

**SAN DIEGO STATE UNIVERSITY**  
**SOCIAL SCIENCES/PARKING STRUCTURE 8**

Final Report

May 29, 2007

**CONSTRUCTION PROJECT EVALUATION**  
**SAN DIEGO STATE UNIVERSITY**  
**SOCIAL SCIENCES/PARKING STRUCTURE 8**

May 29, 2007

*Prepared by:*



*KPMG LLP*  
801 Second Avenue, Suite 900  
Seattle, WA 98104

*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 Social Sciences/Parking Structure 8 at SDSU 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 SDSU 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.

	<b>Observation</b>	<b>Risk</b>	<b>Recommendation</b>
1.	Schematic design work was performed and paid prior to the formal execution of a written contractual agreement with the Architect.	Allowing work to be performed and paid prior to a written contractual agreement exposes the SDSU to unnecessary contractual risks.	Contractual agreements should be fully executed and effective prior to any work being performed on a project. In addition, sufficient controls should be created and implemented to ensure invoices are not paid prior to the formal execution of a contract.  (Ownership: SDSU)
2.	Detail support for change orders was at times missing or limited.	SDSU may be at risk of overpaying for change order work if detailed quotes and supporting cost documentation is missing, limited, or not thoroughly evaluated.	In the future, supporting documentation should be included with each executed change order sufficient enough that a third party can determine the basis and justification for the agreed upon change.  (Ownership: SDSU)
3.	Work was performed and invoiced in excess of the contracted amount and prior to the execution of an amendment.	If a vendor is allowed to perform work in excess of its contractual amount, disagreements over scope and fees with the vendor may occur.	On future projects, SDSU should proactively monitor the amount of funds remaining on a contract and promptly issue amendments as necessary.  (Ownership: SDSU)
4.	Hourly rates invoiced and paid for inspection services vary from contractual hourly rates agreed to in the contractual agreement.	SDSU runs the risk of incurring overpayments when hourly rates billed differ from contractual hourly rates.	In the future, SDSU should review invoices to ensure they are submitted in accordance with contractual terms and conditions. In addition, SDSU should determine whether any adjustment to the J.B. Consulting payments is warranted.  (Ownership: SDSU)

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EXECUTIVE SUMMARY

	<b>Observation</b>	<b>Risk</b>	<b>Recommendation</b>
5.	Project close-out was not performed in a diligent manner.	Costs are still being incurred and SDSU is at risk for potential claims due to the late completion of project close-out.	SDSU should resolve close-out issues in a more expeditious manner.  (Ownership: SDSU)
6.	Time extensions were not negotiated on a contemporaneous basis as they occurred.	Late resolution of time extensions may undermine SDSU'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, SDSU should ensure prompt resolution of time extensions as delays occur.  (Ownership: SDSU)

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## **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 San Diego State University’s (“SDSU”) Social Sciences/Parking Structure 8 (“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 practices.

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 prior years, we also included additional items that we believe may provide benefit to CSU. KPMG identified specific areas within the scope listed below that present the potential for substantive loss or liability for SDSU’s Social Sciences/Parking Structure 8 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 and Inspection Services
- Major Equipment and 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, in our opinion. 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.

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## PROJECT BACKGROUND

The SDSU Social Sciences/Parking Structure 8 Project (“the Project”) included design and construction of a multi-level building including faculty office space, a large capacity lecture hall and classrooms as well as a detached multi-level parking structure. The Project also included site development, site utilities, sidewalks, roadways, lighting, and landscaping.

During the week of March 12, 2007, KPMG conducted fieldwork at the SDSU campus, and reviewed records from the following entities involved with the Project:

Design-Build Contractor	Douglas E. Barnhart, Inc.
Schematic Design Architect	Delawie Wilkes Rodrigues Barker
Design-Build Architect (retained by Contractor)	HMC Architects
Construction Management	O’ Connor Construction Management , Inc.
Inspector of Record	J. B. Consulting & Associates, Inc.
Project Management and Administration	SDSU’s Facilities Planning, Design & Construction Department

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-build, lump sum contract delivery methodology.

### Timeline

The original request for proposal (“RFP”) for the Project limited cost to a maximum of \$23,000,000. Although four contractors submitted bids, all bidders were declared non-responsive due to failure to meet the cost limitation or failing to meet programmatic intent. The RFP was revised on October 30, 2003 in accordance with Trustee policy and new bids were received and opened on December 2, 2003. Douglas E. Barnhart (“Barnhart”) was the successful bidder awarded the contract. Construction began on June 1, 2006 with the issuance of the Notice to Proceed.

