



TO: Mayor Shaun Sipma
Members of the City Council

FROM: Lance Meyer, P.E., City Engineer

DATE: September 7, 2021

SUBJECT: CITYWORKS LICENSE UPGRADE (4423)

I. RECOMMENDED ACTION

1. Approve the modification to the Cityworks license and upgrade to premium ELA;
2. Approve the budget amendment and use of water and sewer cash reserves on 1st reading

II. DEPARTMENT CONTACT PERSONS

Lance Meyer, City Engineer	701-857-4100
Emily Huettl, Assistant City Engineer	701-857-4100

III. DESCRIPTION

A. Background

Staff is well into the development of the City’s asset management and permitting software. We are beginning the integration with Munis inventory and utility billing.

B. Proposed Project

Staff has been working on designing the integration between Munis and Cityworks. During the design process we have encountered two primary obstacles with the integration. These are:

1. Materials used in Cityworks work orders cannot be deducted from the inventory kept in Munis. This is an important integration to help streamline processes and understand inventory levels between the two systems.
2. A service request generated in water billing and sent to public works cannot automatically create a work order in Cityworks. Thus, our operators cannot perform the work in the field and send the completed work order back to Munis. This integration is mission critical as there is a significant volume of work that is traded back and forth every day between utility billing and public works.

The problem is due to the license level the City has with Cityworks, which does not include the API necessary to make these data links function. During contracting for this project, it was impossible to know exactly what license level would be required to make all of these systems function together. The software vendors would not know what to quote the City until the systems designs are completed, which has not happened until recently.

The recommended solution by our implementation consultant is to increase our license level with Cityworks to a premium ELA. This will provide the City with several benefits besides being able to link work order materials and utility billing work orders back to Munis. These benefits include:

- Webhooks – Enable automation within Cityworks itself to automate additional activities based on status, custom fields, or other parameters; specific example (When the water distribution department is working in the field and removes the pavement or concrete as part of the work on a water distribution asset a child work order is automatically created for the repair of the pavement or concrete)
- Cityworks OpX – The City can analyze projects across Permitting and AMS functions from Cases, Inspections & Work orders.
- Cityworks Insights – The City can build asset models to determine the criticality of failure, the probability of failure, and the business risk exposure for any given asset based on asset attributes and work history. As staff inputs more data over the years, Insights can help us to optimize our maintenance work plans. This will be critical as we begin planning for major infrastructure rehabilitations and replacements in the near future.

C. Consultant Selection
N/A

IV. IMPACT:

A. Strategic Impact:

The City Council has already invested in the new software systems to upgrade citywide technology. The Cityworks to Munis integration is a critical connection to tie these major systems together.

B. Service/Delivery Impact:

Cityworks relies heavily on Munis financial and customer data. The integration will transfer the data back and forth between the systems.

C. Fiscal Impact:

Project Costs

The additional required features come at an additional cost to the City. To add the functionality, an increase of \$3,000 is needed in 2021, and \$9,000 for 2022. In future years, the cost would remain static at an additional \$15,000 per year.

Project Funding

The funding will come from water and sewer cash reserves.

V. ALTERNATIVES

1. Council could deny the upgrade. However, staff feels this is a needed integration and is worth the investment, especially long term. The staff time saved by using the software versus coordinating the work by hand will pay for the added investment every year.

VI. TIME CONSTRAINTS

Approval by the council allows the integration design to continue.

VII. LIST OF ATTACHMENTS

- A. Budget Amendment