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Committee Meeting: 4/30/2018

Board Meeting: 5/1/2018 Houston, Texas

R. Steven Hicks, Chairman Ernest Aliseda David J. Beck Kevin P. Eltife Jeffery D. Hildebrand Rad Weaver

|  | Committee<br>Meeting  | Board<br>Meeting | Page |
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| Convene  | 10:00 a.m.<br>Chairman Hicks  |                  |      |
| 1. U. T. System Board of Regents: Discussion and appropriate action regarding Consent Agenda items, if any, assigned for Committee consideration | 10:00 a.m.<br>Discussion  | Action           | 148  |
| Report   |   |                  |      |
| 2. U. T. System: Interim Assessment of Hybrid Project Delivery<br>Pilot  | 10:01 a.m.<br><b>Report/Discussion</b><br>Mr. O'Donnell<br>Mr. Rawski<br>Dr. Ekerdt | Not on<br>Agenda | 149  |
| Additions to the CIP   |   |                  |      |
| 3. U. T. Austin: Energy Engineering Building - Amendment of<br>the FY 2018-2023 Capital Improvement Program to include<br>project                | 10:20 a.m.<br><b>Action</b><br>President Fenves                                     | Action           | 150  |
| Adjourn  | 10:30 a.m.  |                  |      |

# 1. <u>U. T. System Board of Regents: Discussion and appropriate action regarding</u> <u>Consent Agenda items, if any, assigned for Committee consideration</u>

## **RECOMMENDATION**

The proposed Consent Agenda item assigned to this Committee is Item 42.

### 2. U. T. System: Interim Assessment of Hybrid Project Delivery Pilot

# <u>REPORT</u>

Since 2015, progress has been made in implementing the Hybrid Project Delivery Pilot (formerly the Hybrid Project Delivery Initiative) in the planning and construction of previously designated pilot projects as well as other major projects within the Capital Improvement Program (CIP). The application of private sector capital project delivery best practices to selected pilot projects has resulted in building optimization and cost savings. Associate Vice Chancellor O'Donnell will provide an update on the status of pilot projects, the successes achieved, challenges encountered to date, and recommended next steps.

#### 3. <u>U. T. Austin: Energy Engineering Building - Amendment of the FY 2018-2023</u> Capital Improvement Program to include project

### RECOMMENDATION

The Chancellor concurs in the recommendation of the Deputy Chancellor, the Executive Vice Chancellor for Academic Affairs, the Executive Vice Chancellor for Business Affairs, and the institutional president that the U. T. System Board of Regents amend the Fiscal Year 2018-2023 Capital Improvement Program (CIP) to include the Energy Engineering Building project at The University of Texas at Austin.

### BACKGROUND INFORMATION

#### Previous Actions

On August 1, 2016, the Chancellor approved this project for Definition Phase. On November 10, 2016, the Board approved \$100 million in Permanent University Fund Bond Proceeds for this project.

#### Project Description

The Energy Engineering Building will provide critically needed education and research space for the Cockrell School of Engineering. The project is central to achieving the Cockrell School of Engineering's vision to be a globally recognized leader in multidisciplinary innovation dedicated to solving the pressing societal problems of the 21st century and beyond, driving future economic progress, and improving the quality of life. Through modular laboratories and integration of undergraduate education, graduate research, and co-location of research and education programs, this project will bring a new paradigm for energy engineering education and research to the university.

This proposed project has been approved by U. T. System staff and meets the criteria for inclusion in the CIP. Approval of design development plans and authorization of expenditure of funding will be presented to the Board for approval at a later date.

### The University of Texas at Austin Energy Engineering Building

# **Project Information**

| Project Number<br>CIP Project Type<br>Facility Type<br>Management Type<br>Institution's Project Advocate | 102-853<br>New Construction<br>Laboratory, General<br>Institutionally Managed<br>John Ekerdt, Associate Dean for Research, Cockrell<br>School of Engineering |
|--|--|
| Project Delivery Method  | Construction Manager-at-Risk   |
| Gross Square Feet (GSF)  | 183,200  |

## **Project Funding**

|   | Proposed            |
|---|---------------------|
| Permanent University Fund Bond Proceeds                                 | \$100,000,000       |
| Gifts <sup>1</sup>  | \$ 60,000,000       |
| Unexpended Plant Funds  | <u>\$ 5,000,000</u> |
| Total Project Cost  | \$165,000,000       |
| <sup>1</sup> In hand \$14,712,778; Pledged \$13,132,620; Not yet raised | \$32,154,602        |

# **Project Cost Detail**

| Building Cost                    | \$ 98,450,000 |
|----------------------------------|---------------|
| Fixed Equipment                  | 3,875,000     |
| Site Development                 | 6,220,000     |
| Furniture and Moveable Equipment | 4,150,000     |
| Institutionally Managed Work     | 14,850,000    |
| Architectural/Design Services    | 16,353,000    |
| Project Management Fees          | 4,650,000     |
| Insurance                        | 2,616,000     |
| Other Professional Fees          | 8,879,000     |
| Project Contingency              | 4,942,000     |
| Other Costs                      | 15,000        |
| Total Project Cost               | \$165,000,000 |

# Building Cost per GSF Benchmarks (escalated to midpoint of construction)

| Energy Engineering Building                                     |              |        | \$537         |
|---|--------------|--------|---------------|
| Texas Higher Education Coordinating Board Average - Laboratory, |              |        | \$517         |
| General   |              |        |               |
|   | Low Quartile | Median | High Quartile |
| Other U. T. System Projects                                     | \$437        | \$494  | \$548         |
| Other National Projects   | \$409        | \$622  | \$752         |

#### The University of Texas at Austin Energy Engineering Building (continued)

#### **Investment Metrics**

- Facility to provide co-location of education and research programs by 2021
- Address the current unmet space needs for increased faculty and Ph.D. students by 2021

### **Project Planning**

| Definition Phase Completed   | Yes |
|------------------------------|-----|
| Owner's Project Requirements | Yes |
| Basis of Design              | Yes |
| Schematic Design             | Yes |
| Detailed Cost Estimate       | Yes |

#### **Project Milestones**

| Definition Phase Approval      | August 2016   |
|--------------------------------|---------------|
| Addition to CIP                | May 2018      |
| Design Development Approval    | November 2018 |
| Construction Notice to Proceed | December 2018 |
| Substantial Completion         | May 2021      |

### Basis of Design

The planned building life expectancy includes the following elements:

Enclosure: 50 years Building Systems: 30 years Interior Construction: 20 years