CONSTRUCTION

CALIFORNIA POLYTECHNIC STATE UNIVERSITY,
SAN LUIS OBISPO

RECREATION CENTER EXPANSION

Audit Report 13-09
April 30, 2013

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ABBREVIATIONS

BOT  Board of Trustees
Cal Poly  California Polytechnic State University, San Luis Obispo
CM  Construction Manager
CM at Risk  Construction Manager at Risk
CPDC  Capital Planning, Design and Construction
CRB  Certification Review Board
CSU  California State University
ESA  Extra Service Authorization
EO  Executive Order
FPCP  Facilities Planning and Capital Projects
GMP  Guaranteed Maximum Price
ICSUAM  Integrated California State University Administrative Manual
LEED  Leadership in Energy and Environmental Design
OUA  Office of the University Auditor
RCE  Recreation Center Expansion
EXECUTIVE SUMMARY

At its January 2013 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 Polytechnic State University, San Luis Obispo campus and the offices of the construction manager and selected subcontractors from January 22, 2013, through March 1, 2013, and audited the Recreation Center Expansion (RCE) project focusing on the construction management policies and procedures and internal controls and processes in effect at that time.

In our opinion, the fiscal, operational, and administrative controls in effect for the RCE project were sufficient to meet the objectives stated in the “Purpose” section of this report.

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.

PROJECT DEVELOPMENT AND DESIGN [6]

Extra service authorization letters for the RCE project were not always properly approved.

CHANGE ORDER ADMINISTRATION [7]

Inflated labor rates on change orders resulted in an overcharge to the campus of $15,504.

PROJECT COMPLETION AND CLOSEOUT [8]

The campus filed the Notice of Completion for the RCE six months before finalizing the project closeout checklist and the certification of completion. In addition, the campus did not require the construction manager to submit a final accounting of the guaranteed maximum price construction agreement.
INTRODUCTION

BACKGROUND

In February 2008, the California Polytechnic State University, San Luis Obispo (Cal Poly) students approved an increase in student body fees for the purpose of expanding the recreation facilities. In January 2009, the Board of Trustees (BOT) approved schematic plans for the Recreation Center Expansion (RCE) project at a cost of $71,128,000, with funding from systemwide revenue bonds, to be paid from student fees.

In August 2008, the campus executed an agreement with the architectural firm of Cannon Design for services related and incidental to the design and construction of the RCE project, and in October 2008, the campus executed an agreement with the construction manager (CM), Sundt Construction, Inc., for pre-construction services that included design and bid phase services. In December 2009, the campus executed a guaranteed maximum price (GMP) agreement with the CM for construction phase services, at a construction cost of $47,935,096; it issued a Notice to Proceed on December 29, 2009. The State Fire Marshal granted a Certificate of Occupancy on February 14, 2012, and the campus filed Notices of Completion on March 13, 2012, and June 1, 2012, for Phases I and II, respectively.

The RCE project included renovating the existing 64,000-square-foot facility and expanding it by 95,000 square feet. The new 159,000-square-foot center includes the main gym, a new recreational gym, a multipurpose gym, racquetball courts, cardio and weight rooms, a multipurpose room, administration areas, renovations around the existing lap pool, a new leisure pool, and an open grass area for outdoor activities. The project was designed to meet the requirements of Leadership in Energy and Environmental Design (LEED) and is expected to be awarded a silver rating in late spring 2013. LEED is a third-party certification program begun in 1999 by the United States Green Building Council and is a nationally accepted benchmark for the sustainable “green” design, construction, and operation of buildings.

The Cal Poly campus managed the RCE project, and it chose the Construction Manager at Risk (CM at Risk) with GMP delivery method. In this method, a construction management firm chosen by a competitive bidding process provides all or significant portions of design and construction administrative services and takes part in establishing the GMP. The CM at Risk acts as the general contractor during construction, assumes the risk of subcontracting the work, and guarantees completion of the project. The liability for the success in completing the project on time and in budget lies with the construction manager, and not with the university. Further, there is a potential for cost savings should the project be completed below the GMP.

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 Integrated California State University Administrative Manual (ICSUAM); 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 that 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 ICSUAM guidelines; and the use of systemwide standardized architectural, engineering, and other professional appointment contract forms.

