

CONSTRUCTION
CALIFORNIA STATE POLYTECHNIC UNIVERSITY,
POMONA
STUDENT HOUSING – PHASE II

Audit Report 11-14
November 3, 2011

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ABBREVIATIONS

A/E	Architect/Engineer
BOT	Board of Trustees
CFO	Chief Financial Officer
CPDC	Capital Planning, Design and Construction
CRB	Certification Review Board
CSPUP	California State Polytechnic University, Pomona
CSU	California State University
EO	Executive Order
FPM	Facilities Planning and Management
Housing	Student Housing – Phase II
OUA	Office of the University Auditor
SUAM	State University Administrative Manual

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 Polytechnic University, Pomona campus and the offices of the general contractor and selected subcontractors from August 22, 2011, through September 16, 2011, and audited the Student Housing – Phase II (Housing) 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 Housing 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.

PRE-CONSTRUCTION AND BID PROCESS [6]

The campus did not ensure that the Notice to Proceed was issued by the construction administrator.

CONSTRUCTION MANAGEMENT AND ACCOUNTING [6]

The campus did not always properly review hourly labor rate worksheets for change order work.

CHANGE ORDER ADMINISTRATION [7]

Certain change orders were not always properly approved by the associate vice president of facilities planning and management and the vice president of administrative affairs and chief financial officer.

INTRODUCTION

BACKGROUND

In July 2000, the Board of Trustees (BOT) approved a revised campus master plan for California State Polytechnic University, Pomona (CSPUP) that included additional student housing. In January 2007, the BOT approved schematic plans for the CSPUP Student Housing – Phase II (Housing) project at a cost of \$80,059,000, with funding from California State University (CSU) revenue bonds.

In May 2008, the campus solicited project bids and selected W.E. O’Neil Construction Company of California as the general contractor. The campus issued the Notice to Proceed on June 3, 2008, and executed an agreement with the general contractor at a construction cost of \$56,329,793. The campus received a Certificate of Occupancy on June 8, 2010, and filed a Notice of Completion on June 30, 2010.

The Housing project, designed by Sasaki Associates, is located within the boundaries of Kellogg Drive, Eucalyptus Lane, parking lot G, the baseball field, and the gymnasium building. It is adjacent to the Residential Suites Phase I, which were constructed in 2004. The three- and four-story wood-framed structures consist of three- and four-bedroom apartments, and overall, the 225,000-gross-square-foot complex provides 622 beds. The Housing project also includes general study lounges, administrative areas, and service rooms that are adjacent to the elevator lobbies on each floor. A fourth common facility building was erected in addition to the housing buildings; it houses a new convenience store and a café. An expansion to the Residential Suites Phase I mechanical plant provides the chilled and hot water for the four-pipe mechanical systems that serve the new buildings. Site improvements include the courtyard spaces formed by the housing facilities (a combination of planting and hardscape materials), plazas adjacent to the commons facility, a parking lot, related vehicular and emergency access ways, and renovations to the campus childcare center playground that was displaced during construction.

The CSPUP campus managed the Housing 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 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 Housing – Phase II 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 Housing – Phase II 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.

OBSERVATIONS, RECOMMENDATIONS, AND CAMPUS RESPONSES

PRE-CONSTRUCTION AND BID PROCESS

The campus did not ensure that the Notice to Proceed was issued by the construction administrator.

We reviewed the Student Housing – Phase II (Housing) project construction agreement and found that the Notice to Proceed had been signed by a campus procurement and services buyer, rather than the construction administrator identified as the director of facilities design and construction.

State University Administrative Manual (SUAM) §9781 states that after the contract is fully executed, the construction administrator shall issue a Notice to Proceed to the contractor with a copy to the project team, providing the contractor with the official start and end dates, duration of the project, and liquidated damages.

The associate vice president of finance and administrative services stated that current campus protocol allowed the procurement and support services buyer who administered the contracting processes for the Housing project to issue the Notice to Proceed, instead of the construction administrator.

Failure to properly issue a Notice to Proceed increases the risk of project delays due to misunderstandings and miscommunications regarding rights and responsibilities.

