



**FLORIDA
INTERNATIONAL
UNIVERSITY**

Office of Internal Audit

**Audit of Construction Costs-Parking Garage Five
Retail and Public Safety Building (PG-5)**

Report No. 11/12-08

April 5, 2012



FLORIDA
INTERNATIONAL
UNIVERSITY

OFFICE OF INTERNAL AUDIT

Date: April 5, 2012

To: Kenneth Jessell, Chief Financial Officer and Senior Vice President
John Cal, Associate Vice President, Facilities Management

From: Allen Vann, Audit Director

A handwritten signature in blue ink that reads 'Allen Vann'.

Subject: Audit of Construction Costs - Parking Garage Five, Retail and Public Safety Building (PG-5), Report No. 11/12-08

We have completed an audit of costs submitted by Turner Construction Company (Turner) serving as the Construction Manager for the Parking Garage Five, Retail and Public Safety Building. As of September 30, 2011, the total guaranteed maximum price was \$45 million. Turner's construction costs totaled \$43.8 million. The primary objective of the audit was to determine whether total project costs were appropriately funded and costs billed were accurate, current, complete, and in accordance with the contract.

Our audit disclosed that each funding source used to pay for the project was properly authorized, accounted for and used in accordance with the various funding requirements. However, prior to final closeout questionable costs totaling \$462,661 need to be resolved. Management (and Turner) agreed to resolve all potential overcharges during the project closeout including appropriate deductions/credits.

C: Sukrit Agrawal, Chair, BOT Finance and Audit Committee and Committee Members
Mark B. Rosenberg, University President
Javier I. Marques, Chief of Staff, Office of the President
Kristina Raattama, General Counsel
Sylvia Berenguer, Director of Construction, Facilities Management

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OBJECTIVES, SCOPE, AND METHODOLOGY

Pursuant to our approved annual plan, we have completed an audit relating to the construction of the recently completed Parking Garage Five, Retail and Public Safety Building (PG-5). The primary objectives of the audit were to determine whether:

- I. Total project costs were appropriately funded and in accordance with University policies and procedures, applicable laws, rules and regulations; and
- II. Construction costs billed by the Construction Manager, Turner Construction Company were appropriate, actually incurred, properly supported, accurate and in accordance with the articles of the project contract.

During fieldwork we reviewed records maintained by Florida International University (FIU or Owner) and the Construction Manager (CM). This included:

- Applicable University policies and procedures and applicable laws and regulations regarding the appropriate use of various funding sources;
- Support documents related to fund approvals, availability, draw downs, and usage;
- Project pay applications, payments support, contracts and any other documents related to the project; and
- CM project records including:
 1. Project job cost ledgers;
 2. Project insurance cost assumptions and data; and
 3. Project payroll records and reconciliation.

We also:

- Interviewed key FIU and CM personnel involved in the project; and
- Reconciled project funding source amounts and usages to FIU's financial records and Facilities' project ledgers.

BACKGROUND

In January 2009, FIU entered into an agreement with Turner Construction Company to serve as the Construction Manager (CM) for the PG-5 project. The PG-5 project consists of a new seven floor multipurpose building including: 1,969 parking spaces, retail shops, classrooms, and administrative offices for Parking & Transportation, Public Safety, Emergency Management and Health Care Network. The building was constructed as a pre-cast structure with a sandblast exterior finish.



Project Delivery Methodology

This project was delivered using the Construction Manager at Risk contract. Under this method, the CM takes part in the efforts of establishing the Guaranteed Maximum Price (GMP) prior to finalizing the design. The CM acts as the general contractor during construction, assuming the risk of subcontracting the work and guaranteeing the completion of the project within the GMP.

In accordance with the CM agreement, the CM performed the pre-construction services during the design phase and subsequently submitted a GMP proposal. The CM was paid the agreed upon lump sum amount of \$170,000 for pre-construction services.