A Certificate of Occupancy was issued for the Project on June 9, 2006 noting one outstanding deficiency in the parking structure. Upon correction of the deficiency, an unconditional Certificate of Occupancy was issued for Parking Structure 8 on July 7, 2006. A Notice of Completion was issued December 7, 2006. As-built drawings, final testing and approval of the HVAC system were noted on the Notice of Completion as exceptions, and had not been remedied as of the end of KPMG’s fieldwork.

## Project Costs

The Project was initially approved in November 2003 by the Board of Trustees in the amount of \$28,853,000, excluding Group II Equipment based on a per square footage cost as developed from the California Construction Cost Index for the building and parking structure costs. It was anticipated 88% of the financing for the Project would come from the sale of General Obligation bonds and the remaining 12% from parking reserves. Non-state parking revenues were to be used for the parking structure. Group II Equipment (major movable campus furnished equipment) was subsequently approved by the Board in September 2004.

At the time of KPMG's fieldwork SDSU had incurred \$29,461,338 in costs on the Project and had commitments in the amount of \$30,792,922. A summary of Project costs is as follows:

Description	Budget (2-7)	Commitments	Actual	Variance (Budget - Commitments)
Construction	\$ 24,198,000	\$ 25,091,200	\$ 23,811,848	\$ (893,200)
Architect and Engineering	1,561,000	584,950	584,950	976,050
Contract Management	1,694,000	2,189,171	2,188,991	(495,171)
Contingency	1,210,000			1,210,000
Required Additional Services	190,000	88,790	88,790	101,210
<b>Subtotal</b>	<b>\$ 28,853,000</b>	<b>\$ 27,954,111</b>	<b>\$ 26,674,579</b>	<b>\$ 898,889</b>
Group II Equipment (subsequent approval on 9/04)	3,324,000	2,838,811	2,786,759	485,189
<b>Subtotal</b>	<b>\$ 32,177,000</b>	<b>\$ 30,792,922</b>	<b>\$ 29,461,338</b>	<b>\$ 1,384,078</b>

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## **DESIGN COSTS**

A standard Project Architect/Engineering Agreement for schematic design was executed between SDSU and Delawie Wilkes Rodrigues Barker (“Delawie”) on December 19, 2003 in the amount of \$578,000. The services with Delawie were limited to design prior to the execution of the design-build agreement.

Once the Project was bid using a design-build methodology, HMC Architects (“HMC”) became the primary architect working with Barnhart, the design-build contractor. Barnhart was solely responsible for the contract with HMC, and neither CPDC nor SDSU had a direct contractual relationship with HMC.

The original agreement between SDSU and Delawie was effective as of July 30, 2003, but debate over contract language delayed formal execution of the agreement until counsel signed the agreement on December 19, 2003.

The SDSU accounting system shows five invoices in the amount of \$584,458 submitted and three invoices in the amount of \$515,000 paid prior to the formal execution date of the agreement. One of these invoices, in the amount of \$148,500, was dated prior to the effective date of the agreement. An additional two invoices, in the amount of \$69,950, were invoiced but not paid prior to the execution of the agreement.

### ***Observation:***

Schematic design work was performed and paid prior to the formal execution of a written contractual agreement with the Architect.

### ***Risk:***

Allowing work to be performed and paid prior to a written contractual agreement exposes the SDSU to unnecessary contractual risks.

### ***Recommendation:***

1. Contractual agreements should be fully executed and effective prior to any work being performed on a project. In addition, sufficient controls should be created and implemented to ensure invoices are not paid prior to the formal execution of a contract.

(Ownership: SDSU)

### ***Campus Response:***

1. We concur. In the future, SDSU will ensure that invoices are not paid prior to the formal execution of a contract.

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## **CONSTRUCTION BID PROCESS**

In October 2003, four bidders submitted bids as a response to the original design-bid RFP which limited the project costs to a maximum of \$23,000,000. All four bids were declared non-responsive due to failure to meet the cost limitation or failing to meet programmatic intent. The short listed bidders were provided notice of the failed bid attempt and SDSU began revising the RFP.

