

AUDIT COMMITTEE - (MAY 6, 2008)

INTERNAL AUDIT REPORT OF THE LANGSTAFF ROAD RECONSTRUCTION AND BRIDGE REPLACEMENT(CAPITAL PROJECT)

Recommendation

The City Auditor recommends:

That the Internal Audit Report of the Langstaff Road Reconstruction and Bridge Replacement be received.

Economic Impact

The recommendations suggested by the auditor and the implementation of corrective actions in the audit report, will improve the effectiveness of risk management, control and governance processes of the department. Some impact will be economic and will be measurable in dollar terms, while others will provide intangible benefits which may not be measurable. Other benefits will be an improvement in the efficiency and effectiveness in the operations of the department. Internal Audit adds value to all areas of City activity which are audited.

Communications Plan

This is to be addressed by the Corporate Communications department.

Purpose

To present to the Audit Committee, the Internal Audit Report of the Langstaff Road Reconstruction and Bridge Replacement.

Background - Analysis and Options

The audit was part of the Internal Audit Work Plan which was approved by the Audit Committee.

The internal audit report is provided as an attachment. The report explains the definition and objective of internal auditing as well as the scope of internal audit work. The report includes, for all deficient items, (1) the observations of the auditor, (2) the implications, (3) the auditor's recommendations, (4) the commissioner's response for corrective actions and (5) the auditor's response to the corrective actions.

Relationship to Vaughan Vision 2020

This report is consistent with the priorities previously set by Council and the necessary resources have been allocated and approved.

Regional Implications

Not applicable

Conclusion

1. Based on the scope of audit work mentioned in the beginning of the audit report, areas reviewed were considered to be operating effectively, except for the noted observations for which the auditor made recommendations for improvement.
2. The commissioner and director of the department/operation audited, have responded favourably to all observations and recommendations in the Internal Audit Report.
3. When all corrective actions are implemented, (1) internal controls will be improved, (2) the quality of performance in carrying out assigned responsibilities will be enhanced, (3) the department/operation will operate more effectively and efficiently and (4) the Internal Audit department will have added value to the organization and assisted members of the organization in the effective discharge of their responsibilities.

Attachments

Internal Audit Report of the Langstaff Road Reconstruction and Bridge Replacement.

Report prepared by:

Michael Tupchong, CA, CIA, CPA, CFE
City Auditor

Respectfully submitted,

Michael Tupchong, CA, CIA, CPA, CFE
City Auditor



The City Above Toronto

April 9, 2008

Michael DeAngelis
City Manager
City Of Vaughan
2141 Major Mackenzie Drive
Vaughan, Ontario
Canada L6A 1T1

The City of Vaughan
2141 Major Mackenzie Drive
Vaughan, Ontario
Canada L6A 1T1
Tel [905] 832-2281

Dear Michael DeAngelis,

Re: Internal Audit of Langstaff Road Reconstruction and Bridge Replacement

I have completed the internal audit of Langstaff Road Reconstruction and Bridge Replacement. This audit was included in the three year audit work plan.

A follow-up letter will be sent to the auditee, 30 days from the issue date of this Internal Audit Report, requesting the status of Corrective Actions as noted in this report. Subsequent follow-up letters may be sent until all Corrective Actions have been satisfactorily implemented.

I would like to thank Commissioner Bill Robinson, Manager Justin Metras and their staff for accommodating me and providing me with unrestricted access to all staff and information during the audit.

I have exercised independence, objectivity and due professional care in accordance with the Standards for the Professional Practice of Internal Auditing of the Institute of Internal Auditors.

The Internal Audit Department is committed to adding value, providing continuous improvement recommendations and professional service to the whole organization.

Sincerely,

A handwritten signature in black ink that reads "M. Tupchong".

Michael Tupchong CA, CIA, CPA, CFE
City Auditor

cc: W. Robinson C. Harris J. Metras T. Ungar

INTERNAL AUDIT REPORT
LANGSTAFF ROAD RECONSTRUCTION AND BRIDGE REPLACEMENT

SUMMARY OF HEADINGS

<u>Heading</u>	<u>Page No.</u>
▪ Definition, Objective and Scope	2
▪ Follow-up on Corrective Actions	3
▪ Intended Purpose of Report	3
▪ Post Completion Reconciliation between Contract and Actual	4
▪ Consulting Firm Invoices	6
▪ Conclusion	9

