

**CALIFORNIA STATE UNIVERSITY,
FULLERTON**

AUDITORIUM AND FINE ARTS FACILITY

Final Report

September 6, 2006

CONSTRUCTION PROJECT EVALUATION
CALIFORNIA STATE UNIVERSITY, FULLERTON
AUDITORIUM AND FINE ARTS FACILITY

September 6, 2006

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This report and all associated analysis contained herein are based upon information made available to KPMG LLP. KPMG LLP is not responsible for incomplete or inaccurate information provided during the preparation of this report. This report only presents and summarizes factual data and does not represent an opinion or attestation to the position, approach or representation of information made by any other party involved with this evaluation.

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EXECUTIVE SUMMARY

Summary of Findings

Based upon our evaluation, the Auditorium and Fine Arts Facility at CSUF was administered consistent with our expectations of a project of this size, scope and complexity, but with certain areas in the contract administration process that could be improved. We did not find any significant control or process weaknesses that would expose CSUF to major unnecessary risks, but we did uncover several minor discrepancies and control issues that should be addressed.

Our observations, associated risks and recommendations are summarized below. Examples of specific action steps are further detailed in the body of this report.

	Observation	Risk	Recommendation
1.	Design services were performed by the architect prior to the formal execution of a contractual agreement. The architect contract was entered into without evidence of legal review.	Allowing work to begin on a project before an agreement as reviewed and agreed to by counsel is in place may expose CSUF to unnecessary contractual risks.	In the future, CSUF should obtain counter signatures on every ASA executed with a consultant and the standard ASA form should be utilized. In the future, work should commence only after an agreement has been formally executed, including review and signature by counsel. (Ownership: CSUF)
2.	The CSUF signature authority and SUAM does not specify the approval process for a change order containing both additive and deductive items. These items may cancel one another out, resulting in an overall low change order amount, which would require a lower level of signature authority.	It is possible for significant changes to be approved by the person with the lowest level of signature authority, if large additions and large deductions are incorporated on the same change order.	A better business practice would be to require the absolute value of the changes to be considered when determining the appropriate level of signature authority for a change order. CPDC should modify SUAM accordingly. (Ownership: CPDC)
3.	Time extensions were not negotiated on a contemporaneous basis as they occurred.	Late resolution of time extensions may undermine CSUF's ability to reach a favorable agreement with the contractor at the end of the Project and is not a preferred industry practice.	On future Projects, CSUF should ensure prompt resolution of time extensions as delays occur. (Ownership: CSUF)
4.	Inspection work was performed by United Inspection and Testing prior to an agreement being formally executed.	Legal review is a key factor in protecting the interests of CSUF. Allowing work to commence without a contract officially in place poses a contractual risk for CSUF.	In the future, CSUF should attempt that all contracts receive legal review and are formally signed by counsel before any work commences. (Ownership: CSUF)

EXECUTIVE SUMMARY

	Observation	Risk	Recommendation
5.	Invoices from the inspector excluded pertinent billing information including total amount billed to date, prior billings, and remaining contract balance for the specific contract categories.	By not requiring the consultant to present total amount billed to date, prior billings, and remaining contract balance for all specific contract categories, CSUF is risking paying for erroneous billings.	In the future, CSUF should require the use of the standard CSU consultant invoice forms, as presented in the contract documents. (Ownership: CSUF)

INTRODUCTION

Purpose

KPMG LLP (“KPMG”) was retained by California State University’s (“CSU”) Office of the University Auditor on October 29, 2004 to perform an independent project evaluation of California State University, Fullerton’s (“CSUF”) Auditorium and Fine Arts Facility project (“the Project”).

The overall objective of the construction evaluation was to assess construction management practices for the Project and to substantiate that it was managed in accordance with law, Trustee policy, generally accepted business practices, and industry standards.

To the extent they were uncovered as part of our work, this report provides conclusions and recommendations addressing necessary process improvement and recovery of project costs. Recommendations are listed and numbered sequentially throughout this report.

Scope

While the basic scope of our work matches that required by the RFP and that which KPMG has performed in years past, we also included additional items that we believe will provide value to the CSU. KPMG identified specific areas within the scope listed below that present the greatest potential for substantive loss or liability for CSUF’s Auditorium and Fine Arts Facility Project. The various scope categories are outlined in CSU’s Request for Proposal, dated July 14, 2004 and KPMG’s proposal, dated July 27, 2004 and contains the following sections:

- Project Background
- Design Cost
- Construction Bid Process
- Construction Change Orders
- Project Management Inspection Services
- Major Equipment/Materials
- Close-Out Documentation
- Liquidated Damages
- Accounting

Methodology

KPMG's approach to this engagement incorporates a work plan shared with the University Auditor's office as outlined in our agreement with CSU. During the course of our work we expanded on tasks related to scope sections with the greatest potential risk exposure. The work performed by KPMG was conducted in accordance with our aforementioned methodology, but is not limited to, the following tasks:

- Examine financial records, reports, written CSU procedures, CSU contract documents and other material related to the project and compare current practices and procedures with CSU requirements and best practices in the industry;
- Conduct a preliminary review to determine project emphasis;
- Interview key individuals involved in the project;
- Identify significant deficiencies, if any;
- Recommend changes that may result in streamlining the design/construction process, assuring adequate project controls and reducing costs; and
- Prepare a written report of our findings and recommendations.

Exclusions

The services, fees and delivery schedule for this engagement are based upon the following assumptions, representations or information supplied by CSU ("Assumptions").

