

# PURDUE

UNIVERSITY

OFFICE OF THE EXECUTIVE VICE PRESIDENT FOR  
BUSINESS AND FINANCE, TREASURER

April 25, 2012

The Honorable Mitchell E. Daniels, Jr.  
Governor of the State of Indiana  
State House  
Indianapolis, IN 46204

Dear Governor Daniels:

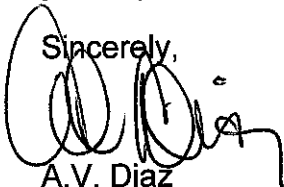
The financing and construction of the project, "Civil Engineering Building Roof Replacement and Green Roof Preparation" on the West Lafayette campus has been approved as required under the Bylaws of the Board of Trustees of Purdue University.

This project will install a new "green" roof system including access points, stairways, safety railings and other roof repairs.

The estimated cost of this project is \$890,000, to be funded from Gift Funds (\$486,295), Departmental Funds (\$118,705), and Repair and Rehabilitation – University Funds (\$285,000).

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 which 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 you may wish.

Sincerely,



A.V. Diaz  
Executive Vice President for  
Business and Finance, Treasurer

/bjm

Attachments

c: Jason Dudich, Associate Commissioner and Chief Financial Officer  
Adam Horst, State Budget Director  
Mary Catherine Gaisbauer, Comptroller  
Kevin Green, Assistant Director of Capital Planning

## Project Summary

### MAJOR REPAIR AND REHABILITATION

<b>INSTITUTION:</b>	<u>PURDUE UNIVERSITY</u>	<b>CAMPUS:</b>	<u>WEST LAFAYETTE</u>
<b>PROJECT TITLE:</b>	<u>Civil Engineering Building Roof Replacement and Green Roof Preparation</u>	<b>BUDGET AGENCY NO.:</b>	<u>B-1-12-2-16</u>
		<b>INSTITUTION'S PRIORITY:</b>	<u></u>

**PROJECT SUMMARY DESCRIPTION (ATTACHMENT A)**

This project will install a new "green" roof system including access points, stairways, safety railings and other roof repairs. R&R dollars will be used to repair and rehabilitate the existing roof system, while gift and departmental funds will be used to install a green roof system and access points for research and educational opportunities.

**SUMMARY OF NEED AND NET CHANGE IN CONTRIBUTION TO EDUCATIONAL SERVICES PROVIDED BY INSTITUTION (ATTACHMENT B)**

The addition of a green roof to the Civil Engineering Building will introduce this new technology to our students and will allow them to participate in research on energy reducing technologies in the building.

**SPACE DATA (ATTACHMENT C)**

AREA AFFECTED BY THE PROJECT:	<u>N/A</u>	GSF	<u>N/A</u>	ASF
PROJECT SIZE:	<u>N/A</u>	GSF	<u>N/A</u>	ASF/GSF
NET CHANGE IN CAMPUS ACADEMIC/ADMINISTRATIVE SPACE:			<u>0</u>	ASF

**TOTAL PROJECT BUDGET (ATTACHMENT D)**

TOTAL ESTIMATED COST:	\$ <u>N/A</u>	\$/GSF	\$	<u>890,000</u>
ANTICIPATED DATE OF PROJECT COMPLETION:	<u>September 2012</u>			

**ANTICIPATED SOURCES OF FUNDING (ATTACHMENT E)**

Gift Funds	\$	<u>486,295</u>
Departmental Funds		<u>118,705</u>
Repair and Rehabilitation – University Funds		<u>285,000</u>
<b>TOTAL BUDGET</b>	<b>\$</b>	<b><u>890,000</u></b>

**ESTIMATED CHANGE IN ANNUAL OPERATING BUDGET AS A RESULT OF THIS PROJECT (ATTACHMENT F)**

\$ \_\_\_\_\_ INCREASE \_\_\_\_\_ DECREASE

NOTE: SEE ATTACHMENTS FOR SUPPORTING INFORMATION REQUEST TO BE SUBMITTED WITH PROJECT SUMMARY FORM.

**MAJOR REPAIR AND REHABILITATION**

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DESCRIPTION OF THE PROJECT:

This project will install a new "green" roof system including access points, stairways, safety railings and other roof repairs. R&R dollars will be used to repair and rehabilitate the existing roof system, while gift and departmental funds will be used to install a green roof system and access points for research and educational opportunities.