INTERNAL AUDIT REPORT
LANGSTAFF ROAD RECONSTRUCTION AND BRIDGE REPLACEMENT

DEFINITION, OBJECTIVE AND SCOPE

1. **Definition:** Internal Auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.
2. The **objective** of Internal Auditing is to assist members of the organization in the effective discharge of their responsibilities. To this end, Internal Auditing furnishes them with analyses, recommendations, counsel, and information concerning the activities reviewed. The internal audit objective includes promoting effective control at reasonable cost. In the end, Internal Audit is focussed on continuous improvement of the organization.
3. The **scope** of Internal Auditing encompasses the examination and evaluation of the adequacy and effectiveness of the organization's system of control and the quality of performance in carrying out assigned responsibilities. The Internal Auditors have authority to review any phase of City activity. The scope of this audit may include one or more of the following:-
 - Reviewing the reliability and integrity of financial and operating information and the means used to identify, measure, classify, and report such information.
 - Reviewing the systems established to ensure compliance with those policies, plans, procedures, laws, and regulations, which could have a significant impact on operations and reports, and should determine whether the organization is in compliance.
 - Reviewing the means of safeguarding assets and, as appropriate, verifying the existence of such assets.
 - Appraising the economy and efficiency with which resources are employed.
 - Reviewing operations or programs to ascertain whether results are consistent with established objectives and goals and whether the operations or programs are being carried out as planned.
 - Reviewing the identification of risk exposures and use of effective strategies to control them.
 - Reviewing specific operations at the request of the Audit Committee or City Manager, as appropriate.

INTERNAL AUDIT REPORT
LANGSTAFF ROAD RECONSTRUCTION AND BRIDGE REPLACEMENT

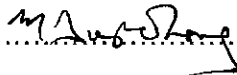
FOLLOW-UP ON CORRECTIVE ACTIONS

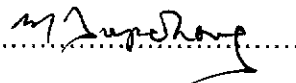
1. It is extremely important that all Corrective Actions as stated in this Internal Audit Report are implemented as soon as possible.
2. The Internal Audit Department will perform regular follow-ups, the first being 30 days after the issue date of the Internal Audit Report, followed by subsequent 30 days until all Corrective Actions have been satisfactorily implemented. Follow-up audits may be done to verify the reported implementation.
3. The Corrective Actions will ensure that the deficiencies as raised by the Auditor will be addressed. After all Corrective Actions have been implemented, there will be improvement in the effectiveness of risk management, control, and governance processes. The department will operate more efficiently and effectively. Members of the organization will also have discharged their responsibilities.
4. At the discretion of the Commissioner/Director, this report may be distributed to the appropriate staff members under their jurisdiction. Deficient items which could be common across the organization should be globally addressed. Further consideration should be given to revise/update current policies and procedures, as deemed necessary.

INTENDED PURPOSE OF THE REPORT

This report is presented purely to add value and to improve the operation in terms of the scope of the audit for effectiveness, efficiency and continuous improvement. Areas reviewed were considered to be operating effectively, except where specifically noted as observations for which the auditor has made recommendations for improvement. The report is not intended to criticize/discredit any individual, or the management of the operation. The recommendations are suggestions of the auditor to achieve the objective of the audit.

End of Field Work: November 20, 2007

Auditor(s): Michael Tupchong.....**Signature:**.....

Approved:

INTERNAL AUDIT REPORT
LANGSTAFF ROAD RECONSTRUCTION AND BRIDGE REPLACEMENT

Post Completion Reconciliation between Contract and Actual

Observations

The contract for the Langstaff Road Reconstruction and Bridge Replacement was substantially completed on November 18, 2005. It was observed that, excluding Change Work Orders totalling \$215,244.59 (approved budget \$310,000), the actual amount paid to the contractor was \$3,024,311.20 before taxes (GST). The contract was for \$3,015,532.43 (before GST), resulting in an amount of \$8,778.77 in excess of the contract amount. No "post completion reconciliation" has been done for this project, or is done for other contracts, to determine, in which areas the actual amounts paid, differed from the contract amount, and the reasons why, so that it becomes a learning experience which can be used to improve the efficiency and effectiveness of future contracts and essentially save the City money.

The auditor extracted the following information from the various records reviewed:

<u>Category</u>	<u>Contract</u>	<u>Actual</u>	<u>Difference</u>
Part A Roadway	1,401,169.27	1,462,393.23	(61,223.96)
Part B Storm/Sanitary Sewers	412593.34	389027.54	23565.80
Part C Traffic Signals	64185.10	62926.08	1259.02
Part D Street Lighting	153269.99	153269.99	0
Part E Structures	867549.39	861252.68	6296.71
Part F Landscaping	116765.34	95441.69	21323.65
	-----	-----	-----
	3,015,532.43	3,024,311.21	(8,778.78)

Roadway was overspent by \$61,223 whereas Storm/Sanitary Sewers were underspent by \$23,565, Landscaping were underspent by \$21,323 Structures were underspent by \$6,296 and Traffic Signals were underspent by \$1,259. The reasons have not yet been analysed and recorded by the department.

Implications:

An overall analysis can provide positive feedback about the project. The reasons for differences of actual spent to budget, can provide information which can be used to improve efficiency and effectiveness of future projects. The lessons learned can be communicated to and shared with all staff.

INTERNAL AUDIT REPORT
LANGSTAFF ROAD RECONSTRUCTION AND BRIDGE REPLACEMENT

Recommendations:

It is recommended that:

A standard template called "Post Completion Contract-Reconciliation" should be prepared for each contract, upon its completion, and should show:-

- (1) Contract \$ Amount for each Category
- (2) Actual \$ Spent for each Category
- (3) Difference between Contract Amount and Actual Spent by Category
- (4) Reasons for Difference(s) if Category variance is 10% or more
- (5) Future Action Plan, if (4) is applicable
- (6) Date Communicated to Staff if (4) is applicable

It should be signed and dated by the project manager, director and commissioner.

