

**KPMG Construction Cost Review
CSU San Marcos – SM360-2
Academic Complex Phase II**

PROJECT OVERVIEW

KPMG was retained by the California State University's (CSU) Office of the University Auditor to perform a review of the CSU San Marcos (CSUSM) Academic Complex Phase II. The project was divided into three (3) Bid Packages: I – Initial Site Work, II – Building Construction, and III – a new Central Plant.

The majority of the project (Bid Package II) consisted of three, three-story buildings totaling approximately 133,000 square feet. Buildings numbered 26 and 27 on the campus master plan are technically one structure (Arts & Humanities Hall), while Building numbered 37 (Science II Hall) is a freestanding structure. The buildings included laboratories, classrooms, faculty offices, auditoriums, art studios and rehearsal halls. The project also included lab furnishings, landscaping, architectural paving, and other site work.

Bid Package I consisted of infrastructure sitework including site preparation, grading, and the installation of foundation related caissons. Bid Package III was for the construction of a two-story expansion to the existing Central Utility Plant, including work on the Cooling Tower Yard and Electrical Building that was to house a new 1,200-ton chiller and a new boiler.

The University hired Douglas E. Barnhart, Inc. to perform the site work (Bid Package I). Swinerton & Walberg Inc. constructed Bid Package II and John Carey Construction Co., Inc. performed the central plant work (Bid Package III).

KPMG focused its review on the most significant portion of the project, the Academic Buildings 26/27 and 37 (Bid Package II). As of the date of our review, work in one auditorium was still in process. That work has since been completed. There are still pending HVAC issues that cannot be completed until Spring Break 2003 when the buildings can be shut down. We also performed reviews for the areas of risk and public works process compliance for the two less significant Bid Packages (I and III). During the weeks of January 20th and 27th, KPMG reviewed project records from the following firms involved in the project's development and execution:

Contractors:	Swinerton & Walberg, Inc Douglas E. Barnhart, Inc John Carey Construction Co., Inc.
Architect/Engineer (A/E):	Rossetti Associates (Bid Package I & II) LSW Engineers
Inspection (IOR):	TSC Consultants
Campus:	Planning Design & Construction (PDC)

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DESIGN COSTS

Bid Package I and II – Sitework and Buildings 26/27 and 37

The overall Academic Complex project was divided into two major phases. Construction of Phase I - University Hall began in 1997. The design for Phase II, Academic Buildings 26/27 and 37, was originally included in the agreement executed by CPDC (Chancellor's Office) for Phase I. CPDC selected Rossetti Associates Architects as the Architect of Record and CPDC had initially managed Phase I of the project.

Phase II of the Academic Complex was managed by the University. A design agreement was executed with Rossetti for project updates and revisions on June 2, 1999 in the amount of \$456,000. The agreement included design services for Bid Packages I and II - Sitework and Buildings 26/27 and 37 respectively. The bidding and construction administration phases were subsequently added through amendment. The University also authorized additional services to Rossetti's original agreement. We found that the additional services were approved by various methods including: contract amendments, purchase order amendments, and extra service authorization letters. The following is an analysis of the basic contract services and extra services:

Date	Number	Description	Approved	Amt. Paid	Bal. Open
2-Jun-99	Original Agreement	WD updates, revisions	\$456,000	\$456,000	-
11-Jun-99	Amendment 1	Campus directed changes	560,000	559,288	712
27-Jan-00	Amendment 2	Contract Administration	<u>398,223</u>	<u>389,638</u>	<u>8,585</u>
Total	Basic Services		1,414,223	1,404,926	9,297
27-Jan-00	Amendment 2A	Road changes	20,000	20,000	-
6-Oct-00	Amendment 3	Telecom	5,482	5,482	-
12-Oct-00	Amendment 4	Parking changes	2,600	2,600	-
14-Feb-01	Purchase Order Amendment 5	Wall removal and MEP	3,740	3,740	-
14-Feb-01	Purchase Order Amendment 5A	Building 37 hot water system	4,800	4,800	-
15-Apr-02	Extra Services 6	Fume hoods/exhaust fan/controls	2,300	2,300	-
20-Jun-02	Extra Services 7	Expenses	7,543	7,543	-
20-Jun-02	Extra Services 7	Dust collector	<u>4,830</u>	<u>0</u>	<u>4,830</u>
Total	Extras		51,295	46,465	4,830
Total	A/E Agreement		\$1,465,518	\$1,451,391	\$14,127

Recommendations:

1. The University should utilize standard formats to authorize A/E Additional Services. Refer to SUAM section 9210 for specific instructions relating to additional services.
2. When additional service authorizations are issued, and it is later determined that the not-to-exceed prices are not billed to the maximum, a deductive

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change should be issued to close out the amendment and disencumber the allotted funds. (Guidelines related to this issue have been added to SUAM. Refer to SUAM section 9786.03.)

