

Metropolitan Nashville Airport Authority

MEMORANDUM

TO: Raul Regalado, President and CEO

CC: Monty Burgess, Senior Vice President and COO
Stan, Van Ostran, Vice President and CFO
Jim Graham, Director of Maintenance
David Howard, Contract Services Coordinator
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FROM: Julie Zwicknagel, Internal Auditor

DATE: January 21, 2009

SUBJ: Bradshaw's Landscape & Maintenance Audit Report

Background

On November 19, 2003, Bradshaw's Landscape & Maintenance, LLC ("Bradshaw") entered into an Exterior Landscape Maintenance Services Contract with the Metropolitan Nashville Airport Authority ("Authority"). The Contract was for a period of one year, effective January 1, 2004 through December 31, 2004, with four additional one-year renewal options.

Bradshaw would perform landscape maintenance services ("landscaping services") including mowing, weed removal, shrub/tree pruning, pest control, mulching, fertilization of trees/lawn/shrubs, watering, outdoor insecticide services, trash removal, etc. at the following Nashville International Airport locations:

Area Description	
1. Economy Parking	11. Quick Turn-Around Facility
2. Terminal	12. Overflow Parking Lot
3. Parking Garage	13. Both sides of Donelson Pike, from Economy Parking Entrance to
4. Ring Road	Murfreesboro Road
5. Hangar Lane	14. Timber Valley
6. Airport Service Road	15. Air Cargo Link Facility
7. Entrance to Employee Parking Lot	16. West Side Facility
8. ARFF Building	17. Sloped Turf Areas
9. Knapp Boulevard	18. Discrete Access
10. Gassaway Building	19. Marina & old Ingram Bldg site, East of Murfreesboro Road

The Contract was developed in such manner to allow the Authority to control the amount of labor expended in landscaping services by establishing costs for routine annual landscaping services and establishing labor and material costs for tasks that need to be performed on an as-needed basis. The routine annual landscaping requirements are services that need to be performed on an annual basis such as grass mowing. The costs for routine annual landscaping services for each contracting period have been established under the Contract terms and conditions.

The as-needed items such as snow and ice removal are services that may or may not be performed from year-to-year and therefore have not been included in the annual contract amount. The labor and material costs for the as-needed services have been established and these items require pre-approval from the Authority’s Contract Services Coordinator (“CSC”) prior to Bradshaw’s performance.

The Authority agreed to pay Bradshaw for the performance of routine annual landscaping services, as detailed below.

<u>Contract Period</u>	<u>Amount</u>
Year 1 - (Jan 04 - Dec 04)	\$411,353
Year 2 - Renewal Option #1 (Jan 05 - Dec 05)	427,807
Year 3 - Renewal Option #2 (Jan 06 - Dec 06)	444,920
Year 4 - Renewal Option #3 (Jan 07 - Dec 07)	462,717
Year 5 - Renewal Option #4 (Jan 08 - Dec 08)	481,225
TOTAL	<u><u>\$2,228,022</u></u>

The routine annual landscaping services are categorized into the following specification requirements. The routine annual landscaping services specification details and total cost for the Year 4 contracting period have been detailed below.

