



**METROPOLITAN GOVERNMENT OF  
NASHVILLE AND DAVIDSON COUNTY**

**OFFICE OF INTERNAL AUDIT**

**Professional Audit and Advisory Service**

**FINAL REPORT**



**Audit of the Music City Convention Center Construction  
Project**

**INTERIM REPORT  
NOVEMBER 1, 2010, THROUGH MAY 31, 2011**

Date Issued: June 27, 2011

Office Location and Phone Number

222 3<sup>rd</sup> Avenue North, Suite 401  
Nashville, Tennessee 37201

615-862-6110

*The Metropolitan Nashville Office of Internal Audit is an independent audit agency  
reporting directly to the Metropolitan Nashville Audit Committee*

# EXECUTIVE SUMMARY

June 27, 2011

Results in Brief	Recommendations
<p>The Metro Nashville Office of Internal Audit performed an audit of the performance and payment bonding requirements, processes and controls in place pertaining to compliance with applicable contract stipulations, laws, and regulations for entities involved in the construction of the Music City Convention Center.</p> <p>Key audit objectives and conclusions were as follows:</p> <ul style="list-style-type: none"> <li>• <i>Were the performance and payment bonds complete as to the required content and acknowledged by the responsible signatories?</i></li> </ul> <p>Yes. No material issues were encountered.</p> <ul style="list-style-type: none"> <li>• <i>Was the coverage amount stated within the performance and payment bonds sufficient to cover 100 percent of the contract value?</i></li> </ul> <p>Generally yes. However, continued vigilance is required to ensure that bond coverage is sufficient.</p> <ul style="list-style-type: none"> <li>• <i>Were the performance and payment bonds accurate as to the stated amount and currently in full force and effect?</i></li> </ul> <p>Yes. However, a second round of verification procedures should be conducted to ascertain the bonding status of 16 outstanding contracts.</p>	<p>Key recommendations of this report include:</p> <ul style="list-style-type: none"> <li>• Ensure that performance and payment bonds are updated to reflect the value of the contracted services when substantial changes are enacted.</li> <li>• Coordinate with the Construction Manager to independently verify the bonding status of the 16 remaining contracts which were not fully executed at the time the audit was conducted.</li> </ul>

## Table of Contents

INTRODUCTION.....	1
AUDIT INITIATION .....	1
MUSIC CITY CONVENTION CENTER PROJECT STATUS .....	1
SIGNIFICANT PROJECT MILESTONES AS OF MAY 31, 2011 .....	1
AUDIT ACTIVITY UPDATE .....	3
BACKGROUND.....	3
OBJECTIVES AND CONCLUSIONS .....	4
OBSERVATIONS AND RECOMMENDATIONS.....	6
A – Some Performance and Payments Bonds did not Reflect the Value of the Services Performed .....	6
B – Independent Verification of Payment and Performance Bonds for 16 Outstanding Contracts should be Conducted .....	6
APPENDIX A. MANAGEMENT RESPONSE.....	9

# INTRODUCTION

## AUDIT INITIATION

The continuous performance audit of the Music City Center construction is being conducted as part of the approved 2011 Audit Work Plan. This is the third in a series of interim reports that will be issued throughout the duration of the construction project. These reports will culminate with a more detailed performance audit report at the conclusion of construction related activities. Significant observations and recommendations noted throughout these interim reports will be incorporated in the final report.

## MUSIC CITY CONVENTION CENTER PROJECT STATUS

### Exhibit A - Project Budget Status as of May 31, 2011

<i>Description</i>	<i>Budget</i>	<i>Paid to Date</i>	<i>Percent Paid</i>	<i>Cost to Complete</i>	<i>Percent Remaining</i>
Direct Construction Costs	\$452,044,757	\$157,212,648	34.8	\$294,832,109	65.2
Land Acquisition & Relocation Costs	57,000,000	50,833,874	89.2	6,166,126	10.8
Architectural Design & Engineering	40,189,684	33,384,986	83.1	6,804,698	16.9
CCA Project Management	10,993,758	5,334,242	48.5	5,659,516	51.5
Project Insurance & Programs	8,252,322	5,394,268	65.4	2,858,054	34.6
Legal, Financing, Audits, and Consultants	2,869,480	1,936,441	67.5	933,039	32.5
MCC Furniture, Fixtures, and Equipment	11,650,000	112,500	1.0	11,537,500	99.0
MCC Pre Opening Operations	2,000,000	-	0.0	2,000,000	100.0
Totals	\$585,000,000	\$254,208,959	43.5	\$330,791,042	57.0

*Source: Convention Center Authority Project Financial Summary*

## SIGNIFICANT PROJECT MILESTONES AS OF MAY 31, 2011

- Concrete and steel work is at 90 and 40 percent completion respectively.
- Two of the 12 sets of catenary trusses that will form the ceiling of the exhibit hall have been erected using an innovative process employing multiple hydraulic jacks to lift the trusses 33 feet up into place; each truss section weighs 250 to 450 tons.
- The permanent truck tunnel that provides access to Bridgestone Arena, as well as to the future Music City Center, has been completed and is now being used for Arena access.
- Construction of the 32 loading docks is largely complete.
- Construction site has a daily average of 650 workers on the job.
- Work on 6<sup>th</sup> Avenue under the building is complete; waiting only for paving closer to building completion.