The revised RFP was made available on October 30, 2003. It increased the project budget to \$23,750,000 and modified certain design criteria. Seven addenda were subsequently issued which answered questions, revised specifications and drawings, and revised forms for submission. An optional pre-proposal conference and site visit was held on November 11, 2003 and was attended by representatives of eleven different companies.

Technical and cost proposals were received from Highland Partnership, Inc., Sundt Construction, Inc., Barnhart, C. E. Wylie Construction Company, and Clark Design/Build of California, Inc. on December 4, 2003. After the technical proposals were received, the evaluation committee conducted an evaluation and determined each bidder's quality points. The cost proposals were publicly opened and an announcement was made regarding the awarded quality points for each bidder.

A calculation was performed in accordance with criteria stated in the Trustee design-build procurement policy to establish the cost per unit of quality for each bidder. A ranking was performed Barnhart was declared the successful bidder receiving 122 quality points, proposing a base bid of \$23,749,618, which calculated to \$194,334 per quality point ranking. The second closest bidder had a \$197,094 per quality point ranking.

Barnhart was awarded the contract, and construction began on June 1, 2006 with the issuance of the Notice to Proceed.

### **Subcontractor Compliance**

Per the contract General Conditions section 32.05-(b) subcontractors who perform work in excess of 'one-half of one percent' of the bid amount must be added to the Expanded List of Subcontractors and submitted to the Trustees subsequent to selection. During a design-build project, the design-builder is expected to submit the names of the subcontractors to CSU as the trades are bid and the subcontractors become known.

Barnhart submitted three Expanded Lists of Subcontractors to SDSU. In addition, one informal list of subcontractors with the name and pertinent contact information for each subcontractor was submitted.

KPMG found nine subcontractors with initial subcontracts valued in excess of one-half of one percent of the bid who were not listed on any of the Expanded Lists of Subcontractors. Seven of these subcontractors were found on the informal list submitted to SDSU, however the informal list was dated after a substantial amount of subcontractor work had already been performed.

It is required by SUAM 9822 that the campus monitor the larger trades on the projects to ensure the subcontractors have been appropriately included on the Expanded Lists of Subcontractors and as required by the Subletting and Subcontracting Fair Practices Act (Public Code Section 4100).

Subsequent to fieldwork, an updated version of the subcontractor listing was obtained from SDSU, which listed the subcontractors as would be expected.

Inquiry of SDSU and Barnhart as well as comparison of the list of subcontractors to Barnhart's actual cost records revealed no evidence of inappropriate subcontractor substitution on the Project.

***Recommendation:***

None

## CONSTRUCTION CHANGE ORDERS

At the time of KPMG’s fieldwork, 13 change orders had been executed on the Project for a total amount of \$1,314,923, increasing the total contract value from \$23,749,618 to \$25,064,541. The following table summarizes Project change orders:

Change Order	Description	Date	Amount
1	Added HVAC zones, sewer leak investigation, door frames	1/6/2005	\$ 98,120
2	Access control security, foundry area scope improvements	1/6/2005	88,046
3	Canyon drain & cutoff wall, parking structure lighting, steam vault shoring	3/17/2005	81,733
4	W-Lot intersection, permit dispenser & environmental inspection credits	6/28/2005	3,574
5	Redesign PS8 foundation, wood veneer doors, waterline replacement	10/12/2005	367,947
6	Window coverings, enlarge steam vault, drainage inlet, storm drain line	2/2/2006	259,021
7	Fire lane between PS8 and tower building	3/9/2006	110,115
8	Water seepage at auditorium elevator, interior storefront, extend tile	6/6/2006	88,892
9	Beneficial occupancy	10/16/2006	-
10	Tensar fabric, irrigation controller, deepen footing at PS8 / waterline	9/21/2006	66,902
11	Additional street improvements, batt insulation at Dean's suite	11/8/2006	97,403
12	Final settlement change order	12/1/2006	53,170
13	Full settlement of all claims	12/12/2006	-
<b>Totals</b>			<b>\$ 1,314,923</b>

The levels of signature authority required for contract change orders as found in the SDSU Certification Proposal and Operational Plan for the Delegation of Capital Outlay Authority (“Delegation Authority”) are as follows:

Position	Up to	Notes
Facilities Planning and Management Project Support Level Program Managers	\$ 20,000	Individual or aggregate
Senior Level Facilities Planning and Management Project Managers (Project Architects)	\$ 50,000	Individual or aggregate
Director of Facilities Planning and Management	\$ 150,000	Must sign all involving scope change
VP of Business and Financial Affairs (or designee)	Above \$150,000	Individual or aggregate

We compared the signatures on the 13 change orders to required signatures per the Delegation of Authority, and noted two discrepancies. First, SDSU determined the level of signature authority required based on the aggregate amount of changes included with Change Order No. 4 instead of the absolute amount of each individual change. Second, Change Order No. 6 in the amount of \$259,021 was not signed by the Vice President of Business and Financial Affairs, as required, and KPMG found no evidence of a designee. However, this was a one time occurrence, and was not indicative of systemic non-compliance.

