Prince William County, Virginia

Internal Audit of the
Public Works Department
Buildings & Grounds Division’s
Work Order Process

Prepared By:
Internal Auditors

November 17, 2014
# Table of Contents

Transmittal Letter ................................................................................................................................. 1  
Executive Summary .............................................................................................................................. 2 - 4  
Background ........................................................................................................................................... 5 - 6  
Objectives and Approach ......................................................................................................................... 7  
Issues Matrix ........................................................................................................................................ 8 - 14  
Process Maps ....................................................................................................................................... 15 – 17  
Appendix
November 17, 2014

The Audit Committee of Prince William County, Virginia
1 County Complex Court
Prince William, Virginia 22192

Pursuant to the approved internal audit plan for fiscal year (“FY”) 2014-15 for Prince William County, Virginia (the “County”), we hereby present the internal audit of the Public Works Department - Building & Grounds Division’s Work Order Process. We will be presenting this report to the Audit Committee of Prince William County at the next scheduled meeting on December 9, 2014. Our report is organized in the following sections:

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>This provides a summary of the issues related to our internal audit of the Building &amp; Grounds Division.</td>
</tr>
<tr>
<td>Background</td>
<td>This provides an overview of the Building &amp; Grounds processes covered as a part of this audit.</td>
</tr>
<tr>
<td>Objectives and Approach</td>
<td>The internal audit objectives and focus are expanded upon in this section as well as a review of the various phases of our approach.</td>
</tr>
<tr>
<td>Issues Matrix</td>
<td>This section gives a description of the items noted during our internal audit and recommended actions as well as management’s response, responsible party and estimated completion date.</td>
</tr>
<tr>
<td>Process Maps</td>
<td>This section provides a depiction of each process in flow chart format.</td>
</tr>
<tr>
<td>Appendix</td>
<td>This section provides an organizational chart of each component unit of the Building &amp; Grounds Division deemed relevant to our procedures.</td>
</tr>
</tbody>
</table>

We would like to thank the staff and all those involved in assisting the Internal Auditors in connection with the internal audit of the Building & Grounds Division’s Work Order Process.

Respectfully Submitted,

[Signature]

INTERNAL AUDITORS
Executive Summary
Executive Summary

The objective of this internal audit was to assess whether the system of internal controls over the Building & Grounds ("B&G" or "the Division") work order process is adequate and appropriate for promoting and encouraging the achievement of management's objectives for effective recording and monitoring. In addition to evaluating the Division’s approach and policies, the internal audit and testing focused on the following key processes:

- Work Order initiation and closeout
- Work Order labor
- Work Order invoices (materials and subcontractors)

In FY 2013, the Prince William County Building & Grounds Division processed over 5,000 work orders at an approximate cost of $9.6 million. The Division is responsible for providing maintenance, custodial, printing and mailing services for over 1 million square feet of building space throughout the County. The Division is funded through the County’s general fund and retains approximately seventy-six (76) authorized positions.

The following section provides a summary of the Issues identified during our procedures. We have assigned relative risk factors to each Issue identified. A summary of issues identified and their relative risk rating is provided below. This is the evaluation of the severity of the concern and the potential impact on the operations. There are many areas of risk to consider including financial, operational, and/or compliance as well as public perception or ‘brand’ risk when determining the relative risk rating. Items are rated as High, Moderate, or Low.

- **High Risk Items** are considered to be of immediate concern and could cause significant operational issues if not addressed in a timely manner.
- **Moderate Risk Items** may also cause operational issues and do not require immediate attention, but should be addressed as soon as possible.
- **Low Risk Items** could escalate into operational issues, but can be addressed through the normal course of conducting business.

The details of these Issues are included within the Issues Matrix section of this report.

<table>
<thead>
<tr>
<th>Issues</th>
<th>Risk Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Performance Metrics / Key Performance Indicators</td>
<td>High</td>
</tr>
</tbody>
</table>

Through our discussions, we noted that there is currently not a recurring, documented process in place for management level monitoring of B&G performance metrics and key performance indicators (KPI). More specifically:

- **Work request / order response time**, including:
  - Time between the initial request and the investigation date
  - Time between the investigation date and start of work
  - Time between the start of work and completion of the job
- **Area hub comparability metrics**, including:
  - Response times (as noted above)
  - Labor hours
  - Materials / Subcontractor costs
  - Work code volume

Consistent, documented and timely review of performance metrics and KPIs is essential to give management the ability to identify trends, assess performance and progress against goals, and identify areas requiring more in-depth review.
## Executive Summary - continued

<table>
<thead>
<tr>
<th>Issues</th>
<th>Risk Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2. Work Order Labor - Review / Timecard Retention</strong></td>
<td>High</td>
</tr>
</tbody>
</table>

