



OFFICE OF THE COMPTROLLER  
CITY OF ST. LOUIS



DARLENE GREEN  
Comptroller

*Internal Audit Section*

1520 Market St., Suite 3005  
St. Louis, Missouri 63103-2630  
(314) 657-3490  
Fax: (314) 552-7670

DR. KENNETH M. STONE, CPA  
Internal Audit Executive

**FILE COPY**

August 10, 2012

Rhonda Hamm-Niebruegge, Director of Airports  
Lambert-St. Louis International Airport  
P.O. Box 10212  
St. Louis, Mo. 63145

RE: Review of Electrical, Mechanical, and Plumbing Design Services for the Capital Improvement Program at Lambert St. Louis International Airport Contract PSA-1018 (Project #2011-41)

Dear Ms. Hamm-Niebruegge:

Enclosed is the Internal Audit Section's report for the review of the electrical, mechanical, and plumbing design services for the Capital Improvement Program at Lambert-St. Louis International Airport for the period October 1, 2006 through March 30, 2011. A description of the scope of our work is included in the report.

Fieldwork was completed on June 11, 2012. Management's responses to the observations and recommendations noted in the report were received on July 2, 2012, and have been incorporated in the report.

This review was made under the authorization contained in Section 2, Article XV of the Charter, City of St. Louis, as revised, and has been conducted in accordance with *the International Standards for the Professional Practice of Internal Auditing*.

If you have any questions, please contact the Internal Audit Section at (314) 657-3490.

Sincerely,

Dr. Kenneth M. Stone, CPA  
Internal Audit Executive

Enclosure:

cc: Gerard Slay, Senior Deputy Director Lambert-St. Louis International Airport  
Cornell Mays, Deputy Director Planning and Development Lambert-St. Louis International Airport  
Susan Kopinski, Deputy Director Finance and Administration Lambert-St. Louis International Airport  
Henrietta Brown, MBA Assistant Airport Director Finance and Accounting  
James Fox, CPA Airport Auditor+



# CITY OF ST. LOUIS

**CITY OF ST. LOUIS**

**LAMBERT-ST. LOUIS INTERNATIONAL AIRPORT**

**REVIEW OF ELECTRICAL, MECHANICAL, AND PLUMBING DESIGN  
SERVICES FOR THE CAPITAL IMPROVEMENT PROGRAM  
PSA-1018**

**OCTOBER 1, 2006 THROUGH MARCH 30, 2011  
PROJECT #2011-41**

**DATE ISSUED: AUGUST 10, 2012**

**Prepared by:  
The Internal Audit Section**



# OFFICE OF THE COMPTROLLER

**HONORABLE DARLENE GREEN, COMPTROLLER**

**CITY OF ST. LOUIS**  
**LAMBERT-ST. LOUIS INTERNATIONAL AIRPORT**  
**REVIEW OF ELECTRICAL, MECHANICAL, AND PLUMBING SERVICES**  
**CAPITAL IMPROVEMENT PROGRAM PSA-1018**  
**OCTOBER 1, 2006 THROUGH MARCH 30, 2011**

**EXECUTIVE SUMMARY**

**Purpose**

The Internal Audit Section (IAS) has completed a review of the electrical, mechanical, and plumbing design services for the Capital Improvement Program at Lambert-St. Louis International between the City of St. Louis and Burns and McDonnell (consultant) and the following sub-consultants: David Mason and Associates, Kwame Building Group, Belle Engineering, Ross and Barruzini and Webb Engineering Services, Inc. The purpose was to determine if the consultant and sub-consultants have adequate controls in place to provide reasonable assurance of the following:

- Accomplishment of established objectives and goals.
- Compliance with applicable laws, regulations, policies, procedures and contract terms.
- Reliability and integrity of financial and operational information.
- Economic and efficient use of resources.
- Safeguarding of assets

**Scope and Methodology**

The review was limited to the review of the consultant and sub-consultants' compliance with the terms and conditions of the contract. Review procedures included inquiries of the management of the consultant and sub-consultants and the Airport Planning and Development department to evaluate the manner in which contract deliverables and compliance provisions are obtained. Total contract cost for the electrical, mechanical, and plumbing design services program is \$2,400,000. We expanded our testing of billings for the consultant to \$982,879 and for the sub-consultants \$ 957,226 in the aggregate for the period October 1, 2006 through March 30, 2011.