1. KPMG is not responsible for and will not make management decisions relating to this Project or any other aspect of CSU's business. CSU shall have responsibility for making all decisions with respect to the management and administration of its real estate and capital projects.
2. CSU management accepts responsibility for the substantive outcomes of this engagement and, therefore, has a responsibility to be in a position in fact and appearance to make an informed judgment on the results of this engagement.
3. Our work under this engagement did not include technical opinions related to engineering, operations and maintenance.
4. KPMG's work under this engagement did not include a review, audit or evaluation of financial statements, tax services, or other services of KPMG not listed in this Statement.
5. We have, and will continue to consider the effect of this engagement on the ongoing, planned and future audits, as required by *Government Auditing Standards* and have determined that this engagement will not impair KPMG's independence.

PROJECT BACKGROUND

The California State University, Fullerton Auditorium and Fine Arts Facility Project (“the Project”) included the construction of a concert hall, studio theater, and black box theater as well as facilities to support the performances, such as the scene shop, dance studio, costume shop and faculty offices. The entire facility encompasses roughly 108,000 gross square feet of space and is connected by hallway to a neighboring facility. The scope of work also included various on-site improvements.

During the week of April 24, 2006, KPMG conducted field work at the CSUF campus. A representative from the CSU University Auditor’s office conducted separate field work at the general contractor’s office. During the field work KPMG and the University Auditor reviewed records from the following entities involved with the Project:

Architect	Hardy Holzman Pfeiffer Associates
General Contractor (GC)	Hensel Phelps Construction Company
Inspector of Record (IOR)	United Inspection & Testing, Inc.
Project Management and Administration	CSUF’s Office of Design and Construction

Follow-up discussions to clarify issues and supplement supporting documentation were conducted through the completion of this report.

Delivery Methodology

The Project was delivered using a Design-Bid-Build, Lump Sum contract delivery methodology.

Timeline

The Project was first funded for preliminary and working drawings in 1992, but due to the failure of a 1994 general obligation bond measure, the project was delayed until 2001. In October, 2001 Hardy Holzman Pfeiffer Associates was retained to perform initial preliminary design services and the Board of Trustees subsequently approved schematic plans for the Project in March, 2002. Construction work was bid in June, 2003. Hensel Phelps Construction Company was the lowest bidder in a competitive selection process with \$36,486,000, excluding additive alternates 1-7. This amount exceeded the engineer’s estimate, but was still accepted. Construction began with the Notice to Proceed effective October 1, 2003, and continued until CSUF took beneficial occupancy on August 18, 2005 with the issuance of a Certificate of Occupancy. Notice of Completion was issued on January 6, 2006, although all outstanding change order costs had not yet been settled with the general contractor, including amounts related to subcontractor claims. At the time of KPMG’s and the University Auditor’s field work, final settlement negotiations with the general contractor were under way.

Project Costs

The entire project was initially approved by the Board of Trustees at \$43,457,000 (excluding \$1,089,000 in funding received in 1992) based on a per square footage cost as developed from the California Construction Cost Index. As all construction bids significantly exceeded the engineer's estimate, it became apparent the cost of the project would exceed the approved budget. CSUF was able to proceed with award of the construction contract by obtaining additional funds through a loan from the CSUF Lottery Trust Fund. Subsequent value engineering efforts reduced the amount of any additional funds needed.

At the time of our field work, CSUF had incurred \$47,249,509 in costs on the Project and was expecting to incur an additional \$383,748 for various services. CSUF also expected a final construction change order in the amount of approximately \$1,300,000 (under negotiation) with the general contractor. The existing loan from the CSUF Lottery Trust Fund, although currently shown as reduced due to value engineering efforts, should cover these additional anticipated expenditures. The table below summarizes the Project costs:

Description	Budget	Actual	Variance
Construction	\$ 32,102,000	\$ 38,282,221	\$ 6,180,221
Contingency	1,614,000		(1,614,000)
Group II Equipment	3,538,000	3,625,000	87,000
Architect and Engineering	2,191,000	3,929,896	1,738,896
Contract Management	2,247,000	481,530	(1,765,470)
Additional Services	1,765,000	930,863	(834,137)
Subtotal	43,457,000	47,249,509	3,792,509
Additional Funds	5,380,360	-	(5,380,360)
Value Engineering	(707,779)	-	707,779
Total	\$ 48,129,581	\$ 47,249,509	\$ (880,072)

Note: Additional funds include Lottery Fund loan amount of \$5,293,360 plus an increase to the Group II Equipment budget from \$3,538,000, as originally approved by the Board of Trustees, to \$3,625,000 per the Allocation Order from the CSU Budget Administration Office.

