

# **For Information Only**

### **Maintenance Management Project Update**

Presented To:	Operations Committee
Presented:	Monday, Mar 05, 2012
Report Date	Wednesday, Feb 22, 2012
Type:	Correspondence for Information Only

### **Recommendation**

For Information Only

# **Background**

As outlined in the Council report dated June 3, 2011 from the General Manager of Infrastructure Services (attached), staff has been diligently working on the Maintenance Management Project.

# What a new CMMS will provide:

A new computerized maintenance management system based on today's technology offers a considerable increase in functionality relative to the City's current MMMS. The current MMMS facilitates budgeting, payroll, production and expenditure tracking. In addition to these attributes, a new computerized maintenance management system will aid in increasing productivity by providing:

#### Signed By

#### Report Prepared By

Shawn Turner Manager of Financial & Support Services Digitally Signed Feb 22, 12

Recommended by the Department

Greg Clausen, P.Eng.
General Manager of Infrastructure

Services

Digitally Signed Feb 22, 12

#### Recommended by the C.A.O.

Doug Nadorozny
Chief Administrative Officer
Digitally Signed Feb 28, 12

- The opportunity for re-engineering business processes to align with industry best practices.
- Improved asset life and reduced downtime by automatically scheduling preventative maintenance.
- Ability to isolate high volume problem areas to effectively manage resources.
- Ability to interface with other financial and maintenance systems reducing duplication of information.
- Electronic records will provide a more efficient means of researching citizen issues.
- Sophisticated reporting will provide managers with the tools to effectively manage work flow.
- G.I.S. functionality that will harmonize with the corporate initiative on Enterprise G.I.S.
- Improved Citizen Relationship Management with the interface between Service Requests and Work Management.
- Enhancements to work planning, tracking and scheduling.
- Better planning, forecasting, managing, and coordinating of resources.
- Improved budgeting and expenditure tracking.
- Promote communication and planning between departments.
- Availability of historical records.
- Obtain timely and accurate information.

 Mobile /Field computing – The City has one of the largest geographic areas among all municipalities in Canada.

## **Update**

Further to the initial requirements gathering exercise, staff performed reviews of major business processes that can be improved with the implementation of a new computerized maintenance management system (CMMS).

Staff also completed Phase One of building a full enterprise Geographic Information System (GIS) to manage required assets for the CMMS project. Phase Two of the GIS project is underway and will assure that all required assets are indentified and current for the start of the CMMS project.

Staff have been successful at selecting an internal candidate for the position of Project Manager for the Maintenance Management Project. The project manager, Mike Schler, has held several posts in the Information Technology division over the past 30 years. The project manager will lead the project team and report to the CMMS project steering committee comprised of:

- -Doug Nadorozny, Chief Administrative Officer
- -Greg Clausen, General Manager Infrastructure Services
- -Lorella Hayes, Chief Financial Officer
- -Bruno Mangiardi, Chief Information Officer

The project team comprised of staff from across various divisions, a consultant and led by the project manager, developed the requirements for the maintenance management system. These requirements were the foundation for the RFP that was issued by the City on February 1, 2012. The RFP closes on February 28, 2012.

Schedule and Next Steps

March - April - Evaluation of RFP submissions including vendor demonstrations.

May 22 - Report to Steering Committee on selection process and successful proponent.

June 12 - Report to Council for the award of the RFP.

July – August – Contract, statement of work, and preparation for implementation.

Sept. – Start of CMMS project.

The project implementation will be undertaken in three phases with the following proposed dates:

Phase I - Sept/2012 to March/2014

Phase II - Oct/2014 to Oct/2015

Phase III - Mar/2016 to Mar/2017

# **Budget**

The preliminary estimate for the implementation of the Maintenance Management Project is approximately \$2.5M. Currently, funds have been committed in the amount of \$2.45M. Staff will outline a detailed funding arrangement upon award of the RFP for this project.



# **For Information Only**

### **Maintenance Management Project**

Presented To:	City Council
Presented:	Wednesday, Jun 15, 2011
Report Date	Friday, Jun 03, 2011
Type:	Correspondence for Information Only

### **Recommendation**

For Information Only

### **Finance Implications**

The estimated cost of this project is \$2.5 million with \$900,000 that has already been set aside from previous years' budgets. The remaining funding will come from future years' capital budgets.