**Background**

PSA 1018 is an open-ended agreement between City of St. Louis and Burns and McDonnell to provide the electrical, mechanical, and plumbing design services for the Capital Improvement Program and other miscellaneous emergency projects at Lambert-St. Louis International Airport. Per the general scope for services, the consultant agrees to provide professional engineering consultant services necessary for electrical, mechanical, and plumbing design services as fully defined in General Scope of Services, Attachment A of PSA-1018.

## Exit Conference

An exit conference was held on Thursday May 24, 2012. Consultant and Sub-Consultants were represented by their managers. The Airport Planning and Development Office was represented by the Deputy Director and Assistant Director Planning and Engineering. The Board of Public Service was represented by the President and Deputy City Engineer. The Airport Finance and Accounting Section was represented by the Airport Assistant Director-Finance & Accounting and Airport Auditor. The Internal Audit Section was represented by the Internal Audit Supervisor and Auditor-in-Charge.

## Conclusion

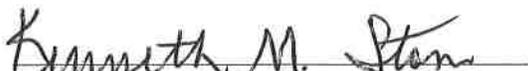
The opportunity exists for the consultant to ensure compliance with the agreement. The following are observations resulting from the review:

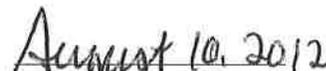
1. Opportunity to comply with the right to audit clause contract provision
2. Opportunity to verify direct reimbursable expenditures. (\$7,087)
3. Opportunity to improve compliance with Article XI, fees and payment provisions

The opportunity exists for the sub-consultants to ensure compliance with the agreement. The following are observations resulting from the review:

4. Labor cost overcharges by Webb Engineering Services, Inc. (\$ 3,248)
5. Indirect cost overcharges by sub-consultants (\$64,727)

Each of these observations is discussed in more detail in the *Detailed Observations, Recommendations and Management's Responses* section of this report.

  
Dr. Kenneth M. Stone, CPA, CGMA  
Internal Audit Executive

  
Date

**CITY OF ST. LOUIS  
LAMBERT-ST. LOUIS INTERNATIONAL AIRPORT  
REVIEW OF ELECTRICAL, MECHANICAL, AND PLUMBING SERVICES  
CAPITAL IMPROVEMENT PROGRAM PSA-1018  
OCTOBER 1, 2006 THROUGH MARCH 30, 2011**

**TABLE OF CONTENTS**

<b>Description</b>	<b>Page(s)</b>
<b>OBSERVATIONS</b>	
Status of Prior Observations	1
Summary of Current Observations	1
<b>DETAILED OBSERVATIONS, RECOMMENDATIONS AND MANAGEMENT'S RESPONSES</b>	 2-7

## OBSERVATIONS

### Status of Prior Observations

This contract has not been previously reviewed by Internal Audit; therefore, there were no prior observations.

### Summary of Current Observations

The opportunity exists for the consultant to ensure compliance with terms and conditions for the professional services of electrical, mechanical, and plumbing design services for the Capital Improvement Program at Lambert St. Louis International Airport. The following are observations resulting from the review:

1. Opportunity to comply with the right to audit clause contract provision
2. Opportunity to verify direct reimbursable expenditures. (\$7,087)
3. Opportunity to improve compliance with Article XI, fees and payment provisions

The opportunity exists for the sub-consultants to ensure compliance with terms and conditions for the professional services of electrical, mechanical, and plumbing design services for the Capital Improvement Program at Lambert St. Louis International Airport. The following are observations resulting from the review:

4. Labor cost overcharges by Webb Engineering Services, Inc. (\$ 3,248)
5. Indirect cost overcharges by sub-consultants (\$64,727)

Each of these observations is discussed in more detail in the *Detailed Observations, Recommendations and Management's Responses* section of this report.

# DETAILED OBSERVATIONS, RECOMMENDATIONS AND MANAGEMENT'S RESPONSES

## *Observations Relative to Prime Consultant*

### **1. Opportunity To Compliance With The Right To Audit Clause Contract Provision**

The consultant did not adequately comply with the right to audit clause of the contract. It took Internal Audit Section (IAS) two months of repeated request for the prime consultant to provide the accounting records supporting the calculations of the indirect costs rates used on the project for billing purposes. The indirect rates consisted of Salary Related Expenses (SRE) and General & Administrative Overhead (G&A). In addition, the information provided was incomplete and IAS had to perform additional procedures to verify the accuracy of these rates.