Campus Responses:

1. The University will draft and utilize a standard format for the authorization of A/E additional Services in accordance with SUAM 9210. The standard format will be completed and included in the University Planning, Design and Construction Manual by November 1, 2003.
2. The University will explicitly state in its procedures that a deductive change should be issued to close out an amendment and disencumber allotted funds when not-to-exceed prices are not billed to the maximum per SUAM 9786.03. This procedure will be coordinated with Procurement and implemented by November 1, 2003. If appropriate, the procedure will be included in the University Planning, Design and Construction Manual.

Bid Package III – Central Plant

CSUSM issued a Request for Proposals (RFP) to solicit engineering design services for the Central Plant Expansion project. The RFP was project specific and was appropriately issued. The University selected LSW Engineers as the engineer for the project. An agreement was executed on May 10, 1999 in the amount of \$163,000 including a not-to-exceed allowance for expenses. One extra service authorization was issued in the amount of \$2,000. The following is an analysis of the basic contract services and extra services:

Date	Number	Description	Approved	Amt. Paid
10-May-99	Original Agreement	Schematic Design	\$30,972	\$30,972
		Preliminary Design	23,430	23,430
		Construction Documents	64,000	64,000
		Bidding	3,200	3,200
		Construction Phase	38,398	38,398
Total	Basic Services		160,000	160,000
10-May-99	Original Agreement	NTE Expenses	3,000	3,000
31-Aug-00	Extra Service	Structural/mech/elec impacts	2,000	2,000
Total	Extras/Expenses		5,000	5,000
Total	A/E Agreement		\$165,000	\$165,000

Recommendation:

None

CONSTRUCTION BID PROCESS

Bid Package II – Buildings 26/27 and 37

The final project estimate, provided by the A/E, was \$20,820,000. The original bid date was established as January 19, 2000, which through two addendums, was changed to February 9, 2000.

Prior to bid, eight (8) Addendums were issued as follows:

- Addendum #1:* Issued December 17, 1999 – Changed the location for the pre-bid walk-through.
- Addendum #2:* Issued December 23, 1999 – Miscellaneous specification changes.
- Addendum #3:* Issued January 10, 2000 – Addressed contractor questions and revised various drawings.
- Addendum #4:* Issued January 14, 2000 – Changed the bid date to January 26, 2000 and revised certain sections of the Project Specifications Manual.
- Addendum #5:* Issued January 19, 2000 – Addressed subcontractor listing requirements and added, revised various sections of the Project Manual.
- Addendum #6:* Issued January 21, 2000 – Changes were made to the Project Specifications Manual.
- Addendum #7:* Issued January 24, 2000 – Changed the bid date from January 26, 2000 to February 9, 2000.
- Addendum #8:* Issued January 21, 2000 – Revised and reissued sections of the Project Specifications Manual.

The initial specifications listed 13 Additive Alternates. Alternates 1 through 10 solicited pricing to build out various spaces. The alternates are as follows:

- Alternate 1:** Self-Instructional Computer Labs in Building 37, various rooms.
- Alternate 2:** Video and Painting Studios in Buildings 26/27, various rooms.
- Alternate 3:** Graduate Research Labs in Building 37, various rooms.
- Alternate 4:** Music Practice Rooms and Electronic Music Studio in Buildings 26/27, various rooms.
- Alternate 5:** Sculpture/Ceramic/Wood Studios in Building 26/27, rooms 355, 355A, 357, and 357A.

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- Alternate 6:** Math Lab and Graduate Research Labs in Building 37; rooms 308, 310, and 312.
- Alternate 7:** Graduate Research Labs in Building 37; rooms 340 and 342.
- Alternate 8:** Arts Patio Canopy in Building 26/27.
- Alternate 9:** Analytical Chemistry Lab and Prep Room in Building 37, rooms 345 and 345A.
- Alternate 10A:** Faculty offices in buildings 26/27, rooms 323 to 341.
- Alternate 10B:** Faculty offices in building 37; rooms 111 to 141.
- Alternate 11:** Construction of a greenhouse adjacent to Building 37.
- Alternate 12:** Provide and install TPO membrane roof system.
- Alternate 13:** Provide and install irrigation and planting as drawn and specified.