Recommendation 1

We recommend that the campus reiterate SUAM requirements to staff to ensure that Notices to Proceed on future projects are issued by the construction administrator.

Campus Response

We concur. We will reiterate SUAM requirements to staff to ensure that Notices to Proceed on future projects are issued by the construction administrator.

Timeline: January 31, 2012

CONSTRUCTION MANAGEMENT AND ACCOUNTING

The campus did not always properly review hourly labor rate worksheets for change order work.

We found that the labor rates charged by two trade subcontractors included variations from the hourly labor rate worksheets when compared to certified payrolls and insurance policies. The variations included a difference in the calculation of the liability insurance and labor burden amounts.

SUAM §9824.01 states that the campus shall request a minimum of the first week's certified payroll records from the general contractor and a minimum of the first week's certified payroll records from each subcontractor of any tier. Additionally, the contractor shall submit to the construction administrator the hourly labor rate worksheet for its entire payroll, as well as for all of its subcontractors. Having the certified payroll records, along with hourly labor rate worksheets, will allow a check on wage rates submitted for change order work.

The administrator in charge for facilities planning and management (FPM) stated that the campus used a third-party vendor to review hourly labor rate worksheets for the project and mistakenly believed that the vendor's review included verification of wage rates on hourly labor rate worksheets.

Failure to review the hourly labor rate worksheets submitted for change order work may result in the campus being charged excess labor costs.

Recommendation 2

We recommend that the campus reiterate to staff that hourly labor rate worksheets for each trade subcontractor should be reviewed and used to verify wage rates submitted for change order work.

Campus Response

We concur. We will reiterate to staff that hourly rate worksheets for each trade subcontractor will be reviewed and used to verify wage rates submitted for change order work.

Timeline: January 31, 2012

CHANGE ORDER ADMINISTRATION

Change orders were not always properly approved.

Specifically, we found that four change orders totaling \$1,618,289 were not approved by the vice president of administrative affairs and chief financial officer (CFO) and eight change orders totaling \$3,170,010 were not approved by the associate vice president of FPM, as required by the campus delegation management plan.

The California State Polytechnic University, Pomona *Capital Outlay Delegation Management Plan*, dated August 2007, states that the associate vice president of FPM has authority to sign individual change orders not exceeding \$200,000 in value, and the vice president of administrative affairs retains authority to sign individual change orders exceeding \$200,000 in value.

The CSU *Construction Management Project Administration Reference Manual* §4.05c states that the construction administrator (associate director of planning and administration) shall review each contract change order for conformance to the approved change proposal(s) and review all attached backup for completeness and conformance to contract specification. The contract manager shall sign

all change orders not exceeding \$100,000 (per the campus capital outlay management plan). If there are multiple change items on a single change order, the construction manager may sign the change order only if the absolute value of each separate item listed on the change order does not exceed his/her authority. If one or more of the items exceeds the construction manager's signature authority, the construction manager must secure a signature from someone with a higher level of signature authority (i.e., the associate vice president of FPM for changes between \$100,001 and \$200,000 and/or the vice president of administrative affairs and CFO for changes exceeding \$200,000).

The administrator in charge for FPM stated that the associate vice president of FPM and the vice president of administrative affairs and CFO's authorization were not obtained due to a campus memorandum of understanding between FPM and university housing services that required the vice president and associate vice president of student affairs to approve all project change orders.

Inadequate approval of change orders increases the risk that errors and irregularities will not be detected in a timely manner and may result in unwarranted changes and excess charges and expenses.

Recommendation 3

We recommend that the campus reiterate to staff that change orders must be approved according to authorized dollar thresholds.

Campus Response

We concur. We will reiterate to staff that change orders must be approved according to authorized dollar thresholds.