During our review, we noted the following issues with respect to work order labor entry into the Infor10 Work Order system:

a) There is not a consistent process in place for mechanics to record their work order time. Manual time entry varies by B&G area “hub” and ranges from daily entry into a manual time sheet, to transcribing labor hours directly onto the printed copy of the respective work order.

b) Supervisors enter mechanic work order time directly into Infor10 from the mechanisms described in the previous bullet. There is currently not a process in place to validate the accuracy of this data entry. Supervisors and the Division Chief conduct varying levels of monthly labor review from the system, but no detailed review of source documents to the actual time entered into Infor10 is performed.

c) B&G retains employee Bi-Weekly timesheets required by County policy; however, there is currently no process in place for the retention of the referenced manual, work order time sheets. For example; when testing work orders as a part of our audit, the Division supplied the time sheets prepared in association with the County’s Bi-Weekly payroll because the manual time sheets associated with each work order had not been retained. Note: Bi-Weekly time sheets do not include a reference to individual work orders and therefore are of limited value in assessing the accuracy of work order time.

d) The policy in place requiring work order labor to be entered into the Infor10 system by the third (3rd) Friday after the end of the previous month is not consistently followed. For example, during our walkthrough with one of the Building Operations Supervisors (conducted on October 16, 2014), we noted that work order time for the respective area hub mechanics had been entered through September 5, 2014; representing a nearly six (6) week delay in time entry.

Due to the fact that the Infor10 system is not integrated with the County’s accounting system and very few work orders are billed out through interdepartmental transfers, inaccurate labor data within the system poses limited risk to the Division. However, these issues increase the risk of inaccurate reporting out of the Infor10 system (which is the system’s primary function), as well as the risk of confusion if specific work orders must be revisited / investigated.

| 3. Work Order Invoices – Review of Data Entry into Performance | Moderate |

During our review, we noted that for materials or subcontractor invoices less than $5,000, there is currently not a process in place for review of the accuracy of invoice data entered into the Performance accounting system. The Accounting Assistant II receives approved invoices from Building Operations Supervisors and enters the relevant invoice attributes into the Performance System. If the invoice is greater than $5,000 it is scanned into the accounting system and subsequently reviewed by all system generated approvers (click approval in Performance). If the invoice is less than $5,000, it is filed at the Accounting Assistant II’s desk and not circulated for accuracy review. Performance system data for invoices less than $5,000, is still subjected to multiple levels of automated review within the Performance system; however, the source document is not included with any of these subsequent levels of review.

Lack of detailed review of accounting system data entry can result in invoices posted for incorrect amounts, in the wrong period, against the wrong purchase order or to the wrong ledger account.

Our detailed procedures consisted of the testing of a sample of 30 work orders. No exceptions were noted related to invoice accuracy through our procedures. However, based upon the process design and controls noted, the opportunity exists for the risks noted above.
Executive Summary - continued

<table>
<thead>
<tr>
<th>Issues</th>
<th>Risk Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4. Work Order System Reporting – Source Data Review</strong></td>
<td>Moderate</td>
</tr>
</tbody>
</table>

During our review, we noted that no formal process exists for reviewing the accuracy of calculations performed by the Management and Fiscal Analyst II, pursuant to monthly, annual or ad-hoc reporting out of the Infor10 system. The information / metrics being reported are reviewed by the Division Chief for reasonableness in conjunction with his expectations and in comparison to prior period data for reasonableness, but an accuracy review of the source data used to develop the information / metrics is not conducted.

As noted in the previous issues above, the Infor10 system’s primary function is to manage / track work order information for the purposes of having minable data for external reporting (external to the Building & Grounds Division). Due to the fact that executive management and the Board will be using the data reported out of Infor10 for decision making, not conducting independent accuracy review of source data used in the preparation of these reports increases the risk of decisions being made using inaccurate data.

| **5. Work Order Invoices – Review of Data Entry into Infor10** | Moderate |

During our review, we noted that there is not a process in place for the review of the Administrative Support Assistant’s invoice data entry into the Infor10 system for accuracy. The Administrative Support Assistant receives the approved invoice from the Accounting Assistant II after it has been entered into the County’s accounting system. The Administrative Support Assistant enters the relevant data from the invoice into Infor10 and then files a copy of the invoice. No subsequent review of the accuracy of this data entry is performed.