There were seven (7) construction bidders listed on the Abstract of Bids, with Swinerton & Walberg being the apparent low bidder at \$20,690,000. The University executed the construction agreement on April 10, 2000, in the amount of \$22,188,007, which included Alternates 1 through 9.

Additional findings related to the project include:

- The Abstract of Bids was appropriately completed.
- Swinerton & Walberg furnished the appropriate Payment and Performance Bonds in the original contract amount as required.
- Swinerton & Walberg is a California Corporation.
- The original construction period covered 660 calendar days.
- Liquidated damages were stated to be \$1,000 per day.
- Notice to Proceed was issued on May 19th, with a start date of May 26, 2000.
- Original completion was established as March 16, 2002.
- With the exception of a few punch list items, HVAC concerns, and completion of minor work, Beneficial Occupancy of Building 37 occurred on July 11, 2002, as identified on Change Order 26.
- With the exception of nine (9) rooms (Rehearsal Hall related), the University took Beneficial Occupancy of Buildings 26/27 on August 6, 2002, as identified in Change Order No. 28.
- The Rehearsal Hall was occupied on February 18, 2003 as documented on Change Order No. 31.
- There were time extensions granted throughout project construction that extended the completion date to April 11, 2003. This included a 225-day non-compensable time extension for the Rehearsal Hall.
- A Notice of Completion (NOC) was recorded as August 6, 2002 (179 days earlier than the revised contractual completion date). This NOC excluded the Rehearsal Hall.
- A final Notice of Completion was recorded as of April 11, 2003.

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Recommendation:

None

Bid Package I – Sitework

The original bid date for the demolition work was July 8, 1999 and was subsequently changed to July 14, 1999 in Addendum 1. Addendum 2 modified Project Specifications Manual sections. Rossetti Associates established the initial project estimate as \$500,000. Three (3) bids were received ranging from \$638,112 to \$858,858 and included unit pricing for caissons. Douglas E. Barnhart submitted the low bid in the amount of \$638,112 and was awarded a construction agreement on July 22, 1999.

Additional findings related to this work include:

- The Notice to Proceed was dated August 19, 1999, with a start date of August 26, 1999.
- The original construction period was to cover a period of 77 calendar days.
- Liquidated damages were stated to be \$1,000 per day.
- Original completion was established as November 11, 1999.
- A 7-day time extension was granted on Change Order 1, which revised the completion date to November 18, 1999.
- Notice of Completion was recorded as January 5, 2000, 48 days later than the revised completion date.
- Change Order No. 2 allowed for a 47-day non-compensable time extension revising the completion date to January 5, 2000. This extension was to allow the Contractor time to complete punch list items and waived their rights to any claims.

Recommendation:

None

Bid Package III – Central Plant

For the Central Plant project the original bid date was March 29, 2000, which was subsequently changed to April 12, 2000 in Addendum 4. LSW Engineers established the initial project estimate as \$1,700,000. There were five (5) addendums issued prior to bid. Seven (7) bids were received ranging from \$1,795,000 to \$2,997,200. Because John Carey Construction received a 5% Small Business advantage, their bid was accepted in the amount of \$1,807,203 rather than the low bid in the amount of \$1,795,000. A construction agreement was executed on June 23, 2000.

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Additional findings related to this work include:

- The Notice to Proceed was dated July 19, 2000, with a start date of July 24, 2000.
- The original construction period was to cover a period of 300 calendar days.
- Liquidated damages were stated to be \$1,000 per day.
- Original completion was established as May 19, 2001.
- A 111-day time extension was granted in settlement Change Order 14.
- Notice of Completion was recorded as September 7, 2001, 111 days later than the revised completion date.

Recommendation:

None

CONTRACTOR COMPLIANCE - SUBCONTRACTING PRACTICES

Bid Package II – Buildings 26/27 and 37

The "List of Proposed Subcontractors" (CM Form 701.04) identified 23 trade divisions and corresponding subcontractors. The "Expanded List of Subcontractors" (CM Form 701.04 A) identified the same trade divisions.