DESIGN COSTS

The architect on this Project, Hardy Holzman Pfeiffer Associates (“HHPA”), was initially selected by CSUF in 1992 to perform architectural and engineering services related to preliminary and working drawings. Due to the failure of a 1994 general obligation bond measure, funding was not made available at the time and as a result, the Project was delayed until 2001 at which point HHPA was asked to continue its work. A standard CSU architectural/engineering agreement was formally executed with HHPA effective October 30, 2001 in the amount of \$3,753,340. Eight additional service agreements (“ASA’s”) were subsequently executed in an aggregate amount of \$390,000 for a revised contract value to \$4,143,340. The architectural base agreement and additional services are summarized in the table below:

Description	Date	Amount
Schematic Design (19%)	10/30/2001	\$ 713,135
Preliminary (14%)	10/30/2001	525,467
Construction Documents (38%)	10/30/2001	1,426,269
Bidding (4%)	10/30/2001	150,134
Construction Administration Phase (22%)	10/30/2001	825,735
Completion of Record Documents (3%)	10/30/2001	112,600
Base Agreement Subtotal		\$ 3,753,340
ASA 1 - Full riging system in studip theater	10/13/2002	16,950
ASA 2 - Foundation bid package	12/18/2002	81,600
ASA 3 - Group II equipment bid package	5/25/2004	33,250
ASA 4 - Project management assistance	8/11/2004	144,000
ASA 5 - Design for electrical power	8/24/2004	950
ASA 6 - Group II equipment construction admin.	11/8/2004	108,750
ASA 7 - Redesign of pile cap	2/10/2005	1,500
ASA 8 - Additional project management	12/12/2005	3,000
ASA Subtotal		\$ 390,000
Total Agreement		\$ 4,143,340

The first two invoices under the initial agreement were presented to CSUF for work performed between October 1, 2001 and November 30, 2001 in an aggregate amount of \$406,487. The agreement was not signed by counsel until November 28, 2001, indicating the architect performed work prior to the agreement being fully executed.

Observation:

Design services were performed by the architect prior to the formal execution of a contractual agreement. The architect contract was entered into without evidence of legal review.

Risk:

Allowing work to begin on a project before an agreement as reviewed and agreed to by counsel is in place may expose CSUF to unnecessary contractual risks.

Recommendation:

1. In the future, work should commence only after an agreement has been formally executed, including review and signature by counsel.

(Ownership: CSUF)

Campus Response:

1. We concur. The campus will not have vendors commence work without a formally executed agreement that includes review and signature by counsel. Corrective action on this recommendation is complete.

The architect ASA's were executed on CSUF letterhead or, in one case, on the CSU standard service agreement. The CSU standard extra services agreement form, recommended for this purpose, was not utilized. The ASA's were not countersigned by the architect, although a cost proposal from the architect indicating agreement to the scope of work set forth in the ASA was usually attached to the ASA letter. At times, CSUF had made manual changes to the cost or scope of work as proposed by the architect. Although SUAM 9210.03 currently does not require the architect's counter signature of a service provider on extra service agreements, obtaining the architect's counter signature is a standard industry practice and would minimize any disagreements over scope or cost. Without a countersignature from the architect indicating consent, CSUF may be unprotected in the event of a dispute. CPDC is in the process of modifying SUAM accordingly.

CONSTRUCTION BID PROCESS

The construction bid process for this project was administered through the CSUF Contracts and Procurement office.

A complete set of specifications, general conditions and drawings were made available to all bidders available May 21, 2003. A pre-bid meeting walk-through was held for the project on the same date. A total of four addendums were issued between May 27, 2003 and June 12, 2003 to revise the construction documents, answer bidders' questions and extend the bid submittal date. Bids were due and opened on June 24, 2003, as revised by addendum number 4.

Three pre-qualified companies submitted competitive bids. These companies include Hensel Phelps Construction Company ("Hensel Phelps"), Kajima Construction Services, Inc. and Swinerton Builders. The bids were received by CSUF, a ranking was completed, and an abstract of bids was created. Hensel Phelps was the lowest responsive and responsible bidder with a base bid of \$36,486,000, excluding additive alternates 1-7. This was \$2,414,000 lower than the closest competitor. The successful bid amount exceeded the construction budget of \$30,824,980 by \$5,661,020, however CSUF elected to still award the contract to Hensel Phelps in order to protect the savings over the other bidders.

KPMG reviewed CSUF's bid files and bid process and found the project administrative team in compliance with requirements related to pre-bid meeting, advertising for bids, distribution of project plans and specifications, review of bid proposal package, issuing of addenda during bidding, pre-qualification of bidders, obtaining required documentation from the successful bidder.

Recommendation:

None

Subcontractor Substitution

KPMG identified two instances of subcontractor substitution for the project. Dynalectric was substituted for Sasco to perform electrical work, and George & Goldberg Design Associates was substituted for Gary Raub Associates to perform canopy rigging work. Hensel Phelps requested to substitute Dynalectric for Sasco due to a clerical error in the listing of subcontractors where Sasco was inadvertently named while Dynalectric's quote was incorporated in the bid amount. This request for substitution occurred two days after bid opening in accordance with SUAM 9821.01 for substitutions due to clerical error. Sasco protested the substitution within the required five days of notice from CSUF; however, SUAM 9821.02 also indicates the subcontractor has six working days from time of prime bid opening to protest. Sasco protested on the seventh day from bid opening.

Despite this slight delay in protest, the protest was accepted and a hearing was held concluding a clerical error was made and approving the substitution. Hensel Phelps requested to substitute George & Goldberg Design Associates for Gary Raub Associates due to Gary Raub Associates' inability to execute a subcontract and provide payment and performance bonds. This substitution was granted in conformance with SUAM and Public Contract Code section 4107(a) without protest.