Due to the fact that the Infor10 system is not integrated with the County’s accounting system and very few work orders are billed out through interdepartmental transfers, inaccurate invoice data entered into the work order system poses limited risk to the Division. However, these issues increase the risk of inaccurate or incomplete reporting out of the Infor10 system (which is the system’s primary function).
Background
Background

Overview
The mission of the Prince William County Department of Public Works – Building & Grounds Division is to do the right thing for the community by creating and sustaining the best environment in which to live, work and play. The B&G Division maintains the infrastructure needed for employees to serve the community by providing building maintenance services to over 125 owned facilities and selected leased properties. These services include, but are not limited to; landscaping, grounds maintenance, paving repair and installation, and moving services; custodial services for over one million square feet; and mail and printing services supporting the needs of the County government. The Division also provides 24/7 operation and responsive emergency support to address natural or manmade disasters and snow removal to keep the County functional. B&G’s work is done with an efficient combination of in-house and contract staff.

Division Organizational Structure and Service Summary
Organizationally, the Building & Grounds Division is broken down into the following component units:

<table>
<thead>
<tr>
<th>Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Administration team within the Building &amp; Grounds Division retains primary responsibility for the following activities:</td>
</tr>
<tr>
<td>• Management / Oversight</td>
</tr>
<tr>
<td>• Recurring and Ad-hoc Reporting</td>
</tr>
<tr>
<td>• Clerical / Administration</td>
</tr>
<tr>
<td>There are currently seven (7) positions within the Division classified as “Administrative”, one of which is currently being supplemented by temporary labor (Accounting Assistant II). The Administration team utilizes the Infor10 system for work order data entry and reporting.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grounds Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Grounds Maintenance team is responsible for providing landscaping and general grounds maintenance for the County’s owned and leased facilities. The team is comprised of a primary supervisor and five (5) maintenance workers, who accounted for approximately 18% of all work orders processed by the Building &amp; Grounds Division (for the period October 1, 2013 – October 1, 2014). The Grounds Maintenance team utilizes the Infor10 system for work order labor, subcontractor and materials data entry and review.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Building Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Building Maintenance team is responsible for installing light fixtures, air filters, and executing all basic repairs needed in the over 125 owned and leased facilities. The team is comprised of five (5) area supervisors (by region); each responsible for managing a team of between three (3) and five (5) maintenance mechanics / technicians. Building Maintenance utilizes the Infor10 system for work order labor, subcontractor and materials data entry / review; and accounts for the largest percentage of work orders completed by any B&amp;G subdivision (80% of all work orders).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Custodial Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through the Building &amp; Grounds Division, Prince William County’s Custodial services team provides waste removal, floor care, rest room sanitation and other cleaning services to over one million square feet of building space. The team is led by two (2) Custodial Services Coordinators, who each manager at team of between ten (10) and thirteen (13) Custodians. The Custodial Services team does not utilize the Infor10 system in its day to day operations. However, some work orders performed by the Division are classified as “HSKP” or “Housekeeping” if they pertain to services like those managed by the Custodial Services team (&lt; 1% of all work orders).</td>
</tr>
</tbody>
</table>
Mail & Courier Services / Graphic Arts and Print Shop

In addition to the building and grounds maintenance and repair functions noted above, the B&G Division also retains responsibility for the County’s mail handling as well as copy and print services for all County departments. These services consist of the processing of approximately 1.4 million pieces of mail, over 7 million copy jobs and approximately 1,300 print jobs each year. The Mail & Courier Services and the Graphic Arts and Print Shop do not utilize the Infor10 work order system in their day to day operations.

Refer to Appendix A for graphical depictions of the current organizational structure as provided by B&G management that were deemed applicable to our procedures.

Building & Grounds Staff to Total Square Footage

The table below details a history of the County’s Building and Grounds staffing ratio. The staffing ratio is the number of Building & Grounds staff as compared to the total square footage maintained by the Division.

<table>
<thead>
<tr>
<th></th>
<th>FY 2012</th>
<th>FY 2013</th>
<th>FY 2014</th>
<th>FY 2015 (adopted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ Ft.</td>
<td>1,453,025</td>
<td>1,453,025</td>
<td>1,453,025</td>
<td>1,453,025</td>
</tr>
<tr>
<td>B&amp;G FTE</td>
<td>72.97</td>
<td>72.97</td>
<td>72.97</td>
<td>74.97</td>
</tr>
<tr>
<td>Ratio</td>
<td>1 to 19,919</td>
<td>1 to 19,919</td>
<td>1 to 19,919</td>
<td>1 to 19,381</td>
</tr>
<tr>
<td>Public Works FTE</td>
<td>340.52</td>
<td>344.52</td>
<td>346.52</td>
<td>348.52</td>
</tr>
</tbody>
</table>

The County’s square footage maintained, as well as related staffing ratios have remained consistent over the past three fiscal years, while the Public Works full-time equivalent employees has grown by approximately two each year. The fiscal year 2015 adopted budget includes an increase in two Building and Grounds full time-equivalent employees.

