

Engineering and Construction Services, Phase One: Controls over Substantial Performance and Warranty Inspection Processes Should be Strengthened

Date: June 28, 2018
To: Audit Committee
From: Auditor General
Wards: All

SUMMARY

This report contains the results of the Auditor General's Phase One audit of construction contracts issued by the Engineering and Construction Services (ECS) Division.

The first phase of the audit focused on substantial performance and warranty inspection processes under the Division's Municipal Infrastructure Construction Service. Subsequent phases will address other areas of capital project management, and is scheduled for completion in 2019.

Overall, we found that the Division has established good guidelines for substantial performance and warranty inspections. However, it needs to ensure its prescribed procedures, including timely inspections and follow-up, are consistently implemented by project staff to minimize the risk of incurring unnecessary costs for defects and damages.

RECOMMENDATIONS

The Auditor General recommends that:

1. City Council request the Chief Engineer and Executive Director, Engineering and Construction Services, to strengthen processes and monitoring measures to ensure that:

- a. Inspections for verifying substantial performance and for identifying deficiencies during the warranty period are conducted in a timely manner
- b. Appropriate deficiency lists are prepared and forwarded to the contractor in a timely manner
- c. Estimated value of all defective and remaining work is documented

- d. Rectification of deficiencies is followed up in a timely manner
- e. Documentation of all follow-up work is retained in the contract files
- f. Rectification work is inspected, and signed-off as completed by the project leader.

2. City Council request the Chief Engineer and Executive Director, Engineering and Construction Services, to update existing procedures within the ECS Capital Works Procedures Manual to ensure that project staff conduct a formal comprehensive assessment of estimated value of defective and remaining work to determine if the criteria for substantial performance prescribed in the Construction Act are met.

3. City Council request the Chief Engineer and Executive Director, Engineering and Construction Services, in consultation with Insurance and Risk Management, to ensure existing procedures for obtaining appropriate insurance and bonding extensions where required, are correct and are being correctly implemented.

FINANCIAL IMPACT

The implementation of the three recommendations contained in this report will further improve the controls over substantial performance and warranty inspection processes. Implementation of these recommendations may potentially result in savings through cost avoidance. However, the amount is not quantifiable at this time.

DECISION HISTORY

The Auditor General's 2017 Audit Work Plan included an audit of construction contracts issued by the Engineering and Construction Services Division. The Work Plan is available at:

<https://www.toronto.ca/legdocs/mmis/2017/au/bgrd/backgroundfile-101843.pdf>

COMMENTS

ECS spends approximately \$500 million annually in capital projects for construction of vital infrastructure including bridges, expressways, roads, streetcar ways, watermains, sewers, treatment plants, and water supply. In addition, ECS provides bridge inspection services, as well as engineering review and acceptance of development applications.

In the life of a construction contract, there are three critical milestones that signify successful delivery of the contracted services:

- Certification of Substantial Performance
- Certification of Completion
- Certification of Final Acceptance

Achievement of each milestone requires a series of project administration activities that must be performed by ECS staff. These are very important steps as they affect various rights and obligations of all parties involved, specifically the City and the contractor.

We observed that there were insufficient processes in place to ensure that all necessary work is completed before certifying these milestones. For example, contract files often did not contain documentation on whether staff conducted inspections to verify that substantial performance has been met. Where inspections were conducted, the deficiencies identified were not assessed against the legal threshold for substantial performance, and were not rectified by the contractor before the City proceeded with issuing the substantial performance certification.

During the warranty period, staff were appropriately conducting warranty inspections but often did not follow-up with the contractor to ensure that deficiencies were corrected by the contractor. Where outstanding deficiencies remained past the expiry date, staff often did not inform bonding companies of delay by the contractor in completing warranty repairs work. Bonding companies act as sureties on behalf of the contractor to guarantee the performance of the contract. Therefore, it is important that bonding companies are timely informed of the delay.

This report presents three recommendations to address the associated risks, improve the controls over substantial performance and warranty inspection processes, and ensure the contract work meets City standards.

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SIGNATURE

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ATTACHMENTS

Attachment 1: Engineering and Construction Services, Phase One: Controls over Substantial Performance and Warranty Inspection Processes Should be Strengthened