Recommendation:

None

CONSTRUCTION CHANGE ORDERS

A total of 92 change orders in the amount of \$1,203,689 were issued for the Project resulting in a total contract value of \$36,883,689. Two additional change orders were in the process of being negotiated at the time of KPMG's field work which would grant 257 additional days to the schedule and add an additional \$1,300,000 related to outstanding change order requests and scheduling impacts. The table below illustrates the change orders issued:

Change Order	Date	Amount
CO 1 - Add back Alternate Bid Items	11/25/2003	\$ 393,000
CO 2 - Substitute Trendstone	12/18/2003	(288,615)
CO 3 - Misc. Modifications	12/18/2003	(154,192)
CO 4 - Miscellaneous Deletions	1/8/2004	(139,543)
CO 5 - Value Engineering	7/14/2004	(126,521)
CO 6 - New CIP Wall, Hardware Changes	7/14/2004	44,132
CO 7 - Extended Column Seats	7/14/2004	61,323
CO 8 - Misc. Additions	7/14/2004	11,750
CO 9 - Modify Pile Cap	7/14/2004	14,975
CO 10 - Credit for Allowances	7/14/2004	(70,000)
CO 11 - Beam and Girder Modifications	8/11/2004	20,128
CO 12 - Deck Support and Balcony	8/20/2004	50,000
CO 13 - Reroute Piping	8/20/2004	48,366
CO 14 - Additional Electrical Outlets	10/21/2004	20,938
CO 15 - Add Fire Rated Doors, Duct Work	10/21/2004	68,252
CO 16 - Drilling of Beams	10/21/2004	12,018
CO 17 - Revise Girders	10/21/2004	24,888
CO 18 - Changes to Deductive Bid Item #2	10/21/2004	38,598
CO 19 - Revised Seating	10/21/2004	22,711
CO 20 - Value Engineering Lighting	11/22/2004	(18,236)
CO 21 - Install Nelson Studs	11/22/2004	41,123
CO 22 - Added Roof Overhang	11/22/2004	26,012
CO 23 - Revise Doors/Frames/Hardware	11/22/2004	19,754
CO 24 - Add Motor Control System	11/22/2004	46,815
CO 25 - CMU Shaft	1/25/2005	36,282
CO 26 - Deck Support	1/25/2005	21,913
CO 27 - Beam Conflict	1/25/2005	4,621
CO 28 - Misc. Revisions	1/25/2005	1,427
CO 29 - Restroom Circuits Autoflush	1/25/2005	10,615
CO 30 - Piping and Curtain Walls	1/25/2005	36,504
CO 31 - CMU Revisions	1/25/2005	24,539
CO 32 - Provide V-Joint	1/25/2005	29,793
CO 33 - Revise Electrical for LULA Lift	1/25/2005	20,403
CO 34 - Misc. Additions	1/25/2005	3,510
CO 35 - Misc. Revisions	1/25/2005	15,250
CO 36 - Lobby Separation	1/25/2005	11,149
CO 37 - Provide Anchors and Chandelier Drop	1/25/2005	7,636
CO 38 - Audio/Visual Revisions	1/25/2005	(13,345)
CO 39 - Misc. Revisions	4/14/2005	6,681
CO 40 - Revise Lighting	4/14/2005	9,750
CO 41 - Misc. Additions	4/14/2005	6,739
CO 42 - Revised Theatrical Dimming	4/14/2005	30,173
CO 43 - Change Overflow Drains	6/7/2005	6,642
CO 44 - Added Plenum Ceiling	4/14/2005	17,547
CO 45 - Add Wood Sleepers	4/14/2005	15,565

CONSTRUCTION CHANGE ORDERS

(change order list continued):

Change Order	Date	Amount
CO 46 - Misc. Revisions	4/14/2005	9,764
CO 47 - Drain Line Relocation	4/14/2005	10,280
CO 48 - Credit for Fixed Seats	4/14/2005	(201,457)
CO 49 - Misc. Revisions	4/14/2005	4,226
CO 50 - Framing	4/14/2005	18,027
CO 51 - Additional Wall Supports, Vents	4/14/2005	71,400
CO 52 - Piping Modifications	4/14/2005	196,952
CO 53 - Firestopping	4/14/2005	9,548
CO 54 - Misc. Additions	4/14/2005	7,100
CO 55 - Electrical Revisions	9/12/2005	22,333
CO 56 - Added Power and Switching	9/12/2005	16,879
CO 57 - Added Support Hangers	9/12/2005	11,565
CO 58 - Catwalk and CMU Veneer	9/12/2005	46,494
CO 59 - Wall Support	9/12/2005	18,941
CO 60 - Misc. Additions	9/12/2005	11,556
CO 61 - Additional CHW Piping	9/12/2005	14,955
CO 62 - Misc. Additions	9/12/2005	2,515
CO 63 - Relocate Exposed Sprinkler	9/12/2005	14,697
CO 64 - Diesel Particulate Filter	9/12/2005	39,786
CO 65 - Wood Floor/Glass Wall Interface	9/12/2005	13,161
CO 66 - Modify Gutter Design	9/12/2005	9,508
CO 67 - Underfloor Wireway	9/12/2005	16,162
CO 68 - Balcony and Fire Protection	9/12/2005	7,509
CO 69 - Ceiling Diffusers	9/12/2005	24,985
CO 70 - Added FCU's	10/6/2005	41,255
CO 71 - Elevator Oil Cooling	10/6/2005	8,210
CO 72 - Misc. Revisions	10/6/2005	10,147
CO 73 - Closet Conditions	10/6/2005	8,239
CO 74 - Misc. Revisions	10/6/2005	1,208
CO 75 - Kite Walls	10/6/2005	15,412
CO 76 - Revised Panel Layout	10/6/2005	6,364
CO 77 - Misc. Additions	10/6/2005	11,164
CO 78 - Metal Panels	10/6/2005	11,079
CO 79 - Misc. Revisions	10/6/2005	4,740
CO 80 - Paint and Signage	10/6/2005	13,968
CO 81 - Power Adjustments	10/6/2005	17,470
CO 82 - Fan Coil Power	10/6/2005	16,538
CO 83 - Revised Toilet Partitions	10/6/2005	34,118
CO 84 - Misc. Revisions	10/6/2005	6,724
CO 85 - Added Walls	12/6/2005	21,861
CO 86 - Remote Alarm	12/6/2005	11,567
CO 87 - Supply Duct	12/6/2005	6,850
CO 88 - Misc. Revisions	12/6/2005	6,973
CO 89 - Revised Power	12/6/2005	26,535
CO 90 - Revised Black-Out Drape	12/6/2005	27,616
CO 91 - Railing Modifications	12/6/2005	8,686
CO 92 - 120V Circuit for Equipment	12/6/2005	19,009
CO 93 - Occupancy	1/6/2006	no executed
CO 94 - Negotiation Settlement	4/4/2006	no executed
Total Contract		\$ 1,203,689