SPECIFICATION	Area	Amount	Estimated per year	Annual Cost
#1 - Grass Mowing/Trash Pick Up				
Cost per Mowing Area:	East	\$4,551.74	25	\$113,793
	South	\$2,947.14	25	\$73,679
	West	\$1,878.52	18	\$33,813
	Remote	\$1,032.63	18	\$18,587
#2 - Fertilizing Annual Flower Beds & Turf Grass				
Cost per Fertilization Application:	Flower Beds	\$1,799.78	2	\$3,600
	Turf Grass	\$4,704.18	2	\$9,408
	Trees	\$866.15	2	\$1,732
	Shrubs	\$2,856.03	2	\$5,712
#3 - Insecticide/Fungicide/Herbicide Spraying				
Cost per Spraying:	30 Acres	\$33.75	8	\$8,099
#4 - Tree Pruning and Trimming				
Pruning Cost per:	Tree	\$784.46	8	\$6,276
#5 - Shrub Trimming & Maintenance				
Cost for Junipers, Crape Myrtles, Hollies, Yews, etc.		\$3,078.75	3	\$9,236
Cost for Barberry, Elaeagnus, Laurels & Manhattan Euonymus		\$2,395.12	4	\$9,580
#6 - Winter Creeper Edging & Trimming				
Cost per Event:	Winter Creeper	\$910.01	8	\$7,280
#7 - Aarons St. Johnswort Edging & Mowing				
Cost per Event:	March mowing	\$3,935.90	1	\$3,973
	St Johnswort	\$857.71	8	\$6,937
#8 & #9 - Annual Plant Materials Labor/Maint				
Labor/Maint Annual Cost #8 & #9		\$6,749.18	1	\$6,749
#8 - Spring Flowers				
Annual Cost:	Spring Flowers	\$47,803.63	1	\$47,804
#9 - Fall Flowers				
Annual Cost:	Fall Flowers	\$9,280.13	1	\$9,280
#10 - Daily Maintenance Personnel				
Annual Cost:	Personnel	\$56.24	700	\$39,370
		\$56.24	700	\$39,370
#11 - Irrigation Systems Monitoring				
Annual Cost:	Monitoring	\$8,436.48	1	\$8,436
Year 4 Total Cost for Routine Annual Services				\$462,717

As previously stated, the as-needed landscaping items require pre-approval from the CSC and these services may or may not be performed from year-to-year. The as-needed landscaping services are categorized into the following specification requirements. The as-needed landscaping services specification details and labor and material costs for each task for the Year 4 contracting period have been detailed below.

SPECIFICATION	Description	Amount
#12 - Overseeding	Cost per Acre	\$523.06
	Cost per 30 Acres	\$16,704.23
#13 - Turf Pre/Post Emergent Application	Cost per Sq. Ft.	\$0.01
	Cost per Acre	\$217.10
	Cost per 30 Acres	\$6,512.96
#14 - Plant Bed Pre/Post Emergent Applications	Cost per Sq. Ft.	\$0.01
	Cost per Acre	\$376.83
	Cost per 30 Acres	\$11,304.88
#15 - Watering Non-Irrigated Areas	Cost per hour	\$42.18
#16 - Additional Manpower/Labor	Hourly Cost	\$32.62
#17 - Additional Mow Areas	Cost per Acre	\$56.08
#18 - Dead/Damaged Plant/Tree Material Removal	Hourly Cost	\$32.62
#19 - Core Aeration of Turf Grass (once a year)	Cost per Event	\$4,218.24
#20 - Mulch Application:		
Apply one cubic yard of dark charcoal shredded hardwood mulch	Hourly Cost	\$34.87
Supply one cubic yard of dark charcoal shredded mulch	Cost per Event	\$19.12
Apply one cubic yard of brown shredded hardwood mulch	Hourly Cost	\$23.62
Supply one cubic yard of brown shredded hardwood mulch	Cost per Event	\$12.37
To remove 1" of existing mulch and replace	Hourly Cost	\$32.62
Brown shredded hardwood mulch	Cost per Event	\$1,124.86
Maintenance of tree mulch rings	Hourly Cost	\$31.50
Dark charcoal shredded hardwood mulch	Cost per Event	\$3.37
#21 - Maintenance of Overflow Parking Area	Cost per Event	\$1,456.70
#22 - Weeding and Cleaning of Specified Areas	Cost per Event	\$2,249.73
#23 - Snow and Ice Removal	Hourly Cost	\$39.37
#24 - Japanese Beetles Program:		
Applying Mach II	Cost per Acre	\$449.95
	Cost per 30 Acres	\$10,123.78
Applying Talstar	Cost per Acre	\$67.49
	Cost per 30 Acres	\$2,024.76
Year 4 As-Need Landscaping Services Cost		

Bradshaw was required to furnish all labor, equipment, materials, and supplies necessary to maintain the Airport grounds as specified in the Contract requirements.

Bradshaw was required to have a qualified (degree in plant science, landscape management, or horticulture and a minimum of 4 years experience in landscape services administration and management), full time supervisor to direct all contract personnel and maintenance supervision to fulfill the Contract requirements. The supervisor would submit to the CSC a Weekly Landscape Services Schedule, which detailed the work completed for that week. The Schedule would be approved by the CSC and Bradshaw would provide copies of the Weekly Landscape Services Schedules when submitting payment requests.

