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# *The Corporation of the City of London*

## Report on Internal Audit Results

- Engineering and Environmental Services:  
Roads & Transportation – Project  
Management and Resource Utilization

April 29, 2015

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# *Agenda*

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## ***Rating Scale – Opportunities for Improvement***

- **Satisfactory**

Controls are present to mitigate process/business risk, however an opportunity exists for improvement.

Satisfactory



- **Needs Improvement**

Existing controls may not mitigate process/business risk and management should consider implementing a stronger control structure.

Needs  
Improvement



- **Unsatisfactory**

Control weaknesses are significant and the overall exposure to risk is unacceptable. Immediate attention and oversight from management is required.

Unsatisfactory



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***Engineering & Environmental Services:  
Roads & Transportation – Project Management  
and Resource Utilization***

# ***Summary of Risks & Scope***

## ***Engineering & Environmental Services: Roads & Transportation – Project Management and Resource Utilization***

### **Scope**

- Transportation Planning and Design and Stormwater Management (SWM) divisions were scoped in based on significance and risk
- Process-based management of projects supported by adequate planning, monitoring, and controlling activities
- Utilization and monitoring of resources

### **Potential Risks**

- Project costs may not be individually tracked and monitored, causing delays in the identification of cost overruns.
- The progress of individual projects may not be monitored effectively, leading to late identification of delays in project completion.
- Other infrastructure may not be completed in line with the timelines of SWM or Transportation Planning and Design projects, resulting in an inefficient use of resources .
- Project teams may not possess the specialty expertise required to complete a project such as bridge design or ecologists.

### **Controls Operating Effectively**

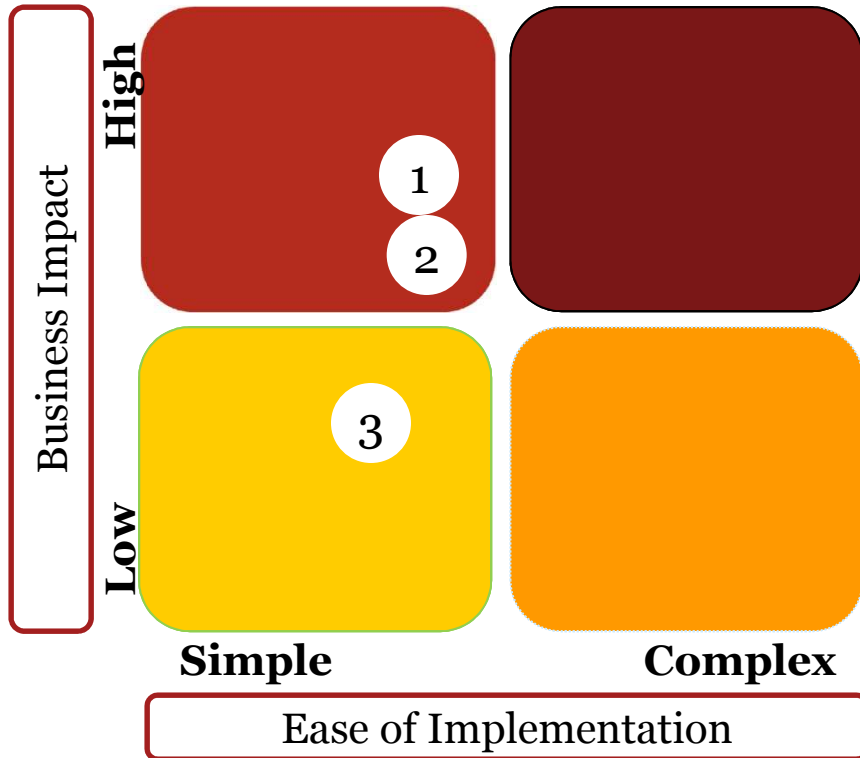
- Project costs are individually tracked and monitored on a timely basis
- Management appropriately prioritized projects to be completed, taking into consideration the condition of current infrastructure and needs of key internal and external stakeholders
- An Internal Utility Coordination Committee meets periodically to review long-term infrastructure plans for the City in order to coordinate timing and location of various projects, thus reducing costs.
- A software has been implemented that the Construction Administration group uses to track project status and project costs to date.

