

**CONSTRUCTION**  
**CALIFORNIA STATE UNIVERSITY,**  
**STANISLAUS**  
**STUDENT RECREATION COMPLEX**

**Audit Report 10-14**  
**October 18, 2010**

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## **ABBREVIATIONS**

BOT	Board of Trustees
CPDC	Capital Planning, Design and Construction
CRB	Certification Review Board
CSU	California State University
CSUS	California State University, Stanislaus
EO	Executive Order
OUA	Office of the University Auditor
Student Recreation	Student Recreation Complex
SUAM	State University Administrative Manual

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## **EXECUTIVE SUMMARY**

At its January 2010 meeting, the Board of Trustees directed the Office of the University Auditor (OUA) to review construction activity. Construction auditing had been performed by KPMG since fiscal year 1997/98 with coordination from the OUA. In fiscal year 2008/09, OUA staff began performing construction audits.

We visited the California State University, Stanislaus campus and the offices of the general contractor and selected subcontractors from June 21, 2010, through July 15, 2010, and audited the Student Recreation Complex (Student Recreation) project focusing on the construction management policies and procedures and internal controls and processes in effect at that time.

Our study and evaluation did not reveal any significant construction management or internal control problems or weaknesses that would be considered pervasive in their effects on construction activity controls. However, we did identify other reportable weaknesses that are described in the executive summary and body of this report. In our opinion, the operational and administrative controls in effect for the Student Recreation project were sufficient to meet the overall audit objective stated below.

As a result of changing conditions and the degree of compliance with procedures, the effectiveness of controls changes over time. Specific limitations that may hinder the effectiveness of an otherwise adequate system of controls include, but are not limited to, resource constraints, faulty judgments, unintentional errors, circumvention by collusion, and management overrides. Establishing controls that would prevent all these limitations would not be cost-effective; moreover, an audit may not always detect these limitations.

The following summary provides management with an overview of conditions requiring attention. Areas of review not mentioned in this section were found to be satisfactory. Numbers in brackets [ ] refer to page numbers in the report.

### **CHANGE ORDER ADMINISTRATION [6]**

Various inflated rates and erroneous labor burden computations charged by the general contractor and one trade subcontractor inflated labor costs by \$5,238. Certain inflated rates were charged by a second trade subcontractor, but insufficient timekeeping support prevented a detailed computation of the total overcharges. In addition, the general contractor applied excessive overhead and profit mark-ups that resulted in an overcharge of \$6,036.

### **PROJECT COMPLETION AND CLOSEOUT [8]**

The campus prepared and signed the Notice of Completion on July 31, 2009, five months prior to completion of the project closeout checklist and certification of completion and two weeks prior to obtaining a Conditional Certificate of Occupancy from the Office of the State Fire Marshal.

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## INTRODUCTION

### **BACKGROUND**

In June 2006, California State University, Stanislaus (CSUS) executed an agreement with the architectural firm of HMC Architects for the development of plans and specifications to construct a new student recreation complex. In November 2006, the Board of Trustees (BOT) approved the CSUS campus master plan revision and the schematic plans for the CSUS Student Recreation Complex (Student Recreation) at a project cost of \$16,374,000 with funding from the issuance of systemwide revenue bonds, to be paid from student fees. In September 2007, the BOT approved the issuance of these bonds in an amount not-to-exceed par value of \$18,445,000.

Also in September 2007, the campus solicited project bids. It selected McFadden Construction, Inc., as the general contractor and executed an agreement at a construction cost of \$11,143,000. The campus issued the Notice to Proceed on November 5, 2007, with an expected completion date of December 12, 2008. At the time of our audit, construction costs, including approved change orders, totaled \$11,529,017. The campus filed a Notice of Completion on August 6, 2009 and obtained a Conditional Certificate of Occupancy on August 13, 2009. The campus obtained the final Certificate of Occupancy on October 22, 2009.

The CSUS Student Recreation project is situated on 19 acres of the CSUS campus with two soccer fields, a track and field arena, bleachers with an 18,927-square-foot press box building, team rooms, and a 1,313-square-foot restroom and shower room building for the primary use of athletes. The lighted stadium accommodates 2,500 seats, and the track is regulation size; the soccer fields have sections of both artificial turf and natural turf for field events. The Student Recreation project also includes an 18,363-square-foot fitness center for general student use, storage, and an adjacent parking lot.

