TO: Personnel Board

FROM: Emaan Abdel-Halim, Human Resources

DATE: November 14, 2012

SUBJECT: Engineering Aide 2 – Water Utility Division (Santi)

At the request of the Water Utility General Manager, Tom Heikkinen, and Computer Mapping / GIS Coordinator, Peter Braselton, I have studied the position (#4027) of Engineering Aide 2 (CG16, Range I3) currently occupied by Mr. Shayne Santi. Mr. Braselton is recommending movement of Mr. Santi to Civil Technician 2 (CG16, Range I4) as part of the class specification transition to the Civil Technician progression series for use within the Water Utility, and based on increased responsibility by Mr. Santi. After reviewing the position description (see attached), and conversations with Mr. Braselton as well as the incumbent, I agree that Mr. Santi should be moved to the level of Civil Technician 2 for the reasons outlined in this memo.

The class specification defines an Engineering Aide 2 as:

... skilled technical support work performed in a professional engineering and public works construction projects. The work involves independently performing a variety of tasks such as: technical drafting of plans, maps, drawings and layouts; developing and/or using computer applications; making routine engineering computations, and performing other related field and office work as assigned. The work at this level differs from the Engineering Aide I level in terms of technical difficulty/complexity of the assignments and independence of action. [emphasis added]

The class specification defines a Civil Technician 2 as:

...technical support work in a professional engineering and public works construction environment. The work involves independently performing a variety of tasks such as: technical drafting of plans, maps, drawings and layouts; developing and/or using computer applications; making routine engineering computations, performing construction inspection activities; and performing other related field and office work as assigned. ...Movement to the Civil Technician 2 level is based on increased independence and demonstrated ability to perform more complex and/or comprehensive technical support functions. [emphasis added]

Examples of duties and responsibilities found at the Civil Technician 2 level include:

Organize, layout, and prepare complete project plans for construction of streets, highways, sewers, drainage system, water system, landfill, and /or other public improvement projects. Prepare specification documents for uncomplicated equipment purchases and public works improvement.

Perform construction inspection activities: measuring, monitoring, and recording quantities; quality; time of delivery; and installation of construction materials to ensure compliance with contract specifications and other requirements.

Check horizontal and vertical alignments, estimates, material schedules, and construction time for public works projects. Interpret contract documents, contractor communications, and land records.

Maintain and update the official map and official corporate limits. Draft sketches and details, prepare legal descriptions, prepare resolutions and schedule Common Council Action, draft and process notices of public hearing and other related materials for street vacations, relocation orders and official map changes.

Maintain Water Utility maps and records related to specific programs such as Flushing and Lead Water Service Abatement.

There is overlap between the class specifications for Engineering Aide and Civil Technician series. However, both classifications perform technical support work for engineering activities, and include field and office support. The main distinction at the Civil Technician 2 level is that at the 2 level work is expected to be performed with greater independence, and requires a demonstrated ability to perform more complex and/or comprehensive technical support functions. Additionally, a Civil Technician 2 performs these functions with minimal supervision, but the work is typically reviewed by higher level technical staff.

Mr. Santi began his employment with the City in February 2002 as an hourly Engineering Assistant 2 with the Water Utility. In February 2003, Mr. Santi was promoted to an hourly Civil Engineer; and then promoted again in February 2006 to a permanent Engineering Aide 2 which is his current position at the Water Utility. Beginning in 2010, Mr. Santi took over primary responsibility for overseeing and managing the annual unidirectional flushing of the water mains. Comprising 50% of his position's duties, this function operates from roughly March/April through November in any given year (barring any extraneous circumstances like drought). Mr. Santi is responsible for coordinating and planning the yearly flushing schedule, leading work crews and coordinating work assignments with the Operations unit, updating and providing maps for the work crews, inputting all related data entry and recordkeeping, and responding to customers regarding flushing schedules. Mr. Santi also coordinates with large commercial customers to ensure the flushing schedule causes minimal disruption to business services in the area. When determining the flushing schedule, Mr. Santi may receive some direction from the Water Quality section to focus attention on specific problem areas that may require more attention to improve the quality of water from that main. An integral part of this process requires that samples be taken before a water main is flushed, samples are sent to state lab for testing, and then another sample is taken post-flush to establish the level of quality. Mr. Santi assesses the lab results and determines if additional flushing is necessary and if so adds this to the schedule for unidirectional flushing.

The other main duties that Mr. Santi's responsible for includes updates to the GIS mapping and Hydraulic Model software programs. The work in this area goes hand-in-hand with the flushing work and comprises about 35% of his overall job responsibilities. Mr. Santi reviews construction reports and field updates, determines the necessary changes and updates needed to be input to the GIS data and Hydraulic Model software. Both these systems operate independently of each other, and therefore require manual updates in order accurately reflect of the components of entire water main systems. Such updates may include indicating where new hydrants are placed, where larger water mains have been installed, or areas of new construction which have not yet been added to the GIS mapping or Hydraulic Model systems.

Mr. Santi performs his duties with minimal supervision and direction while producing very thorough and accurate work, as reviewed by his immediate supervisor. He solely manages and coordinates the annual unidirectional flushing process for the Water Utility, as well as handles pertinent updates to the GIS and Hydraulic Model systems. This level of work is expected at the Civil Technician 2 level and consistent with the examples of duties and responsibilities found in that class specification. As such, I recommend that Mr. Santi's position be recreated as a Civil Technician 2 and that he be reallocated to the new position. We have prepared the necessary Resolution to implement this recommendation.

Attachments

Compensation	2012 Annual	2012 Annual	2012 Annual
Group/Range	Minimum (Step I)*	Maximum (Step 5)	Maximum +12%
			longevity
16/13	\$46,833	\$52,192	\$58,450
16/14	\$48,079	\$54,120	\$60,624

^{*}Listed salaries are effective December 9, 2012.

cc: Tom Heikkinen – Water Utility General Manager
Peter Braselton – Computer Mapping / GIS Coordinator
Shayne Santi – Engineering Aide 2