KPMG performed additional detailed testing on ten selectively sampled change order line items. On these ten sampled line items, KPMG observed some minor discrepancies in calculation for mark-up, however these discrepancies were insignificant in value.

KPMG traced the supporting documentation for the contractor and the various subcontractors to Change Order Requests (“COR’s”) for the ten sampled change order line items. KPMG found instances where change order amounts were not consistently supported. Documentation included with the change order provided an amount different from the final change order value. Negotiations took place, but it was not always possible to determine how and why the final amount was agreed to.

***Observation:***

Detail support for change orders was at times missing or limited.

***Risk:***

SDSU may be at risk of overpaying for change order work if detailed quotes and supporting cost documentation is missing, limited, or not thoroughly evaluated.

***Recommendation:***

2. In the future, supporting documentation should be included with each executed change order sufficient enough that a third party can determine the basis and justification for the agreed upon change.

(Ownership: SDSU)

***Campus Response:***

2. We concur. In the future, SDSU will provide additional documentation supporting the basis and justification for changes on future projects.

**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 errors and omissions insurance shall be secured and maintained in an amount no less than \$1,000,000 per occurrence.

SDSU provided a change order log that reflected the initiating source of each change order. The following table summarizes the data:

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CONSTRUCTION CHANGE ORDERS

Class	Type of Change	Amount	% of Total CO	% of Original Contract
4.1	Error in or omission from the contract documents	\$ 125,297	9.5%	0.5%
4.2	Unforeseeable job site condition	391,760	29.8%	1.6%
4.3	Change in the requirements of a regulatory agency	110,115	8.4%	0.5%
4.4	Change originated by the University	687,751	52.3%	2.9%
4.5	Changes in specified work due to the unavailability of specified materials	-	0.0%	0.0%
4.6	Other	-	0.0%	0.0%
<b>Total Change Orders</b>		<b>\$ 1,314,923</b>	100.0%	5.5%
Original Contract Amount		\$ 23,749,618		
<b>Total</b>		<b>\$ 25,064,541</b>		

Based on the provided information, change orders attributable to errors and omissions are calculated to be 0.5% of the original contract amount which is less 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 \$125,297.

***Recommendation:***

None

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## CONSTRUCTION MANAGEMENT SERVICES

O'Connor Construction Management ("O'Connor") entered into a standard CSU Service Agreement with SDSU on March 11, 2004 to provide construction management services for the Project. The contract consists of a not to exceed base contract agreement in the amount of \$350,680 and two smaller amendments bringing the total contract value to \$362,485. The contractual obligations are summarized in the table below:

<b>Contract</b>	<b>Date of Execution</b>	<b>Total related to the Project</b>
Base contract	4/20/2004	\$ 350,680
Amendment 1 - Add hours for closeout	8/31/2006	5,385
Amendment 2 - Add more hours for closeout	10/5/2006	6,420
<b>Services related to the Project</b>		<b>\$ 362,485</b>

KPMG performed testing on the O'Connor invoices and found the invoices to be in compliance with contracted rates and contained proper approval signatures for payment. However, invoice No. 28 and invoice No. 29 dated August 31, 2006 exceed the \$350,680 and indicate work was performed in excess of the contracted amount prior to the execution of an amendment.

***Observation:***

Work was performed and invoiced in excess of the contracted amount and prior to the execution of an amendment.

***Risk:***

If a vendor is allowed to perform work in excess of its contractual amount, disagreements over scope and fees with the vendor may occur.

***Recommendation:***

3. On future projects, SDSU should proactively monitor the amount of funds remaining on a contract and promptly issue amendments as necessary.

(Ownership: SDSU)

***Campus Response:***

3. We concur. SDSU will strengthen its method of monitoring contracts to ensure amendments are added prior to the exhaustion of encumbrances.