Corrective Actions (Commissioner Bill Robinson Response)

A standard template has now been prepared and staff will be informed to complete the form at the completion of each contract. The completed form will be reviewed, signed and dated by senior staff.

Auditor's Response to Corrective Action:

A standard template has been prepared and will be used at the completion of each project.

INTERNAL AUDIT REPORT
LANGSTAFF ROAD RECONSTRUCTION AND BRIDGE REPLACEMENT

Consulting Firm Invoices

Observations

1. The department used a consultant to verify that the extent of the work, equipment and material quantities supplied by the contractor have been reviewed, have been agreed with the contractor and have been verified on site, and that the progress billing by the contractor is correct and is recommended for payment.
2. The auditor reviewed the agreement and invoices of the consulting firm. The contract with the consulting firm is to provide contract administration and construction inspection services, including geotechnical testing and disbursements. The contract was approved with an estimated upset limit of \$235,000 plus GST. Included in the contract was re-imbusement of expenses such as travel, labour hours and other expenses. Total payments to December 11, 2007 was \$204,835 with one more invoice to come.
3. It was observed from the invoices, that the make-up(details) of travel kilometres (for example, from point A to point B), and hours worked (for example, time sheets) by consultant employee, were not available for review . Only the total figures were shown.

Example:

• Employee A	<u>177.50hrs</u>	\$70/hr	\$12,425.00
• Employee B	<u>220 hrs</u>	\$63/hr	\$14,238.00
• Employee C	<u>68.50 hrs</u>	\$110/hr	\$7,535.00
• Travel field kms-.39c/km			\$858.00
• Travel field kms-.39			\$1053.00
• Travel field kms-.39			\$834.60

4. There was another approved budget for \$108,000 plus GST, with the same consultant, to include the design of the bridge replacement

One invoice totalled \$62,296.00. It included 24 consultant employee names with their individual total hours ranging from 1 hour to 177.50 hours to add up to the total 721.45 hours. The employees' charge out rate varied from \$50/hr to \$155/hr. There were no further details attached (for example, time sheets) to provide further information on the hours worked. The bill was approved and paid by the department.

INTERNAL AUDIT REPORT
LANGSTAFF ROAD RECONSTRUCTION AND BRIDGE REPLACEMENT

Implications

Without supporting detailed information, hours worked or kilometres travelled by a consultant employee, cannot be reviewed for reasonableness. There is inadequate control over kilometres and hours charged to the department.

Recommendations

It is recommended that future **Request For Proposals** should be more specific to include the items below:-

1. For contracts, which allow for re-imburement of travel kilometres and/or hours worked, more details should be required from consultants. There should be supporting documentation e.g., timesheets to show by calendar date, (1) the kilometres travelled from point A to point B and (2) the hours worked for each consultant employee claimed. These totals should agree with the total kilometres and hours claimed for payment. This should be reviewed and approved with a signature, before the invoice is approved for payment.
2. The hourly rate for each consultant employee should be specified and should be part of the Consultant's Proposal and be included in the Official Agreement. Staff rate annual adjustments, should not be left open, but should be specified e.g., at the annual Consumer Price Index or a pre-determined X percent.
3. Disbursements for photocopy, mileage and other expenses, should be defined and specified wherever possible and not left open-ended. For example photocopy @ Xc/page, mileage at Xc/kilometre.
4. All consultant claims for third party charges should be supported with third party invoices for example: telephone, faxes, photos, courier service, printing, chemical and physical tests, all subconsultant charges.
5. Expenses for tools of the trade should not be re-imburseable e.g., cameras, measuring equipment, tools, software, etc. as they are the tool requirements to do the job.

Corrective Action(s) (Commissioner Bill Robinson Response)

The recommendations have been implemented and consultants have been instructed to submit the required details. Staff have been informed and are following the recommendations.

INTERNAL AUDIT REPORT
LANGSTAFF ROAD RECONSTRUCTION AND BRIDGE REPLACEMENT

Auditor's Response to Corrective Action(s)

The recommendations are now being enforced for each consultant.

INTERNAL AUDIT REPORT
LANGSTAFF ROAD RECONSTRUCTION AND BRIDGE REPLACEMENT

CONCLUSION

1. Based on the scope of audit work mentioned in the beginning of the audit report, areas reviewed were considered to be operating effectively, except for the noted observations for which the auditor made recommendations for improvement.
2. The commissioner and director of the department/operation audited, have responded favourably to all observations and recommendations in the Internal Audit Report.
3. When all corrective actions are implemented, (1) internal controls will be improved, (2) the quality of performance in carrying out assigned responsibilities will be enhanced, (3) the department/operation will operate more effectively and efficiently and (4) the Internal Audit department will have added value to the organization and assisted members of the organization in the effective discharge of their responsibilities.