TO: Personnel Board

FROM: Emaan Abdel-Halim, Human Resources

DATE: 15 January 2014

SUBJECT: Engineering Program Specialist I- Water

The Water Utility has requested a study of the vacant position (#1888) of Engineering Program Specialist I (CG16-17). Given the recent retirement of the incumbent, and upon reviewing the current needs of the Mapping section, the Water Utility General Manager, Tom Heikkinen and Principal Engineer – Water, Al Larson have requested this position be recreated as a Surveyor 2 (CG18-08). During the course of this position study, I reviewed the proposed position description and met with Mr. Larson; the Computer Mapping/GIS Coordinator, Peter Braselton; and the Surveyor 2 from Parks, Dan Rodman. Given the changing technological needs and work flow processes within the Mapping section, I agree with their recommendation for the reasons outlined in this memo.

The Water Utility's Mapping Section is comprised of the Computer Mapping/GIS Coordinator (CG18-II) as the unit's supervisor, one Engineering Program Specialist 2 (CG16-I9), one Engineering Program Specialist I (CG16-I7), and one Engineering Aide 2 (CG16-I4). Within the last year, a review of the work flow processes created a change in how the work is done in the Mapping Section. Previously, the GIS and electronic record drawings (ERD) were compiled without survey, from construction inspector notes. The management of the section determined that a more efficient and accurate process would be created by incorporating field survey work prior to the ERD step and GIS updates. By changing the work flow process to project construction, survey, ERD and GIS updates, the mapping section is ensuring the accuracy of the project 'as-built' and ERD is a true reflection of the final project. Once the new workflow was implemented, and given the higher level professional level survey field work required, the survey and ERD generation duties were performed by a professional Engineer within Water or by City Engineering. Under the current organizational structure, there are no positions in this section with the required qualifications to perform this registered survey and mapping work.

The class specification for Engineering Program Specialist I describes the work as:

... responsible program coordination, project, and **specialized field work** in a professional engineering environment. The work involves direct **responsibility for specialized programs, projects, and activities** relating to the support of engineering staff and projects. Positions at this level perform **technical and quasi-professional functions such as conducting field surveys and evaluations, preparing plans and specifications**, and coordinating regulated facilities/activities (e.g., underground storage tanks, waste oil collection, landfill monitoring, marking program, crash program, etc.)... [emphasis added]

The class specification for Surveyor 2 describes the work as:

... responsible supervisory and/or specialized professional work in a public works division. The positions in this class serve as: I) chief of a surveying crew with responsibility for performing special projects and tasks which require registration as a Land Surveyor, (i.e., functions relating to the legal establishment or re-establishment of survey monuments, the

preparation of certified survey maps and the performance of other specialized projects and activities necessitating registration), or 2) coordinator of the Division's public land records program with responsibility for completing and recording documents which require registration as a Land Surveyor. ... [emphasis added]

Up until his recent retirement, the incumbent in the Engineering Program Specialist I position primarily focused on drafting and ERD work for the Mapping section. In the last few years, the backlog of ERD records fell under the responsibility of the Engineering Program Specialist I. As the workflow processes changed and with new tools to do the work more efficiently, the fundamental needs of the position have changed. By front loading the surveying and ERD work into the system, the previous ERD duties of the former incumbent and new surveying duties have been assigned to an Engineer within Water.

The goals of creating this Surveyor 2 position is to minimize the measurements required for Construction Inspectors to verify in the field, create more accurate records in less time, and to collect data and create ERDs with more accuracy. By using a professional Surveyor to perform this work, it would allow Water Utility Engineering staff to focus on areas of expertise. While the Surveyor's main focuses will be to conduct the field surveys and update ERDs, this position will also be the point person for the daily CADD hardware and software management. Additionally, with this position the Water Utility will be able to conduct easement research in house instead of contracting out this work.

During the course of this position study, I met with the Parks Surveyor 2, in the same proposed classification, to compare work responsibilities and duties. I found the duties of this requested position is consistent with the work performed by the Parks. The Surveyor in Parks works closely with the Landscape Architects on the front end and back end of the design and construction of projects. Again, by conducting accurate measurements prior to construction and confirming the actual end project measurements, Parks can ensure the accuracy of the CADD system maps. This position is also expected to perform topographic and boundary surveys, construction staking as needed, land records research, and is the primary position responsible for the CADD software management. All of these duties are in line with the expectations of the Surveyor position in Water Utility.

The Water Utility's goal is to have the entire water system for the City mapped out with accuracy in the GIS system. With technological advancements and the continual expansion of the water system, the needs of the Utility have increased to the level that requires a professional Surveyor. Therefore, I am recommending recreation of the Engineering Program Specialist I position to a Surveyor 2 within the Water Utility budget. The necessary resolution to implement this recommendation has been drafted.

Editor's Note:

Compensation	2014 Annual	2014 Annual	2014 Annual
Group/Range	Minimum	Maximum	Maximum
	(Step I)	(Step 5)	+12% longevity
16/17	\$53,547	\$61,788	\$69,212
18/08	\$55,560	\$65,931	\$73,190

cc: Tom Hekkinen – Water Utility General Manager Al Larson – Principal Engineer – Water Peter Braselton – Computer Mapping/GIS Coordinator Greg Leifer – Labor Relations Manager