The CSUF presented a clear signature authority for approval of change orders and followed it without exception. However, KPMG recognized one weakness in the signature authority policy. When a change order contains both additive and deductive items, the amounts may cancel one another out, thus requiring a lower level of signature authority. If the absolute amounts for additive and deductive changes are considered instead, a higher level of signature authority may be required. A better practice would be to consider the absolute amounts of the changes when evaluating change orders for signature approval. CPDC is currently in the process of revising SUAM to clarify this point.

Observation:

As currently stated, the CSUF signature authority and SUAM does not specify the approval process for a change order containing both additive and deductive items. These items may cancel one another out, resulting in an overall low change order amount, which currently would require a lower level of signature authority.

Risk:

It is possible for significant changes to be approved by the person with the lowest level of signature authority, if large additions and large deductions are incorporated on the same change order.

Recommendation:

2. A better business practice would be to require the absolute value of the changes to be considered when determining the appropriate level of signature authority for a change order. CPDC should modify SUAM accordingly.

(Ownership: CPDC)

Management Response:

2. We agree. The change order procedure was modified and posted on the CPDC web site in SUAM, Appendix D. We also reviewed this change in our training session on October 12, 2006.

KPMG sampled ten change orders and tested them for appropriate mark-up calculations. Supporting information was included with all change orders and the standard CSU contractor change order summary form was completed. However, in all cases, the amount supported by the change order back-up exceeded the amount approved by CSUF. This would typically occur as a result of negotiation discussions where CUSF was able to settle for a lesser change order amount than what was originally submitted by the contractor. In those instances, CSUF would not indicate what charges from the original change order were deleted nor was a revised change order summary form prepared. As a result, we were

not able to establish what the appropriate mark-up on the revised change order amount would be, since the appropriate detail was not present.

No extension for time had been granted through change order number 92, which was the last change order executed between CSUF and Hensel Phelps at the time of KPMG's field work. CSUF were in negotiations regarding a project time extension of approximately 257 days, as no extra time had been granted on any of the prior change orders. These negotiations were occurring after the Notice of Completion was issued.

SUAM section 9792.01 describes the responsibilities of the construction administrator during the construction phase and specifically provides guidance on contemporaneous resolution of contract extensions. It is also a preferred industry practice to resolve any additional time needed as they occur.

Observation:

Time extensions were not negotiated on a contemporaneous basis as they occurred.

Risk:

Late resolution of time extensions may undermine CSUF's ability to reach a favorable agreement with the contractor at the end of the Project and is not a preferred industry practice.

Recommendation:

3. On future Projects, CSUF should attempt prompt resolution of time extensions as delays occur.

(Ownership: CSUF)

Campus Response:

3. We concur. On future projects the campus will initiate efforts to attempt prompt resolution of time extensions as delays occur. Corrective action on this recommendation is complete.

Change Order Report Analysis

CSU has historically considered change order costs incurred due to errors and omissions by the architect of up to 3% of the initial award construction cost as falling within the architect's 'standard of care'. However, the agreement as executed does not contain any language defining 'standard of care', but states the architect shall secure and maintain appropriate errors and omissions insurance of no less than \$1,000,000 per occurrence.

CSUF provided a change order log reflecting the source of each change order. Based on the information available, change orders attributable to architect’s errors and omissions exceeded 138% of the total net change order costs. The value exceeds 100% due to large credit change order amounts. These errors and omissions are calculated to be 4.67% of the original contract amount which is greater than the 3% that fall under the CSU’s acceptable levels of ‘standard of care’. The total dollar amount attributable to errors and omissions is \$1,667,399.

The current SUAM section 9236 states that errors and omissions shall be evaluated with errors given potentially full value and omissions a potential 20% of full value consideration. CSUF did not track errors and omission separately and as a result, it cannot be determined with certainty if the architect performed within the requirements of ‘standard of care’. The following table summarizes the data:

Class	Type of Change	Amount	% of Total CO	% of Original Contract
4.1	Error in or omission from the contract documents	\$ 1,667,399	138.52%	4.67%
4.2	Unforeseeable job site condition	105,266	8.75%	0.30%
4.2	Change in the requirements of a regulatory agency	82,524	6.86%	0.23%
4.4	Change originated by the University	(664,634)	-55.22%	-1.86%
4.5	Changes in specified work due to the unavailability of specified materials	13,134	1.09%	0.04%
4.6	Other	-	0.00%	0.00%
Blank		-	0.00%	0.00%
Total Change Orders		1,203,689	100.00%	3.37%
Original Contract Amount		35,680,000		
Total		\$ 36,883,689		

CSUF calculated change orders attributable to errors and omissions separately and the total was determined to be 1.84% of the original contract amount which is less than 3%. The amount of errors and omissions is an acceptable level of ‘standard of care’.