- Utility work in the streets surrounding the new convention center – 4<sup>th</sup>, 5<sup>th</sup>, and 8<sup>th</sup> Avenues and Demonbreun Street – wraps up.
- Plumbing and electrical contractors continue installation of overhead conduit and ductwork in Building-A and the garage.
- Through the 1st quarter of 2011, Diversity Business Enterprise participation is 24.8 percent, totaling 137 companies composed of:
  - Minority Owned Businesses at 11 percent with 51 companies.
  - Women Owned Businesses at 4.0 percent with 44 companies.
  - Small Business Enterprises at 9.8 percent with 42 companies.
- The Workforce Development program has helped 191 individuals obtain jobs on the site. An additional 903 have been referred to training programs with 23 community based organizations around Nashville.

### Exhibit B – Setting the Massive Roof Trusses for the Exhibit Hall



# AUDIT ACTIVITY UPDATE

## BACKGROUND

Performance bonds and the related payment bonds are types of surety bonds which are financial tools that provide a guarantee to the owner (“obligee”) of the faithful performance of the contract, as well as the subsequent payment of materials and labor by the contractor (“principal”) to suppliers, in the event of a contractor default. In construction projects, it is customary for the owner to require the contractors or project managers to procure such bonds in order to guarantee that the value of the work will not be lost in the case of an unfortunate event, such as insolvency, does occur. Performance and payment bonds are secured by contractors in several different ways and calculations used to arrive at its cost is an arcane craft understood only by experienced insurance industry experts. Rates can be as low a 1.5 percent of the contract amount to as large as 10 percent depending on factors such as the type and size of construction, the type of trade of the principal, bid amount, liquid and real assets of the principal, and the principal’s creditworthiness. Payments for these bonds can be required in one lump sum or, in most cases, broken down into increments as the project progresses. The inherent variability and somewhat esoteric nature of acquiring the bonds and their settlement increases the risks involved and therefore requires closer examination and verification.

The Metro Nashville Office of Internal Audit’s objective for reviewing the performance and payment bonds was to ascertain whether contractors were in compliance with:

- Contract stipulations set forth in article 19.5 *Performance and Payment Bonds* - Construction Management Agreement with Bell/Clark a Joint Venture,
- Requirements of the Metropolitan Code of Laws § 4.20.030 – *Contract Performance and Payment Bonds*, and
- Tennessee Code Annotated, § 7-33-305 - *Construction bids — Amount of bond issue — Performance bond — When bids binding — Construction by municipality's own forces.*

The contract terms and the stated laws specifically require that trade and subcontractors provide performance and payment bonds sufficient to cover 100 percent of the contracted value throughout the duration of the construction project or until they have sufficiently completed their contracted scope of work and absolved by the obligee.

As part of our evaluation, the Metro Nashville Office of Internal Audit assessed the existence, completeness, accuracy, and validity of the submitted performance and payment bonds, for the executed contracts, related to the construction of the Music City Convention Center.

## OBJECTIVES AND CONCLUSIONS

1. *Were payment and performance bonds provided by the trade and subcontractors in compliance with legal and contractual obligations?*

Yes. At the date of review, there were 44 possible contracts that could have been reviewed. However, 16 of the 44 contracts, with an aggregate value of \$45,207,060 were either not fully executed or have not been let out for bidding. (See Observation B, page 6.)

The Metro Nashville Office of Internal Audit conducted document reviews to evaluate and ascertain the existence of the required performance, and the related payment bonds, for the other 28 fully executed contracts for contractors which either had performed or are currently performing work for the Music City Convention Center. The available contracts came from 17 different construction trades with a collective value of \$281,630,127. We encountered no exceptions or material deviations.

2. *Were the performance and payment bonds complete as to the required content and acknowledged by the responsible signatories?*

Yes. All 28 fully executed contracts included the necessary elements normally found and required within a surety contract including the signed, witnessed, and dated acknowledgement of the bond by both the principal and the surety representative, the date of the bond's execution, the amount of the bond coverage, the power-of-attorney's certification, and the seal of a notary in the state and county of execution.

