



Office of the Chief Financial Officer and Treasurer

August 17, 2023

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

Dear Governor Holcomb:

At its meeting on August 4, 2023, the Purdue University Board of Trustees approved the planning, financing, construction and award of construction contracts for the Shreve Hall Electrical Enhancements and Replacement project on the West Lafayette campus.

This project will install new transformers to replace existing ones and replace main and secondary electrical distribution equipment that is at the end of its service life.

The planned work will modernize the electrical distribution system to improve equipment reliability, lighting and the continuance of partial building power during planned outages.

The estimated total project cost is \$4,400,000 and will be fully funded by Auxiliary Funds – Housing/Dining.

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 read 'C. Ruhl', written over a light blue horizontal line.

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
Shreve Hall Electrical Enhancements and Replacement

Institution:	Purdue University	Budget Agency Project No.:	B-1-24-2-05
Campus:	West Lafayette	Institutional Priority:	N/A
Previously approved by General Assembly:	No	Previously recommended by CHE:	No
Part of the Institution's Long-term Capital Plan:	Yes		

Project Size:	N/A	N/A	ASF (2)	N/A	ASF/GSF
Net change in overall campus space:	N/A	GSF	N/A	ASF	

Total cost of the project (3):	\$ 4,400,000	Cost per ASF/GSF:	N/A	GSF
Total cost of the demolition:	\$ -		N/A	ASF
Funding Source(s) for project (4):	Amount	Type		
	\$ 4,400,000	Auxiliary Funds - Housing/Dining		
Estimated annual debt payment (6):	\$0			
Are all funds for the project secured:	Yes			

Project Funding:
The project is being fully funded by Auxiliary Funds - Housing/Dining, and all funds are secured.

Project Cost Justification
Since the project is utilities based, there is not a ASF or GSF associated with the work. This project's scope and cost are described more in the Capital Project Details section.

Estimated annual change in cost of building operations based on the project:	\$ -
Estimated annual repair and rehabilitation investment (5):	\$ 66,000

(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

Shreve Hall Electrical Enhancements and Replacement

Institution:	Purdue University	Budget Agency Project No.:	B-1-24-2-05
Campus:	West Lafayette	Institutional Priority:	N/A

Description of Project

This project will enhance the electrical distribution system currently located in Shreve Residence Hall on the West Lafayette campus. This project will install two new transformers to replace existing transformers and replace main and secondary electrical distribution equipment. The existing transformers and main electrical distribution equipment are at the end of their expected service lives and are not meeting the building's needs. In order to allow students to reside in the building and to accommodate long lead times for new equipment, work will be completed during the summers of 2025 and 2026.

Need and Purpose of the Program

The majority of electrical distribution equipment is 50-60 years old and nearing or past its service life. With the age of the equipment, replacement parts are no longer available, making repairs difficult. This project will improve lighting and equipment reliability through the modernization of the building's electrical distribution system. The enhanced system will allow power to be shut down to portions of the building when electrical work needs to be performed, allowing operations to continue in the majority of the building. Currently, power to the entire building must be shut down to safely work on building power systems.

This project is included in Purdue's FY24 Repair and Rehabilitation budget.

Space Utilization

60 ASF of general use (recreation) space will be repurposed as utility space.

Comparable Projects

Owen Hall Transformer Replacement (2017)

\$825,000

This project replaced the gear inside of the existing vault and included some masonry rework.

Shreve Residence Hall is a larger building than Owen Residence Hall and requires larger electrical service and equipment as a result. More than double the amount of equipment is being replaced in Shreve compared to Owen, and the space for equipment must be expanded to accommodate the size. These differences account for the higher cost of the proposed project.