The following substitutions were appropriately processed and approved:

- Mountain Movers for Excavating Engineers (name error only)
- Rossi for T. B. Penick Concrete
- Morley Construction for DNS (building concrete)

As part of the bid process review, Swinerton provided the original bid files. In most cases, and with all major trade work, the Contractor obtained multiple bids. The following trade bids were examined in detail:

- **Lath & Plaster:** Seven (7) bids were received. Only two (2) bids included the same specification sections and were the most inclusive. Of the two, the low bidder, Advanced Systems, was awarded a subcontract in the amount of \$2,411,200.
- **Earthwork:** Five (5) bids were received ranging from \$165,000 to \$225,000. A subcontract was issued to the low bidder, Mountain Movers, in the amount of \$165,000.
- **Site Utilities:** Three (3) bids were received in amounts between \$146,714 and \$286,550. The low bidder was ultimately substituted with Burtech for a subcontract amount of \$192,000.
- **Glass & Glazing:** Three (3) bids were received in amount ranging from \$263,125 to \$319,366. Swinerton issued the subcontract to LaMesa Glass in the amount of \$263,125.
- **Lab Fixtures:** Four (4) bids were received that ranged from \$722,000 to \$851,650 exclusive of alternates. The low bidder, Dow, received a subcontract in the amount of \$1,007,467 (\$722,000 plus \$285,467 for accepted alternates).

Recommendation:

None

Bid Package III – Central Plant

John Carey Construction submitted a "List of Proposed Subcontractors" and an "Expanded List of Subcontractors" that included the same ten (10) subcontractors and trades. We found that the listed masonry subcontractor was identified as Professional

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Masonry. New Dimension Masonry was actually awarded the subcontract in the amount of \$46,880, which exceeded ½ of 1% of Carey's contract. We were unable to locate the request for substitution or the University's approval to substitute.

Recommendation:

3. The University should determine whether or not subletting practices were compromised on the project and whether John Carey Construction should be assessed penalties as provided in Public Code Section 4100.

Campus Response:

3. The University will coordinate with Capital Planning, Design and Construction to determine if John Carey Construction should be assessed penalties as provided in Public Code Section 4100. The University will provide the results of this assessment to the Office of the University Auditor by way of memorandum by November 1, 2003.

CONSTRUCTION CHANGE ORDERS

Bid Package II – Buildings 26/27 and 37

Over 360 Change Order Requests (CORs) were incorporated into 32 Change Orders. Changes totaled \$1,839,322 adding 8.42% to the original contract amount of \$22,188,007. The majority of changes, 56%, were attributable to University directed changes. The largest change was the addition of a theater-rigging package in Building 26 and dimming system equipment for studios and rehearsal and lecture halls. These additional costs were funded from Group I and Group II budgets. Normally, Group II is funded from a separate allocation and is procured outside the construction budget.

Recommendation:

4. The University should determine whether transferring Group II funds into the construction budget for change order costs circumvented Public Works bidding requirements.

Campus Response:

4. The University is reviewing its records to determine if transferring Group II funds into the construction budget for change order costs circumvented Public Works bidding requirements. The University will seek input from Capital Planning, Design and Construction during its analysis. The University will provide the results of this analysis to the Office of the University Auditor by way of memorandum by November 1, 2003.

As part of our review process we sampled change orders and traced subcontractor estimates to the actual subcontractor change orders. Swinerton furnished all subcontractor files and provided a “Commitment Change Order Status Report” that reflected each subcontract and change orders issued against them. KPMG reviewed approximately 65% of the total changes.

KPMG found Swinerton’s records were accurate, and we were able to trace all sampled subcontractor quotes/backup included with University change orders to the applicable subcontract change orders.

Labor Fringe & Burden

Swinerton & Walberg included minimal labor costs on change orders. Less than 3% of labor costs were charged on the change orders included in our sample. However, as a result of our request, they provided a labor rate analysis. On prevailing wage rates, Swinerton charged 9.09% and 9.60% for payroll taxes, which is well within industry standards.

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Change Order Report Analysis

PDC (Campus) provided a log categorizing change orders by source. The following table summarizes their report:

Type of Change	C.O. Totals	% of CO	% of Contract
4.1 Errors/Omissions from the Contract Documents	726,548	38.87%	3.27%
4.2 Unforeseeable job site conditions	54,435	2.91%	0.25%
4.3 Regulatory agency, bldg. code, safety, health	-	0.00%	0.00%
4.4 Originated by the University	1,052,689	56.31%	4.74%
4.5 Unavailability of specified materials	4,188	0.22%	0.02%
4.6 Other	31,462	1.68%	0.14%
Total Change Orders	1,869,322	100.00%	8.42%
Original Contract Amount	22,188,007		
Total	24,057,329		

Recommendation:

- On future project analysis, the University should not code changes to the 4.6 “Other” category. This classification is not allowed on reports to the Board of Trustees and, as suggested in the Project Administration Reference Manual Paragraph 4.03.a (4), its usage should be avoided.