Review of Contractor Files

The CSU Office of the University Auditor performed all field work conducted at the contractor’s premises related to this audit. The specific scope of work included:

- Reviewing change orders for adequate support and documentation.
- Reviewing the general contractor’s bid selection to determine if the trades were competitively bid and the lowest bidders were selected for the project.
- Reviewing the expanded list of subcontractors provided to the campus at the time of award and evaluate whether substitutions of a subcontractor were administered in accordance with the provisions listed within the general conditions of the contract.

No exceptions were noted by the CSU Office of the University Auditor.

Recommendation:

None

PROJECT MANAGEMENT INSPECTION SERVICES

United Inspection and Testing (“UIT”) was retained to perform construction inspection and materials testing services on the Project. An initial agreement, effective June 18, 2003, was executed in an amount not to exceed \$398,680. Two consultant contract changes were issued to this agreement. The first dated October 27, 2004 in the amount of \$155,000 allowed for an increase in the inspector’s rate from \$60 to \$68 per hour. The second consultant contract change was executed to disencumber \$75,000 at the termination of services with UIT, resulting in a total contract amount of \$478,680, as summarized in the table below:

Description	Total
Total Base Contract	\$ 398,680
Change #1 - Increase in inspector rate	155,000
Change #2 - Disencumber amount	(75,000)
Subtotal ESA's	\$ 80,000
Total	\$ 478,680

The invoices from UIT as sampled and tested by KPMG contained the appropriate signature authority and were captured accurately in the accounting system. However, KPMG noted that UIT presented four separate invoices in the aggregate amount of \$44,070, for billing periods occurring prior to the signature of counsel on the agreement. This indicates work was performed without a formal executed contract agreement in place.

- Invoice 1104, \$5,280, dated April 17, 2003 (billing ending March 31, 2003)
- Invoice 1161, \$10,580, dated May 20, 2003 (billing ending April 30, 2003)
- Invoice 1275, \$22,280, dated June 26, 2003 (billing ending May 31, 2003)
- Invoice 1315, \$5,930, dated July 17, 2003 (billing ending June 11, 2003)

SUAM 9780.03 and 9210.01 states the requirements for review by counsel and that an agreement is not considered in effect until approved by CSU Office of General Counsel.

Observation:

Inspection work was performed by United Inspection and Testing prior to an agreement being formally executed.

Risk:

Legal review is a key factor in protecting the interests of CSUF. Allowing work to commence without a contract officially in place poses a contractual risk for CSUF.

Recommendation:

4. In the future, CSUF should attempt that all contracts receive documented legal review and are formally signed by counsel before any work commences.

(Ownership: CSUF)

Campus Response:

4. We concur. As indicated in the campus response to recommendation number one, the campus will attempt that all contracts receive documented legal review and are formally signed by counsel before any work commences. Corrective action on this recommendation is complete.

Exhibit B of the agreement between CSUF and UIT contains the invoice form referenced by Section 5.06 of Rider A of the agreement. This form represents the recommended CSU consultant invoice format. CSUF did not utilize this form. Instead, invoices were submitted on UIT letterhead which did not contain all pertinent invoice information, including total contract amount by categories outlined by the contract section 5.01, total amount billed to date, prior billings, and remaining contract balance.

Observation:

The standard CSU invoice form as specified by the agreement was not used. As a result, actual invoices excluded pertinent billing information including total amount billed to date, prior billings, and remaining contract balance for the specific contract categories.

Risk:

By not requiring the consultant to present total amount billed to date, prior billings, and remaining contract balance for all specific contract categories, CSUF is risking paying for erroneous billings.

Recommendation:

5. In the future, CSUF should require the use of the standard CSU consultant invoice forms, as presented in the contract documents.

(Ownership: CSUF)

Campus Response:

5. We concur. The campus will require use of the standard CSU consultant invoice forms, as presented in the contract documents. Corrective action on this recommendation is complete.

MAJOR EQUIPMENT/MATERIALS REVIEW

KPMG selected and reviewed a sample of materials and equipment based on construction cost and accessibility to the installed items. As this Project was a functional facility at the time of KPMG's field work, consideration was given to equipment and materials located in occupied areas in order not to interrupt any student or faculty activities.

CSUF allowed full and complete access to drawings, specifications, samples and submittals, which were organized, easy to locate and contained sufficient information. The equipment and materials located in the field were compared to submittals approved by the architect and/or engineer and were verified against performance specifications, submittals, and drawings.