Systems and Data

To facilitate the achievement of management’s objectives pursuant to the services outlined above, B&G has implemented a CMMS (Computerized Maintenance Management System) called Infor10 (known to many in the Division as D7i). Infor10 is data management software that tracks employee labor hours, materials used and subcontractor services performed pursuant to individual “Work Orders”. As depicted in the process flowcharts included on pages 15 - 17 herein, B&G employees field and execute work requests through various manual data entry points into Infor10.

The following table was also derived directly from the work order data provided by management, and summarizes the average labor, subcontractor, and materials costs per Work Order, by Work Group for all completed Work Orders in the period of October, 1 2013 – September 26, 2014:

<table>
<thead>
<tr>
<th>Work Group</th>
<th>Average Cost Per Work Order</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Labor</td>
</tr>
<tr>
<td>GRDS</td>
<td>$106.95</td>
</tr>
<tr>
<td>MAINT</td>
<td>$160.88</td>
</tr>
<tr>
<td>ADMIN</td>
<td>$237.23</td>
</tr>
<tr>
<td>HSKP</td>
<td>$768.66</td>
</tr>
<tr>
<td>Work Order Avg</td>
<td>$434.67</td>
</tr>
</tbody>
</table>
Objectives and Approach
Objectives and Approach

Objectives

The primary objective of the engagement was to assist the County in executing an Internal Audit of the Building & Grounds Division’s Work Order process in an effort to evaluate the design and effectiveness of internal controls as well as to identify opportunities for efficiency gains and process improvements. Our procedures focused on the following key work order processes:

• Work Order initiation and closeout
• Work Order labor
• Work Order invoices (materials and subcontractors)

Approach

Our approach consisted of the following:

Obtaining an Understanding and Risk Assessment

The first phase of our review consisted primarily of inquiry in an effort to obtain an understanding of the Division’s structure and key processes in scope. The following procedures were conducted as a part of this phase of our review:

• Conducted interviews with key personnel to obtain a detailed understanding of the Division’s work order process and subprocesses, monitoring functions, contractual arrangements and key performance indicators
• Performed a review of any documented policies and procedures, quantitative reporting and other information obtained from the Division
• Performed inquiry with key process owners to obtain an understanding of the following processes:
  o Work Order initiation and closeout
  o Work Order labor
  o Work Order invoices (materials and subcontractors)
• Developed flowcharts for processes within scope
• Based on the information obtained through our inquiry procedures, McGladrey identified inherent risks and relevant controls and developed a detailed, risk-based, workplan for the evaluation of the design of processes and controls.

Evaluation of the Design and Testing of Process and Controls

The Process and Control Evaluation phase of this engagement consisted of an evaluation of the design and testing of select transactions identified within the respective Division’s processes as listed in Phase One above. We performed walkthroughs of each process, including select testing procedures for proper authorization, reasonableness in association with work order tasks and accuracy through source document review including, but not limited to time cards, payroll registers, invoices, service contracts and other relevant data. Specific procedures performed included:

• Obtaining a population of Work Orders completed October 1, 2013 through September 26, 2014
• Testing a sample of 30 work orders to determine if County policies and procedures were followed, appropriate supporting documentation was obtained, proper approvals were made, and transactions were recorded accurately and completely
• Assessing the Division’s processes and controls to determine effectiveness

Reporting

At the conclusion of the audit, we summarized our findings into this report. We have reviewed the results of our testing with the Division Chief and relevant process owners.
Issues Matrix
Through our discussions, we noted that there is currently not a recurring, documented process in place for management level monitoring of B&G performance metrics and key performance indicators (KPI). More specifically:

- Work request / order response time, including:
  - Time between the initial request and the investigation date
  - Time between the investigation date and start of work
  - Time between the start of work and completion of the job
- Area hub comparability metrics, including:
  - Response times (as noted above)
  - Labor hours
  - Materials / Subcontractor costs
  - Work code volume

Consistent, documented and timely review of performance metrics and KPIs is essential to give management the ability to identify trends, assess performance and progress against goals, and identify areas requiring more in-depth review.

**Recommendation**

We recommend B&G develop a formal, recurring process for management level review of Key Performance Indicators. These KPI’s should be selected with the objectives of monitoring trends, assessing performance, and identifying areas of concern, etc. The selected metrics and evidence of management’s review should be documented in a recurring (e.g. monthly) report for ease of review.

**Management’s Response**

B&G agrees. The current process is informal and the present KPIs need to be evaluated for effectiveness in managing the Division. Additional KPIs will be developed to improve the Division’s performance and service to customers.

