



Office of the Chief Financial Officer and Treasurer

August 11, 2022

The Honorable Eric J. Holcomb  
Governor of the State of Indiana  
Statehouse  
Indianapolis, IN 46204

Dear Governor Holcomb:

At its meeting on August 5, 2022, the Purdue University Board of Trustees approved the planning, financing, construction and award of construction contracts for the Max W & Maileen Brown Family Hall Renovation on the West Lafayette campus.

This project will renovate approximately 32,000 GSF of existing space on the first floor of the building. A number of instructional labs, lab support spaces, computational research labs, classrooms, offices and a collaboration area will be renovated or created. Mechanical, electrical and heating, ventilation and air conditioning systems that primarily support the first floor will be upgraded.

Upon completion of this project, instructional lab capacity will be increased to accommodate student enrollment growth in the School of Electrical and Computer Engineering. The project will result in increased space efficiency and flexibility while accommodating more students per assigned square foot (ASF) within the existing building footprint. Additionally, Americans with Disabilities Act (ADA) accessibility will be enhanced.

The estimated total project cost is \$14,573,000. This includes \$14,000,000 in Gift Funds and \$573,000 in Operating Funds.

Subject to review by the Commission for Higher Education and recommendation by the State Budget Committee and the Budget Agency, we request your approval to proceed with this project. Attached are the completed forms that the Commission has prescribed for its review of such projects. We will be happy to answer any questions you or your staff may have or to provide any additional information that is needed.

Sincerely,

A handwritten signature in black ink, appearing to be 'C. Ruhl'.

Christopher A. Ruhl  
Chief Financial Officer and Treasurer

Attachments

c: Seth Hinshaw, Chief Financial Officer, Indiana Commission for Higher Education  
Zachary Jackson, Director, Indiana State Budget Agency  
Jasmine Williams, Assistant Director, Indiana State Budget  
Kathleen Thomason, Comptroller, Purdue University  
Anne Hazlett, Senior Director, Government Relations, Purdue University

**PROJECT COST SUMMARY**  
**Max W & Maileen Brown Family Hall Renovation**

<b>Institution:</b>	Purdue University	<b>Budget Agency Project No.:</b>	B-1-23-2-03
<b>Campus:</b>	West Lafayette	<b>Institutional Priority:</b>	N/A
<b>Previously approved by General Assembly:</b>	No	<b>Previously recommended by CHE:</b>	No
<b>Part of the Institution's Long-term Capital Plan:</b>	Yes		

<b>Project Size:</b>	31,866 GSF (1)	21,026 ASF (2)	0.66 ASF/GSF
<b>Net change in overall campus space:</b>	0 GSF	0 ASF	

<b>Total cost of the project (3):</b>	\$ 14,573,000	<b>Cost per ASF/GSF:</b>	\$ 457.32 GSF
<b>Total cost of the demolition:</b>	\$ -		\$ 693.09 ASF
<b>Funding Source(s) for project (4):</b>	Amount	Type	
	\$ 14,000,000	Gift Funds	
	\$ 573,000	Operating Funds	
<b>Estimated annual debt payment (6):</b>	\$0		
<b>Are all funds for the project secured:</b>	Yes		

**Project Funding:**  
The renovation is being funded primarily by Gift Funds with the remainder coming from Operating Funds.

**Project Cost Justification**  
This project scope and cost are similar to the project listed in the comparable project section.

<b>Estimated annual change in cost of building operations based on the project:</b>	\$ -
<b>Estimated annual repair and rehabilitation investment (5):</b>	\$ 218,595

(1) Gross Square Feet (GSF)- Sum of all area within the exterior envelope of the structure.  
(2) Assignable Square Feet (ASF)- Amount of space that can be used by people or programs within the interior walls of a structure. Assignable square feet is the sum of the 10 major assignable space use categories: classrooms, laboratories, offices, study facilities, special use facilities, general use facilities, support facilities, health care facilities, residential facilities and unclassified facilities. For information on assignable space use categories, see Space-Room Codes tab.  
(3) Projects should include all costs associated with the project (structure, A&E, infrastructure, consulting, FF&E, etc.)  
(4) Be consistent in the naming of funds to be used for projects. If bonding, note Bonding Authority Year (1965, 1929, 1927, etc.)  
(5) Estimate the amount of funding the institution would need to set aside annually to address R&R needs for the project. CHE suggests 1.5% of total construction cost  
(6) If issuing debt, determine annual payment based on 20 years at 4.75% interest rate  
- If project is a lease-purchase or lease, adjust accordingly. Note the total cost of the lease in the project cost, and annual payments in project description