In July 2009, amendment number 1 to the CM agreement established the construction phase GMP for the project. Due to funding constraints, the project construction was rolled out into three phases totaling \$32,500,384, subject to change orders. Per the CM agreement, the GMP can only be increased by owner approved change orders. As of September 30, 2011, the total revised GMP was \$45,046,364 as detailed below:

Phase I	\$ 7,201,000
Phase II	2,570,000
Phase III	<u>22,729,384</u>
Subtotal	\$ 32,500,384
Change Orders	<u>12,545,980¹</u>
Total GMP	<u>\$ 45,046,364</u>

According to CM records, as of September 30, 2011, the construction phase of the project is 98% completed and FIU withheld \$575,462 as retainage. It is anticipated that the project will be closed out shortly after the completion of our audit.

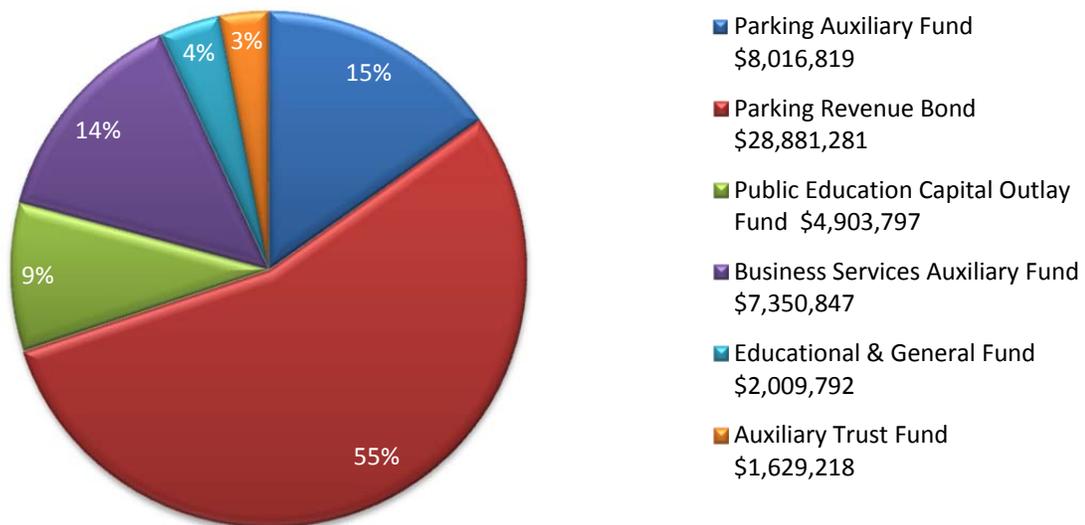
¹ The majority of the change orders resulted from the various user departments' request for change in project scope.

FINDINGS AND RECOMMENDATIONS

Section I - Funding Sources

As of September 2, 2011, the approved funding for the entire project totaled \$52,791,754. In addition to the GMP, this includes Architect/Engineer fees, furniture and fixtures, and other professional services. The chart below details the various funding sources.

Funding Source



We reviewed PG-5 project records maintained by the Facilities Management Department to determine if each funding source was properly authorized, accounted for and used in accordance with the various funding requirements. Our review disclosed that each fund was properly authorized, accounted for and used for its intended purpose.

Section II - Construction Costs

The following schedule summarizes our review of construction costs through September 30, 2011:

Retainage		\$ 575,462
Potential Recoveries:		
1. Insurance Charges	\$ (452,042)	
2. Training Charges	(7,219)	
3. Extra Costs	(3,400)	(462,661)
Net Amount		\$ 112,801
Payments		43,666,239
Total		<u>\$43,779,040</u>

Facilities Management staff is in the process of closing out the project, which will likely result in additional adjustments. Nevertheless, details of our review follow.

1. Insurance Charges – \$452,042

a) **Workers Compensation & General Liability Insurance – \$53,238**

Turner elected to provide Workers Compensation and General Liability Insurance for both its staff and subcontractors through a Contractor Controlled Insurance Program (CCIP). For that portion of the insurance covered by CCIP, Turner will be reimbursed 3% of the total GMP.