## INSPECTION SERVICES

On April 2, 2004 J. B. Consulting and Associates, Inc. (“J.B. Consulting”) entered into a Service Agreement with SDSU to provide inspection services for the Project. The contract consists of a not-to-exceed base agreement in the amount of \$387,400 and two smaller amendments in the amount of \$38,243 bringing the total contract value to \$425,643. The contractual obligations are summarized in the table below:

Contract	Date of Execution	Amount
Base contract	4/2/2004	\$ 387,400
Extra Services Agreement #1 - Extension of Inspection Services	4/24/2006	34,123
Extra Services Agreement #2 - Extension of Inspection Services	7/13/2006	4,120
<b>Total</b>		<b>\$ 425,643</b>

The base agreement and the subsequent amendments specify an hourly rate of \$65 per hour. Starting with invoice number 20 and continuing through the end of the billings, the actual rate charged per hour varied. The invoices were subsequently paid as billed, and KPMG found no explanation for the variation in rates. The following table shows the cost variance between the amount billed and the price based on the contractual hourly rate:

Invoice	Hours charged	Amount Billed	Contracted Price	Variance
20	160	\$ 11,200	\$ 10,400	\$ 800
21A	16	1,117	1,040	77
21B	169	11,763	10,985	778
22	160	11,200	10,400	800
23	144	10,080	9,360	720
24	17	1,080	1,105	(25)
24B	55	3,600	3,575	25
<b>Total</b>	<b>721</b>	<b>\$ 50,040</b>	<b>\$ 46,865</b>	<b>\$ 3,175</b>

### *Observation:*

Hourly rates invoiced and paid for inspection services vary from the hourly rates agreed to in the contractual agreement.

### *Risk:*

SDSU runs the risk of incurring overpayments when hourly rates billed differ from contractual hourly rates.

***Recommendation:***

4. In the future, SDSU should review invoices to ensure they are submitted in accordance with contractual terms and conditions. In addition, SDSU should determine whether any adjustment to the J.B. Consulting payments is warranted.

(Ownership: SDSU)

***Campus Response:***

4. We concur. SDSU will continue to review invoices to ensure compliance with terms and conditions. In addition, a letter requesting reimbursement was sent to J.B. Consulting. The reimbursement was promptly received and credited back to the project account.

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## 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 fieldwork, consideration was given to equipment and materials located in occupied areas in order not to interrupt any student or faculty activities.

SDSU 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:

<b>Division</b>	<b>Drawing No.</b>	<b>Brand</b>	<b>Model No./ Capacity</b>	<b>Description</b>
15720	M1.2	McQuay	RAH077C	Roof top air handling unit
15720	M1.2	Goodman	PCK-048-3C	AC unit
14240	A7.10	Seville	3,500 lbs	Hydraulic elevator
09510	A7.2	custom configuration	various	Acoustical ceiling
12610	A7.2	custom manufactured	n/a	Auditorium seating
16200	E6.1	Cutler Hammer	600 Amp - 3 Phase	Electrical panel D3L
08800	A5.0	custom manufactured	North/South elevation	Aluminum curtain wall

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

***Recommendation:***

None

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## **CLOSE-OUT PROCESS**

A Certificate of Occupancy was issued for the Social Sciences Building on June 9, 2006 noting one outstanding deficiency in the parking structure. Upon correction of the deficiency, an unconditional Certificate of Occupancy was issued for Parking Structure 8 on July 7, 2006. A Notice of Completion was issued December 7, 2006 noting as-built drawings and final testing and approval of HVAC system as exceptions. As of the end of KPMG's fieldwork, these items had not been remedied and SDSU was still holding retainage.

KPMG verified the project close-out requirements established by the contract General Conditions and SUAM. The CSU standard close-out checklist was used to track close-out items. KPMG reviewed operation and maintenance manuals, warranties, punch list, operating permits, pre-final and final inspections and other relevant project close-out documentation. Nothing came to KPMG's attention indicating an issue with the close-out process aside from the difficulties in balancing the HVAC system.

As of May 29, 2007, six months after the Notice of Completion was issued, the close-out issue of balancing of the HVAC system remains outstanding. This is longer than what would be expected on a project of this size and complexity.

### ***Observation:***

Project close-out was not performed in a diligent manner.

### ***Risk:***

Costs are still being incurred and SDSU is at risk of potential claims due to the late completion of project close-out.

