

## **SPEED Deferred Maintenance and Building Renewal Projects**

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**FY15 - #12**

Submitted to:

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# **SPEED Deferred Maintenance and Building Renewal Projects**

## **Summary**

Our audit of Phase II and III Stimulus Plan for Economic and Educational Development (“SPEED”) Deferred Maintenance and Building Renewal (“DM/BR”) projects was included in our approved Fiscal Year (“FY”) 2015 Audit Plan. Phase I was reviewed as part of our Fiscal Year 2010 Audit Plan, and audit report FY10 - #05 was issued in January 2010.

The SPEED initiative supports the “Engaging” and “Innovating” pillars of the University’s Never Settle strategic plan by providing urgently needed funding to extend the life of and modernize facilities to help meet the education needs of the future. Administration and project monitoring for the SPEED DM/BR projects is provided by Facilities Management (“FM”).

**Background:** The SPEED funding was designed to help spur the State’s economy by issuing bonds to fund capital projects. University revenues cover 20% of the debt service, with the State paying the remaining 80% out of Arizona Lottery proceeds.

In February 2009, the Legislature’s Joint Committee on Capital Review (“JCCR”) reviewed the three universities’ fire and life safety SPEED project submissions and allocated \$68 million for UA’s projects. The most critical projects, totaling \$16 million, were completed under Phase I. The remaining \$52 million was used to complete Phase II and III projects (covered by this audit). The Phase II and III projects were divided into 10 categories of work with a total of 15 UA financial accounts that included 163 projects. (See table below.)

<b>Category of Work</b>	<b>No. of Accounts</b>	<b>No. of Projects</b>	<b>Project Costs</b>
Interior/Exterior Building Components	2	18	\$18,431,987
Heating, Ventilation and Air-Conditioning	2	30	14,560,593
Arizona Health Sciences Critical Improvements	1	21	5,963,981
Mechanical System Repairs & Replacements	1	49	5,579,228
Building Structural Components	2	5	2,385,000
Fire Alarm and Fire Sprinkler Systems	1	4	1,990,844
Elevator/Code Compliance Upgrades	1	10	986,819
Electrical Code Upgrades	2	6	834,584
Football Stadium Structural Repairs	2	2	737,640
Critical Roofing Repairs	1	18	598,948
<b>Total</b>	<b>15</b>	<b>163</b>	<b>\$52,069,624</b>

## **SPEED Deferred Maintenance and Building Renewal Projects**

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The SPEED DM/BR projects reviewed were awarded using the following types of procurement methods:

- **Sole-Source Provider:** A sole source exists when there is a need for a specific item or service that is only available from one source. For example, systems that are integrated across campus, such as fire detection, fire suppression, and access control and security, necessitate the use of a single contractor or service provider. Sole-source documentation is prepared and only one contractor prepares a bid.
- **Sealed Bid:** Projects that exceed an aggregate dollar amount of \$100,000 are awarded on the basis of sealed competitive proposals or bids from various qualified contractors who respond to a specific scope of work. A purchase order is then awarded to the contractor with the lowest responsible bid.
- **Job Order Contracting (“JOC”):** JOC construction contractors are selected through a qualifications-based selection process in response to a *Request for Proposal* (“RFP”) solicitation that is issued on a five-year cycle. A shortlist of qualified contractors for specific services (e.g., mechanical, electrical) is ranked, and upon the successful negotiation of project-specific work, a *Work Order* and *Notice to Proceed* are issued. *Work Orders* for renovation and alteration projects cannot exceed \$2M. Once a JOC contract is issued, any change in the contract price, contract time, or scope of work must be made by a written and approved change order. Exhibit A of the Tri-University’s standard JOC agreement prescribes specific methodology for calculating change orders, including limitations on contractor and subcontractor fees.

**Audit Objectives:** To determine whether contractor billings for the SPEED DM/BR projects are adequately supported and in accordance with contract provisions, including whether:

- internal controls were in place and operating effectively to ensure requests for cost-proposals/quotes, bids, and contractor selections complied with University procurement policies and procedures;
- contractor requests for payment were adequately supported and did not exceed the purchase order amount;
- bond and insurance coverage was in compliance with the terms of the contract;
- change orders (“CO”) were priced according to the contract terms; and
- opportunities for process improvements exist.

**Scope:** Our audit of the SPEED DM/BR projects included all Phases II and III projects completed between June 2011 and October 2014 totaling \$52 million.