PLANNING CHANGES:

N/A

RELATIONSHIP TO OTHER CAPITAL IMPROVEMENT PROJECTS:

This green roof project is the final piece of the contiguous learning space created by the recent Lyles Ideas to Innovation, Pankow Materials, and Burke Hydraulic/Hydrology Lab renovations and the newly completed Civil Engineering Research Garden. It is visually connected to these spaces and will provide an exterior testing space for green roof assemblies.

Based on the existing condition of this roof area, repairs are required; therefore, this repair work will be enhanced with academic improvement.

HISTORICAL SIGNIFICANCE:

N/A

## MAJOR REPAIR AND REHABILITATION

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### RELATIONSHIP TO MISSION AND LONG-RANGE PLANNING

The School of Civil Engineering's mission includes providing an exceptional educational experience for our undergraduate students. Our undergraduate curriculum includes many laboratories. It is critical that our students are exposed to state-of-the art facilities with updated equipment. The addition of a green roof to the Civil Engineering Building will introduce this new technology to our students and will allow them to participate in research on energy reducing technologies in the building.

### NEED AND EXPECTED CONTRIBUTION TO EDUCATIONAL SERVICES:

With our new architectural engineering program, this unique facility is an important component of the new curriculum. Our students and faculty in the architectural engineering and environmental areas will collaborate to develop methods for sustainability testing and modeling in "real world" settings. This will be achieved by using the pavers and plant medium on the new roof to study heat loads of the roof structure and investigate energy reducing technologies for the building. They will also investigate the impact of a rainwater collection system for the green roof.

### ALTERNATIVES CONSIDERED:

No alternative roof areas were considered. This space allows for the least expensive and most convenient access from associated laboratory and student spaces within the Civil Engineering Building.

### PRIORITY RANKING:

High. This named space is planned for a dedication ceremony in honor of the 125th anniversary of the Civil Engineering department.

### RELATIONSHIP TO LONG-RANGE FACILITY PLANS:

The Civil Engineering Green Roof Project was initiated two years ago by the Civil Engineering Student Advisory Council. The original goal was to provide a gathering space for students while providing opportunities for the School to demonstrate the sustainability and green initiatives that they are learning about in many of their classes. Over the last two years the students have raised more than \$125,000 toward the project with proceeds from their annual CE Career Fair. The School of Civil Engineering, their alumni, industrial partners, and R&R funding from Purdue have provided the balance of the \$890,000 project.

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**CAMPUS ACADEMIC/ADMINISTRATIVE SPACE:**

Gross Square Footage: 9,943,779 Assignable Square Footage: 5,963,068

**TOTAL AREA IN FACILITY OR STRUCTURE: (Civil Engineering Building)**

Gross Square Footage: 297,338 Assignable Square Footage: 177,884

PROVIDE A TABULAR BREAKDOWN OF THE FACILITY'S ASSIGNABLE AREA AS PRESENTLY USED AND AS PLANNED UPON COMPLETION OF THE PROJECT:

	ASF		
	TOTAL BUILDING	FUTURE USE	PRESENT USE
<b><u>INSTRUCTION AND LIBRARY SPACE</u></b>			
(a) Classroom (110,115)	<u>10,681</u>	<u>10,681</u>	<u>10,681</u>
(b) Class Laboratories (210,215,220,225)	<u>21,327</u>	<u>21,327</u>	<u>21,327</u>
(c) Libraries (410 thru 455)	<u>6,491</u>	<u>6,491</u>	<u>6,491</u>
(d) All Other	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	<u>38,499</u>	<u>38,499</u>	<u>38,499</u>
<b><u>INSTRUCTION RELATED</u></b>			
(e) Office (310 thru 355)	<u>55,970</u>	<u>55,970</u>	<u>55,970</u>
(f) All Other	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	<u>55,970</u>	<u>55,970</u>	<u>55,970</u>
<b><u>RESEARCH SPACE</u></b>			
(g) Non-Class Laboratories (250,255)	<u>75,699</u>	<u>75,699</u>	<u>75,699</u>
(h) Other	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	<u>75,699</u>	<u>75,699</u>	<u>75,699</u>
<b><u>HEALTH CARE SPACE (SUBTOTAL)</u></b>	<u>0</u>	<u>0</u>	<u>0</u>
<b><u>RELATED SUPPORTING FACILITIES</u></b>	<u>7,716</u>	<u>7,716</u>	<u>7,716</u>
<b><u>SUBTOTAL</u></b>	<u>177,884</u>	<u>177,884</u>	<u>177,884</u>
<b><u>OTHER ASSIGNABLE SPACE (SUBTOTAL)</u></b>	<u>0</u>	<u>0</u>	<u>0</u>
<b><u>TOTAL</u></b>	<u>177,884</u>	<u>177,884</u>	<u>177,884</u>