Additionally, Bradshaw was required to have a minimum of two employees available for landscape maintenance requests on a daily basis and on-site 40 hours per week from March 1 to October 31. These daily maintenance employees are referred to as daily maintenance personnel (“DMPs”). The DMPs mow, edge, weed, maintain annual plant beds, trim, prune, mulch, water non-irrigated areas, monitor irrigation, inspect coverage, pick-up trash, remove leaves, fertilize, and undertake other related work that is requested by the CSC.

The SMWBE participation level for the contract was established at 9%; however, Bradshaw was able to achieve 100% participation level because they have met all SMWBE requirements and are SMWBE certified by the Authority.

The First Amendment to the Exterior Landscape Maintenance Services Contract with Bradshaw (“Bradshaw Contract”), effective February 23, 2005, exercised the Authority’s first one-year renewal option to extend the Contract from January 1, 2005 through December 31, 2005, under the same “Year Two” compensation terms (\$427,807), as provided for in the Contractor’s bid.

The Second Amendment to the Bradshaw Contract, effective January 3, 2006, exercised the Authority’s second renewal option to extend the Contract from January 1, 2006 through December 31, 2006, under the same “Year Three” compensation terms (\$444,920), as provided for in the Contractor’s bid.

The Third Amendment to the Bradshaw Contract, effective January 16, 2007, exercised the Authority’s third renewal option to extend the Contract from January 1, 2007 through December 31, 2007, under the same “Year Four” compensation terms (\$462,717), as provided for in the Contractor’s bid.

The Fourth Amendment to the Bradshaw Contract, effective February 11, 2008, exercised the Authority’s fourth and final renewal option to extend the Contract from January 1, 2008 through December 31, 2008, under the same “Year Five” compensation terms (\$481,225), as provided for in the Contractor’s bid.

The Authority’s CSC is responsible for administering the Bradshaw contract to ensure the Airport grounds are properly maintained and comply with contract terms. The CSC has established procedures to assist in monitoring the Bradshaw contract, which consist of Bradshaw providing the CSC with a Weekly Landscape Services Schedule that documents the services Bradshaw has completed for the week. The CSC has also created a spreadsheet by contract year to monitor invoice payments against the budgeted amount.

On a monthly basis, the CSC coordinates with Bradshaw the landscaping services that need to be performed for the month. Additionally, the CSC performs monthly inspections of the Airport grounds to ensure Bradshaw is complying with contract terms. The CSC and Bradshaw have developed a good working relationship with open lines of communication.

Throughout the course of the audit, Internal Audit observed the variability of monitoring landscaping services. The landscaping business is highly dependent upon weather conditions, whether there is too much or too little rain can significantly impact maintaining the Airport grounds. For example, if it is a dry summer, the Contractor would not mow as much during the peak mowing season. On the other hand, if there was a lot rain during the spring time, then it would be more difficult to get rid of undesirable weeds and grasses because the ground has to be dry for insecticide to kill weeds.

The CSC has put in place some good processes, procedures, and controls such as Weekly Landscaping Services Schedule, budget tracking mechanism, coordinating the monthly landscaping services, and performing monthly inspections. However, there are some general recommendations needed to ensure the Airport grounds are being properly maintained and comply with contract terms.

Objectives

The objectives of the audit were as follows:

1. Determine Bradshaw is complying with contract terms;
2. Determine the Authority is adequately administering the Bradshaw contract to ensure compliance with contract terms;
3. Determine the validity of payments made to Bradshaw; and
4. Document and evaluate existing internal controls.

Testing

In order to satisfy the audit objectives, the following tests were performed:

1. Determined Contactor maintained adequate insurance coverage.
 - a. Obtained a copy of the current certificate of insurance on file.
 - b. Verified that the comprehensive public liability, property damage, and worker's compensation insurance coverage met the amount specified in the contract.
 - c. Verified that the certificate of insurance were current and adhered to all other contract terms.
2. Determined Contractor had complied with reporting of chemicals provisions by providing copies of the Material Safety Data Sheets ("MSDS") for each chemical used on the Contract.
3. Determined Contractor's employees were dressed in appropriate uniforms, which included shirts and hats with the Contractor's insignia.
4. Determined Contractor performed soil analysis.
 - a. Verified the Contractor completed 19 separate soil samples from annual flowerbeds and turf grass areas at different locations twice per year.
 - b. Verified the Contractor completed 15 separate soil samples from trees and shrub areas at different locations twice per year.
5. Determined Contractor had a Commercial Pest Control License from the Tennessee Department of Agriculture and that one designee possessed a Commercial Pesticide Applicator License.
6. Determined Contractor had a qualified full-time supervisor to direct all contract personnel and maintenance supervision.