As of September 30, 2011, the FIU paid Turner \$1,309,322 for Workers Compensation and General Liability Insurance. A review of Turner's insurance information revealed that the CCIP insurance expiration date for the PG-5 project was expired on September 30, 2010. Turner confirmed that CCIP insurance coverage ended at the project's substantial completion date, September 30, 2010. Since then, Turner has provided CCIP using self-insurance coverage, which cost less than the agreed upon 3%. Nonetheless, Turner continued to bill FIU at the 3% CCIP rate without informing Facilities Management of the change in CCIP coverage. After our inquiry, Turner contacted Facilities Management and offered a credit of \$53,238.16.

b) **Unsupported Subcontractor Default Insurance – \$398,804**

During the construction period, Turner provided FIU with Subcontractor Default Insurance (Subguard) in lieu of a surety bonds. The applied cost for Subguard was \$11.50 per \$1,000 of the enrolled subcontractor work. Turner billed the University \$398,804 for Subguard insurance through September 30, 2011. However, an examination of Turner's records reveals that the supporting invoice was for only \$314,106 resulting in \$84,698 excessive charges to the University. Upon our inquiry, Turner explained that this is not a final invoice and they are in the process of

determining which subcontractors should be included or excluded from the Subguard coverage, in order to determine the final cost.

The Subguard invoice was not from the underwriter, Steadfast Insurance Company, but rather from *Turner Surety and Insurance Brokerage, Inc.*, an insurance brokerage company wholly owned by Turner Construction Company. As of December 16, 2011, the Turner did not provide actual payment information to support the purchase of Subguard insurance from Steadfast Insurance Company. Additionally, the insurance expired as of December 31, 2009. However, per the CM records as of September 30, 2011 the project is 98% completed and the CM was unable to provide us with proof of continued insurance coverage though the project duration.

2. Training Charges – \$7,219

Facilities Management agreed to pay Turner a 34% EBE multiplier rate, which included employee training at 2.65%. As of August 31, 2011, Turner's billable payroll volume was \$1,497,467. Accordingly, Turner charged the University a total of \$39,683 (2.65% x \$1,497,467) as employee training cost. However, Turner also directly charged FIU \$7,219 in actual training cost incurred during the project by staff assigned to the project. Since they already billed the training cost as part of the EBE multiplier, billing it again directly as part of actual costs represents a double billing.

3. Extra Costs – \$3,400

Per article 1.1 of the CM agreement, Turner agreed to furnish efficient business administration and superintendence and to complete the project in an expeditious and economical manner consistent with University's interests.

While reviewing selected direct furniture and equipment purchased directly by FIU, we noted that a vendor contacted the Turner's staff to confirm the scheduled delivery of the furniture. The CM staff informed the vendor that the delivery time and location were set. Upon arrival at the construction site, the vendor was informed that the construction was behind schedule and could not accept the delivery. As a result, FIU incurred additional cost of \$3,400 for the vendor's accommodations and travel time.

Conclusion:

Based on our audit, we concluded that \$462,661 in costs submitted by Turner Construction Company were unsupported and/or questionable.

Recommendation:

Prior to closeout and releasing retainage, the Facilities Management Department should take necessary steps to recover or otherwise resolve the potential overcharges and unsupported costs with Turner Construction Company.

Management Response/Action Plan:

1. a) Workers Compensation & General Liability Insurance - \$53,238

Concur. This was identified prior to the audit and will be addressed during close-out. Turner has already stated its intention to deduct/credit the full amount during close-out.

b) Unsupported Subcontractor Default Insurance - \$398,804

Concur. This will also be addressed during close-out when the GMP contract value is reconciled with actual construction costs. The amount that is currently unsupported is \$84,698, and will be reviewed during close-out. Turner Surety and Insurance Brokerage, Inc. presented an invoice in the amount of \$314,106 for the insurance. This invoice will be reviewed during close-out. The business relationship between the insurance brokerage company and the construction company may not make the invoice invalid and we will work with the contractor and our Office of General Counsel to reach a determination.

2. Training Charges - \$7,219

Concur. This will be addressed during close-out.

3. Extra Costs - \$3,400

Concur. This will be addressed during close-out.