**PROJECT DETAILED DESCRIPTION - ADDITIONAL INFORMATION**  
**Max W & Maileen Brown Family Hall Renovation**

<b>Institution:</b>	Purdue University	<b>Budget Agency Project No.:</b>	B-1-23-2-03
<b>Campus:</b>	West Lafayette	<b>Institutional Priority:</b>	N/A

**Description of Project**

This project will renovate approximately 32,000 GSF on the first floor of the Max W & Maileen Brown Family Hall, formerly the Electrical Engineering Building, on the West Lafayette campus. Several instructional labs, lab support spaces, computational research labs, classrooms, offices, the electrical shop and a collaboration area will be renovated or created. The computational research labs will support 15 researchers and up to 150 graduate students. While renovations occur, occupants will use swing space in the adjacent Potter Engineering Center.

New walls with overhead doors will be constructed between labs to allow flexibility in adjusting space for various course sizes: the doors will be opened to accommodate larger class sizes and closed for smaller classes. Flooring and lighting will be replaced throughout the renovated space, and student lab benches will be replaced within the instructional labs. Restrooms for both genders will be added on the north and south ends of the building, consistent with the location of restrooms on other floors. Mechanical, electrical and heating, ventilation and air conditioning (HVAC) systems that primarily support the first floor are at the end of their service lives and will be upgraded. Exterior glazing will be modified and supplemented to improve overall daylighting and transparency.

**Need and Purpose of the Program**

The School of Electrical and Computer Engineering (ECE) is the largest school in the College of Engineering, serving over 1,700 sophomore, junior and senior undergraduate students and approximately 1,000 graduate students. The mission of the school is to serve and lead the state of Indiana, the nation, and the world-wide profession of electrical and computer engineering through the education of the next generation of engineers, discovery that advances fundamental knowledge and its applications, and by innovation and engagement that address global challenges of societal impact. This renovation will support the experiential education of the students in the ECE program.

This renovation will help address the need for larger class sizes due to an overarching strategic enrollment growth initiative in the College of Engineering, and specifically, increased enrollment within ECE. This project will modernize and increase instructional lab capacity to accommodate the increased enrollment. The renovation is in alignment with University space administration strategies, and it will result in increased space efficiency and flexibility while accommodating more students per assigned square foot (ASF) within the existing building footprint. The existing first floor instructional space accommodates 128 students, and the renovation will accommodate 207 students when complete, for approximately a 60% increase in student capacity. This project will enhance Americans with Disabilities Act (ADA) accessibility.

**Space Utilization**

More than 20,000 ASF is impacted by this project. The space utilization of the existing first floor is assigned in order from most to least ASF as teaching labs, offices, research labs, classrooms and support space. The renovation will reallocate space by reducing office space by approximately 30% in order to increase research lab and teaching spaces. More than 1,000 square feet will be repurposed from non-assignable space to assignable space due to more efficient use of space.

**Comparable Projects**

Electrical Engineering and Multiple Building Renovation, 2016

- \$21,725,000
- 60,244 GSF / 30,979 ASF
- \$361/GSF; \$701/ASF
- The scope included renovations to instructional labs and faculty spaces, in addition to classroom updates, in several engineering buildings, including the ground floor of the Electrical Engineering Building (the floor below current project scope). Mechanical, electrical and HVAC work was included for the affected buildings.

The total project cost for the 2016 was higher, included work in multiple buildings and covered more square footage in the renovation than the proposed project. The cost/GSF of the proposed project is in line with the completed project when accounting for inflation since that time.

**Background Materials**

**CAPITAL PROJECT REQUEST FORM**  
**INDIANA PUBLIC POSTSECONDARY EDUCATION**  
**INSTITUTION CAMPUS SPACE DETAILS FOR MAX W & MAILEEN BROWN FAMILY HALL RENOVATION**