Campus Response:

- On any future project analyses, the University will not code changes to the 4.6 “Other” category. The University recommends that if the intent is to not use this category in reports to the Board of Trustees, the category should be removed from the reporting form. Planning Design and Construction at Cal State San Marcos will develop a department policy to provide reasonable assurance that no future code changes to the 4.6 “Other” category will take place.

Bid Package III – Central Plant

Approximately 75 Change Proposals (CPs) were incorporated into 14 Change Orders. Changes totaled \$305,736 adding 16.92% to the original contract amount of \$1,807,203.

Changes due to A/E errors and omissions totaled \$196,440, or 10.87% of the total contract amount, which is significantly higher than the industry standard of approximately 3% to 4%.

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Recommendation:

6. The University should work with CPDC (Chancellor’s Office) to determine whether to pursue compensation for costs due to A/E errors and omissions by applying the analysis included in SUAM Section 9236.

Campus Response:

6. The University will coordinate with Capital Planning, Design and Construction to determine whether to pursue compensation for costs due to A/E errors and omissions by applying the analysis included in SUAM 9236. The University will provide the results of this analysis and any possible actions to the Office of the University Auditor by way of memorandum by November 15, 2003.

As part of our review process we sampled change orders and traced subcontractor estimates to the actual subcontractor change orders. John Carey provided subcontractor reports that reflected each subcontract and the change orders issued against them. KPMG reviewed approximately 62% of the total changes, beyond of the global settlement included in CO No. 14. We were able to trace all sampled subcontractor quotes/backup included with University change orders to the applicable subcontract change orders.

PDC (Campus) provided a log categorizing change orders by source. The following table summarizes their report:

Type of Change	C.O. Totals	% of CO	% of Contract
4.1 Errors/Omissions from the Contract Documents	\$196,440	64.25%	10.87%
4.2 Unforeseeable job site conditions	26,665	8.72%	1.48%
4.3 Regulatory agency, bldg. code, safety, health	-	0.00%	0.00%
4.4 Originated by the University	82,917	27.12%	4.59%
4.5 Unavailability of specified materials	(286)	-0.09%	-0.02%
Total Change Orders	\$305,736	100.00%	16.92%
Original Contract Amount	1,807,203		
Total	\$2,112,939		

Recommendation:

None

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PROJECT MANAGEMENT/INSPECTION SERVICES

CSUSM hired TSC Consultants to provide Inspector of Record (IOR) services. PDC (Campus) provided documentation that supported their selection of TSC, based upon the fact that TSC had been the IOR for the first Building included in the Academic I Project - University Hall, Building 15, completed in the fall of 1998. KPMG finds it reasonable that continuity be maintained for these services.

The University provided in-house project management assistant services for the project based on wages and benefits. The University subsequently engaged services from other firms to supplement the IOR and in-house staff, which would typically be provided from a comprehensive project management firm on a project of this size. For purposes of analyzing total project management and IOR costs, we have included these additional amounts. All costs are as follows:

TSC Consultants - Inspector of Record				
Bid Package II and III		Approved	Amt. Paid	Balance
Contract	17-Mar-99	\$262,800	\$262,800	-
Amendment 1	11-Feb-02	45,000	40,362	4,638
ESA Letter 2	8-Jul-02	3,500	3,500	-
Expenses			727	(727)
Totals		\$ 311,300	\$ 307,389	\$3,911
Pinnacle One - Constructability Review				
Bid Package II		Approved	Amt. Paid	Balance
Purchase Order	18-Jun-99	5,495	5,495	-
Amendment 1	26-Jul-99	25,140	20,432	4,708
Totals		\$ 30,635	\$ 25,927	\$ 4,708
Pinnacle One – Schedule Review/Updates				
Bid Package II		Approved	Amt. Paid	Balance
Purchase Order	2-Dec-99	92,000	30,440	61,560
Purchase Order Expenses		500	55	445
Totals		\$ 92,500	\$ 30,495	\$ 62,005
PDC Asst. PM			Amt. Paid	
In-house Staff			\$ 106,574	
GEM Eng. - Constructability Central Plant			Amt. Paid	
Original Agreement		\$ 9,000	\$ 7,140	\$ 1,860
Total Construction Management Costs			\$ 477,525	

Total management costs were \$477,525, representing 1.79% of the total project construction costs for the three contracts in the amount of \$26,673,775. Swinerton was paid \$23,971,372, Douglas Barnhart was paid \$589,464, and John Carey \$2,112,939. This percentage is marginally lower than the average of 2.5% to 3.5%.