# **SPEED Deferred Maintenance and Building Renewal Projects**

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**Methodology:** Our audit objectives were accomplished through:

- reviewing applicable University procurement and expenditure policies and procedures;
- discussing and corresponding with University representatives from FM, Procurement and Contracting Services (“PACS”), and Planning, Design and Construction (“PD&C”);
- examining PACS’ project files, including sole-source justifications, JOC processes and agreements, *Request for Proposals/Bids*, and *Purchase Orders*;
- verifying all required insurance coverage and bonds were maintained during the project;
- preparing a control schedule of project purchase orders, COs, and payments;
- reconciling purchase orders and payments and comparing to the detailed supporting invoices or contractor payment applications;
- reviewing COs and supporting documentation to ensure changes were reasonable and approved; and
- recalculating the fee, bonds and insurance, and taxes charged on COs.

**Sample Selection Methodology:**

- To select accounts for review, we used ACL Analytics to randomly select 5 (30.3%) of the 15 Phase II and III accounts. The 5 sample accounts contained 51 projects, from which we judgmentally selected 11 sample projects for review. The 11 projects represented 28 purchase orders awarded to various vendors/contractors.
- Our objective was to select at least 50% of the dollar amount for each of the five sample accounts, with an overall minimum of 25% coverage for all Phase II and III projects. The 11 sample projects represent approximately \$14 million (27%) of the \$52 million.

**Conclusions:** Based on our audit work, we found that University processes for procurement of Phase II and III DM/BR projects complied with University policies and that financial transactions generally complied with the terms of the contracts. Specifically, we concluded that the contractor selection process complied with University policies and procedures, including the requirement for maintaining insurance and payment and performance bonds. We ascertained that all transactions were sufficiently supported and payments were based on actual costs incurred. Our review of COs revealed that the COs represented a legitimate change in the scope of work, and credits were received where applicable. However, not all revised JOC contractual

## **SPEED Deferred Maintenance and Building Renewal Projects**

amounts were accurate and/or priced in accordance with Exhibit A. Additional details can be found beginning on page 6.

The audit identified an opportunity for improvement that could further enhance FM's management of future projects. We suggested to FM management that subaccounts be established within UAccess to assist in accounting for individual project costs. As reflected in the table on page 1, the 163 Phase II and III SPEED DM/BR projects were managed under 15 UAccess accounts based on categories of work. Each project has separate accountability requirements. Because the costs were intermingled within one account, they were not easily identifiable to a specific project. As suggested, FM began using subaccounts in FY 2015 and will use them for future projects.

According to the Institute of Internal Auditors International Professional Practices Framework, an organization is expected to establish and maintain effective risk management and control processes. These control processes are expected to ensure, among other things, that:

- the organization's strategic objectives are achieved;
- financial and operational information is reliable and possesses integrity;
- operations are performed efficiently and achieve established objectives;
- assets are safeguarded; and
- actions and decisions of the organization are in compliance with laws, regulations, and contracts.

Our assessment of these control objectives as they relate to the SPEED DM/BR projects is on the following page.

## SPEED Deferred Maintenance and Building Renewal Projects

General Control Objectives	Control Environment	Audit Result	
		No.	Page
<b>Achievement of the Organization's Strategic Objectives</b>			
<ul style="list-style-type: none"> <li>Strategic objectives were met by extending the life and quality of UA facilities for current and future students, staff, employees, and visitors.</li> </ul>	Reasonable to Strong Controls in Place		
<b>Reliability and Integrity of Financial and Operational Information</b>			
<ul style="list-style-type: none"> <li>Contractor billings were adequately supported by actual costs incurred by the contractors.</li> </ul>	Reasonable to Strong Controls in Place		
<ul style="list-style-type: none"> <li>Change orders were priced and approved according to contract requirements.</li> </ul>	Opportunity for Improvement	1	6
<b>Effectiveness and Efficiency of Operations</b>			
<ul style="list-style-type: none"> <li>UA payments to contractors did not exceed the contracted amount.</li> </ul>	Reasonable to Strong Controls in Place		
<b>Safeguarding of Assets</b>			
<ul style="list-style-type: none"> <li>The contractors provided the contracted scope of work.</li> </ul>	Reasonable to Strong Controls in Place		
<b>Compliance with Laws and Regulations</b>			
<ul style="list-style-type: none"> <li>Bonds and insurance coverage was in compliance with the terms of the contract.</li> </ul>	Reasonable to Strong Controls in Place		
<ul style="list-style-type: none"> <li>The contracts were managed to ensure contractors complied with contract terms.</li> </ul>	Reasonable to Strong Controls in Place		

We appreciate the assistance of FM, PACS, and PD&C personnel during the audit.