(INSERT PROJECT TITLE AND SBA No.)	Current Campus Totals			Subtotal Current and Future Space	Capital Request		Net Future Space
	Current Space in Use	Space Under Construction (1)	Space Planned and Funded (1)		Space to be Terminated (1)	New Space in Capital Request (2)	
<b>A. OVERALL SPACE IN ASF</b>							
Classroom (110 & 115)	336,545	-	-	336,545	(211)		336,334
Class Lab (210,215,220,225,230,235)	755,112	72,943	-	828,055		256	828,311
Non-class Lab (250 & 255)	1,660,895	16,022	29,714	1,706,631		2,718	1,709,349
Office Facilities (300)	2,385,957	17,570	9,452	2,412,979	(1,668)		2,411,311
Study Facilities (400)	392,685	14,337	664	407,686			407,686
Special Use Facilities (500)	1,218,311	-	12,709	1,231,020			1,231,020
General Use Facilities (600)	1,008,003	3,335	21,390	1,032,728			1,032,728
Support Facilities (700)	2,875,731	(860)	-	2,874,871	(69)		2,874,802
Health Care Facilities (800)	216,011	-	-	216,011			216,011
Resident Facilities (900)	2,489,928	-	254,158	2,744,086			2,744,086
Unclassified (000)	15,282	-	-	15,282			15,282
<b>B. OTHER FACILITIES</b> (Please list major categories)							
<b>TOTAL SPACE</b>	<b>13,354,459</b>	<b>123,347</b>	<b>328,087</b>	<b>13,805,893</b>	<b>(1,948)</b>	<b>2,974</b>	<b>13,806,919</b>

Notes:

- Space/Room codes based on Postsecondary Ed Facilities Inventory and Classification Manual (2006)

(1) Identify in a footnote the specific facilities that are included in the data in these columns. Do not include pending approval, non-submitted projects or non-funded projects

Space under construction includes:

- Gateway Complex
- Hypersonics Building
- Schleman/Stewart Renovation
- Whistler Mechanical Project

Space planned and funded includes:

- Life Sciences Phenotyping Greenhouse Building
- Mackey Locker Rooms Renovation
- Ross-Ade Stadium Renovation
- Northwest Chiller Plant System Improvements
- Vawter Hall Electrical Enhancements and Replacement

Space to be terminated includes:

N/A

**CAPITAL PROJECT COST DETAILS**  
**Max W & Maileen Brown Family Hall Renovation**

<b>Institution:</b>	Purdue University	<b>Budget Agency Project No.:</b>	B-1-23-2-03
<b>Campus:</b>	West Lafayette	<b>Institutional Priority:</b>	N/A

**ANTICIPATED CONSTRUCTION SCHEDULE**

	<b>Month</b>	<b>Year</b>
<b>Bid Date</b>	December	2022
<b>Start Construction</b>	May	2023
<b>Occupancy (End Date)</b>	July	2024

**ESTIMATED CONSTRUCTION COST FOR PROJECT**

	<b>Cost Basis (1)</b>	<b>Estimated Escalation Factors (2)</b>	<b>Project Cost</b>
<b><u>Planning Costs</u></b>			
a. Engineering	\$ 400,000		N/A
b. Architectural	\$ 550,000		N/A
c. Consulting	\$ 150,000		N/A
<b><u>Construction</u></b>			
a. Structure	\$ 6,773,000		N/A
b. Mechanical (HVAC, plumbing, etc.)	\$ 2,000,000		N/A
c. Electrical	\$ 1,300,000		N/A
<b><u>Movable Equipment</u></b>	\$ 1,500,000		N/A
<b><u>Fixed Equipment</u></b>	\$ 500,000		N/A
<b><u>Site Development/Land Acquisition</u></b>	\$ -		N/A
<b><u>Other (Please list)</u></b>	\$ 1,400,000		N/A
<b>TOTAL ESTIMATED PROJECT COST</b>	<b>\$ 14,573,000</b>	<b>\$ -</b>	<b>N/A</b>

(1) Cost Basis is based on current cost prevailing as of: (INSERT MONTH AND YEAR)

(2) Explain in the Description of Project Section of the "Cap Proj Details" schedule the reasoning for estimated escalation factors

**CAPITAL PROJECT OPERATING COST DETAILS**  
**Max W & Maileen Brown Family Hall Renovation**

<b>Institution:</b>	<u>Purdue University</u>	<b>Budget Agency Project No.:</b>	<u>B-1-23-2-03</u>
<b>Campus:</b>	<u>West Lafayette</u>	<b>Institutional Priority:</b>	<u>N/A</u>

			<u>GSF OF AREA AFFECTED BY PROJECT</u>		31,866
<u>ANNUAL OPERATING COST/SAVINGS (1)</u>					
	Cost per GSF	Total Operating Cost	Personal Services	Supplies and Expenses	
1. Operations	\$ -	\$ -			
2. Maintenance	\$ -	\$ -			
3. Fuel	\$ -	\$ -			
4. Utilities	\$ -	\$ -			
5. Other	\$ -	\$ -			
<b>TOTAL ESTIMATED OPERATIONAL COST/SAVINGS</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

Description of any unusual factors affecting operating and maintenance costs/savings.

(1) Based on figures from "Individual Cap Proj Desc" schedule