### ***Recommendation:***

5. SDSU should resolve close-out issues in a more expeditious manner.

(Ownership: SDSU)

### ***Campus Response:***

5. We concur. SDSU will improve efforts to close out projects in an expeditious manner. The project has been closed and a Notice of Completion filed.

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## LIQUIDATED DAMAGES

The Notice to Proceed to Barnhart establishes the original term of the contract as 600 days with work beginning on June 1, 2004 and to be completed on January 23, 2006.

Through change order process a total of 301 days were added to the Project extending the expected completion date to November 20, 2006.

SDSU took beneficial occupancy when the Certificates of Occupancy were issued for the Social Sciences Building and for Parking Structure 8 on June 9, 2006 and July 7, 2006 respectively. Both dates are prior to the contracted completion date. However, per the contract General Conditions section 39.01 the Notice of Completion establishes the official completion date related to liquidated damages.

The Notice of Completion was issued on December 7, 2006 which is 17 days after the contracted completion date. As such, liquidated damages could be contractually enforceable.

The contract agreement and the Notice to Proceed established the amount of liquidated damages at \$3,000 per day. Upon obtaining beneficial occupancy the Trustees can reduce the amount of damages charged per day by one half per contract General Conditions section 38.02 bringing the amount charged per day for liquidated damages to \$1,500. Multiplying this daily rated by the 17 days between the contracted completion date and the Notice of Completion we arrive at a total amount of \$25,500 in potential liquidated damages as shown in the following table:

<b>Document / Description</b>	<b>Date</b>
Notice to Proceed	
Contracted Begin Date	6/1/2004
Total Calendar days per contract	600
Contracted Completion Date	1/23/2006
Days added	301
Final Contracted Completion Date	11/20/2006
Notice of Completion	12/7/2006
Variance	17
Liquidated Damages (LD) daily rate	\$ 1,500
<b>Potential Liquidated Damages</b>	<b>\$ 25,500</b>

SDSU expressed no interest in pursuing liquidated damages, and has added 235 days to the final settlement change order as an accommodation to Barnhart.

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 SDSU's ability to reach a favorable agreement with the contractor at the end of the Project and is not a preferred industry practice.

***Recommendation:***

6. On future Projects, SDSU should endeavor prompt resolution of time extensions as delays occur.

(Ownership: SDSU)

***Campus Response:***

6. We concur. SDSU will improve its contractual process of analyzing delays during construction by issuing milestone change orders as recommended by CPDC. The University will also make greater efforts to issue time extensions contemporaneous with delays where practical.

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## ACCOUNTING

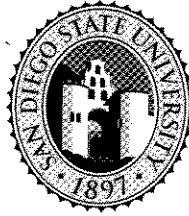
KPMG reviewed the accounting process on the Project. SDSU's Facilities Planning Design and Construction Office provided an Excel workbook which contained contractual obligations, encumbrances, payment information, and other project information. This workbook was not directly generated by the accounting system, but was a 'shadow' system the campus used to track project costs.

KPMG traced physical invoices and contractual obligations from the contractor, construction manager and the inspector of record to the entries in the workbook provided and found no errors.

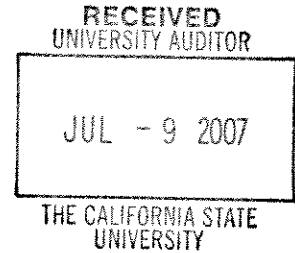
Implementation of this type of 'shadow' accounting is a common practice among CSU campuses and can be effective tool as long as it is reflective of the actual transactions posted into the main accounting system and reconciled on a regular basis. It is imperative to make sure all such accounting is reflective of the actual transactions posted into the main accounting system. KPMG reviewed documentation which demonstrated that reconciliation between the Excel spreadsheets and the main accounting system occurred.

***Recommendation:***

None



July 6, 2007



Mr. Larry Mandel  
University Auditor  
The California State University  
401 Golden Shore, 4<sup>th</sup> Floor  
Long Beach, CA 90802

Dear Mr. Mandel:

Attached is San Diego State University's response to the KPMG audit report on the Social Sciences/Parking Structure 8 construction project. For ease of reference, the report's recommendations have been included with our responses.