**Attachment D  
Project Cost**

**MAJOR REPAIR AND REHABILITATION**

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<u>ANTICIPATED CONSTRUCTION SCHEDULE</u>		<u>MONTH</u>	<u>YEAR</u>
Bid Date		<u>May</u>	<u>2012</u>
Start Construction		<u>June</u>	<u>2012</u>
Occupancy		<u>September</u>	<u>2012</u>
<u>ESTIMATED CONSTRUCTION COST:</u>			
	<u>PROJECT COST BASIS (a)</u>	<u>ESCALATION FACTORS (b)</u>	<u>ESTIMATED PROJECT COST (c)</u>
Planning Costs			
Academic Facilities Planning Fund	\$	\$	\$
Other Architectural Fee	\$	\$	\$ 69,550
Construction Structure			
Structure	\$	\$	\$ 350,000
Mechanical (Plumbing, HVAC, Elevators)	\$	\$	\$ 150,000
Electrical	\$	\$	\$ 150,000
Movable Equipment	\$	\$	\$
Fixed Equipment	\$	\$	\$
Site Development/Land Acquisition	\$	\$	\$
Other (Supervision and testing, PM fees, insurance, contingencies)	\$	\$	\$ 170,450
<b>Total Estimated Project Cost</b>	<b>\$</b>	<b>\$</b>	<b>\$ 890,000</b>

(a) Based on current costs prevailing as of (month, year) March 2012

(b) Explain the basis for arriving at this estimate  
     Detailed cost estimate by design architecture firm

(c) Description of unique building characteristics, design features, construction materials, site development factors or other considerations affecting cost estimates on a separate page immediately following.

Attachment E  
Source(s) of Funding

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ESTIMATED TOTAL PROJECT COST: \$ 890,000

SOURCES OF FUNDING:

Prior Appropriation (Acts of \_\_\_\_\_ ) \$ \_\_\_\_\_

State Appropriation Requested \$ \_\_\_\_\_

Bonding Authority (Acts of 1965) \$ \_\_\_\_\_

Bonding Authority (Acts of 1929) \$ \_\_\_\_\_

Lease Purchase \$ \_\_\_\_\_

Other: Gift Funds \$ 486,295

Departmental Funds 118,705

Repair and Rehabilitation –

University Funds 285,000

(specify)

EXPLANATION OF ANY UNIQUE FUNDING FEATURES:

The plant material, planting medium, tray system and installation labor will be a gift in kind.

**Attachment F  
Estimated Change in Operating Costs**

**MAJOR REPAIR AND REHABILITATION**

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GROSS SQUARE FOOTAGE OF AREA AFFECTED BY PROJECT: N/A GSF

ANNUAL OPERATING COST:

	COST PER SQUARE FOOT	TOTAL COST	PERSONNEL SERVICES	SUPPLIES AND EXPENSE
Operations	\$ _____	\$ _____	\$ _____	\$ _____
Maintenance	\$ _____	\$ _____	\$ _____	\$ _____
Fuel	\$ _____	\$ _____	\$ _____	\$ _____
Utilities	\$ _____	\$ _____	\$ _____	\$ _____
Other	\$ _____	\$ _____	\$ _____	\$ _____
<b>TOTAL</b>	<b>\$ _____</b>	<b>\$ _____</b>	<b>\$ _____</b>	<b>\$ _____</b>
<u>LESS OPERATING COST OF:</u>				
Existing Area Affected (Office Space)		\$ _____	\$ _____	\$ _____
*Other Space Affected		\$ _____	\$ _____	\$ _____
<b>ESTIMATED CHANGE IN COST</b>		<b>\$ <u>N/A</u></b>	<b>\$ <u>N/A</u></b>	<b>\$ <u>N/A</u></b>

DESCRIPTION OF ANY UNUSUAL FACTORS AFFECTING OPERATING AND MAINTENANCE COST:

DESCRIPTION OF ANTICIPATED PLANT EXPANSION REQUEST

Of the above "Estimated Change In Cost," what amount (if any) will be requested as a "plant expansion" adjustment to the Institution's operating budget? Beginning on what date? Based on current costs prevailing as of (month, year)

N/A