The CSUS campus managed the Student Recreation project, and it chose the Design-Bid-Build delivery method. In this method, the design and construction aspects are contracted for separately, and the project is usually awarded to the lowest bid by a qualified general contractor. The architect/engineer (A/E) develops a schematic design, works with other professionals to complete drawings and specifications, and coordinates the bid documents. The project is advertised and bids are requested for various general contractors, who in turn bid out subcomponents of the project to multiple subcontractors and compile a complete bid for submission. The A/E participates in bid review and selection. During the construction phase, the A/E reviews work progress and issues site instructions, change orders, and other documentation necessary to the construction process, and the general contractor manages the construction process and daily activity on the construction site and often provides work with its own forces. The university remains responsible for project inspection and testing, and for generally administering the project.

Executive Order (EO) 672, *Delegation of Capital Outlay Management Authority and Responsibility*, dated July 25, 1997, delegates to campus presidents the authority to manage directly state and non-state funded capital outlay projects. The chancellor's office issues this delegated authority to the campus subject to its compliance with the capital outlay certification procedure. To comply, the campus submits a request for Delegation of Capital Outlay Management Authority to the Certification Review Board (CRB) for review. Then the executive vice chancellor and chief financial officer in the chancellor's

office must approve the request. The campus president is responsible for ensuring that he or she exercises delegated authority in compliance with applicable statutes, regulations, and policies of the BOT; the campus manages capital projects via a process consistent with the provisions of the State University Administrative Manual (SUAM); and the campus has in place appropriate internal controls and processes to ensure that responsibilities are carried out in a manner consistent with the campus capital outlay management plan submitted with the request for delegated authority.

The certification procedure required by EO 672 includes submission of a capital outlay management plan, which defines the campus organizational and operational structure and expenditure authority, and serves as the campus policies and procedures for the administration of construction activities. Updated plans are to be submitted when campus operational structure changes are made which impact the plan. Certification is continuous unless a Capital Planning, Design and Construction (CPDC) post-project performance review determines that problems were caused by campus negligence, in which case the CRB may recommend that the campus be placed on probation. The CRB may ultimately recommend that certification be withdrawn if identified operational/management deficiencies are not remedied.

For those campuses that are not certified, the chancellor's office may execute a Memorandum of Delegation for a capital outlay project, which delegates administration, including construction management, to the campus. The CPDC construction management unit may also perform construction administration and management.

EO 666, *Delegation of Professional Appointments Related to Capital Outlay Projects and Campus Physical Development*, dated March 7, 1997, delegates the authority to each campus president or designee to make all professional appointments relative to capital outlay projects and campus physical development. Further, the campus president or designee is responsible for ensuring compliance with all applicable statutes and regulations, BOT policies, and SUAM guidelines; and the use of systemwide standardized architectural, engineering, and other professional appointment contract forms.

The SUAM, in part, contains an overview of all CPDC policies and procedures associated with the capital outlay process. SUAM §9700 through §9843, *Construction Management for Public Works Contracts*, describe the requirements for preparing and administering public works contracts under the provisions of Public Contract Code §10700 *et seq.* SUAM §9200 through §9212, *Professional Services for Campus Development*, describe the requirements for developing and administering professional services agreements with service providers such as architects and engineers and for testing services and project-related studies.

The California State University (CSU) *Construction Management Procedures Manual* contains the CSU construction management policies and procedures that apply to a project, and each construction administrator, project manager, inspector of record, campus representative, and design professional is required to use this manual as appropriate during the construction administration of a project.

## **PURPOSE**

The overall audit objective was to ascertain the effectiveness of construction management policies and procedures and internal controls and processes related to the administration of construction activities and, specifically, the Student Recreation project.

Within the overall audit objective, specific goals included determining whether:

- ▶ Delegated authority to manage capital outlay projects exists, and the campus capital outlay management plan is current for campus-managed projects.
- ▶ Project development is in accordance with statutory and CSU policy requirements, including required BOT and CPDC approvals.
- ▶ Administration and management of the project provide effective internal controls and processes consistent with the campus capital outlay management plan and the SUAM.
- ▶ Professional appointments are in accordance with statutory requirements, BOT policy, and the SUAM, and systemwide standardized professional appointment contract forms are used, approved by the Office of General Counsel, and fully executed prior to performance of work.
- ▶ Extra services are appropriate, authorized, and separately tracked, and an evaluation is performed for each professional service provided.
- ▶ The bidding process is rigidly controlled, performed in accordance with statutory requirements and the SUAM, and incorporates the contract documents maintained on the CPDC website.
- ▶ Contract documents are complete, routed to the Office of General Counsel as appropriate, and timely executed; required contract bonds and insurance are received; and a Notice to Proceed is issued.
- ▶ Subcontractors are adequately monitored, and requests for subcontractor substitutions are handled in accordance with statutory requirements and the SUAM.
- ▶ Operational and administrative controls ensure maintenance of financial accountability and completion of the project within the approved scope, schedule, and budget.
- ▶ Contract and service agreement payments are adequately supported, appropriately approved, and timely paid, and retention is handled in accordance with statutory requirements and the SUAM.
- ▶ Equipment is procured in the most economical method, purchased materials meet specifications required by construction documents and drawings, and all required inspections and tests are timely and properly performed and adequately documented.