7. Determined the Contractor had a minimum of two employees available for landscape maintenance requests on a daily basis and on-site 40 hours per week from March 1 to October 31.
8. Determined Contractor maintained a grass and weed control program in order to control dandelions, Johnson grass, thistles, clover, and any other undesirable weeds and grasses.
9. Determined Contractor developed and maintains a written hazardous waste spill contingent plan listing materials used, spill prevention procedures, and containment equipment and procedures in accordance with Federal, State and Local, Environmental and TOSHA regulations.
10. Verified Contractor complied with airport security and safety requirements.
11. Determined the Authority's Contract Services Coordinator ("CSC") adequately administered the Bradshaw contract to ensure compliance with contract terms.
 - a. Determined the CSC monitored the routine annual landscaping services and as-needed landscaping services to ensure compliance with contract terms.
 - b. Verified Bradshaw submitted Weekly Landscape Services Schedule to the CSC.
 - c. Determined contract renewal and amendments complied with contract terms and were properly stated.
 - d. Verified the Contractor met the SMWBE requirement in the contract.
 - i. Confirmed with the Director of Business Diversity Development ("BDD") that Bradshaw had met all SMWBE certification requirements and was properly certified by the Authority.
 - e. Determined the CSC performed monthly inspections of the Airport grounds to verify the grounds were being maintained in compliance with contract requirements.
12. Obtained payment history from January 2007 through December 2007 and performed the following:
 - a. Obtained invoices from Accounts Payable files and prepared "As Invoiced" schedule.
 - b. Reviewed each invoice for mathematical accuracy.
 - c. Verified the amount charged per service were consistent with the contractual price.
 - d. Verified that the total services provided throughout the contract period, and the corresponding payments, did not exceed the list of services approved and the total agreed upon fee for the contract period.
 - e. Verified the Contactor billed for actual services performed during the invoicing period.
 - f. Verified escalations per the contract amounts were correctly calculated.
 - g. Verified some of the invoices were not properly coded and approved by Authority personnel.
13. Determined work outside of the contract was properly approved.
 - a. Obtained invoices from January 2008 through July 2008 and randomly selected three invoices for detailed testing.
 - b. Determined an estimate was provided to the Authority and approval for payment was made prior to the work being performed.

14. Reviewed instances of services performed over and above the contract. Confirmed that the services were requested and authorized by appropriate Authority personnel.
15. Through inquiry and observation, reviewed the existing internal controls in place.

Conclusion

Based upon the audit, the following was determined with respect to the stated objectives:

1. An invoice for routine annual services performed during Year 4 contracting period was received and paid against the prior year's contract, as noted in finding #1.
2. Invoices for as-needed landscaping services were paid against the contract for routine annual services, as noted in finding #2.
3. The Authority did not include the terms and conditions for exercising renewal options in the Bradshaw Contract, as noted in finding #3.
4. Bradshaw should provide the Authority with a copy of the soil analysis reports to ensure compliance with contract requirements, as noted in finding #4.

Finding #1

Observation

An invoice for routine annual services performed during Year 4 contracting period was received and paid against the prior year's contract.

Background

The Finance Department generally inputs the terms and conditions of Maintenance service contracts and contract amendments into the MP2 system and Maintenance performs the receiving of invoices against those contracts for payment. This provides Maintenance with a tool for monitoring the amount received and the amount remaining on the contract at any point in time.

Most Maintenance service contracts have specific beginning and ending contract dates associated with them. Although there is no field within MP2 on which to document the expiration dates, the Finance Department documents the time period to be covered in the notes field in MP2. Finance closes contracts in MP2 when the total contract amount has been received or upon expiration of the contract.