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Although remaining balances were disencumbered, contract adjustments should be executed to formally close out the agreement.

Recommendation:

7. When additional service authorizations or not-to-exceed agreements are issued, and it is later determined that the not-to-exceed prices are not billed to the maximum, a deductive change should be issued to close out the amendment. (Guidelines related to this issue have been added to SUAM. Refer to SUAM section 9786.03.)

Campus Response:

7. In accordance with SUAM 9786.03, a deductive change order will be issued to close out an amendment whenever additional service authorizations or not-to-exceed agreements are issued. This directive will be explicitly stated in the University Planning, Design and Construction Manual by November 1, 2003.

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LIQUIDATED DAMAGES

Bid Package II – Buildings 26/27 and 37

With the exception of a few punch list items, HVAC concerns, and completion of minor work, Beneficial Occupancy of Building 37 occurred on July 11, 2002, as identified on Change Order 26. With the exception of nine (9) rooms, the University took Beneficial Occupancy of Buildings 26/27 on August 6, 2002, as identified in Change Order No. 28. The nine rooms excluded on this change order involved the remaining finish carpentry and painting work for the Rehearsal Hall. The University took Beneficial Occupancy of the Rehearsal Hall on February 18, 2003 as documented in Change Order No. 31.

The following changes describe the circumstances and extensions relating to the project:

	Original Completion Date		March 17, 2002
CO No. 2	Color concrete changes	5-day time extension	March 22, 2002
CO No. 11	Delays through 2/6/01	24-day time extension	April 15, 2002
CO No. 18	Door frame/hardware/exterior skin system	10-day time extension	April 25, 2002
CO No. 27	Late submittals	10-day time extension	May 5, 2002
CO No. 29	Top beam gridline 13	15-day time extension	May 20, 2002
CO No. 29	Building gridline 13 structural design	32-day time extension	June 21, 2002
CO No. 29	Rehearsal hall addition	225-day time extension	February 1, 2003
CO No. 32	Planning/programming for scheduling and materials lead time	70-day time extension	April 11, 2003

The University filed a Notice of Completion for Bid Package II on August 6, 2002, that took exception to roofing installation, HVAC work, exterior plaster and the Rehearsal Hall as described in Beneficial Change Orders Nos. 26 and 28. Once the Rehearsal Hall and HVAC work was completed, a final Notice of Completion was filed as of April 11, 2003. It is unusual to file multiple Notices of Completion and was most likely unnecessary.

Recommendation:

8. On future projects, the University should typically only file one Notice of Completion as explained in SUAM. Occupancies prior to completion were documented in change orders as required.

Campus Response:

8. On future projects the University will issue only one Notice of Completion for the entire project. In this instance two Notices of Completion were issued: one for the substantial majority of the buildings with several exceptions and a second for the completion of a single theater located in one of the buildings. Planning Design and Construction at Cal State San Marcos will develop a

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department policy to provide reasonable assurance that no future instances of issuing more than one Notice of Completion will take place.

Bid Package I – Sitework

Original completion was established as November 11, 1999. A 7-day time extension was granted on Change Order 1, revising the completion date to November 18, 1999. Notice of Completion was recorded as January 5, 2000, 48 days later than the revised completion date. Change Order No. 2 allowed for a 47-day non-compensable time extension (one-day difference) revising the completion date to January 5, 2000. This extension was to allow the Contractor time to complete punch list items and waived their rights to any claims. Since the extension was to provide for completion of punch list corrections, assessment of liquidated damages was not warranted.

Bid Package III – Central Plant

The Central Plant project's original completion date was May 19, 2001. Notice of Completion was recorded as September 7, 2001, 111 days later than the revised completion date. A 111-day time extension was granted on the final Change Order No. 14 that settled all claims and revised the completion date to September 7, 2001. John Carey Construction claimed time extensions and compensation for delays caused during construction at no fault of the contractor and presented the University with \$306,211 in additional costs. Representatives from the Chancellor's Office, the IOR and campus personnel settled these costs for \$194,996, an amount that was \$111,215 less than claimed by the Contractor. If it had been the position of the University that the delays were due to Contractor performance, the University would have been entitled to \$111,000 in liquidated damages (\$1,000 x 111 days). It is our position that the University negotiated in the best interest of the Trustees.