Background Materials

CAPITAL PROJECT REQUEST FORM
INDIANA PUBLIC POSTSECONDARY EDUCATION
INSTITUTION CAMPUS SPACE DETAILS FOR Shreve Hall Electrical Enhancements and Replacement

(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)	
A. OVERALL SPACE IN ASF							
Classroom (110 & 115)	335,609	(2,532)	18,301	351,378	-	-	351,378
Class Lab (210,215,220,225,230,235)	798,413	(16,463)	24,260	806,210	-	-	806,210
Non-class Lab (250 & 255)	1,705,678	25,281	(662)	1,730,297	-	-	1,730,297
Office Facilities (300)	2,337,380	(46,473)	26,472	2,317,379	-	-	2,317,379
Study Facilities (400)	416,131	55,895	13,307	485,333	-	-	485,333
Special Use Facilities (500)	1,207,887	8,486	1,124	1,217,497	-	-	1,217,497
General Use Facilities (600)	977,156	(27,128)	16,892	966,920	(60)	-	966,860
Support Facilities (700)	2,881,468	(876)	(8,559)	2,872,033	-	-	2,872,033
Health Care Facilities (800)	220,687	-	(1,900)	218,787	-	-	218,787
Resident Facilities (900)	2,424,325	-	111,146	2,535,471	-	-	2,535,471
Unclassified (000)	129,184	-	-	129,184	-	-	129,184
B. OTHER FACILITIES							
(Please list major categories)							
TOTAL SPACE	13,433,918	(3,810)	200,381	13,630,489	(60)	-	13,630,429

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:

- Schleman/Stewart Renovation
- Whistler Mechanical Project
- Ross-Ade Stadium Renovation
- Zucrow High Speed Propulsion Lab
- Mackey Locker Rooms Renovation
- Brown Family Hall Renovation
- Libraries Study Space Renovation
- University Hall and Related Renovations

Space planned and funded includes:

- Life Sciences Phenotyping Greenhouse Building
- Nursing and Pharmacy Education Building
- Northwest Chiller Plant System Improvements
- Vawter Hall Electrical Enhancements and Replacement
- PMU 2nd Floor Hospitality Renovation
- Mechanical Engineering Building Renovation
- Birck Nanotechnology Center Clean Room Modernization and Related Renovations
- Chilled Water Capacity Enhancement Projects
- Runway 5-23 and Intermediate Connector Taxiway
- Purdue Airport Terminal
- Grant Street Parking Garage Repairs
- Hillenbrand Residence Hall South
- Shealy Hall Roof Replacement
- University and Schleman Halls Strategic Transformer Replacement
- Wetherill Lab Drain and Supply Line Replacement Phase I

(1) Spaces to be terminated include general use (recreation) space that will be repurposed as utility space.

(2) There is no assignable space added as part of this project.

CAPITAL PROJECT COST DETAILS
Shreve Hall Electrical Enhancements and Replacement

Institution:	Purdue University	Budget Agency Project No.:	B-1-24-2-05
Campus:	West Lafayette	Institutional Priority:	N/A

ANTICIPATED CONSTRUCTION SCHEDULE

	<u>Month</u>	<u>Year</u>
Bid Date	January	2024
Start Construction	May	2025
Occupancy (End Date)	August	2026

ESTIMATED CONSTRUCTION COST FOR PROJECT

	<u>Cost Basis (1)</u>	<u>Estimated Escalation Factors (2)</u>	<u>Project Cost</u>
<u>Planning Costs</u>			
a. Engineering	\$ 230,000		N/A
b. Architectural	\$ 70,000		N/A
c. Consulting	\$ -		N/A
<u>Construction</u>			
a. Structure (Civil)	\$ 700,000		N/A
b. Mechanical	\$ -		N/A
c. Electrical	\$ 3,100,000		N/A
<u>Movable Equipment</u>	\$ -		N/A
<u>Fixed Equipment</u>	\$ 100,000		N/A
<u>Site Development/Land Acquisition</u>	\$ -		N/A
<u>Other (PM fee, insurance, contingencies, printing)</u>	\$ 200,000		N/A
TOTAL ESTIMATED PROJECT COST	\$ 4,400,000	\$ -	N/A

(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
Shreve Hall Electrical Enhancements and Replacement

Institution:	Purdue University	Budget Agency Project No.:	B-1-24-2-05
Campus:	West Lafayette	Institutional Priority:	N/A

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

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

This project will have a negligible impact on operating and maintenance costs/savings.

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