An objective of the audit was to determine the validity of payments made to Bradshaw and verify invoices were properly coded and approved by Authority personnel. Through audit testing, Internal Audit identified the following invoice for routine annual services performed

during Year 4 (January 2007 – December 2007) contracting period that was received and paid against the prior year’s contract (CO06-000028). The prior year’s contracting period was from January 2006 through December 2006.

SPECIFICATION	04/01/07 Invoice #MNAA20070401
#1 - Grass Mowing - East Area	\$4,551.74
#2 - Fertilizing Annual Flower Beds & Turf Grass:	
Flower Beds	1,799.78
Turf Grass	4,704.18
Trees	866.15
Shrubs	2,856.03
#3 - Insecticide/Fungicide/Herbicide Spraying	1,012.38
#4 - Tree Pruning and Trimming	784.46
#6 - Winter Creeper Edging & Trimming	910.01
#7 - Aarons St. Johnswort Edging & Mowing	4,807.67
#10 - Daily Maintenance Personnel	4,921.28
Total	\$27,213.68

The invoice was received against the prior year’s contract (CO06-000028) in the MP2 system on April 11, 2007, and paid (Check No. OPER049309) by the Authority on April 20, 2007.

Additionally, Internal Audit reviewed the Third Amendment to the Bradshaw Contract, entered into on January 16, 2007, which exercised the Authority’s renewal option to extend the Contract from January 1, 2007 through December 31, 2007. The Finance Department received a copy of the Amendment from the Purchasing Department on January 18, 2007, which was noted on Finance’s file copy. The Amendment complied with contract terms and was properly stated.

Through further audit testing, it was determined that the Finance Department did not set up Bradshaw’s Year 4 Contract (CO07-000023) in the MP2 system until April 12, 2007. Consequently, invoice #MNAA20070401 was received and paid against the prior year’s contract because the Year 4 Contract was not set up and the prior year’s contract was open with an available balance to receive against.

It should also be noted that Bradshaw’s Year 3 Contract (CO06-000028) for the period January 2006 through December 2006 was not closed by the Finance Department in the MP2 system until August 20, 2007, approximately 8 months after the expiration date.

If a contract expires but is not identified in a timely manner, the Authority could continue paying for undesired or inappropriate services.

Recommendation

In the future, the CSC should ensure that the contract to which invoices relate are still current before an invoice is approved and received for payment.

The Finance Department should set up contracts in the MP2 system in a timely manner to ensure payments adhere to current contract terms and conditions. In addition, the Finance Department should close out maintenance service contracts or contract amendments prior to setting up the new or current contract. This will ensure no payments will be made against contracts that have passed their expiration dates.

Management Response

The CSC will notify all parties charged with receiving or payment responsibilities for the landscaping contract that a new contract year has begun when submitting payment request invoices for action.

Maintenance received the invoice against the 2006 contract. The treatment of contracts, engagement letters, and other similar documents has been inconsistent at MNAA. Finance and Purchasing will work together to develop a procedure for gathering, entering, maintaining, and closing contracts in MP2. However, it should be the responsibility of the using department (i.e., Maintenance) to advise Finance when a contract should be closed. The using department is in the best position to know if all invoices for goods and services rendered have been received and paid against the contract. There are many situations where it may be appropriate to have multiple contracts with the same vendor, as well as have contracts open for both the prior and current year. Closing a contract prematurely may make it difficult to process payments timely and create reporting errors. While Finance should generally not make the final determination to close a contract, Finance can remind using departments to review open contracts and review contracts for closing if they remain open 60 or more days past the expected contract expiration date.

Finding #2

Observation

Invoices for as-needed landscaping services were paid against the contract for routine annual services.

Background

The Authority established through the contracting documents routine landscaping services that would be required to be performed on an annual basis. The routine annual services are received and paid against the contract terms set up in the MP2 system. Additionally, the Authority determined there were as-needed landscaping services that may or may not need to

be performed throughout the year and therefore established labor and material costs for these services. The as-needed services require pre-approval from the CSC and are not paid against the contract but coded to the proper accounting code.

The following invoices for as-needed landscaping services were improperly coded by the Authority or the Contractor and paid against the contract terms for routine annual services.