Recommendation:

None

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MAJOR EQUIPMENT REVIEW

The initial review of Contract Documents and Specifications was performed at the University. KPMG was furnished a submittal log from which we selected our sample. Submittal records were provided and reviewed at the campus.

Of the submittals reviewed, all were traced from Project Specifications to submittal data and final acceptance. A project walk-through was conducted with a representative from campus personnel in order to verify that specified and approved equipment had been provided and installed by Swinerton & Walberg on Bid Package II.

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

Div. #	Brand	Model #	Description
15440	Grundfos	CRN8 - 50G	Series C Multistage Centrifugal Pump
15540	Bell & Gossett	3E Series 1510	Centrifugal Pump - Base Mounted
15540	Bell & Gossett	2E Series 1510	Centrifugal Pump - Base Mounted
15555	Amtrol, Inc.	Therm-x-trol ST – 12	Domestic Water Heater
15555	Lochinvar	HSX27120	Standard Hi-power Electric Water Heater
16200	Kohler	800ROZD4	Diesel Generator
16200	Kohler	800RODZ-4	4 Cycle Diesel Generator
16410	Square D	500T90HFISNLP	Low Voltage Transformer
16410	Square D	30T3H	Low Voltage Transformer

Recommendation:

None

**KPMG Construction Cost Review
CSU San Marcos – SM360-2
Academic Complex Phase II**

ACCOUNTING

KPMG conducted a review of the University's cost accounting reporting system and invoice processing practices. The reporting system is maintained in Planning Design & Construction independently of the accounting and procurement departments, requiring PDC to enter all invoice information in spreadsheets - even though the University accounting department also enters all invoices into the central accounting system. CSUSM does regularly reconcile budget and expenditures to the financial accounting system.

We have found the practices for tracking project costs at CSU San Marcos consistent with what KPMG has found at other campuses. KPMG continues to encounter duplicative efforts in Capital Outlay accounting practices. In prior reviews, we have recommended that the Chancellor's Office research the implementation of system-wide reporting practice that interface with the financial software in use at campuses.

Recommendation:

None



Office of the Vice President, Finance and Administrative Services

*Stephen G. Garcia
Chief Financial Officer and Vice President*

*California State University San Marcos
San Marcos, California 92096-0001 USA*

*Tel: 760 750-4950; Fax: 760 750-4949
sgarcia@csusm.edu
www.csusm.edu*

Date: July 15, 2003

To: Larry Mandel
University Auditor

Jim Usher
Audit Manager

From: Stephen Garcia
Chief Financial Officer & Vice President
Finance and Administrative Services
Cal State San Marcos



Subject: Responses to Construction audit of Academic II, at California State University San Marcos

Attached are the campus responses to the construction audit of Academic II building at California State University San Marcos. If you have any further questions please feel free to contact Dean Manship by email at dmanship@csusm.edu or by phone at (760) 750-4503.

The California State University

Bakersfield • Channel Islands • Chico • Dominguez Hills • Fresno • Fullerton • Hayward • Humboldt • Long Beach • Los Angeles • Maritime Academy • Monterey Bay • Northridge • Pomona • Sacramento • San Bernardino • San Diego • San Francisco • San Jose • San Luis Obispo • San Marcos • Sonoma • Stanislaus



Following are the University's initial responses to the draft recommendations in the KPMG Construction Cost Review for California State University San Marcos (SM 360-2) Academic Complex Phase II.

1 Recommendation:

The University should utilize standard formats to authorize A/E Additional Services. Refer to SUAM section 9210 for specific instructions relating to additional services.

Response:

The University will draft and utilize a standard format for the authorization of A/E additional Services in accordance with SUAM 9210. The standard format will be completed and included in the University Planning, Design and Construction Manual by November 1, 2003

2. Recommendation:

When additional service authorizations are issued, and it is later determined that the not-to-exceed prices are not billed to the maximum, a deductive change should be issued to close out the amendment and disencumber the allotted funds. (Guidelines related to this issue have been added to SUAM. Refer to SUAM section 9786.03.)

Response:

The University will explicitly state in its procedures that a deductive change should be issued to close out an amendment and disencumber allotted funds when not-to-exceed prices are not billed to the maximum per SUAM 9786.03. This procedure will be coordinated with Procurement and implemented by November 1, 2003. If appropriate, the procedure will be included in the University Planning, Design and Construction Manual.