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# **SPEED Deferred Maintenance and Building Renewal Projects**

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## **Audit Results, Recommendations, and Responses**

### **1. Change Orders were not accurately priced.**

#### **Condition:**

Sixteen (67%) of the twenty-four change orders reviewed<sup>1</sup> contained errors related mainly to allowable fees. As a result, the University of Arizona overpaid two JOC contractors a net amount of \$16,260.

#### **Criteria:**

- Paragraph 28.3 of the 2012 Job Order Contract states, “The cost or credit to the Owner resulting from a change in Work shall be determined in one or more of the following ways:

“A. By unit prices from the Unit Price Book specified. Unit prices, from a unit price book (i.e. R.S. Means, etc.), proposed on the Proposal form and included in the Contract are not subject to further overhead and profit adjustments. The Contract Sum will be adjusted by the direct extension of the number of units and the unit prices. Contractor Fee will be added, and then adding the insurance, bonds, and tax to compute the total cost.

“B. By mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation as a non-prepriced item in accordance with the Contract Documents and in the format as described on Exhibit A, Change Order Pricing Format.”

- Exhibit A of the JOC Contract states that contractor fees shall be “actual percentages based on and supported by records of the applicable Subcontractor and/or Contractor.” PD&C developed the *JOC 2012 Contractors’ Information* chart that established allowable fees for JOC contractors who were awarded a 2012 JOC agreement.

#### **Causes:**

- FM staff were not aware of all JOC contract requirements and stipulations, including (1) the *JOC 2012 JOC Contractors’ Information* chart that established profit and overhead fees for individual contractors, and (2) the contractually prescribed methodology for pricing change orders.

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<sup>1</sup> Ten of the twenty-eight sample-selected purchase orders had a total of 24 change orders, valued at \$1,354,045. Of the 24 change orders, 7 were non-JOC contracts and 17 were JOC contracts.



## **SPEED Deferred Maintenance and Building Renewal Projects**

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- Although FM had procedures in place to coordinate with the architect to determine if change order costs were reasonable, the procedures did not include a validation process to ensure all costs, including contractor profit and overhead fees, were accurate and priced in accordance with Exhibit A.

### **Effect:**

Without specific procedures in place to ensure accurate change order pricing, the University is at risk for paying more than the allowable contract amount.

### **Recommendations:**

- 1) FM should initiate action to recoup change order under/overpayments identified during the audit.
- 2) Management should consider reviewing the remaining 14 change orders for the two contractors to determine whether other overpayments exist and seek reimbursement accordingly.
- 3) FM management should coordinate with PD&C to obtain immediate training to become familiar with existing construction contract delivery methods, to include JOC and Construction Manager at Risk agreements. Thereafter, training should occur at least annually and/or as changes are made to agreements. FM staff such as project managers, business services personnel, and appropriate associate directors should attend the training.
- 4) FM should strengthen existing procedures for validating change order amounts. The procedures should include a review of allowable contractor fees to ensure the correct fees are applied.

### **Management Response:**

- 1) Implemented: May 2016. It was FM's recommendation to reach out to our JOC Contractors to recoup the overpayment charged for the profit and overhead on the change orders. Consequently, the meeting has taken place with the contractor, and they have agreed to reimburse the University for the overpayment.
- 2) Target Implementation Date: May 2016. FM Business Services has reviewed the remaining 14 change orders and determined that there was only one overpayment of the profit and overhead totaling \$76.90 to a contractor. FM is in the process of invoicing the contractor for that total.

## **SPEED Deferred Maintenance and Building Renewal Projects**

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- 3) Target Implementation Date: June 2016. FM is in the process of coordinating a training in the near future and scheduling annual refresher training with all those involved in the JOC and Construction Manager at Risk process.
  
- 4) Implemented: April 2016. FM immediately initiated a two-step process in which before the change order is approved, FM Business Services recalculates the overhead and profit amount to make sure the fees are within the limitations prescribed in the Tri-University Standard JOC negotiated agreement. After it has been verified that the appropriate profit and overhead percentages are being used, authorization is issued to the Project Manager to move forward with the change order.