Article II of the Professional Service Agreement (PSA)-1018, regarding the responsibility of the prime consultant, states, "The consultants' records shall be open to inspection and shall be subject to audit and/ or reproduction during normal business hours. The consultant's records as referred to in this agreement shall include any and all information, materials and data of every kind and character including without limitation, records, books, papers, documents, etc."

The prime consultant did not comply with the right to audit clause provisions of the contract.

The incomplete information delayed completion of the review by requiring additional procedures.

### **Recommendation**

It is recommended that the prime consultant establish a system of internal controls to ensure that the requirements of the contract agreement regarding the availability of the accounting records are understood and complied with.

### **Management's Response**

*Burns and McDonnell understands their contractual obligation and agree that we did not meet the audit expectations relative to timeliness. In the future, Burns and Mc Donnell will work more diligently to find ways to meet our contractual obligations while protecting the highly confidential nature of this type of information.*

## DETAILED OBSERVATIONS, RECOMMENDATIONS AND MANAGEMENT'S RESPONSES

### 2. Opportunity To Verify Direct Reimbursable Expenditures (\$7,087)

The prime consultant billed the City \$7,087 for computer usage, which consisted of non-Computer Assisted Digital Design (CADD) work. This expense, had already been billed as a labor cost included in the related SRE and G&A.

Billings for direct purchases should not include any expenses that are part of the labor cost.

The prime consultant did not have a system of controls in place to ensure that the expenses billed as labor costs are not also billed as purchase of services.

The City was billed twice for the same expense.

#### **Recommendation**

It is recommended the City of St. Louis Board of Public Service pursue cost recovery for \$7,087, the non-CADD computer usage billed twice, (once as salary and again as purchase of services).

#### **Management's Response**

*Burns and McDonnell has reviewed the detail information provided by the Internal Audit Section. In general we agree that the majority of the expenses we did billed twice. We apologize for this error and will reimburse the City of St, Louis the entire amount.*

### 3. Opportunity To Improve Compliance With Article XI Fees and Payment Provisions

Article XI of the PSA requires the development of overhead rates (general and administrative G/A) and salaries and related expense (SRE) be in accordance with Code of Federal Regulations (CFR) included FAR Part 31. FAR Part 31.204 allows a cost be allocable if the distribution of the cost is in reasonable proportion to the benefits received.

Article XI of the PSA requires the use of contract employees be approved by the City along with their salary rates. An appropriate reduction in overhead rates may apply to these employees.

The submitted rates for reimbursable rates for general and administrative show that rates consisted of consolidated cost for all home offices located within the United States and not the home office from which the services were being provided to PSA 1018.

## **DETAILED OBSERVATIONS, RECOMMENDATIONS AND MANAGEMENT'S RESPONSES**

### **3. Continued**

In addition, the general administrative rate consisted of two components: a G/A rate for services provided by prime contractor employees and a G/A rate for employees of the prime and contract labor. These rates are combined as one G/A rate for all billable hours billed to the City of St. Louis.

We neither obtained nor determined from the information provided, if these audited rates as applied to the billable hours were fair and reasonable per FAR Part 31 and reflective of the actual cost in operating the designated home office for PSA-1018 since the rates included consolidated cost from all home offices operated by the prime consultant.

We also saw no approval for contract labor to be billed for PSA-1018 which would make the rate for "employees of the prime consultant and contractor labor" applicable to billable hours submitted by the prime contractor for services provided.

The prime contractor financial reporting system does not provide reasonable assurance of the following:

- Consolidated home office audited rates applied to billable hours are fair and reasonable to the general and administrative rates for a home office which provided services for PSA 1018.
- G/A rates applied to the labor cost billed were employees of the prime contractor or contract labor but not both.

The City of St. Louis was billed \$423,846 for general and administrative cost based upon cost of operation for all home offices of the prime consultant.

### **Recommendation**

It is recommended the prime-consultant improve compliance with the Fees and Payments provisions. Specifically:

- Documenting that the consolidated general and administrative rates for home offices is less than the general and administrative cost for a single home office providing services to the City of St. Louis.
- All contract labor to be assigned to contracts with the City of St. Louis receives prior approval inclusive of labor and the applicable overhead rate(s).
- Overhead rates submitted for review and approval are presented as outlined in the audited statements.

