

*Audit and Advisory Services*  
401 Golden Shore, 4th Floor  
Long Beach, CA 90802-4210

*Larry Mandel*  
Vice Chancellor and  
Chief Audit Officer

562-951-4430  
562-951-4955 (Fax)  
lmandel@calstate.edu

September 19, 2018

Dr. Thomas A. Parham, President  
California State University, Dominguez Hills  
1000 E. Victoria Street  
Carson, CA 90747

Dear Dr. Parham:

**Subject: Audit Report 18-61, *Cooling Tower Replacement and Domestic Water Line Replacement*,  
California State University, Dominguez Hills**

We have completed an audit of the *Cooling Tower Replacement and Domestic Water Line Replacement* construction project as part of our 2018 Audit Plan, and the final report is attached for your reference. The audit was conducted in accordance with the Institute of Internal Auditors' *International Standards for the Professional Practice of Internal Auditing*.

There were no reportable observations revealed during the review. The final audit report has been posted to Audit and Advisory Services' website.

I wish to express my appreciation for the cooperation extended by the campus personnel over the course of this review.

Sincerely,



Larry Mandel  
Vice Chancellor and Chief Audit Officer

c: Timothy P. White, Chancellor



## **CONSTRUCTION**

**California State University,  
Dominguez Hills**

**Cooling Tower Replacement and  
Domestic Water Line Replacement**

Audit Report 18-61  
September 13, 2018

## EXECUTIVE SUMMARY

### OBJECTIVE

The objectives of the audit were to ascertain the effectiveness of operational, administrative, and financial controls over construction activities; identify cost recovery opportunities; and ensure compliance with relevant governmental regulations, Trustee policy, Office of the Chancellor directives, construction contract general conditions, and campus procedures.

### CONCLUSION

We found the control environment for the areas reviewed to be effective.

Based upon the results of the work performed within the scope of the audit, the operational, administrative, and financial controls for the Cooling Tower Replacement and Domestic Water Line projects as of August 17, 2018, taken as a whole, provided reasonable assurance that risks were being managed and objectives were met. There were no reportable observations revealed during the review.

## GENERAL INFORMATION

### BACKGROUND

In October 2016, the campus executed a Task Order Construction Agreement (TOCA) master enabling service agreement with the general contractor PCL Construction Services, Inc. The Cooling Tower Replacement and Domestic Water Line Replacement projects were performed under this TOCA agreement. The campus executed a construction services agreement for the Cooling Tower Replacement project with construction costs of \$3,265,754 on April 17, 2017. The campus executed a construction services agreement for the Domestic Water Line project with construction costs of \$1,084,053 on July 14, 2017. The campus filed a notice of completion on July 3, 2017, for the Cooling Tower Replacement project and has not currently filed a notice of completion for the Domestic Water Line project.

The Cooling Tower Replacement project consisted of replacing an 800-ton cooling tower located in the Central Plant. The cooling tower supports the campus chilled water system and increases the efficiency of campus chillers. Because the campus will need additional cooling towers in the future to accommodate new campus buildings, the replacement tower includes the capacity to house a second tower. The Domestic Water Line Replacement project consisted of excavating and installing a new 2,300-linear-foot water line. The project also included landscaping and hardscaping restoration in the areas where work was completed.

The California State University, Dominguez Hills (CSUDH) campus managed the Cooling Tower Replacement and Domestic Water Line projects, and it chose the TOCA delivery method. In this method, the campus selects a service provider in a two-phase process and establishes a master enabling agreement to deliver multiple projects under a two-year contract. Each project total cost must be less than \$7 million, and the total cost of all projects completed cannot be more than \$20 million. A separate task order and construction agreement are executed for each individual project. Fees for TOCA projects can be based on hourly rates or on a percentage of direct construction costs using a construction manager at risk or collaborative design-build delivery method. This delivery method provides additional efficiencies in bidding small major capital projects.