- ▶ Change orders are appropriately approved, supported, accurately priced, and sufficiently tracked, and construction allowances and contingency balances are adequately administered and controlled.
- ▶ Project completion is adequately administered, including completion of pre-final/final inspections, punch list items, project closeout checklist, and Notice of Completion; preservation of project files, equipment manuals/warranties, and spare parts/materials; and resolution of any liquidated damages.

## **SCOPE AND METHODOLOGY**

The scope of audit included, but was not limited to, the review of design budgets and costs; the bid and award process; invoice processing and payment; change orders; construction management, architectural, and engineering services; use of major equipment/materials; the closeout process; administration of liquidated damages; and overall project cost accounting and reporting. This included any transactions or activity performed by the campus, construction management firm, and trade subcontractors.

Our study and evaluation were conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing* issued by the Institute of Internal Auditors, and included the audit tests we considered necessary in determining that operational and administrative controls are in place and operative. This review emphasized, but was not limited to, compliance with state and federal laws, BOT policies, and Office of the Chancellor and campus policies, letters, and directives.

We focused primarily on the operational and administrative controls in effect for the Student Recreation project with an emphasis on compliance with the CSU *Construction Management Procedures Manual*, SUAM policies and procedures associated with the capital outlay process, the campus capital outlay management plan, and construction contract general conditions. We evaluated the effectiveness of construction management policies and procedures and adequacy of internal controls and processes, and sought opportunities for improvement to further the success of CSU's capital outlay program.

Specifically, we reviewed and tested:

- ▶ Delegation of construction management authority.
- ▶ Review and approval of project design, budget, and funding.
- ▶ Professional services agreements and any extra services changes.
- ▶ Administration of the bid and award process.
- ▶ Contract execution and required contract bonds and insurance.
- ▶ Subcontractors and subcontractor substitutions.
- ▶ Contract and service agreement payment processing.
- ▶ Procurement of major equipment and materials.
- ▶ Performance of required inspections and tests.
- ▶ Review, approval, and tracking of change orders.
- ▶ Direct labor and associated burden.
- ▶ Construction management and overall project cost accounting and reporting.
- ▶ Construction allowances and contingency balances.
- ▶ Administration of the project closeout process and resolution of any liquidated damages.

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## OBSERVATIONS, RECOMMENDATIONS, AND CAMPUS RESPONSES

### CHANGE ORDER ADMINISTRATION

#### LABOR RATES AND BURDEN

Administration of general contractor and trade subcontractor labor rates and the associated burden needed improvement.

We reviewed hourly labor rates and the associated labor burden charged by the general contractor and two trade subcontractors and noted variations from the hourly rate worksheets previously submitted to the campus.

- ▶ The hourly labor rates for the general contractor included inflated rates for federal unemployment taxes resulting in overcharges ranging from \$2.08 to \$3.09 per hour. The inclusion of these inflated rates increased the labor cost for the general contractor by \$2,603.
- ▶ The hourly labor rates for one trade subcontractor included inflated rates for federal unemployment taxes and the federal insurance contribution rate and erroneously included state taxes. The inclusion of these inflated rates increased the labor cost for this trade subcontractor by \$2,635.
- ▶ The hourly rates for the second trade subcontractor included inflated rates for federal insurance and Medicare contributions, but insufficient timekeeping support prevented a detailed computation of the total overcharges.

The *Contract General Conditions for Design-Bid-Build Projects* §6.01.b (1) states that costs are allowed for the actual payroll costs to the contractor for labor, field supervision of changed work, and engineering or technical services directly required for the performance of the changed work. Costs include payments, assessments, or benefits required by lawful labor union collective bargaining agreements; compensation insurance payments; liability insurance premiums on labor only; contributions made to the state pursuant to the Unemployment Insurance Code; and taxes paid to the federal government required by the Social Security Act.

The director of design and construction stated that the labor rate overcharges by the general contractor and the two subcontractors was due to oversight.

Failure to review hourly labor rates and the associated labor burden may result in increased project costs.