Timeline: January 31, 2012

APPENDIX A: PERSONNEL CONTACTED

Name

Title

Office of the Chancellor

Elvyra San Juan

Assistant Vice Chancellor,
Capital Planning, Design and Construction

California State Polytechnic University, Pomona

J. Michael Ortiz

President

Edwin Barnes

Vice President, Administrative Affairs and Chief Financial Officer

Darwin Labordo

Associate Vice President, Finance and Administrative Services

Darrick Lackey

Capital Outlay Accountant

Walter Marquez

Administrator in Charge, Facilities Planning and Management

Morris Taylor

Senior Project Manager, Facilities Design and Construction

Joyce Xiong

University Auditor



Office of the Vice President
for Administrative Affairs

November 29, 2011

RECEIVED
UNIVERSITY AUDITOR

DEC - 2 2011

THE CALIFORNIA STATE
UNIVERSITY

Mr. Larry Mandel, University Auditor
Office of the Auditor
The California State University
400 Golden Shore, Suite 210
Long Beach, CA 90802

Dear Mr. Mandel:

Subject: Campus Response to Recommendations – Student Housing Phase II

Enclosed is California State Polytechnic’s campus response to the Student Housing Phase II 11-14 audit. We appreciate the effort you and your staff have made to indicate areas where our procedures or internal controls could be strengthened. We will take the necessary actions to address the report’s recommendations.

Please direct questions concerning the response to Darwin Labordo, Associate Vice President of Finance and Administrative Services and Associate Chief Financial Officer at 909-869-2008 or dlaboro@csupomona.edu.

Sincerely,

Edwin A. Barnes, III, Vice President
Administrative Affairs

Cc: J. Michael Ortiz, President
Darwin Labordo, Associate Vice President, Finance & Administrative Services
Walter Marquez, Administrator In Charge, Facilities Planning & Management
Joice Xiong, University Auditor

Enclosure

CONSTRUCTION
CALIFORNIA STATE POLYTECHNIC UNIVERSITY,
POMONA

STUDENT HOUSING – PHASE II

Audit Report 11-14

PRE-CONSTRUCTION AND BID PROCESS

Recommendation 1

We recommend that the campus reiterate SUAM requirements to staff to ensure that Notices to Proceed on future projects are issued by the construction administrator.

Campus Response

We concur. We will reiterate SUAM requirements to staff to ensure that Notices to Proceed on future projects are issued by the construction administrator.

Timeline: January 31, 2012

CONSTRUCTION MANAGEMENT AND ACCOUNTING

Recommendation 2

We recommend that the campus reiterate to staff that hourly labor rate worksheets for each trade subcontractor should be reviewed and used to verify wage rates submitted for change order work.

Campus Response

We concur. We will reiterate to staff that hourly rate worksheets for each trade subcontractor will be reviewed and used to verify wage rates submitted for change order work.

Timeline: January 31, 2012

CHANGE ORDER ADMINISTRATION

Recommendation 3

We recommend that the campus reiterate to staff that change orders must be approved according to authorized dollar thresholds.

Campus Response

We concur. We will reiterate to staff that change orders must be approved according to authorized dollar thresholds.

Timeline: January 31, 2012

THE CALIFORNIA STATE UNIVERSITY
OFFICE OF THE CHANCELLOR

BAKERSFIELD

CHANNEL ISLANDS

January 3, 2012

CHICO

MEMORANDUM

DOMINGUEZ HILLS

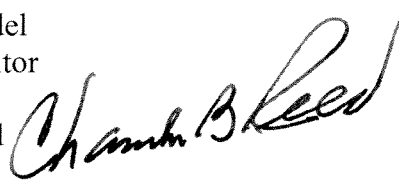
EAST BAY

TO: Mr. Larry Mandel
University Auditor

FRESNO

FULLERTON

FROM: Charles B. Reed
Chancellor



HUMBOLDT

SUBJECT: Draft Final Report 11-14 on *Student Housing – Phase II*,
California State Polytechnic University, Pomona

LONG BEACH

LOS ANGELES

In response to your memorandum of January 3, 2012, I accept the response as submitted with the draft final report on *Student Housing – Phase II*, California State Polytechnic University, Pomona.

MARITIME ACADEMY

MONTEREY BAY

CBR/amd

NORTHRIDGE

POMONA

SACRAMENTO

SAN BERNARDINO

SAN DIEGO

SAN FRANCISCO

SAN JOSÉ

SAN LUIS OBISPO

SAN MARCOS

SONOMA

STANISLAUS