The ICSUAM, in part, contains an overview of all CPDC policies and procedures associated with the capital outlay process. ICSUAM §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. ICSUAM §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.
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 RCE 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 ICSUAM.

- Professional appointments are in accordance with statutory requirements, BOT policy, and the ICSUAM; 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 ICSUAM, 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 ICSUAM.

- 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 ICSUAM.

- Group II equipment is properly managed and accounted for, 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 fiscal, 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 RCE project with an emphasis on compliance with the CSU Construction Management Procedures Manual, ICSUAM 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.
OBSERVATIONS, RECOMMENDATIONS, AND CAMPUS RESPONSES

PROJECT DEVELOPMENT AND DESIGN

Extra service authorization (ESA) letters for the Recreation Center Expansion (RCE) project were not always properly approved.

We reviewed 30 ESA letters and found that:

- One ESA letter for more than $50,000 was not approved by the executive dean as required by the campus outlay management plan.
- None of the 30 ESA letters were countersigned by the service provider.

*California Polytechnic State University, San Luis Obispo Capital Outlay Management Plan*, dated November 27, 2007, states that approval by the executive dean is required for change orders over $50,000 and up to $200,000.

Integrated California State University Administrative Manual (ICSUAM) §9210.03, *Extra Services Changes to Professional Agreements*, states that ESA letters shall require the approval of the appropriate personnel and a countersignature by the service provider.

The director of facilities planning and capital projects (FPCP) stated that the ESA letter was missing the appropriate approval due to oversight. He also stated his belief that because the campus-executed ESAs were issued with the service provider’s proposal as an attachment, they met the intent of the ICSUAM. He further stated that the ESA example provided on the chancellor’s office Capital Planning, Design and Construction (CPDC) website did not show a countersignature.

The absence of proper approvals on ESA letters increases the risk of misunderstandings and miscommunication regarding rights and responsibilities.

**Recommendation 1**

We recommend that the campus reiterate to staff that ESA letters must be approved in accordance with the campus capital outlay management plan and conduct staff training to ensure that ESA letters are prepared and processed in accordance with ICSUAM §9210.03, *Extra Services Changes to Professional Agreements*.

**Campus Response**

We concur. We will update our procedures to include approval of ESA letters in accordance with the campus capital outlay management plan, and conduct staff training to ensure that ESA letters are prepared and processed in accordance with ICSUAM §9210.03, *Extra Services Changes to Professional Agreements*. 
Date of completion: September 30, 2013

CHANGE ORDER ADMINISTRATION

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

We reviewed hourly labor rates and the associated labor burden charged by two trade subcontractors for a sample of change orders, and we found that:

- One trade subcontractor charged inflated labor rates on two separate change order requests. This increased labor costs by $14,701.

- A second trade subcontractor charged an inflated labor rate by calculating labor burden rates on total hourly wage rates that included fringe benefits not paid to the employee. This increased labor costs by $803.

The Contract General Conditions for CM at Risk with Guaranteed Maximum Price Projects §6.01.b (1) states that the construction manager (CM) and trade contractors shall submit a fully detailed breakdown of the cost of every labor classification to be utilized on a proposed change on the hourly labor rate worksheet. The unit cost of labor shall be an accurate accounting of actual costs being paid.

The FPCP director stated that the inflated labor rates were not identified due to oversight.

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

Recommendation 2

We recommend that the campus:

a. Pursue recovery of the $15,504 in inflated labor costs charged by the trade subcontractors and determine, as appropriate, if other change order work performed by these trade subcontractors was cost-inflated in a similar manner. The results of this recovery should be reported to CPDC.

b. Conduct staff training to ensure that hourly labor rates and the associated labor burden charged by trade subcontractors are properly reviewed and accurate in accordance with §6.00, Changes in the Work, of the Contract General Conditions for CM at Risk with Guaranteed Maximum Price Projects.

Campus Response

a. The campus will pursue recovery of the $15,504 in inflated labor costs and will review other change orders involving the trade subcontractors listed.
b. The campus will conduct staff training to ensure that labor rates and the associated labor burden charged by trade subcontractors are appropriate and accurate in accordance with §6.01, Changes in the Work, of the Contract General Conditions for CM at Risk Projects.

