

TO: Personnel Board

FROM: Emaan Abdel-Halim, Human Resources

DATE: 28 April 2015

SUBJECT: Asset Manager – Water Utility

The City of Madison's Water Utility General Manager, Tom Heikkenen, and Principal Engineer, Al Larson, have requested the creation of the new classification titled Asset Manager for a new position within the 2015 budget. The 2015 Adopted budget describes:

The addition of a 1.0 FTE Asset Management Professional position. This position will be responsible for monitoring all of the Water Utility's physical plant assets including physical condition, useful life, asset maintenance cycles, and replacement cycles. This includes building, wells, reservoirs, booster stations, pumps, motors. The incumbent will also lead the development of an asset management system including a computerized maintenance management system (CMMS), to maximize the value of Water Utility physical assets.

The Water Utility is developing an Asset Management Program to maximize the value of the Utility's infrastructure assets and manage the systemic repair and replacement of such assets. A position description for the proposed position is attached. Based on a review of the position description, discussions with Mr. Larson and Pete Braselton, Computer Mapping/GIS Coordinator, a review of other positions in the City's classification plan and comparable positions in other municipalities, I recommend creating the new classification of "Asset Manager" with placement in CG18, Range 10 for the reasons outlined in this memo. In addition, I recommend that the position identified in the Water Utility Operating Budget as "Asset Mgmt. Professional" in CG18-xx be deleted and recreated as a 1.0 FTE Asset Manager in CG18, Range 10.

City of Madison Water Utility is proposing the creation of a new classification to perform focused professional technical work to develop processes and procedures to ensure the infrastructure system meets service goals while minimizing total life cycle costs. The proposed position description includes the following significant duties:

- Organize and lead a cross functional team to define system wide operational goals, prioritize improvement initiatives, and provide a framework for measuring progress.
- Develop processes and procedures to plan for and finance repair and replacement of Utility infrastructure, while maximizing life cycle and minimizing costs.
- Develop, document, and periodically update the program for utility system condition assessment, data collection and organization.
- Review, evaluate, recommend and implement asset management program software. Use data from the Utility's Computerized Maintenance Management System (CMMS) to inform maintenance and condition assessment activities.
- Develop, review and revise program procedures and criteria for identifying and ranking capital renewal and replacement projects.

Reporting to the Computer Mapping/GIS Coordinator (CG18, R11), the Asset Manager position will assess the current data available for the 20,000+ pipe segments as well as all the equipment of over 30 well houses in the City. This will require determining the actual equipment and components for all the Utility's assets and their condition, in order to establish a timeline for repair and replacement to ensure quality customer delivery. The Asset Manager will also need to decide what data is still needed to be collected, and create a plan to gather this information to input into a program management system for the future planning of capital projects. This initial stage will likely take anywhere from three to five years for the data analysis, collection and system development for the Asset Management Program at the Water Utility. Following this initial assessment, the Asset Manager will be responsible for continual updates to the CMMS and ensuring that maintenance is occurring on schedule.

In conducting this position study, I examined several comparable positions within the City of Madison as well as for other municipalities who have Asset Managers. Through my discussion with Mr. Larson and Mr. Braselton, it's been determined that the work of the Asset Manager is very similar to the classification of Engineer 3, in CG 18, Range 10.

A review of the class specification for Engineer 3 (see attached) describes the work as:

... professional engineering **work performed in the office and/or field** in connection with the **design, management, and construction** of a **wide variety of public works projects**.... work is characterized by the **exercise of technical and professional judgment**, the broader application of professional engineering expertise, and **proficiency in the operational and procedural aspects of the work**.
[emphasis added]

Engineer 3s in the City are primarily responsible for the project management of a variety of public works projects. These duties include interagency communication and coordination, scheduling, oversight of plan designs and specifications, and perform special engineering studies including construction materials studies and tests. Additionally, these positions perform the job duties independently, coordinate major projects with minimal involvement from higher level staff, and require a high level of analytical skills and the exercise of technical and professional judgment.