The following equipment items and specific model data were approved and visually confirmed as installed on the project:

Division	Drawing No.	Brand	Model No./ Capacity	Description
15850	M204	Thermal Corp	27-PLN-3-11/ 20HP 460/03 V 1750 RPM	AH-1 -Air Handling Unit
15850	M301	Thermal Corp	20-AFDW-21/ 10HP 460/03 V 1750 RPM	AH-11 - Air Handling Unit
14240	n/a	Mitsubishi	5,000 lb capacity	Elevator 1
14240	n/a	Mitsubishi	5,000 lb capacity	Elevator 2
08870	n/a	3form	Solo Clear 3/8" Champagne SFX finish	Sloped Glazing Canopy
16000	E 504	n/a	208Y / 120V 30 4W	Electric panel SSA
12610	n/a	Seating Concepts	Salem Custom	Fixed Audience Seating
16510-15 f32	E002	Horton Lees Broaden Lighting Design	500 PS 35/IF 2500VA	Concert Hall Pendant mounted Tungsten Halogen Chandelier
16510-15 f36A	E002	Horton Lees Broaden Lighting Design	300T 3Q / CL 300VA	Pendant mounted Tungsten Halogen Chandelier
15160	n/a	Bell & Gossett ITT Industries	3E Series 1531/ 292 GPM @85 ft 15HP/1750 RPM	Pumps
05510	n/a	M.Mahpar	300lb/sq ft capacity	Metal Stairs

The equipment and materials observed in the field conformed to the specified requirements, drawings, specifications and submittals, based on a visual inspection of equipment labeling, and comparison to physical materials samples provided and approved by the architect.

Recommendation:

None

CLOSE-OUT PROCESS

The Notice of Completion for this Project indicating the Project completion was issued on January 6, 2006 indicating completion of construction and occupancy of the facility taken by CSUF. However, at the time of KPMG's field work, several issues, including pending change orders and unresolved claims, remained outstanding with the contractor. The contractor is legally enabled to put CSUF on notice of the filing of a claim and requesting a Claims Review Board hearing within 30 calendar days after the recorded date of the Notice of Completion. Hensel Phelps notified CSUF within the prescribed period and submitted a formal Notification of Claims on February 3, 2006.

Per SUAM sections 9820.03, 9833 and Section 32 of the CSU Construction Management Procedures Manual, the construction administrator should issue a global settlement change order and document any final settlement agreements related to time and compensation. Any such settlement should be memorialized in writing with back-up and concurrence by the architect.

At the time of our review there were two change orders in the process of being executed: change order number 93, which indicated CSUF taking beneficial occupancy of the Project, and change order number 94 in the amount of \$1,300,000 and granting 273 additional days. Change order number 94 encompassed a proposed settlement of all outstanding claims on the Project. CPDC was involved in the settlement discussions. Nothing came to KPMG's attention that would indicate the settlement negotiations did not proceed as would be expected on a Project of this size and complexity under the guidelines set forth by SUAM.

KPMG reviewed the Notice of Completion, the Certificate of Occupancy, punch list, operating permits, operation & maintenance manuals, warranties, as-built drawings, pre-final and final inspections, and other relevant project close out documentation, which was filed in an orderly fashion and retained properly at CSUF.

Recommendation:

None

LIQUIDATED DAMAGES

The Project lasted beyond the initially scheduled completion date by nearly six months. Final completion was contractually supposed to occur by July 18, 2005. The Certificate of Occupancy was issued on August 18, 2005 and the Notice of Completion was not issued until January 6, 2006. No change orders allowed for any time extensions to the contract as executed at the time of KPMG's field work. The contract specified liquidated damages in the amount of \$6,000 for every day the Project lasted beyond the contractual finish date. At time of occupancy, the liquidated damages were contractually reduced to \$3,000 per day. The schedule below summarizes the liquidated damages as calculated based on the original schedule and zero extra days granted by change orders:

Document	Date	Delay Days	Amount of Liquidated Damages	Total Damages
Certificate of Occupancy	8/18/2005	31	\$ 6,000	\$ 186,000
Notice of Completion	1/6/2006	172	3,000	516,000
Total Liquidated Damages		203		\$ 702,000

Due to the delay in completion of the Project, liquidated damages need to be taken into account by CSUF. However, considering the ongoing settlements negotiations with the contractor and likelihood of additional days added through a final change order time extension, actual liquidated damages were not expected to be separately imposed by CSUF at the time of KPMG's field work, but rather incorporated as a component of the final settlement. CSUF was following the guidelines outlined by SUAM sections 9820.03, 9833 and Section 32 of the CSU Construction Management Procedures Manual in negotiating the final settlement change order.

Recommendation:

None

ACCOUNTING

KPMG reviewed the accounting process on the Project, including accounts payable, recording of contracts and change orders, and reconciliation of invoices to the general ledger. Since the project was funded from multiple sources, multiple accounts were used to account for the various transaction data. Accounting for contracts, commitments and payments for vendors, consultants and contractors was maintained independently by CSUF's Office of Design and Construction in an excel spreadsheet, which was regularly reconciled to the accounting system. KPMG's testing of the spreadsheet and underlying documentation did not reveal any discrepancies. Implementation of this type of shadow accounting is a common practice among CSU campuses and could be an effective tool as long as this shadow accounting is reflective of the actual transactions posted into the main accounting system and reconciled on a regular basis.

Recommendation:

None



Office of the Vice President for Administration
and Finance/CFO
(714) 278-2115 / Fax (714) 278-5842

RECEIVED
UNIVERSITY AUDITOR

OCT 12 2006

THE CALIFORNIA STATE
UNIVERSITY

DATE: October 11, 2006

TO: Larry Mandel
University Auditor

FROM: Milton A. Gordon
President *maf*

SUBJECT: Campus Response to Recommendations: KPMG Audit Report on the Auditorium and Fine Arts Facility Construction Project, California State University, Fullerton

Thank you for the KPMG audit report on the Auditorium and Fine Arts Facility Construction Project, California State University, Fullerton.

Appropriate University administrative officers have reviewed the subject report. Our specific comments and planned corrective actions concerning the audit recommendations are attached.