### **Recommendation 1**

We recommend that the campus:

- a. Pursue recovery of the \$5,238 in inflated labor costs resulting from various inflated rates and the erroneous inclusion of state taxes by the general contractor and/or trade subcontractor.
- b. Conduct staff training to ensure that hourly and premium labor rates and the associated labor burden charged by the contractor and trade subcontractors are appropriate and accurate in accordance with §6.00, Changes in the Work, *Contract General Conditions for Design-Bid-Build Projects*.

### **Campus Response**

We concur. The university construction team approved changes that included these computational errors. By April 2011, training will be developed and conducted at the onset of each new project for the construction management team assigned to projects to ensure that labor rates are correct. In addition, the director of design and construction and other construction management team members attended the Capital Planning, Design and Construction construction management webinar on November 5, 2010, which specifically addressed this observation. The university will pursue recovery of \$5,238 in inflated labor costs from general contractor.

### **MARK-UPS**

Administration of the general contractor overhead and profit mark-ups needed improvement.

We reviewed overhead and profit mark-ups applied by the general contractor and found an overcharge of \$6,036. We noted that the general contractor erroneously applied a 15 percent mark-up instead of a 10 percent mark-up to work performed with cost in excess of \$50,000.

The *Contract General Conditions for Design-Bid-Build Projects* §6.01.b (6) states that the contractor may add up to 15 percent mark-up to its direct cost when self-performing the changed work on the first \$50,000, and 10 percent thereafter on the balance beyond \$50,000.

The director for design and construction stated that failure to review the general contractor's profit and overhead mark-ups was due to oversight.

Failure to review general contractor mark-ups increases the risk that errors and irregularities will not be detected and may result in increased project costs.

### **Recommendation 2**

We recommend that the campus:

- a. Pursue recovery of the \$6,036 of overcharge.

- b. Conduct staff training to ensure that general contractor mark-ups are appropriate and accurate in accordance with §6.00, Changes in the Work, *Contract General Conditions for Design-Bid-Build Projects*.

### **Campus Response**

We concur. A negotiated settlement with the general contractor prevents collectability of the overcharge noted. However, future vendor selections will be closely scrutinized, in an attempt to avoid selection of general contractors with similar business practices. In addition, by April 2011, the campus will develop training for all project managers to ensure proper mark-ups for change orders are being applied and proper documentation of variations exist.

## **PROJECT COMPLETION AND CLOSEOUT**

Administration of the project completion and closeout needed improvement.

We found that the campus prepared and signed the Notice of Completion on July 31, 2009, five months prior to completion of the project closeout checklist and certification of completion and two weeks prior to obtaining a Conditional Certificate of Occupancy from the Office of the State Fire Marshal.

State University Administrative Manual (SUAM) §9830 states that the process for inspection and acceptance of completed contract work includes a pre-final inspection of construction, which may include preparation of a punch list for any deviations or delinquencies in the work, and a final inspection, which includes completion of the project closeout checklist and certification of completion by the designer/architect, project manager/construction inspector, and construction administrator. Upon completion, the construction administrator files a Notice of Completion with the County Recorder of the county where the project is located.

The director of design and construction stated that the project was substantially complete with the exception of last-minute fire safety changes requested by the Office of the State Fire Marshal. She further stated that the campus did not want to extend the duration of the contract while fire safety work was completed, and as a result, the Notice of Completion was processed first.

Failure to obtain a Certificate of Occupancy from the Office of the State Fire Marshal and complete the project closeout checklist and certification of completion prior to filing the Notice of Completion increases the risk of misunderstandings and miscommunication regarding rights and responsibilities.

### **Recommendation 3**

We recommend that the campus reiterate to the staff that a Certificate of Occupancy from the Office of the State Fire Marshal should be obtained and the project closeout checklist and certification of completion should be prepared prior to filing the Notice of Completion.

**Campus Response**

We concur. The campus will develop training by April 2011 and will continue to train all construction management staff at the onset of each new project on the SUAM policies and procedures regarding construction projects.

