalation	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 COVID implications.	This risk is mitigated by planning the project with an annual escalation factor of 7%.
Project delay	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.
COVID-19 Effects	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 managers, designers and the contractor will make extra efforts to mitigate supply chain disruptions by being flexible with alternate materials and schedule.

TOTAL COST OF OWNERSHIP

The estimated life cycle ownership costs for the Graf Hall Interior Renovation are summarized in the following table.

Forecasted Total Cost of Ownership Graf Hall Interior Renovation	
ITEM	COST
Net Project Cost	**$6,000,000**
Total Cost Avoidance	**($3,500,000)**
Removal of Deferred Maintenance	($3,500,000)
Lifecycle Ownership Costs – Net Present Value (NPV)	**$4,370,000**
Operations and Maintenance (50 yrs @ $180K - escalated 3% annually)	$4,370,000

RECOMMENDATION

Staff recommend that the Finance & Administration Committee recommend to the Board approval of a total capital project budget of $6.0M for the Graf Hall project and advancing of the project to the construction phase.