Please contact Vice President Willie Hagan or Assistant Vice President Naomi Goodwin if you have questions or concerns.

Attachment

cc: Willie Hagan, Vice President, Administration & Finance/CFO
Jay Bond, Associate Vice President, Facilities Management
Naomi Goodwin, Assistant Vice President, Administration & Finance

CONSTRUCTION PROJECT EVALUATION
CALIFORNIA STATE UNIVERSITY, FULLERTON
AUDITORIUM AND FINE ARTS FACILITY

DESIGN COSTS

Recommendation:

1. In the future, work should commence only after an agreement has been formally executed, including review and signature by counsel.

(Ownership: CSUF)

Campus Response:

1. We concur. The campus will not have vendors commence work without a formally executed agreement that includes review and signature by counsel. Corrective action on this recommendation is complete.

CONSTRUCTION CHANGE ORDERS

Recommendation:

3. On future Projects, CSUF should attempt prompt resolution of time extensions as delays occur.

(Ownership: CSUF)

Campus Response:

3. We concur. On future projects the campus will initiate efforts to attempt prompt resolution of time extensions as delays occur. Corrective action on this recommendation is complete.

PROJECT MANAGEMENT INSPECTION SERVICES

Recommendations:

4. In the future, CSUF should attempt that all contracts receive documented legal review and are formally signed by counsel before any work commences.

(Ownership: CSUF)

5. In the future, CSUF should require the use of the standard CSU consultant invoice forms, as presented in the contract documents.

(Ownership: CSUF)

Campus Responses:

4. We concur. As indicated in the campus response to recommendation number one, the campus will attempt that all contracts receive documented legal review and are formally signed by counsel before any work commences. Corrective action on this recommendation is complete.
5. We concur. The campus will require use of the standard CSU consultant invoice forms, as presented in the contract documents. Corrective action on this recommendation is complete.

Business and Finance
401 Golden Shore, 5th Floor
Long Beach, CA 90802-4210

www.calstate.edu


Richard P. West
Executive Vice Chancellor/CFO

562-951-4600
Fax 562-951-4970
rwest@calstate.edu

MEMORANDUM

Date: October 26, 2006

To: Larry Mandel
University Auditor

From: Richard P. West 
Executive Vice Chancellor & Chief Financial Officer

Subject: Audit Report
Auditorium and Fine Arts Facility
California State University, Fullerton

RECEIVED
UNIVERSITY AUDITOR

OCT 27 2006

THE CALIFORNIA STATE
UNIVERSITY

I am pleased that the overall theme of this audit report continues in a positive vein and that it finds general compliance with established procedures. I have reviewed the report's findings with my Capital Planning, Design and Construction (CPDC) staff, and have attached our response to the auditors' findings and recommendation to CPDC.

RPW:JRC:bn

Attachment

cc: Ms. Elvyra F. San Juan
Mr. Larry Piper
Mr. Thomas M. Kennedy
Mr. James R. Corsar

CSU Campuses
Bakersfield
Channel Islands
Chico
Dominguez Hills
East Bay

Fresno
Fullerton
Humboldt
Long Beach
Los Angeles
Maritime Academy

Monterey Bay
Northridge
Pomona
Sacramento
San Bernardino
San Diego

San Francisco
San José
San Luis Obispo
San Marcos
Sonoma
Stanislaus

CONSTRUCTION PROJECT EVALUATION
CALIFORNIA STATE UNIVERSITY, FULLERTON
AUDITORIUM AND FINE ARTS FACILITY

CONSTRUCTION CHANGE ORDERS

Recommendation:

2. A better business practice would be to require the absolute value of the changes to be considered when determining the appropriate level of signature authority for a change order. CPDC should modify SUAM accordingly.

(Ownership: CPDC)

Management Response:

2. We agree. The change order procedure was modified and posted on the CPDC web site in SUAM, Appendix D. We also reviewed this change in our training session on October 12, 2006.

THE CALIFORNIA STATE UNIVERSITY
OFFICE OF THE CHANCELLOR



BAKERSFIELD

November 28, 2006

CHANNEL ISLANDS

CHICO

MEMORANDUM

DOMINGUEZ HILLS

EAST BAY

TO: Mr. Larry Mandel
University Auditor

FRESNO

FROM: Charles B. Reed
Chancellor

FULLERTON

HUMBOLDT

SUBJECT: KPMG Draft Final Report on the *Auditorium and Fine Arts Facility*
Construction Project at California State University, Fullerton

LONG BEACH

LOS ANGELES

In response to your memorandum of November 28, 2006, I accept the response as submitted with the draft final report on the *Auditorium and Fine Arts Facility* construction project at California State University, Fullerton.

MARITIME ACADEMY

CBR/amd

MONTEREY BAY

Enclosure

NORTHRIDGE

POMONA

cc: Ms. Erika Alvord, KPMG

Dr. Milton A. Gordon, President, CSU Fullerton

SACRAMENTO

Dr. Willie J. Hagan, Vice President, Administration and Finance/CFO,
CSU Fullerton

SAN BERNARDINO

Mr. Dennis Hordyk, Assistant Vice Chancellor, Financial Services

SAN DIEGO

Ms. Elvyra San Juan, Assistant Vice Chancellor, CPDC

Mr. Richard P. West, Executive Vice Chancellor and Chief Financial Officer

SAN FRANCISCO

SAN JOSÉ

SAN LUIS OBISPO

SAN MARCOS

SONOMA

STANISLAUS