UCIRVINE | INTERNAL AUDIT SERVICES

Construction Management Audit Internal Audit Report No. I2016-104 April 4, 2016

Prepared By Loran Lerma, Principal Auditor Reviewed By Niran Joshi, Associate Director Approved By Mike Bathke, Director

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INTERNAL AUDIT SERVICES IRVINE, CALIFORNIA 92697-3625

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LEON ROACH DIRECTOR, CAPITAL DESIGN & CONSTRUCTION PROJECTS UC IRVINE MEDICAL CENTER - PLANNING ADMINISTRATION

RE: Construction Management Audit Report No. I2016-104

Internal Audit Services (IAS) has completed the review of Construction Management and the final report is attached.

If you have any questions or require additional assistance, please do not hesitate to contact me.

Mike Battle

Mike Bathke Director UC Irvine Internal Audit Services

Attachment

C: Audit Committee Krikor Jansezian, Director, Ancillary Services Matthew Hicks, Systemwide Deputy Audit Officer

I. BACKGROUND

In accordance with the fiscal year (FY) 2015-2016 audit plan, Internal Audit Services (IAS) conducted an audit of construction management at the request of the UC Office of the President. This review was performed at all UC campuses using a standard system-wide audit program that was developed for this construction review.

II. PURPOSE, SCOPE AND OBJECTIVES

The purpose of the review was to assess the adequacy of the internal controls and construction management processes on major capital projects, over the bidding and award process, change order execution, compliance with construction funding restrictions and requirements, and overall compliance with UCI policies and the UC Facility Manual (FM). The period of the review was for construction projects started within the last three years and retention on the project not yet been released.

IAS examined the change order (CO) review and approval processes for the campus and medical center. IAS selected projects from campus Design and Construction Services (D&CS) for examination of the bid and award process, reviewed COs for a detailed review and required approvals, reviewed compliance with restrictions and requirements attached to construction project funding and for projects over \$25 million, verified contractors are enrolled and covered under the University of California Insurance Program (UCIP).

The review included the following procedures:

- 1. Reviewed local and system-wide policies related to campus and medical center construction;
- 2. Interviewed management and other key personnel responsible for construction management activities and individuals with process responsibilities;

- 3. Reviewed and evaluated local bidding award practices to include contractor pre-qualification procedures, invitation for bid submission, review and approval of bids submitted, and to ensure contractors selected met the minimum responsibility for licensing, bonding and insurance requirements;
- 4. Reviewed construction project drawings and documentation;
- 5. Reviewed the CO review and approval processes and procedures;
- 6. Reviewed CO backup documentation for adequate support, and to determine if the scope of work was reflected in the CO;
- 7. Reviewed COs for labor and material pricing accuracy, and accurate calculations of construction charges and fees;
- 8. Reviewed funding restriction requirements associated with different types of construction projects;
- 9. Reviewed and evaluated departmental practices and controls to monitor compliance with construction funding restrictions and requirements;
- 10. Performed a limited review of UCIP insurance program enrollment and verified insurance coverage for program participants.

III. CONCLUSION

Based on our review, the construction bidding and award process appears to be satisfactory and functioning in accordance with UCI policies and FM requirements. Also, for projects over \$25 million, contractor and sub-contractors appear to be enrolled and covered under the UCIP insurance program as required.

However, IAS found opportunities to improve the review and approval of COs. For one capital project, some of the COs reviewed lacked detailed support for labor and materials for sub-contractor work submitted by the contractor that are necessary to accurately quantify and calculate costs.

Additionally, change order requests (COR) that exceed \$100,000 lacked documentation of factors to demonstrate and determine the decision to proceed by CO as opposed to advertise for competitive bid.

Observation details and recommendations were discussed with management who formulated action plans to address the issues. These details are presented below.

IV. OBSERVATION

1. <u>Change Order Review</u>

Background

A CO may revise, add to, or delete previous requirements of the construction work, adjust the contract sum, and/or adjust the contract time. COs may not be executed until the contract has been signed by University authorized personnel and the contractor.

Substantial COs that exceeds \$100,000 should be supported by factors that can demonstrate that no advantage would be gained by conducting an advertised bid for work. Certain factors must be considered in written justification to determine if a CO is justified as opposed to competitive bid.

Observation

IAS examined the CO review and approval processes for the campus and medical center. IAS selected for review one capital project from the campus (Mesa Court Expansion, Project 996296) that had not yet been completed and released. There were 39 CORs from eight COs during the review period. IAS examined the COs but judgmentally selected 13 CORs, or 33 percent of the total CO costs (\$840,000 of \$2.5 million), for a more detailed review for compliance with UCI policies and FM requirements. The COR cost methods were based on actual cost plus a contractor fee (overhead and profit).

Based on our review, our observations are as follows:

• All eight COs were approved by authorized personnel;

- All 13 CORs reviewed were approved by authorized personnel;
- All 13 CORs reviewed were in agreement with the contract requirements;
- Five of 13 (38 percent) CORs reviewed lacked adequate support documentation for labor and material breakdown costs for sub-contractor work submitted by the contractor;
- Seven CORs exceeded \$100,000. The CORs lacked documentation of factors to demonstrate and determine the decision to proceed by CO as opposed to competitive bid. IAS reviewed the COs and determined they were not a condition that required a competitive bid.

Although some COs may exceed \$100,000, for efficiency, D&CS bundles multiple CORs into a single CO. There were several CORs under \$100,000, but when bundled into one CO may exceed \$100,000.

The FM Volume 5, Part II, Section 3.2.1, Cost Proposals, and General Conditions, authorizes compensation for extra work based on actual cost plus a contractor fee. The contractor is paid for the actual time spent by the contractor's employees and subcontractors and the materials they actually used. The contractor is required to keep daily records of its actual costs, and submit them for approval by the University's Representative. As a result, the contractor should be able to provide sufficient labor breakdown, material quantity and unit price details on every project. Lack of adequate documentation to support actual time spent and materials used could result in improper payments and contractor fees and violate UCI policies and FM requirements.

The FM Volume 5, Chapter 13.2.7, Guidelines for Substantial COs, typically prohibits COs or a series of COs exceeding \$100,000, unless it can be convincingly demonstrated that no advantage would be gained by conducting an advertised bid for work. It is D&CS's responsibility to document the rationale for a substantial CO and the primary factors to proceed by CO.

Management Action Plan

D&CS management will develop or strengthen their review process and procedures over cost proposals submitted by the general contractor (GC) and subcontractor to review for missing key cost details such as wage rates, labor classification and list of materials and the extended unit price. The cost proposals were largely lump sum amounts, which are allowed under the University's General Conditions, but did not properly adhere to the instructions of the cost proposal, Exhibit 7 form which states "Attach supporting data to each such form to substantiate the individually listed costs. The costs provided on these forms shall be used to substantiate additional costs shown on the cost proposal Summary."

D&CS will also develop a process and procedures for substantial COs that exceed \$100,000. D&CS will enhance their Project Scope Change Request form to document factors that justify the decision to proceed by CO. These corrective action plans will be implemented by June 30, 2016.