Additionally, I reviewed the classification specification (see attached) of the Transportation Operation Analyst, in CG 18, Range 10; which describes the work as:

... **responsible, professional administrative work** within the Traffic Engineering/Parking Division. ... provides professional staff support in the development, analysis and administration of various Division budgets and in the **development and/or analysis of departmental programs, operations and functions**. ... the work includes coordinating the inter-agency and private sector billing for the division; **participating in policy development and interpretation**; and **directing the administrative phase of the divisional service delivery system**. [emphasis added]

The Transportation Operations Analyst provides control of the day-to-day expenditures and revenues for the Traffic Engineering/Parking Utility. This position coordinates and performs systems development and maintenance activities for the agency's transportation financial reporting and operations systems and procedures. Serving as the system improvement coordinator, this position develops data collection systems and procedures and provides instruction/recommendations to optimize customer oriented transportation services. Additionally, by assisting department managers with the preparation of specifications and cost estimates for equipment selection, this position is responsible for coordinating major transportation studies.

As part of this position study, I also reviewed the position of Asset Manager for other municipalities who current have this classification. Recently the City of Bellevue, Washington recruited for an Asset Manager. According to the job posting, this position's primary responsibilities are:

... the lead for the Utilities Asset Management Program, which guides how the Utilities Department manages \$3.5 billion worth of water, sewer and storm water assets to meet service goals while minimizing total life-cycle cost. The position is responsible for managing all aspects of the program including **program planning, development, and implementation, monitoring system performance metrics**, recommending changes to policy and practice based on those metrics, incorporating emerging best practices in asset management, and **forecasting resource requirements** for use in developing utility rate models. [emphasis added]

This Asset Manager position's essential duties include monitoring key performance indicators, developing/maintain the asset inventory, performing condition assessment, mapping assets, developing long-term asset replacement or rehabilitation projects, making short-term decisions on asset repair or replacement, and planning for long-range financial needs. The position requires a Bachelor's degree in Civil Engineering or related field, with at least five years progressively responsible experience with asset management programs, and at least three years supervisory experience. The pay range for the Asset Manager in Bellevue, WA was posted at \$83,569-\$115,303 annually.

In my evaluation of the proposed Asset Manager classification, I've found that the responsibilities are in line with the classifications of Engineer 3 and Transportation Operations Analyst. The Asset Manager will be leading the implementation of a new program area for the Water Utility; which will require a high level of analytical skills similar to the above mentioned positions. This new position will offer the Water Utility a structured and organized means of inventorying and assessing the assets of the agency, recommending asset replacement, and minimizing costs for the Utility by evaluating an assets life cycle and maintaining a high level of service delivery for customers. The Asset Manager will also require technical expertise and skills to work with a variety of software and databases related financial reporting, mapping, and computerized maintenance systems. This position will also play a key role in the capital project planning and the overall Water Utility's master plan, and therefore will require fundamental knowledge of utility finance, budgeting and long term planning. These roles are all very similar to the Transportation Operations Analyst. Lastly, in my external comparison with the City of Bellevue, WA the proposed classification in CG 18, Range 10 is slightly under the stated salary

of the Bellevue position; however the Bellevue position does have responsibility for three utilities – water, sewer, and storm water – as well as an overall higher cost of living than Madison, WI.

Therefore, I recommend the creation of the Asset Manager classification in CG18, Range 10. This is comparable to the Engineer 3 and other professional classifications in CG18, Range 10. I further recommend that the new position in the Water Utility Operating Budget be recreated as an Asset Manager.

The necessary Resolution to implement this recommendation has been prepared.

Editor's Note:

Classification Title	Compensation Group/Range	2015 Annual Minimum (Step 1)	2015 Annual Maximum (Step 5)	2015 Annual Maximum (+12% longevity)
Asset Manager	18/10	\$61,674	\$74,773	\$83,015

cc: Brad Wirtz, Human Resources Director
Mike Lipski, HR Services Manager
Tom Heikkinen, General Manager - Water Utility
Al Larson, Principal Engineer - Water Utility
Pete Braselton, Computer Mapping / GIS Coordinator – Water Utility