**DETAILED OBSERVATIONS, RECOMMENDATIONS AND  
MANAGEMENT'S RESPONSES**

**3. Continued**

**Management's Response**

*Burns and McDonnell believes that the use of consolidated approach for tracking and reporting general and administrative cost is compliance with FAR Part 31. We acknowledge the obligation to receive prior approval from the City of St. Louis for the use of contract labor and their associated costs.*

*Auditor's Comments*

*FAR Part 31.201.4 allows a cost to be assignable or chargeable as long as it is distributed in a reasonable proportion to the benefits received. The Internal Audit Section has been provided no information to verify that a consolidated rate is a reasonable proportion to the benefits received per FAR Part 31,201.4. We saw no billing where G/A costs were not added to the labor cost whether it was contract or non-contract labor.*

**Observations Relative to Sub -Consultants**

**4. Labor Costs Overcharges By Webb Engineering Services, Inc. (\$3,428)**

The sub-consultant's billed hourly labor rates were higher than the hourly rates based on its accounting records. The differences between the billed and the actual hourly labor rates resulted in unsupported billings for the labor costs by \$3,428 as follows:

Over-billed labor costs	\$ 1,371
Add: SRE 48.81% of over-billed labor cost	669
G&A OH 101.20% of over-billed labor cost	<u>1,388</u>
Total questioned cost including SRE and G&A OH	<u>\$ 3,428</u>

Article XI, Fees and Payments of the contract requires that the labor cost billed by contractor / sub-contractor should be based on their actual hourly labor rates.

The sub-consultant did not establish a system of internal control to ensure compliance with the Article XI, Fees and Payments, of the contract.

The sub-contractor did not comply with the Article X1, Fees & Payment requirements of the contract. Non-compliance with this requirement resulted in the City paying \$3,428 for the payroll cost that exceeded the actual cost.

**DETAILED OBSERVATIONS, RECOMMENDATIONS AND  
MANAGEMENT'S RESPONSES**

**4. Continued**

**Recommendation**

It is recommended the City of St. Louis, Board of Public Service pursue cost recovery of \$3,428 for the labor costs billed in excess of actual costs incurred.

**Management's Response**

*No management response was received from the sub-consultant.*

*Auditor's Comments*

*Additional time and information was provided to the sub-consultant to respond to the observation and recommendation. The sub-consultant did not respond. Cost recovery should be pursued.*

**5. Indirect Cost Overcharges By Sub-Consultants (\$64,727)**

The sub-consultants' billed SRE and G&A rates were either not based the audited rates or did not agree to their accounting records. The variances between the billed and the audited or actual rates, calculated based on their accounting records, resulted in unsupported billings to the City for \$64,727 as follows:

A	B	C	D	E
Sub-Consultant	Indirect Cost Category	Amount Billed	Amount Based on Accounting Records	Unsupported Billings (C-D)
David Mason and Associates	G/A	\$87,508	\$82,640	\$4,868
Ross and Barruzini	SRE	\$139,157	\$105,047	\$34,110
Kwame Building Group	G/A	\$94,785	\$84,168	\$10,617
Webb Engineering	SRE and G/A	\$ 46,545	\$31,413	\$15,132
Total		\$ 367,995	\$303,268	\$64,727

According to the contract, SRE and G&A OH rates shall be verified by an audit preferred by a governmental agency in accordance with the Code of Federal Regulations (CFR) requirements. Rates other than those verified by an audit are provisional and should be adjusted when audited rates are available.

## DETAILED OBSERVATIONS, RECOMMENDATIONS AND MANAGEMENT'S RESPONSES

### 5. Continued

The sub-consultant did not have a system of internal controls in place to ensure compliance with the contract's SRE and G&A rates determination requirements:

Audit procedures performed to evaluate the sub-consultants' accounting system indicated that their accounting systems were not adequately differentiating between direct and indirect costs.

The accounting systems shows the home office reimbursable rates rather than field office rates were submitted for billing productive salary costs.  
Three sub-consultants did not submit audited SRE and G/A rates.

The sub-contractor did not comply with the contract's SRE and G&A rates determination requirements. The non-compliance with this requirement resulted in the City paying \$64,727 for the labor costs that it did not incur.

#### **Recommendation:**

It is recommended the City of St. Louis Board of Public Service pursue cost recovery of \$64,727 for indirect costs billed in excess of actual costs.

#### **Management's Response**

*The following sub-contractors submitted responses and agree to repay the City of St. Louis: David Mason & Associates and Kwame Building Group.*

#### *Auditor's Comments*

*We received no formal management responses from Webb Engineering Services, Inc. or Ross and Barruzini regarding their overbillings on PSA-1018 as requested by June 11, 2012. Cost recovery should be pursued.*