

Internal Audit Report

**CONTRACT COMPLIANCE
ROAD RESURFACING
DEPARTMENT OF PUBLIC WORKS
APRIL 2008**

Office of the County Auditor





OFFICE OF THE COUNTY AUDITOR

Haskell Arnold, CPA
County Auditor

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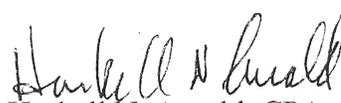
The County Council and County Executive
of Howard County, Maryland

Pursuant to Section 212 of the Howard County Charter and Council Resolution 22-1985, we have conducted a review of selected activities of the

DEPARTMENT OF PUBLIC WORKS CONTRACT COMPLIANCE - ROAD RESURFACING

and our report is submitted herewith. The scope of our examination related specifically to a review of Contracts on Capital Project H-2008, "FY 2006 Road Resurfacing Program." The body of our report presents our findings and recommendations.

The contents of this report have been reviewed with the Chief Administrative Officer, and the Director of Public Works. We wish to express our gratitude to the Bureau of Highways and the Office of Purchasing for the cooperation and assistance extended to us during the course of this engagement.


Haskell N. Arnold, CPA
County Auditor


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SUMMARY

We performed a contract compliance review of the contracts for road resurfacing entered into by the County. We reviewed contracts and payments for fiscal year 2007. We found that the County's payments to the vendors are in compliance with contract pricing and total cost. However, we found that work was done against a contract before it had been issued and that the commitments against the capital project exceeded the budgeted appropriation. We also found that costs were shifted between capital projects. Written policies and procedures need to be prepared and kept current in order to ensure that personnel are aware of all requirements.

We made several recommendations to improve the controls over spending against capital projects. These recommendations will help the County to better track the costs against capital projects.

INTRODUCTION AND SCOPE

The County Auditor's Office reviewed compliance to the contracts for Road Resurfacing on Capital Project H-2008, "FY 2006 Road Resurfacing Program." We selected three contracts from this capital project for compliance with terms stated, renewal periods and any other concerns related to this operation. We reviewed all of the invoices paid in Fiscal Year 2007 against these three contracts to ensure compliance with the terms of the contracts. These contracts are monitored by the Department of Public Works, Bureau of Highways. We did not look at the bidding process other than to determine how the contract was awarded.

BACKGROUND

Capital project H-2008 is a multi-year project to provide resurfacing to various County roads that are selected and prioritized by the Road Surface Management System. This system rates roads based on the actual observed conditions of the road surface. Milling, shoulder improvements, surface-seal and other road preparation work may be required. The County enters into multiple contracts to provide for the different types of work to be done.

The County employs inspectors, both County employees and contracted inspectors, to observe the process and to measure and record quantities of product used. The inspectors are on-site throughout the construction process to ensure compliance with standard specifications required by the State of Maryland. Inspectors then report the information about quantities of product used to the Bureau of Highways. When the contractors bill the County for the work that was done, the bills are sent to the Bureau of Highways for approval. At the Bureau of Highways, the invoices are compared against the information provided by the inspectors. If the quantities are in agreement, the Engineering Specialist III who oversees the project will sign off so that the invoice can be processed for payment. If there is a discrepancy, the contractor is contacted and the difference is resolved before payment of the invoice.

FINDINGS AND RECOMMENDATION

We looked at three purchase orders and the accompanying contracts and invoices for Fiscal Year 2007. The three purchase orders were: M-3372 to E.J. Breneman, L.P., M-3237 to American Paving Fabrics, Inc., and M-1765 to Bardon Inc., dba Aggregate Industries. Each purchase order is discussed separately below.

P.O. M-3372, E.J. Breneman, L.P.

Section 807 of the Howard County Charter allows joint or cooperative purchases with other public jurisdictions within the State of Maryland, or with the State, and with other public entities. This purchase order was to place crack seal materials on an as-needed basis at various Howard County locations in accordance with all terms, conditions and specifications of Maryland State Highway Administration Contract #4071241407, "Crack Sealing at Various Locations." The contract was properly signed and dated August 24, 2006 and the purchase order, in the amount of \$220,000, was issued on September 1, 2006. The contract was to expire on December 31, 2007. Since the funding for this contract was approved in the Fiscal Year 2007 Capital Budget, there is not a violation of Section 612 of the Howard County Charter. There was no provision to extend the contract.