Date of completion: September 30, 2013

PROJECT COMPLETION AND CLOSEOUT

NOTICE OF COMPLETION

The campus filed the Notice of Completion for the RCE project six months before finalizing the project closeout checklist and the certification of completion.

ICSUAM §9830, Contract Completion and Acceptance of Construction, 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 FPCP director stated that the Notice of Completion was filed before the project closeout checklist and certification of completion were finalized due to a misinterpretation of the requirements under ICSUAM §9830.

Filing the Notice of Completion before finalizing the project closeout checklist and the certification of completion increases the risk of misunderstandings and miscommunication regarding rights and responsibilities.

Recommendation 3

We recommend that the campus reiterate to staff that the project closeout checklist and the certificate of completion should be finalized before the Notice of Completion is filed.

Campus Response

We concur. The campus will conduct staff training to ensure that the project closeout checklist should be finalized before the Notice of Completion is filed.

Date of completion: September 30, 2013
FINAL ACCOUNTING

The campus did not require the CM to submit a final accounting of the guaranteed maximum price (GMP) construction agreement.

We found that the CM, subsequent to project completion, did not provide sufficient documentation demonstrating that the total cost of the project equaled or exceeded the final GMP construction agreement amount of $47,935,096. The documentation should have included, but not have been limited to, all actual subcontractor costs, direct material, and labor provided by the construction manager and a reconciliation of contractual fees paid by the campus.

Executive Order 672, Delegation of Capital Outlay Management Authority and Responsibility, dated July 25, 1997, states, in part, that the campus shall carry out all construction management activities and complete the project within the approved scope, schedule, and budget.

The FPCP director stated that he was unaware of the requirement to obtain a final accounting of the GMP construction agreement from the CM and perform a verification of the costs.

Lack of a final accounting of actual project costs by the CM increases the risk that the campus’ payments would exceed the total GMP construction amount and that any errors and irregularities would not be detected.

Recommendation 4

We recommend that the campus:

a. Require and obtain a final accounting of the GMP construction agreement from the CM and perform a verification of the costs.

b. Notify CPDC in the event the total actual cost is less than $47,935,096, and request that the difference be returned to the campus.

Campus Response

a. The campus will require that the CM submits a final accounting of the GMP and will perform a verification of costs.

b. We will notify CPDC and request reimbursement from the CM should the total actual cost be less than $47,935,096.

Date of completion: September 30, 2013
## APPENDIX A:
### PERSONNEL CONTACTED

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
<tr>
<td><strong>Office of the Chancellor</strong></td>
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<tr>
<td>James Hoffman</td>
<td>Chief of Construction Management</td>
</tr>
<tr>
<td>Elvyra San Juan</td>
<td>Assistant Vice Chancellor, Capital Planning, Design and Construction</td>
</tr>
<tr>
<td><strong>California Polytechnic State University, San Luis Obispo</strong></td>
<td></td>
</tr>
<tr>
<td>Jeffrey D. Armstrong</td>
<td>President</td>
</tr>
<tr>
<td>Mark Benadiba</td>
<td>Director of Payroll and Accounts Payable</td>
</tr>
<tr>
<td>Ken Delmese</td>
<td>Property Clerk</td>
</tr>
<tr>
<td>Mark Hunter</td>
<td>Associate Vice President, Facilities</td>
</tr>
<tr>
<td>Perry Judd</td>
<td>Project Manager, Facilities Planning and Capital Projects</td>
</tr>
<tr>
<td>Lawrence Kelley</td>
<td>Vice President, Administration and Finance</td>
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<tr>
<td>Lorlie Leetham</td>
<td>Assistant Vice President, Fiscal Services and Auxiliary Reporting</td>
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<tr>
<td>Dave Marshall</td>
<td>Assistant Director, Internal Control and GAAP</td>
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<tr>
<td>Joel Neel</td>
<td>Director, Facilities Planning and Capital Projects</td>
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<tr>
<td>Kimberly Perez</td>
<td>Director of General Accounting</td>
</tr>
<tr>
<td>Gail Pipal</td>
<td>Associate Director, Facilities Planning and Capital Projects</td>
</tr>
<tr>
<td>Dru Zachmeyer</td>
<td>Director, Contracts and Procurement</td>
</tr>
</tbody>
</table>
May 28, 2013