3. *Was the coverage amount stated in the performance and payment bonds sufficient to cover 100 percent of the contract value?*

Generally yes. We compared the performance and payment bond coverage amounts stated in 28 fully executed contracts and compared these with the schedule of values listed in the American Institute of Architects (AIA) form G702 and noted that four of the 28 bonds reviewed did not correspond. (See Observation A, page 6.)

4. *Were the performance and payment bonds secured through reputable sureties that had adequate bonding capacity to cover the full value of the bonds executed?*

Yes. For this portion of the review, the Metro Nashville Office of Internal Audit reviewed statements contained within the power of attorney certificates and compared the bonding limits stated therein to the total value of the bonds executed. In all 28 instances, we did not observe any exceptions and bonding capacity had sufficient coverage. The second part of the objective entailed reviewing the bond surety's insurance industry rating. To accomplish this, the Office of Internal Audit subscribed to A.M. Best, the foremost insurance rating agency designated by the Securities and Exchange Commission. The Metro Nashville Office of Internal Audit utilized A.M. Best's financial-strength ratings to quantify the bondholder's ability to pay claims. Any rating less than a B- would be considered as an exception (see Exhibit C, page 5). Our review indicated that 23 of the 28 sureties had an A.M. Best rating of A, which is

considered excellent, and 5 of the 23 had a rating of A+, which is considered superior. No other issues were noted.

### Exhibit C – A.M. Best Financial Strength Rating Scale

<i>Definition</i>	<i>Rating</i>
Superior	A++, A+
Excellent	A, A-
Good	B++, B+
Fair	B, B-
Marginal	C++, C+
Weak	C, C-
Poor	E
Under Regulatory Supervision	E
In Liquidation	F
Suspended	S

Source: A.M. Best Company

5. *Were the performance and payment bonds accurate as to the stated amount and currently in full force and effect?*

Yes. The Metro Nashville Office of Internal Audit sent 23 bond confirmation or verification letters, with an aggregate contractual value of \$265,988,189, to the respective bondholders of current contractors in order to obtain independent assurance that the bonds they issued were stated in the correct amount, currently in effect, and therefore valid. We considered non-responses as negative confirmations which required follow-up activities. The Metro Nashville Office of Internal Audit received all 23 positive confirmations that affirmed the bond value and its current status. No other issues were noted.

### Exhibit D – Performance and Payment Bonds Review Summary

	<i>Count or Total</i>
Performance and Payment Bonds Reviewed	28
Value of Bonds Reviewed	\$281,630,127
Performance and Payment Bonds not Reviewed	16
Estimated Value of Bonds not Reviewed	\$ 45,207,060
Bond Confirmations Sent	23 <sup>1</sup>
Value of Confirmations Sent	\$265,988,189
Bonds Verified	23
Value of Confirmed Bonds	\$265,988,189

Source: Metro Nashville Office of Internal Audit

<sup>1</sup> As of April 20, 2011, four of the 28 contractors have substantially completed the contracted scope of work. One of the contractors reviewed was involved in public utility work and not involved in the direct construction of the Music City Convention Center. These five contractors were excluded from the verification test.

## OBSERVATIONS AND RECOMMENDATIONS

### ***A – Some Performance and Payments Bonds did not Reflect the Value of the Services Performed***

Our review of the pertinent records indicated that the stated value of four out of 28 performance and payment bonds, when compared to the value of services rendered as indicated within the schedule of values in American Institute of Architects form G702, Application and Certificate for Payment, did not correspond. The aggregate value of the difference totaled, \$2,377,250 for all four contractors. The Metro Nashville Office of Internal Audit acknowledges that within the dynamic framework of a construction environment, several changes can, and does, occur during the course of the construction project. Some changes, such as contract amendments, change orders, and increased scope of work may come about which can invariably increase the cost of the services rendered by the principal or subcontractor. Under these circumstances, it is prudent to ensure that payment and performance bonds are also updated to reflect coverage for the added exposure. In addition, updating the coverage ensures compliance with existing laws and prevents possible complications when legal disputes arise between involved parties.

#### Criteria:

- Metropolitan Code of Laws § 4.20.030 – *Contract Performance and Payment Bonds*
- Tennessee Code Annotated, § 7-33-305 - *Construction bids — Amount of bond issue — Performance bond — When bids binding — Construction by municipality's own forces.*

#### Risks:

Insufficient bond coverage diminishes the protections and security afforded by performance and payment bonds.

#### Recommendation:

The Convention Center Authority's project management team should coordinate with the construction management team to ensure that payment and performance bonds are updated when substantial changes in the contracted value are performed.