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## APPENDIX A: PERSONNEL CONTACTED

### Name

### Title

#### Office of the Chancellor

Elvyra San Juan

Assistant Vice Chancellor,  
Capital Planning, Design and Construction

#### California State University, Stanislaus

Hamid Shirvani

President

Robert Gallegos

Associate Vice President,  
Capital Planning and Facilities Management

Russell Giambelluca

Vice President for Business and Finance

Melody Maffei

Director of Design and Construction

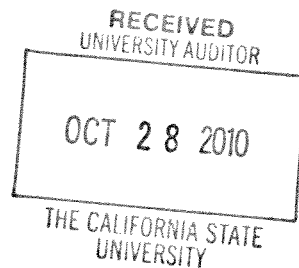
Claire Tyson

Associate Vice President, Financial Services



CALIFORNIA STATE UNIVERSITY STANISLAUS

VICE PRESIDENT OF BUSINESS AND FINANCE



October 27, 2010

Larry Mandel, University Auditor  
Office of the Chancellor  
401 Golden Shore  
Long Beach, CA 90802-4210

Dear Larry,

Attached is a document that represents the response to the Student Recreation Center Audit Report 10-14. We are providing this in hardcopy and as a scanned submission.

If you have any questions, please feel free to contact me or Claire Tyson at the number below.

Regards,

A handwritten signature in cursive script that reads "Russell Giambelluca".

Russell Giambelluca  
Vice President

enclosure

**CONSTRUCTION**  
**CALIFORNIA STATE UNIVERSITY,**  
**STANISLAUS**  
**STUDENT RECREATION COMPLEX**  
**Audit Report 10-14**

**CHANGE ORDER ADMINISTRATION**

**LABOR RATES AND BURDEN**

**Recommendation 1**

We recommend that the campus:

- a. Pursue recovery of the \$5,238 in inflated labor costs resulting from various inflated rates and the erroneous inclusion of state taxes by the general contractor and/or trade subcontractor.
- b. Conduct staff training to ensure that hourly and premium labor rates and the associated labor burden charged by the contractor and trade subcontractors are appropriate and accurate in accordance with §6.00, Changes in the Work, *Contract General Conditions for Design-Bid-Build Projects*.

**Campus Response**

Management concurs with the observation and recommendation. The University construction team approved changes that included these computational errors. By April 2011, training will be developed and conducted at the onset of each new project for the construction management team assigned to projects to ensure that labor rates are correct. In addition, the director of design and construction and other construction management team members attended the CPDC construction management webinar on November 5<sup>th</sup> which specifically addressed this observation. The University will pursue recovery of \$5,238 in inflated labor costs from General Contractor.

**MARK-UPS**

**Recommendation 2**

We recommend that the campus:

- a. Pursue recovery of the \$6,036 of overcharge.

- b. Conduct staff training to ensure that general contractor mark-ups are appropriate and accurate in accordance with §6.00, Changes in the Work, *Contract General Conditions for Design-Bid-Build Projects*.

**Campus Response**

Management understands the observation. A negotiated settlement with the general contractor prevents collectability of the overcharge noted. However, future vendor selections will be closely scrutinized, in an attempt to avoid selection of general contractors with similar business practices. In addition by April 2011, the campus will develop training for all project managers to ensure proper mark ups for change orders are being applied and proper documentation of variations exist.

**PROJECT COMPLETION AND CLOSEOUT**

**Recommendation 3**

We recommend that the campus reiterate to the staff that a Certificate of Occupancy from the Office of the State Fire Marshal should be obtained and the project closeout checklist and certification of completion should be prepared prior to filing the Notice of Completion.

**Campus Response**

The University understands the observation and recommendation. The campus will develop training by April 2011, and continue to train all construction management staff at the onset of each new project on the SUAM policies and procedures regarding construction projects.

THE CALIFORNIA STATE UNIVERSITY  
OFFICE OF THE CHANCELLOR

BAKERSFIELD

CHANNEL ISLANDS

December 15, 2010

CHICO

**MEMORANDUM**

DOMINGUEZ HILLS

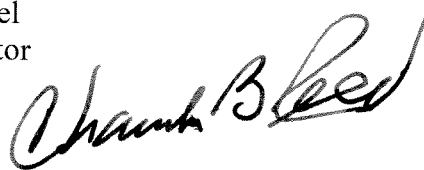
EAST BAY

TO: Mr. Larry Mandel  
University Auditor

FRESNO

FULLERTON

FROM: Charles B. Reed  
Chancellor



HUMBOLDT

SUBJECT: Draft Final Report 10-14 on the *Student Recreation Complex*,  
California State University, Stanislaus

LONG BEACH

LOS ANGELES

In response to your memorandum of December 15, 2010, I accept the response  
as submitted with the draft final report on the *Student Recreation Complex*,  
California State University, Stanislaus.

MARITIME ACADEMY

MONTEREY BAY

NORTHRIDGE

POMONA

CBR/amd

SACRAMENTO

SAN BERNARDINO

SAN DIEGO

SAN FRANCISCO

SAN JOSÉ

SAN LUIS OBISPO

SAN MARCOS

SONOMA

STANISLAUS