SPECIFICATION	10/02/07 Invoice #MNAA200 7100008	10/02/07 Invoice #MNAA200 7100009	12/03/07 Invoice #MNAA200 7120001	12/24/07 Invoice #MNAA200 7120018	Total As- Needed Invoices Paid Against Contract
#14 - Plant Bed Pre/Post Emergent Applications			3,768.28		3,768.28
#21 - Maintenance of Overflow Parking Area	400.00	800.00			1,200.00
#22 - Vole Monthly Maintenance			1,254.66	1,254.66	2,509.32
Total	\$400.00	\$800.00	\$5,022.94	\$1,254.66	\$7,477.60

Although the amount received against the contract is not considered material, it could have affected the available monies remaining on the contract for future invoice payments. Therefore, the invoices should specifically identify whether the payments are for routine annual services or as-needed services for proper accounting of payments.

Recommendation

The CSC should make certain landscaping invoices specifically identify whether the payments are for routine annual or as-needed services to ensure invoice payments are properly approved, coded, and comply with contract terms.

Management Response

The CSC will mark all payment request invoices to reflect whether they should be paid as contract or non-contract service.

Finding #3

Observation

The Authority did not include the terms and conditions for exercising renewal options in the Bradshaw Contract.

Background

The Exterior Landscape Services Invitation to Bid (“ITB”) stated the contract would be a three-year contract with two options to renew. However, the Purchasing Department notified

Bradshaw through a notice of award letter dated October 30, 2003, that the Authority would be issuing the contract for one year and would renew years two and three by amendment due to the contract, payment, and performance bonds needing to be renewed annually. Therefore, the Bradshaw Contract was set up for a period of one year, effective January 4, 2004 through December 31, 2004.

The Authority has exercised all options to the Contract through a formal contract amendment process. All of the Amendments (one through four) complied with the current contract terms and were properly stated. However, the Authority did not include in the Exterior Landscape Services ITB, notice of award letter, or Bradshaw Contract, the standard contracting language for exercising contract renewal options.

For example, the Bradshaw Contract should have included standard Term of Contract language as noted below.

The Contract commences on the date of full execution and is for a period of one year, and is subject to four additional one-year renewals. MNAA will have the sole right to exercise said options by giving the Contractor at least thirty days written notice prior to the expiration of the original term or any renewal term.

The Authority needs to make sure there are certain standards included in contract documents to clearly define the contracting period and conditions for exercising renewal options.

Recommendation

The Purchasing Department should make certain the contracting period is properly stated and the conditions for exercising renewal options are included in the upcoming Exterior Landscape Maintenance Services contract and contracting documents.

Management Response

Purchasing will make certain that the contracting period is properly stated in all future contacts.

Finding #4

Observation

Bradshaw should provide the Authority with a copy of the soil analysis reports to ensure compliance with contract requirements.

Background

Soil analysis is used to determine the level of nutrient content, composition, and other characteristics found in a soil sample. The results of soil analysis provide agricultural personnel with an estimate of the amount of fertilizer nutrients needed to supplement the soil and obtain the desired growing results.

The contracting documents require Bradshaw to have soil analysis performed twice per year by a qualified soil-testing laboratory, stating percentages of organic matter, gradation of sand, silt and clay content, cation exchange capacity, soluble salt level, soil pH, nitrogen, phosphorus, potassium (“NPK”) ratings, macro and micronutrients. Bradshaw would collect 19 separate soil samples from annual flowerbeds and turf grass areas and 15 separate soil samples from trees and shrub areas at random locations. The soil testing report would provide recommendations for applications of chemicals and fertilizers.

Internal Audit obtained soil analysis reports performed by Soil First Consulting and verified that Bradshaw was complying with soil analysis contracting requirements; however, the Authority does not receive a copy of the soil testing reports. Bradshaw indicated that the Airport grounds soil nutrient content has not changed much over the past 5 years and any soil deficiencies and recommendations noted on the soil reports are communicated to the CSC.

Although Bradshaw is performing soil testing, providing the CSC with a copy of the soil testing reports would ensure compliance with contract requirements.

Recommendation

Bradshaw should provide the CSC with a copy of the soil testing reports to ensure compliance with contract requirements.

Management Response

The CSC has instructed the Contractor to provide MNAA copies of all soil sample test data along with a statement outlining any actions the Contractor deems necessary to take as a result of the test results.