**Planned Action:** B&G will develop a formalized process for reviewing KPIs. As part of this action, B&G will review and/or revise existing KPIs and create KPIs as needed.

**Responsible Party:** The Change Management Process Team (CMPT), headed by the Division Chief and the Management & Fiscal Analyst II will be responsible for implementation of this.

**Implementation Date:** End of Fiscal Year 2015
During our review, we noted the following issues with respect to work order labor entry into the Infor10 Work Order system:

a) There is not a consistent process in place for mechanics to record their work order time. Manual time entry varies by B&G area “hub” and ranges from daily entry into a manual time sheet, to transcribing labor hours directly onto the printed copy of the respective work order.

b) Supervisors enter mechanic work order time directly into Infor10 from the mechanisms described in the previous bullet. There is currently not a process in place to validate the accuracy of this data entry. Supervisors and the Division Chief conduct varying levels of monthly labor review from the system, but no detailed review of source documents to the actual time entered into Infor10 is performed.

c) B&G retains employee Bi-Weekly timesheets required by County policy; however, there is currently no process in place for the retention of the referenced manual, work order time sheets. For example; when testing work orders as a part of our audit, the Division supplied the time sheets prepared in association with the County's Bi-Weekly payroll because the manual time sheets associated with each work order had not been retained. Note: Bi-Weekly time sheets do not include a reference to individual work orders and therefore are of limited value in assessing the accuracy of work order time.

d) The policy in place requiring work order labor to be entered into the Infor10 system by the third (3rd) Friday after the end of the previous month is not consistently followed. For example, during our walkthrough with one of the Building Operations Supervisors (conducted on October 16, 2014), we noted that work order time for the respective area hub mechanics had been entered through September 5, 2014; representing a nearly six (6) week delay in time entry.

Due to the fact that the Infor10 system is not integrated with the County's accounting system and very few work orders are billed out through interdepartmental transfers, inaccurate labor data within the system poses limited risk to the Division. However, these issues increase the risk of inaccurate reporting out of the Infor10 system (which is the system's primary function), as well as the risk of confusion if specific work orders must be revisited / investigated.

Recommendation

We recommend the Division implement a consistent form or process for all mechanics to record their work order labor. This may be facilitated by leveraging forms / processes already in use by the central hub supervisor. In addition, we recommend the Division implement a policy requiring work order labor to be entered into the Infor10 system within one business week of the date the work is performed, and the Division retain the document on which manual work order time is recorded for a minimum of two years (electronic / scanned retention would be acceptable).

We also recommend a review process be implemented for ensuring the accuracy of work order time entered into Infor10 by Building Operations Supervisors. At a minimum, this process should include formally documented random, monthly spot checks of a sample of manual timesheet hours to Infor10 work order hours. The review process should be conducted by someone other than the Building Operations Supervisor that entered the manual timesheet, in order to promote adequate segregation of these duties.

Management’s Response

Continued on the following page…
### Management’s Response

**Continued from the preceding page…**

a) B&G agrees. Each hub has a process that it uses for mechanics to record their work. But, the process is not consistent.

**Planned Action:** B&G will standardize its processes for recording mechanics’ time, and B&G will write procedures to be followed as a standard process to follow.

**Responsible Party:** The Change Management Process Team (CMPT), headed by Division Chief and the Management & Fiscal Analyst II, will be responsible for implementation of this.

**Implementation Date:** End of Fiscal Year 2015’s 3rd Quarter: 31 March 2015.

b) B&G agrees. B&G currently validates all source data for time cards, which are the basis for employee pay. Time Card source information is validated by managers when submitted. Time card source information is validated by the Administrative Assistant III once the time card is received. Managers and the Administrative Assistant III ask questions when the source information is questionable. Accuracy of the time card data entry into Infor10 is not currently validated.

**Planned Action:** B&G will standardize its processes for time card data entry into Infor10 and develop a formal validation process. The validation process will be documented as a guide for a standard process of performing validations.

**Responsible Party:** The Change Management Process Team (CMPT), headed by Division Chief and the Management & Fiscal Analyst II, will be responsible for implementation of this.

**Implementation Date:** End of Fiscal Year 2015’s 4th Quarter: 30 June 2015.

c) B&G agrees. B&G retains and archives all Time Sheets, in accordance with County Policy. Records substantiating the allocation of that time to work orders are not retained.

**Planned Action:** B&G will standardize its processes for time card source information review, and B&G will document the process to be followed.

**Responsible Party:** The Change Management Process Team (CMPT), headed by Division Chief and the Management & Fiscal Analyst II, will be responsible for implementation of this.