According to both the County inspector's records and the vendor's invoice, all of the work was performed between October 31, 2006 and December 6, 2006. The vendor submitted an invoice to the County dated December 11, 2006 for \$219,757.90. All line items were priced in accordance with the contract pricing. There were four instances where the daily quantities shown on the inspector's log did not match those from the vendor. The differences were in the quantity of joint and crack sealing material used and ranged from 10 to 40 pounds. In total, the total difference was 20 pounds, with the vendor billing the County for 134,990 pounds of material used while the inspectors logged 135,010 pounds of usage. The total difference would have amounted to \$32.20, an amount we consider to be immaterial.

P.O. M-3237, American Paving Fabrics, Inc.

This purchase order was also made within the provisions of Section 807 of the County Charter. It is a requirements contract that instructs the vendor to “in accordance with all terms, conditions, and specification of Anne Arundel County Proposal #H-478647 (P.O. #103516-000-OO) “Bituminous Surface treatment County Wide” and agreement dated July 26, 2006, you are to place petromat paving fabrics on various County roads.” As noted, the contract was properly signed on July 26, 2006 and the purchase order in the amount of \$330,000 was issued the same day. The contract was effective for 60 days after the date of commencement, or until September 25, 2006. There was no provision to extend the contract.

The vendor submitted four invoices to the County against this purchase order that totaled \$260,323.86. However, we noted that the earliest invoice was dated July 5, 2006, three weeks before the date of the contract and purchase order and was for work performed between May 2, 2006 and June 30, 2006. Therefore, the work against this purchase order commenced nearly three months before the contract and purchase order were in place and was for work performed in the prior fiscal year. We did not find any indication that these funds had been encumbered in the previous fiscal year. Additionally, we reviewed the financial records pertaining to this project at the end of Fiscal Year 2006 and discovered that the expenditures and encumbrances totaled \$1,447,607.26 more than the amount budgeted. We also found that the second invoice against this purchase order was for work performed between July 5, 2006 and July 25, 2006, again prior to the date of the purchase order and contract.

The budget is a legal document which clearly indicates how much can be obligated against each capital project. The fact that the expenditures and encumbrances as of June 30, 2006 exceeded the budgetary authority indicates that this is not being followed. Additional work, performed by American Paving Fabrics, was not included in this overage. Also, \$151,369.10 of work had been performed in the absence of a contract and purchase order. We, therefore, recommend that:

1. **The Department of Public Works should monitor its expenditures and encumbrances more closely in order to avoid exceeding budgetary authority.**

Administration's Response:

The Administration concurs with this recommendation. The Department of Public Works will manually monitor its expenditures and encumbrances against the County's financial databases maintained by the Department of Finance in order to avoid exceeding budgetary authority.

2. ***The Department of Public Works should not enter into any agreement which would cause a project to exceed budgetary authority.***

Administration's Response:

The Administration concurs with this recommendation. The Department of Public Works will not enter into any agreement which would cause a project to exceed budgetary authority as verified by the County's financial databases maintained by the Department of Finance.

3. ***The Department of Public Works should provide the Department of Finance with information to ensure that all work performed by the end of the fiscal year is accrued against each capital project.***

Administration's Response:

The Administration concurs with this recommendation. The Department of Public Works will provide the Department of Finance with all requested information to ensure that all work performed by the end of the fiscal year is accrued against each capital project.

4. ***The Department of Public Works should work to ensure that no work shall be performed in the absence of a purchase order and a contract, when required.***

Administration's Response:

The Administration concurs with this recommendation. The Department of Public Works will make sure that work is performed only with a purchase order and a contract, when required.