Mr. Larry Mandel
University Auditor
Office of the University Auditor
The California State University
401 Golden Shore Road
Long Beach, CA 90805-4275

Subject: Campus Responses to Recommendations of Incomplete Draft Audit Report Number 13-09, Recreation Center Expansion, California Polytechnic State University, San Luis Obispo

Dear Larry:

Enclosed are responses to the recommendations in the incomplete draft of the Recreation Center expansion audit report (Audit Report 13-09). The responses are submitted to you for review and acceptance by the Chancellor. The responses include a corrective action plan and time frame for completion.

Please direct questions to Lorlie Leetham, Assistant Vice President, Fiscal Services and Auxiliary Reporting, at (805)756-5421 (lleetham@calpoly.edu).

Sincerely,

Lawrence R. Kelley
Senior Vice President for Administration and Finance

cc: J. Armstrong
    L. Leetham
CONSTRUCTION
CALIFORNIA POLYTECHNIC STATE UNIVERSITY,
SAN LUIS OBISPO
RECREATION CENTER EXPANSION
Audit Report 13-09

PROJECT DEVELOPMENT AND DESIGN

Recommendation 1

We recommend that the campus reiterate to staff that ESA letters must be approved in accordance with the campus capital outlay management plan and conduct staff training to ensure that ESA letters are prepared and processed in accordance with ICSUAM §9210.03, Extra Services Changes to Professional Agreements.

Campus Response

We concur. We will update our procedures to include approval of ESA letters in accordance with the campus capital outlay management plan, and conduct staff training to ensure that ESA letters are prepared and processed in accordance with ICSUAM §9210.03, Extra Services Changes to Professional Agreements.

Date of completion: September 30, 2013

CHANGE ORDER ADMINISTRATION

Recommendation 2

We recommend that the campus:

a. Pursue recovery of the $15,504 in inflated labor costs charged by the trade subcontractors and determine, as appropriate, if other change order work performed by these trade subcontractors was cost-inflated in a similar manner. The results of this recovery should be reported to CPDC.

b. Conduct staff training to ensure that hourly labor rates and the associated labor burden charged by trade subcontractors are properly reviewed and accurate in accordance with §6.00, Changes in the Work, of the Contract General Conditions for CM at Risk with Guaranteed Maximum Price Projects.
Campus Response

a. The campus will pursue recovery of the $15,504 in inflated labor costs and will review other change orders involving the trade subcontractors listed.

b. The campus will conduct staff training to ensure that labor rates and the associated labor burden charged by trade subcontractors are appropriate and accurate in accordance with §6.01, Changes in the Work, of the Contract General Conditions for CM at Risk Projects.

Date of completion: September 30, 2013

PROJECT COMPLETION AND CLOSEOUT

NOTICE OF COMPLETION

Recommendation 3

We recommend that the campus reiterate to staff that the project closeout checklist and the certificate of completion should be finalized before the Notice of Completion is filed.

Campus Response

We concur. The campus will conduct staff training to ensure that the project closeout checklist should be finalized before the Notice of Completion is filed.

Date of completion: September 30, 2013

FINAL ACCOUNTING

Recommendation 4

We recommend that the campus:

a. Require and obtain a final accounting of the GMP construction agreement from the CM and perform a verification of the costs.

b. Notify CPDC in the event the total actual cost is less than $47,935,096, and request that the difference be returned to the campus.

Campus Response

a. The campus will require that the CM submits a final accounting of the guaranteed maximum price (GMP) and will perform a verification of costs.

b. We will notify CPDC and request reimbursement from the CM should the total actual cost be less than $47,935,096.

Date of completion: September 30, 2013
June 17, 2013

MEMORANDUM

TO: Mr. Larry Mandel  
   University Auditor

FROM: Timothy P. White  
       Chancellor

SUBJECT: Draft Final Report 13-09 on the Recreation Center Expansion,  
         California Polytechnic State University, San Luis Obispo

In response to your memorandum of June 17, 2013, I accept the response as submitted with the draft final report on the Recreation Center Expansion, California Polytechnic State University, San Luis Obispo.

TPW/amd