### **Value-for-Money Considerations**

- Optimize the use of the ‘just-in-time’ process for SWM ponds to help align the expenditure of project costs with the needed timing for completion of the ponds through the Growth Management Implementation Strategy.

# Action Plan Summary

## Engineering & Environmental Services: Roads & Transportation – Project Management and Resource Utilization

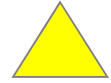


Observations	Timing	Rating
#1: Utilization of completed infrastructure - SWM	2016 GMIS process	Needs Improvement
#2: Progress tracking and monitoring - SWM	Summer 2015	Satisfactory
#3: Project management collaboration	2015 construction season	Satisfactory

- High Business Impact, Easy to Implement
- High Business Impact, Difficult to Implement
- Low Business Impact, Easy to Implement
- Low Business Impact, Difficult to Implement

# Observations & Action Plans - #1

Needs  
Improvement



## Engineering & Environmental Services: Roads & Transportation – Project Management and Resource Utilization

### Observation

#### Utilization of completed SWM ponds

There have been instances in the past where a pond was scheduled for completion based on the land developer's communicated needs, however the land developer did not meet proposed timelines. This is important given the changes made through the 2014 Development Charges process that transferred responsibility for construction to the City.

### Business Impact

There is a risk that a land developer will not develop the land in the surrounding area in a timely manner benefiting from the completed SWM pond. This may prevent resources from being used to complete other projects in areas where growth and development is more likely to occur and will put a strain on the City Services Reserve Fund.

### Action Plan

It is recommended that the City optimize the use of the *Stormwater Management Facility "Just in Time" Design and Construction Process* as approved through the Development Charges process. The process delays paying the developer for land until 25% of the building permits have been issued for the surrounding properties and links the timing of the developers servicing tender with the facility tender, which will reduce the risk of ponds being built without associated growth and development in the area.

### Action Plan Lead

Divisional Manager, Stormwater

Director, Roads and Transportation

PricewaterhouseCoopers LLP

### Timing

Incorporate timing into the 2016 GMIS process (April 2015)

# Observations & Action Plans -#2

Satisfactory



## Engineering & Environmental Services: Roads & Transportation – Project Management and Resource Utilization

### Observation

#### Progress tracking and monitoring – SWM

The City coordinates projects through the Growth Management Implementation Process. Until recently, monitoring of a project’s progress was not done in a formal manner and was left to the project managers to review at their own discretion. Progress was often monitored based on costs incurred to date rather than the actual percentage of work completed. A new ‘Project Assignment Spreadsheet’ has been created to allow for appropriate tracking and monitoring.

### Business Impact

There is a risk that projects will not be completed on time if the progress is not monitored effectively, which could lead to additional costs. These delays impact budgets/funding and lead to issues with GMIS implementation and assumption processes.

### Action Plan

It is recommended that the new project management process for SWM projects should be used to streamline completion. It is also recommended that the City provide training where required to incorporate project tracking expertise. The Project Assignment spreadsheets should be stored on the City’s internal database, allowing them to be updated in ‘real time’ and reducing the time spent discussing updates in bi-weekly meetings.

### Action Plan Lead

Divisional Manager, Stormwater

Director, Roads and Transportation

### Timing

Summer 2015



# Observations & Action Plans -#3

Satisfactory



## Engineering & Environmental Services: Roads & Transportation – Project Management and Resource Utilization

### Observation

#### Project management collaboration

It is noted that once a Transportation Planning and Design (TPD) construction project begins, the detailed project management responsibility transfers to the City’s Construction Administration (CA) group. However, the ultimate responsibility for the project still falls within the TPD division.

The division has access to the same project management tool used by CA. However, greater coordination is required to ensure that all stakeholders are aware of the status of projects or involved in the resolution of any issues that may arise.

### Business Impact

Senior City management may not have the necessary information to respond to inquiries or requests for information relating to the status of on-going projects. Strategic decisions around project completion could be impacted.

### Action Plan

It is recommended that consideration be given to reviewing alignments within Engineering Services.

Transportation management should review the project status on a formalized, periodic basis with all stakeholders. The review protocol should include if a project is on schedule, indicate time delays or cost overruns. Enhanced coordination with the Utility Coordinating Committee is required to ensure input from all stakeholders.

### Action Plan Lead

Director, Roads and Transportation  
Managing Director EES and City Engineer

### Timing

2015 construction season

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