We checked the quantities on each invoice to ensure that the pricing matched the contract price and that the quantities matched the amounts recorded by the County's inspector. The pricing was correct on all four invoices and the quantities were correct on three out of four invoices. On American Paving Fabrics invoice number 34901, dated July 5, 2006, backup information attached to the invoice by the vendor indicated that the vendor had provided 55,814 square yards of paving fabric and this matched the quantity shown on the inspector's records for the same dates. However, the invoice was only for 46,011 square yards of paving fabric, a difference of 9,803 square yards, or \$14,606.47 at the contract price. We were unable to determine what constituted this difference. We spoke with personnel from the Bureau of Highways and they could not account for this difference either. We asked if there were any written procedures in place that cover the approval of invoices and found that none exist. This amount is not immaterial and the County may have a liability to the vendor. We, therefore, recommend that:

5. ***The Department of Public Works should contact American Paving Fabrics, Inc. to resolve the difference on invoice number 34901.***

Administration's Response:

The Administration concurs with this recommendation. The Department of Public Works has contacted American Paving Fabrics, Inc. and has received their written confirmation that Purchase Order M3237, which includes this invoice, has been paid in full.

6. ***The Department of Public Works should develop a set of written procedures to cover the process of approving invoices for payment and that the procedures should include a method to compare quantities on invoices against quantities on backup information to ensure that they are in agreement.***

Administration's Response:

The Administration concurs with this recommendation. The Department of Public Works has developed a set of written procedures to cover the process of approving invoices for payment and that the procedures should include a method to compare quantities on invoice against quantities on backup information to ensure that they are in agreement.

P.O. M-1765, Bardon Inc., dba Aggregate Industries

This purchase order was made through the bidding process. It is a requirements contract to lay superpave material on various roads in accordance with all terms, conditions, and specifications of “Road Patching and Resurfacing Program – FY06.” The contract was properly signed on July 28, 2005 and the original purchase order was issued on July 29, 2005. The original purchase order price was \$2,993,942.48. There were seven change orders to the P.O., making the final purchase order amount \$3,203,267.68. Work on the contract was to commence on August 15, 2005. Section 15.1 of the contract states that “This is a requirements type contract for 1 year commencing after approval and proper execution of the contract documents, with a renewal option for 1 additional year, exercisable at the sole discretion of the County.” The County held a five percent retainage until satisfactory completion of the project. In the General Conditions section of the contract (page GC-89), the stated amount of retainage is ten percent “unless otherwise reduced in the discretion of the engineer.” The reduction to five percent retainage was at the engineer’s discretion. However, in the Special Provisions section of the contract (paragraph 21.12), the retainage amount is stated as being ten percent, with no allowance for reduction at the engineer’s discretion. It was noted that the General Conditions contained language that indicated that in the case of any discrepancy, the terms listed in the General Conditions would take precedence. We understand that with multiple contract documents, some discrepancies may occur and concur with this mechanism for reconciling the differences.

The contract was for two purchase orders on two different but similar capital projects. The contract total, and that of the original two purchase orders, is \$5,993,942.48. (It should be noted that the contract total is not a fixed price, but is based upon estimated quantities. The contract covers the unit costs of each line item only. Vendors are paid for the actual quantities used at the contracted price.) The other purchase order was number M-1764 against Capital Project H-2007. This project is to remove the travel surface and replace the structural road base in selected areas of the roadway, then resurface with base aggregate bituminous concrete or surface treatment material in that area. These improvements act as a program to extend the useful life of the existing road, delaying the cost and need for complete resurfacing. The original price of P.O. M-1764 was \$3,000,000. There were two change orders to the P.O., making the final purchase order amount \$2,949,000. Our review of the contract did not indicate any contractual separation between capital projects of the work to be performed. The only place where the projects were separated was in the purchase orders.

There were eight invoices paid against purchase order M-1765 in Fiscal Year 2007. The contract has a clause that provided for a cost adjustment for liquid asphalt if the price increased or decreased from \$180 per ton. This adjustment was based on the asphalt index listed on the Maryland Asphalt Association website. Four of the invoices paid were for increased costs of liquid asphalt. In each case, we were able to verify the unit cost and the quantity used to justify the cost increases. There were two invoices for work performed between June 28 and August 25, 2006. We compared a sample of the daily totals from the inspector's log to the daily amounts on the invoices and found no exceptions. We found that the total quantities on the invoices added up correctly and the pricing was in accordance with the contract. There was an invoice that was split between two purchase orders, the other purchase order being number M-3315, dated August 17, 2006 and issued to Bardon, Inc. dba Aggregate Industries. It was for work performed through September 22, 2006. Since only \$1,589.65 was applied to P.O. M-1765, we did not test this invoice. The other invoice was to pay the retainage on all previous invoices for work performed.