### **Background**

The Municipal Maintenance Management System (MMMS) is a software system that was developed in the 1970's by the former City of Sudbury. The MMMS system was used by the City of Sudbury and Regional Municipality of Sudbury to plan, record and report on work units completed and

# Signed By

#### **Report Prepared By**

Shawn Turner Manager of Financial & Support Services Digitally Signed Jun 3, 11

#### **Recommended by the Department**

Greg Clausen, P.Eng. General Manager of Infrastructure Services Digitally Signed Jun 3, 11

#### Recommended by the C.A.O.

Doug Nadorozny Chief Administrative Officer Digitally Signed Jun 3, 11

actual costs versus budgeted units in Public Works (roads, water, wastewater, parks/recreation, solid waste and fleet). The MMMS records production and expenditure data that can be delineated based on geographic area, work activity, or by cost centre. MMMS reports are relied upon by Management to track progress of production and expenditures throughout the year. They are used to establish budgets and staffing levels.

Over the three decades since development, the MMMS system has undergone numerous modifications and has been interfaced with various budgeted and planning systems that the municipality has adopted. However, the technology of the current MMMS is outdated and cannot support current and future corporate initiatives.

There has been one study and one audit performed that have assessed the City's current MMMS. In 2007 KPMG was engaged to study the MMMS. This report highlighted issues such as:

-The high operating cost of the MMMS due to the labour intensive nature of the system.

- -The MMMS is based on business processes from the 1970's and has not kept pace with changes in process and technology.
- -The reporting formats have not kept pace with the changing information needs of the City.

Recently, the Auditor General's 2010 audit on Miscellaneous Winter Roads Maintenance recommended that "Due to the age of the software and limited ability within MMMS to associate activities and costs to specific road assets or road segments, management should continue to investigate other available programs in the market place that could be used to support budget planning, work order management, productivity tracking and cost analysis to the infrastructure asset level."

## What a new system will provide

A new maintenance management system based on today's technology offers a considerable increase in functionality relative to the City's current MMMS. The current MMMS facilitates budgeting, payroll, production and expenditure tracking. In addition to these attributes, a new maintenance management system can aide in increasing productivity by providing:

- Improved asset life and reduced downtime by automatically scheduling preventative maintenance.
- Ability to isolate high volume problem areas to effectively manage resources.
- Database of how and when work orders are performed will reduce paperwork.
- Ability to interface with other financial and maintenance systems reducing duplication of information.
- Electronic records will provide a more efficient means of researching citizen issues.
- Sophisticated reporting will provide managers with the tools to effectively manage work flow.
- G.I.S. functionality that will harmonize with the corporate initiative on G.I.S.

#### Maintenance Management System (MMS) Project

In the fall of 2010, the City retained Prior and Prior – a management consulting and technology firm practicing exclusively in the municipal sector- to perform requirements gathering. A representative from Prior and Prior met with individual divisions as well as collectively with multiple divisions and departments to gather and document the requirements for a new maintenance management system.

In addition to the requirements gathering, a governance structure has been implemented for the MMS project. The governance of the MMS project consists of a Steering Committee and a Working Group under the leadership of a Project Manager.

The MMS project is large and will affect multiple departments and divisions. As a result an MMS Steering Committee has been assembled to provide high level guidance and corporate direction. The steering committee is comprised of:

- Doug Nadorozny, Chief Administrative Officer
- Greg Clausen, General Manager Infrastructure Services
- Lorella Hayes Chief Financial Officer
- Bruno Mangiardi Chief Information Officer

As well, the project will have a Working Group that will assist the Project Manager as team leads in their respective areas. Working Group members may be included on a full-time or part-time basis as required. The Working Group members have yet to be finalized.

The Working Group will be led by a Project Manager that is to be determined. Due to the anticipated time frames and multi-faceted nature of the project, it is required that an external Project manager with proven experience in this field be retained.

#### **Next Steps**

A Project Manager will be required to work exclusively on the MMS project. This position will be posted internally and when a successful applicant selected, he or she will report to the Steering Committee. Due to the magnitude and diverse knowledge required to implement a maintenance management system, a project manager may work and/or consult with experts in this realm as required.

The Project Manager will be responsible for setting an achievable schedule for the R.F.P. for vendor selection, evaluation of the vendors, subsequent award and the implementation of the project. It is expected that the entire project will be implemented in multiple phases in order to manage the project and the resources most effectively and efficiently. The expected time-frame for complete implementation of all phases is approximately 3 years with milestones achieved at intervals along the way.

#### **Budget**

A preliminary estimate for the full implementation of a new maintenance management system is approximately \$2.5M. Funding in the amount of \$900,000 has been set aside during previous years budgets. This approved funding will be enough to start the process as outlined above. This work will allow staff to generate a more accurate cost estimate for the project. Final decisions for capital allocations will come from future Water/Wastewater and Roads capital envelopes via the capital budget process.