Should you have any questions or require additional information, please contact Valerie Carter, Audit and Tax Director, at 619-594-5901.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen L. Weber".  
Stephen L. Weber  
President

Attachment

- c: Sally F. Roush, Vice President for Business and Financial Affairs
- Scott Burns, Associate Vice President, Financial Operations
- Tony Fulton, Director, Facilities Planning, Design and Construction
- Valerie J. Carter, Audit and Tax Director

**CONSTRUCTION PROJECT EVALUATION**  
**SAN DIEGO STATE UNIVERSITY**  
**SOCIAL SCIENCES/PARKING STRUCTURE 8**

**DESIGN COSTS**

***Recommendation:***

1. Contractual agreements should be fully executed and effective prior to any work being performed on a project. In addition, sufficient controls should be created and implemented to ensure invoices are not paid prior to the formal execution of a contract.

(Ownership: SDSU)

***Campus Response:***

1. We concur. In the future, SDSU will ensure that invoices are not paid prior to the formal execution of a contract.

**CONSTRUCTION CHANGE ORDERS**

***Recommendation:***

2. In the future, supporting documentation should be included with each executed change order sufficient enough that a third party can determine the basis and justification for the agreed upon change.

(Ownership: SDSU)

***Campus Response:***

2. We concur. In the future, SDSU will provide additional documentation supporting the basis and justification for changes on future projects.

## **CONSTRUCTION MANAGEMENT SERVICES**

### ***Recommendation:***

3. On future projects, SDSU should proactively monitor the amount of funds remaining on a contract and promptly issue amendments as necessary.

(Ownership: SDSU)

### ***Campus Response:***

3. We concur. SDSU will strengthen its method of monitoring contracts to ensure amendments are added prior to the exhaustion of encumbrances.

## **INSPECTION SERVICES**

### ***Recommendation:***

4. In the future, SDSU should review invoices to ensure they are submitted in accordance with contractual terms and conditions. In addition, SDSU should determine whether any adjustment to the J.B. Consulting payments is warranted.

(Ownership: SDSU)

### ***Campus Response:***

4. We concur. SDSU will continue to review invoices to ensure compliance with terms and conditions. In addition, a letter requesting reimbursement was sent to J.B. Consulting. The reimbursement was promptly received and credited back to the project account.

## **CLOSE-OUT PROCESS**

### ***Recommendation:***

5. SDSU should resolve close-out issues in a more expeditious manner.

(Ownership: SDSU)

### ***Campus Response:***

5. We concur. SDSU will improve efforts to close out projects in an expeditious manner. The project has been closed and a Notice of Completion filed.

## **LIQUIDATED DAMAGES**

### ***Recommendation:***

6. On future Projects, SDSU should endeavor prompt resolution of time extensions as delays occur.

(Ownership: SDSU)

### ***Campus Response:***

6. We concur. SDSU will improve its contractual process of analyzing delays during construction by issuing milestone change orders as recommended by CPDC. The University will also make greater efforts to issue time extensions contemporaneous with delays where practical.

THE CALIFORNIA STATE UNIVERSITY  
OFFICE OF THE CHANCELLOR



BAKERSFIELD

August 29, 2007

CHANNEL ISLANDS

CHICO

**MEMORANDUM**

DOMINGUEZ HILLS

EAST BAY

TO: Mr. Larry Mandel  
University Auditor

FRESNO

FROM: Charles B. Reed  
Chancellor

A handwritten signature in black ink that reads "Charles B. Reed".

FULLERTON

SUBJECT: KPMG Draft Final Report on the *Social Sciences/Parking Structure 8*  
Construction Project at San Diego State University

HUMBOLDT

LONG BEACH

In response to your memorandum of August 29, 2007, I accept the response as submitted with the draft final report on the *Social Sciences/Parking Structure 8* construction project at San Diego State University.

LOS ANGELES

MARITIME ACADEMY

CBR/jt

MONTEREY BAY

Enclosure

NORTHRIDGE

cc: Ms. Erika Alvord, KPMG

POMONA

Mr. Scott Burns, Associate Vice President, Financial Operations, SDSU

SACRAMENTO

Ms. Colleen Nickles, Assistant Vice Chancellor, Financial Services

SAN BERNARDINO

Ms. Elvyra San Juan, Assistant Vice Chancellor, CPDC

SAN DIEGO

Dr. Stephen L. Weber, President, SDSU

SAN FRANCISCO

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

SAN JOSÉ

SAN LUIS OBISPO

SAN MARCOS

SONOMA

STANISLAUS