**Implementation Date:** End of Fiscal Year 2015’s 4th Quarter: 30 June 2015.

**Continued on the following page…**
<table>
<thead>
<tr>
<th>Rating</th>
<th>Issue</th>
<th>Management’s Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>2. Work Order Labor - Review / Timecard Retention - continued</td>
<td><em>Continued from the preceding page…</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>d) B&amp;G agrees. The policy is communicated in the 2\textsuperscript{nd} and 3\textsuperscript{rd} weekly staff meetings as our “Performance Measures Due Date”. Due to staff shortages, delays occur.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Planned Action: The process needs to be standardized, documented, and re-communicated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Responsible Party: The Change Management Process Team (CMPT), headed by Division Chief and the Management &amp; Fiscal Analyst II, will be responsible for implementation of this.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Implementation Date: End of Fiscal Year 2015’s 3rd Quarter: 31 March 2015.</td>
</tr>
</tbody>
</table>
During our review, we noted that for materials or subcontractor invoices less than $5,000, there is currently not a process in place for review of the accuracy of invoice data entered into the Performance accounting system. The Accounting Assistant II receives approved invoices from Building Operations Supervisors and enters the relevant invoice attributes into the Performance System. If the invoice is greater than $5,000 it is scanned into the accounting system and subsequently reviewed by all system generated approvers (click approval in Performance). If the invoice is less than $5,000, it is filed at the Accounting Assistant II’s desk and not circulated for accuracy review. Performance system data for invoices less than $5,000, is still subjected to multiple levels of automated review within the Performance system; however, the source document is not included with any of these subsequent levels of review.

Lack of detailed review of accounting system data entry can result in invoices posted for incorrect amounts, in the wrong period, against the wrong purchase order or to the wrong ledger account.

Our detailed procedures consisted of the testing of a sample of 30 work orders. No exceptions were noted related to invoice accuracy through our procedures. However, based upon the process design and controls noted, the opportunity exists for the risks noted above.

We recommend a review of invoice data entry be performed by Division management to ensure all attributes reflected on the source document were accurately entered into the Performance System. In addition, we recommend all invoices over $1,000 be scanned into the Performance System so that each system initiated approver has the ability to review the invoice should they determine the need exists.

B&G partially agrees: B&G stores and archives all invoices and invoice documentation regardless of the amount, as per Finance Department requirement. Invoices and invoice documentation can be provided, and have been provided, when requested by various parties (for example the County’s Accounting Department). There are already existing guidelines (issued at the department level and the County level). At the departmental level, SOP 1.003.2. Disbursements, originally issued on 3/9/2009 and revised 4/3/2014, references adherence to all internal control guidelines including those issued under the “Executive Internal Control Policy 1.0-00”; and at the county level, “Executive Internal Control Policy 1.0-00”, originally issued on 5/1/2010 and revised on 10/1/2011, has sections on Reconciliation and Review, Documentation Policies and Procedures, Records, and Verification. Verification, in particular, states that “Data entry into manual and automated systems should be checked, verified or edited to ensure accuracy and reliability of data. Detailed, written policies and procedures at the divisional level will be formalized in order to be more in adherence to existing policies and procedures.

Planned Action: The review process can be strengthened and improved and B&G will implement a review of invoices less than $5,000. B&G will evaluate the efficiency impacts of scanning invoices greater than $1,000 and will make a determination regarding the feasibility of this portion of the recommendation.

Responsible Party: The Change Management Process Team (CMPT), headed by Division Chief and the Management & Fiscal Analyst II, will be responsible for implementation of this.

Implementation Date: End of Fiscal Year 2015’s 3rd Quarter: 31 March 2015.
## Issues Matrix - continued

### Work Order System Reporting

<table>
<thead>
<tr>
<th>Rating</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate</td>
<td>4. Work Order System Reporting – Source Data Review</td>
</tr>
</tbody>
</table>

During our review, we noted that no formal process exists for reviewing the accuracy of calculations performed by the Management and Fiscal Analyst II, pursuant to monthly, annual or ad-hoc reporting out of the Infor10 system. The information / metrics being reported are reviewed by the Division Chief for reasonableness in conjunction with his expectations and in comparison to prior period data for reasonableness, but an accuracy review of the source data used to develop the information / metrics is not conducted.

As noted in the previous issues above, the Infor10 system’s primary function is to manage / track work order information for the purposes of having minable data for external reporting (external to the Building & Grounds Division). Due to the fact that executive management and the Board will be using the data reported out of Infor10 for decision making, not conducting independent accuracy review of source data used in the preparation of these reports increases the risk of decisions being made using inaccurate data.