We anticipated that the invoice for retainage would be split in proportion to the dollar amount of the work performed under each purchase order. Prior to paying the retainage, the amount charged against P.O. M-1765 was \$3,179,750.52 and the amount paid against P.O. M-1764 was \$2,650,684.56. We expected that the amount of retainage charged against P.O. M-1765 would be 54.537% of the invoice total of \$313,856.15, or \$171,168.06. However, only \$15,560.71 was charged against this purchase order, a difference of \$155,607.35. We asked Bureau of Highways personnel why this occurred. We received no definitive answer. It was suggested that the retainage may not have been withheld on some invoices. We reviewed the invoices from fiscal year 2007 and determined that retainage had been withheld at five percent on each one of them. We did not review all of the invoices, since some of them were from Fiscal Year 2006, but we found that the retainage on the two invoices for work performed between June 28 and August 25, 2006 was \$70,838.17, more than the amount paid against the subject purchase order. We noted, however, that purchase order price of P.O. M-1765 was only \$23,517.16 higher than the expenditures against that purchase order to the date of the invoice. If the full amount of retainage that should have been charged against P.O.M-1765 had been paid, the total amount paid against that purchase order would have exceeded the purchase order amount by \$147,650.90 and would have required an eighth change order. The amount of retainage charged against P.O. M-1764 matched exactly the amount remaining on that purchase order. It is apparent that amount of retainage charged against P.O. M-1765 was reduced in order to keep the total expenditures under the purchase order total and not cause another

change order to be processed. When we were asking why the retainage against P.O. M-1765 was so low in relation to P.O. M-1764, it was stated that it didn't matter since it was all against the same contract. However, since the contract was for two different capital projects, each with a separate, legally adopted budget, it does matter which capital project is charged for the work being performed. Since both purchase orders have been closed, further changes to the purchase orders cannot be made.

In our discussion with personnel from the Department of Public Works, we found that the reason the two projects were combined was because the major efforts of both projects were the same and it was believed that combining the two projects on a single bid would yield a lower overall cost. The amounts initially assigned to each project were done so arbitrarily. While we concur with trying to reduce costs, the legal budget document must be followed and takes precedence. However, we noted that the two efforts were combined in capital projects through Fiscal Year 1999 and believe that a solution may lie in combining the two projects into one.

We recommend that:

7. ***The Purchasing Office should not issue any contracts against more than one capital project unless the contract clearly delineates which items are to be charged against each capital project.***

Administration's Response:

The Administration concurs with this recommendation. The Purchasing Office will not issue any contracts against more than one capital project unless the contract clearly delineates which items are to be charged against each capital project.

8. ***The Department of Public Works should establish a procedure to ensure that the costs on a capital project are not applied to another capital project.***

Administration's Response:

The Administration concurs with this recommendation. The Department of Public Works will establish a procedure to ensure that the costs on a capital project are not applied to another capital project.

9. *The Department of Public Works should work with the Department of Finance to effect a transfer of funds in the amount of \$155,607.35 from Capital Project H-2007 to Capital Project H-2008 to properly account for the amount of work done on each project.*

Administration's Response:

The Administration concurs with this recommendation. The Department of Public Works has requested a Journal Voucher for the Department of Finance to effect a transfer of expenses in the amount of \$155,607.35 to properly account for the amount of work done on these projects.

10. *The Department of Public Works should consider combining the capital projects for Road Resurfacing and Deep Milling Restoration in order to realize potential cost savings while operating within budget constraints.*

Administration's Response:

The Administration concurs with this recommendation. The Department of Public Works will combine the capital projects for Road Resurfacing and Deep Milling Restoration.

We asked if the Bureau of Highways was satisfied with the performance of each of the three vendors that we tested and if there were any vendor disputes or legal issues relating to the contract. We were told that the vendors had performed the work according to the specifications and that the work was acceptable to the Bureau and that there were not any disputes with the vendors or any legal issues related to the contracts.

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