### ***B – Independent Verification of Payment and Performance Bonds for 16 Unexecuted Contracts should be Conducted***

Although the Office of Internal Audit was able to independently verify the status of all 23 bonds tested, future review procedures must include follow-up measures to ensure that the remaining 16 contracts, not fully executed at the time of audit initiation, are subjected to review and independent verification.

#### Criteria:

- Article 19.5 *Performance and Payment Bonds* - Construction Management Agreement with Bell/Clark a Joint Venture

- Tennessee Code Annotated, § 7-33-305 - *Construction bids — Amount of bond issue — Performance bond — When bids binding — Construction by municipality's own forces*
- Metropolitan Code of Laws § 4.20.030, *Contract Performance and Payment Bonds*.

Risks:

Invalid bond coverage may violate existing statutes as well as reducing the financial protections and security afforded by performance and payment bonds.

Recommendations:

The Authority's project management team should coordinate with the construction management team to enable independent determination regarding the completeness, accuracy, and validity of the 16 unverified bonds from contracts which were not fully executed at the time the review was initiated.

# GENERAL AUDIT INFORMATION

## STATEMENT OF COMPLIANCE WITH GAGAS

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform our work to obtain sufficient, appropriate evidence to provide a reasonable basis for our observations and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our observations based on our audit objectives.

## SCOPE AND METHODOLOGIES

The audit period focused primarily on the period encompassing the beginning of on-site construction activities from April 1, 2010, through June 7, 2011, and the performance on the processes in place during the time of the audit. To perform the review and the test of details, the Metro Nashville Office of Internal Audit reviewed and examined issued payment and performance bonds, performed analytical procedures, and sent out confirmation requests to various surety bondholders; to ascertain whether the existence, completeness, accuracy, and validity of those performance and payment bonds were in compliance with stated criteria.

## CRITERIA

In conducting this audit, the existing processes and controls to the Music City Convention Center construction project were evaluated for compliance with:

- Article 19.5 *Performance and Payment Bonds* - Construction Management Agreement with Bell/Clark a Joint Venture
- Tennessee Code Annotated, § 7-33-305 - *Construction bids — Amount of bond issue — Performance bond — When bids binding — Construction by municipality's own forces*
- Metropolitan Code of Laws § 4.20.030, *Contract Performance and Payment Bonds*.

## STAFF ACKNOWLEDGEMENT

Mel Marcella, CPA, CIA, CFE, CISA, CMA, In-Charge Auditor  
Mark Swann, CPA (Texas), CIA, CISA, Project Quality Assurance

## **APPENDIX A. MANAGEMENT RESPONSE**

- Management's Responses Starts on Next Page -



June 22, 2011

Mark Swann  
Metropolitan Auditor  
Office of Internal Audit  
222 3<sup>rd</sup> Avenue North, Suite 401  
Nashville, TN 37201

Re: Convention Center Authority – response to interim audit

Dear Mr. Swann,

This letter acknowledges that The Convention Center Authority is in receipt of the interim audit report for the period November 1, 2010 through May 31, 2011. The Convention Center Authority has evaluated all of the observations raised in this report. The Convention Center Authority will undertake the recommended actions. For the items that are on-going, an update can be made available as needed.

Thanks for your assistance and cooperation during this process. Please let us know if you need anything further from us at this time.

Sincerely,

A handwritten signature in black ink, appearing to read "Larry Atema", with a stylized flourish at the end.

Larry Atema  
Senior Project and Development Manager  
Convention Center Authority

Cc: Marty Dickens  
Mark Arnold  
Charles Robert Bone  
Rich Riebeling  
Charles Starks

Attached: Audit of the Music City Convention Center Construction Project  
Management Response to Audit Recommendations

**Audit of the Music City Convention Center Construction Project  
Management Response to Audit Recommendations**

Audit Recommendation	Response to Recommendation / Action Plan	Assigned Responsibility	Estimated Completion
<p>A. The Convention Center Authority’s project management team should coordinate with the construction management team to ensure that payment and performance bonds are updated when substantial changes in the contracted value are performed.</p>	<p><b>Accept</b> The Project Management team for the Music City Center will work closely with the Construction Manager to monitor any increase in contract values for any and all subs. And with any significant change, continue to review the bonding capacity for that subcontractor</p>	<p>Scott Black</p>	<p>On-going</p>
<p>B. The Convention Center Authority’s project management team should coordinate with the construction management team to enable independent determination regarding the completeness, accuracy, and validity of the payment and performance bonds from the 16 unexecuted contracts, in subsequent audit engagements.</p>	<p><b>Accept</b> The Project Management team for the Music City Center will coordinate with the Construction Management team regarding the timing of the completion of the execution of the remaining 16 contracts referenced in this report. With the completion of each contract, the PM team will review the bonding documentation and confirm capacity and company strength.</p>	<p>Scott Black</p>	<p>On-going</p>