### Recommendation

We recommend a review process be implemented for ensuring the accuracy of information / metrics being compiled by the Management and Fiscal Analyst II out of the Infor10 system. At a minimum, this process should include random spot checks of source data and calculations used in recurring or ad-hoc reporting by someone other than the Management and Fiscal Analyst II, in order to promote adequate segregation of these duties.

### Management’s Response

B&G agrees.

**Planned Action:** B&G will implement a review process for recurring and ad-hoc reporting.

**Responsible Party:** The Change Management Process Team (CMPT), headed by Division Chief and the Management & Fiscal Analyst II, will be responsible for implementation of this.

**Implementation Date:** End of Fiscal Year 2015’s 3rd Quarter; 31 March 2015.
## Work Order Invoices

<table>
<thead>
<tr>
<th>Rating</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate</td>
<td>5. Work Order Invoices – Review of Data Entry into Infor10</td>
</tr>
</tbody>
</table>

During our review, we noted that there is not a process in place for the review of the Administrative Support Assistant’s invoice data entry into the Infor10 system for accuracy. The Administrative Support Assistant receives the approved invoice from the Accounting Assistant II after it has been entered into the County’s accounting system. The Administrative Support Assistant enters the relevant data from the invoice into Infor10 and then files a copy of the invoice. No subsequent review of the accuracy of this data entry is performed.

Due to the fact that the Infor10 system is not integrated with the County’s accounting system and very few work orders are billed out through interdepartmental transfers, inaccurate invoice data entered into the work order system poses limited risk to the Division. However, these issues increase the risk of inaccurate or incomplete reporting out of the Infor10 system (which is the system’s primary function).

### Recommendation

We recommend a review process be implemented for ensuring the accuracy of work order invoices entered into Infor10 by the Administrative Support Assistant. At a minimum, this process should include formally documented random, monthly spot checks of a sample of invoices to Infor10 work order costs. The review process should be conducted by someone other than the Administrative Support Assistant that entered the invoice, in order to promote adequate segregation of these duties.

### Management’s Response

B&G agrees. There is no formal process. At the departmental level, SOP 1.003.2, Disbursements, originally issued on 3/9/2009 and revised 4/3/2014, references adherence to all internal control guidelines including those issued under the “Executive Internal Control Policy 1.0-00”; and

At the county level, “Executive Internal Control Policy 1.0-00”, originally issued on 5/1/2010 and revised on 10/1/2011, has sections on Reconciliation and Review, Documentation Policies and Procedures, Records, and Verification. Verification, in particular, states that “Data entry into manual and automated systems should be checked, verified or edited to ensure accuracy and reliability of data.”

Detailed written procedures at the division level will be formalized in order to be more in adherence to existing policies and procedures.

**Planned Action:** The review process can be strengthened and improved. A formalized process will be developed to validate ASA II data entry, and the formal process to be followed will be documented.

**Responsible Party:** The Change Management Process Team (CMPT), headed by Division Chief and the Management & Fiscal Analyst II, will be responsible for implementation of this.

**Implementation Date:** End of Fiscal Year 2015’s 3rd Quarter: 31 March 2015.
Process Maps
Process Maps

Prince William County – Work Order Initiation and Closeout

**Division Chief**

- Receives work request list and reviews for validity and applicable funding source(s) / IDT relevance. Authorizes work requests.

**Custodial Services Coordinator**

- Phone call/email regarding potential work request is received
- Work requests are entered into Infor10 as “pending” status and assigned to a BOS based upon area hub. Prepares a work request list based on pending work orders
- Receives approved work request list and changes status in Infor10 from pending to active. Infor10 automatically notifies the assigned BOS of the new work order

**Building Operations Supervisor**

- Retrieves notification of a new work order in the Infor10 system
- Assigns each work order to a Maintenance Mechanic / Building Ops Technician in the Infor10 system
- Prints the work order information and puts a physical copy in the Mechanic / Technician’s mailbox
- Pursuant to the process as outlined on the referenced Labor and Invoice process flows, the BOS marks the work order as “completed” in the Infor10 system

**Mechanic/Technician**

- Checks their mailbox for new work orders
- Assesses need(s) executes labor, procures materials / subcontractors as applicable
- Sees Work Order Labor Flowchart
- Pursuant to the process as outlined on the referenced Labor and Invoice process flows, the work order is completed and submitted for BOS review.

- Sees Work Order Invoice Flowchart
### Prince William County – Work Order Labor Process Flow

#### Infor10 Work Order System

- **Mechanic/Technician**: Tracks their time by individual work order. This tracking is performed daily and is recorded on manual time sheets or directly on the printed work order (Issue #2).
- **Building Ops Supervisor**: Conducts monthly review of the Infor10 labor hours report by employee to assess fulfillment of monthly chargeable hours based on working days in a month (7.5 hours per day).