Campus presidents have been delegated the authority to directly manage state and non-state funded capital outlay projects. The chancellor's office issues this delegated authority to the campus subject to its compliance with the capital outlay certification procedure. To comply, the campus submits a request for Delegation of Capital Outlay Management Authority to the Certification Review Board (CRB) for review. Then the executive vice chancellor and chief financial officer in the chancellor's office must approve the request. The campus president is responsible for ensuring that he or she exercises delegated authority in compliance with applicable statutes, regulations, and BOT policies; the campus manages capital projects via a process consistent with the provisions of the Integrated California State University Administrative Manual (ICSUAM); and the campus has in place appropriate internal controls and processes to ensure that responsibilities are carried out in a manner consistent with the campus capital outlay management plan submitted with the request for delegated authority.

The campus capital outlay management plan defines the campus organizational and operational structure and expenditure authority and serves as the campus policies and procedures for the administration of construction activities. Updated plans are to be

submitted when campus operational structure changes are made that impact the plan. Certification is continuous unless a Capital Planning, Design and Construction (CPDC) post-project performance review determines that problems were caused by campus negligence, in which case the CRB may recommend that the campus be placed on probation. The CRB may ultimately recommend that certification be withdrawn if identified operational/management deficiencies are not remedied.

Each campus president (or designee) also has been delegated authority to make all professional appointments relative to capital outlay projects and campus physical development in accordance with applicable statutes, regulations, BOT policies, and ICSUAM provisions; and must ensure the use of systemwide standardized architectural, engineering, and other professional appointment contract forms. Further, each construction administrator, project manager, inspector of record, campus representative, and design professional is required to use the California State University (CSU) *Construction Management Project Administration Reference Manual*, which contains the CSU construction management policies and procedures that apply to a project.

## SCOPE

We visited the CSUDH campus and the offices of the general contractors and selected subcontractors from February 19, 2018, through August 17, 2018. Our audit and evaluation included the audit tests we considered necessary in determining whether operational, administrative, and financial controls for the Cooling Tower Replacement and Domestic Water Line projects were in place and operative. The audit focused on procedures in effect during the planning and construction of the project.

Specifically, we reviewed and tested:

- Delegation of construction management authority.
- Review and approval of project design, budget, and funding.
- Administration of the bid and award process.
- Contract execution and required contract bonds and insurance.
- Construction management and accounting, including allowance and contingency tracking and invoicing and payment applications.
- Review, approval, pricing, and tracking of change orders.
- Close-out processes, including completion of required inspections and certifications.

As a result of changing conditions and the degree of compliance with procedures, the effectiveness of controls changes over time. Specific limitations that may hinder the effectiveness of an otherwise adequate system of controls include, but are not limited to, resource constraints, faulty judgments, unintentional errors, circumvention by collusion, and management overrides. Establishing controls that would prevent all these limitations would not be cost-effective; moreover, an audit may not always detect these limitations.

Our testing and methodology was designed to provide a review of key operational, administrative, and financial controls, including interviews, walkthroughs, and detailed testing

on a limited number of general contractor and selected subcontractor transactions. Our review did not examine all aspects of financial controls or encompass all financial transactions for every contractor and subcontractor.

## CRITERIA

Our audit was based upon standards as set forth in federal and state regulations and guidance; Trustee policy; Office of the Chancellor directives; and campus procedures; as well as sound administrative practices and consideration of the potential impact of significant risks. This audit was conducted in conformance with the Institute of Internal Auditors' *International Standards for the Professional Practice of Internal Auditing*.

This review emphasized, but was not limited to, compliance with:

- Public Contract Code Chapter 2.5, *CSU Contract Law*
- Public Contract Code §4100 *et seq.*, *Subletting and Subcontracting Fair Practices Act*
- Government Code §13402 and §13403
- Executive Order (EO) 666, *Delegation of Professional Appointments Related to Capital Outlay Projects and Campus Physical Development*
- EO 672, *Delegation of Capital Outlay Management Authority and Responsibility*
- ICSUAM §9000 through §9005, *Capital Outlay and Public Works Contracts*
- ICSUAM §9200 through §9212, *Professional Services for Campus Development*
- ICSUAM §9230 through §9237, *Project Plan Development for Major Capital Construction Projects*
- ICSUAM §9700 through §9843, *Construction Management for Public Works Contracts*
- *CSU Construction Management Project Administration Reference Manual*
- *Contract General Conditions for CM at Risk with Guaranteed Maximum Price Projects*

## AUDIT TEAM

Senior Audit Manager: Wendee Shinsato  
Senior Auditor: Jamarr Johnson