3. Recommendation:

The University should determine whether or not subletting practices were compromised on the project and whether John Carey Construction should be assessed penalties as provided in Public Code Section 4100.

Response:

The University will coordinate with Capital Planning, Design and Construction to determine if John Carey Construction should be assessed penalties as provided in Public Code Section 4100. The University will provide the results of this assessment to the Office of the University Auditor by way of memorandum by November 1, 2003.

4. Recommendation:

The University should determine whether transferring Group II funds into the construction budget for change order costs circumvented Public Works bidding requirements.

Response:

The University is reviewing its records to determine if transferring Group II funds into the construction budget for change order costs circumvented Public Works bidding requirements. The University will seek input from Capital Planning, Design and Construction during its analysis. The University will provide the results of this analysis to the Office of the University Auditor by way of memorandum by November 1, 2003.

5. Recommendation:

On future project analysis, the University should not code changes to the 4.6 "Other" category. This classification is not allowed on reports to the Board of Trustees and, as suggested in the Project Administration Reference Manual Paragraph 4.03.a (4), its usage should be avoided.

Response:

On any future project analyses, the University will not code changes to the 4.6 "Other" category. The University recommends that if the intent is to not use this category in reports to the Board of Trustees, the category should be removed from the reporting form. Planning Design and Construction at Cal State San Marcos will develop a department policy to provide reasonable assurance that no future code changes to the 4.6 "Other" category will take place.

6. Recommendation:

The University should work with CPDC (Chancellor's Office) to determine whether to pursue compensation for costs due to A/E errors and omissions by applying the analysis included in SUAM Section 9236.

Response:

The University will coordinate with Capital Planning, Design and Construction to determine whether to pursue compensation for costs due to A/E errors and omissions by applying the analysis included in SUAM 9236. The University will provide the results of this analysis and any possible actions to the Office of the University Auditor by way of memorandum by November 15, 2003.

7. **Recommendation:**
When additional service authorizations or not-to-exceed agreements are issued, and it is later determined that the not-to-exceed prices are not billed to the maximum, a deductive change should be issued to close out the amendment. (Guidelines related to this issue have been added to SUAM. Refer to SUAM section 9786.03.)

Response:

In accordance with SUAM 9786.03, a deductive change order will be issued to close out an amendment whenever additional service authorizations or not-to-exceed agreements are issued. This directive will be explicitly stated in the University Planning, design and Construction Manual by November 1, 2003.

8. **Recommendation:**
On future projects, the University should typically only file one Notice of Completion as explained in SUAM. Occupancies prior to completion were documented in change orders as required.

Response:

On future projects the University will issue only one Notice of Completion for the entire project. In this instance two Notices of Completion were issued: one for the substantial majority of the buildings with several exceptions and a second for the completion of a single theater located in one of the buildings. Planning Design and Construction at Cal State San Marcos will develop a department policy to provide reasonable assurance that no future instances of issuing more than one Notice of Completion will take place.

If you have any questions or comments regarding these draft responses to the audit's recommendations, please contact Dean Manship at (760) 750-4503 or by email at dmanship@csusm.edu.

THE CALIFORNIA STATE UNIVERSITY
OFFICE OF THE CHANCELLOR

BAKERSFIELD

CHANNEL ISLANDS

July 28, 2003

CHICO

MEMORANDUM

DOMINGUEZ HILLS

FRESNO

TO: Mr. Larry Mandel
University Auditor

FULLERTON

HAYWARD

FROM: Charles B. Reed
Chancellor

HUMBOLDT

SUBJECT: KPMG Draft Final Report on the *Academic Complex Phase II* (Project No. SM360-2) at California State University, San Marcos

LONG BEACH

LOS ANGELES

In response to your memorandum of July 28, 2003, I accept the response as submitted with the draft final report on the *Academic Complex Phase II* project at California State University, San Marcos.

MARITIME ACADEMY

MONTEREY BAY

CBR/bh

NORTHRIDGE

Enclosure

POMONA

cc: J. Patrick Drohan, Assistant Vice Chancellor, CSU CPDC
Stephen G. Garcia, Vice President, Finance and Administrative Services
Roy McTarnaghan, Interim President

SACRAMENTO

SAN BERNARDINO

SAN DIEGO

SAN FRANCISCO

SAN JOSE

SAN LUIS OBISPO

SAN MARCOS

SONOMA

STANISLAUS