#### Performance Accounting System

- **P.W. Director’s Office**: Enters approved Bi-Weekly timesheets into the Performance Accounting System.
- **Admin Support Assistant III**: Receives Bi-Weekly timesheets from non-administrative personnel and enters this time into the Infor10 system as an administrative work order.
- **Building Ops Supervisor**: Receives Bi-Weekly timesheets from B&G Administrative employees and enters this time into the Infor10 system as an administrative work order.
- **Performance Labor**: Completes the Bi-Weekly Timesheet to record regular time, overtime, and leave.

---

**Notes**:

- **Issue #2**: Infor10 Labor tracking is performed daily and is recorded on manual time sheets or directly on the printed work order.
- **Issue #3**: Performance Labor completes the Bi-Weekly Timesheet to record regular time, overtime, and leave.

---

**Process Maps - continued**
## Process Maps - continued

### Prince William County – Work Order Invoice Process Flow

#### Building & Grounds Management

- **Automation:**
  - Machine
  - System

#### Admin Support Assistant

- **Manual:**
  - Paper
  - Document

#### Accounting Assistant II

- **Manual:**
  - Paper
  - Document

#### Building Operations Supervisor

- **Manual:**
  - Paper
  - Document

#### Mechanic/Technician

- **Manual:**
  - Paper
  - Document

---

1. **Inventory On hand?**
   - Yes
     - Applies materials from inventory if what is needed to complete the work order is already obtained and stored in stock
   - No

2. **Inventory On hand?**
   - Yes
     - Reviews work order and/or invoices from Mechanic/Technician for reasonableness in association with the work and initials the invoice
   - No
     - Deducts any inventory used on the work order from the Infor10 system

3. **Reviews work order and/or invoices from Mechanic/Technician for reasonableness in association with the work and initials the invoice**
   - If the invoice is >$5,000, it is scanned into the Performance System
   - If the invoice is < $5,000, it is filed in a cabinet at the Accounting Assistant’s desk (Issue #5)

4. **Reviews invoices from the Accounting Assistant for reasonableness in association with the work order and initials the invoice**
   - Prints the invoices and matches with ship tickets received from Mechanics / Technicians. The package is then submitted to each BOS at the weekly staff meeting for review / approval

5. **Confirms need for materials, vendor and / or subcontractor based upon the scope of the work order and verifies through Management Analyst that P.O. and adequate funding exists**

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**END**
Appendix A - continued

Building & Grounds – Grounds Maintenance

Grounds Maintenance
PUBLIC WORKS
BUILDINGS & GROUNDS DIVISION
412 Peabody Street
Manassas, VA 20110

Robert Weiss
Buildings & Grounds
Division Chief
PCN: 897043

Jill Holley
Grounds Maintenance
Supervisor
PCN: 891209

James Morehead
Maintenance Worker
PCN: 891201

Santos Sanchez
Maintenance Worker
PCN: 891207

Vacant
Maintenance Worker (PP)
PCN: 953006

Chris Hancock
Maintenance Worker
PCN: 763010

Steven Horn
Maintenance Worker
PCN: 763003
Appendix A - continued

Building & Grounds – Custodial Services

Custodial Services
PUBLIC WORKS
BUILDINGS & GROUNDS DIVISION
9412 Peabody Street
Manassas, VA 20110

Robert Weiss
Buildings & Grounds Division Chief
PCN: 897043

Laurel Rolley
Custodial Services Coordinator
PCN: 953005

Cindy Mastrull
Custodian Leader
PCN: 744006

Rita Young
Custodian
PCN: 733007

Curtis Williams
Custodian
PCN: 763006

Linda Sturgell
Custodian
PCN: 993039

Maria Velasquez
Custodian
PCN: 744005

James Seay
Custodian
PCN: 959338

James Powell
Custodian (PP)
PCN: 991903

Rosa Sanchez
Custodian
PCN: 892305

Ferny Garcia
Custodian
PCN: 763009

Judith Cotirel
Custodian
PCN: 763008

Jane Taylor
Custodian
PCN: 894012

Ana Santos
Custodian
PCN: 774002

John Waite
Custodian
PCN: 891908

Jens Kjar
Custodian
PCN: 967004

Vacant
Custodian
PCN: 895026

Maria Calles
Custodian
PCN: 744004

Eduardo Blandon
Custodian
PCN: 774001

Eliseo Larios
Custodian
PCN: 946002

Gloria Corum
Custodian
PCN: 891203

Reina Flores
Custodian
PCN: 892300

Suyapa Cuero
Custodian
PCN: 894011

Vacant
Custodian
PCN: 892302

Carmen Solis
Custodian (PP)
PCN: 991903
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