TO: Personnel Board

FROM: Susan Gafner-HR Analyst

DATE: June 24, 2016

SUBJECT: Water Civil Technician 3

At the request of the Water Utility General Manager, Tom Heikkinen, Principal Engineer, Al Larson and Construction Supervisor, Jeff Belshaw, I conducted a position study of the Water Construction Inspectors (CG16-14) position (#1893-K. Zutter, #3739-B. McNeary, #1871-T. Pearson, #4094-C. Selva, #1867-J. Peterson) at the Water Utility. The request for this position to be studied is due to the expansion of duties and responsibilities. Upon reviewing the submitted position description and meeting with Mr. Larson and Mr. Belshaw, as well as the incumbents, I recommend the following for the reasons outlined in this memo:

- Delete the classification of Water Construction Inspector in CG16, Range 14
- Create new classifications of Water Civil Technician 1, 2 and 3 in CG16, Range 12, 14, 16, respectively;
- Recreate position #s 1807, 4094 and 1867 into the new Water Civil Technician 2 classification in CG16, Range 14; and reallocate the incumbents, T. Person, C. Selva and J. Peterson respectively into the new positions.
- Recreate position #s 1893 and 3739 into the new Water Civil Technician 3 classification in CG16, Range 16, and reallocate the incumbents, K. Zutter and B. McNeary, respectively into the new positions.

First, a review of the classification specification for the existing Water Construction Inspector describes work as:

> …responsible paraprofessional inspection work of all phases of water system construction work (mains and services) to ensure compliance with established standards. This work is characterized by independent judgment and discretion in overseeing assigned projects and in the resolution of construction problems such as those encountered in high density, multi-use/commercial areas, and/or situations requiring the integration of a large number of public works, utilities, or disruption of services considerations. The work is performed under the general supervision of a Water Utility Engineer or Water Construction Supervisor.

The proposed new classifications describe

> … responsible paraprofessional public works engineering and construction administration work. The work includes but is not necessarily limited to surveying, base map development, project setup, construction inspection of the installation of water mains, valves, water services, hydrants, and facility construction, record keeping, and computer aided drafting of as constructed information for utility long term records. Responsibilities include, but are not limited to, set up of project records and files, computer aided drafting work, surveying, detailed record keeping, preparation of record drawings from construction records, evaluating changes to construction, review of pay requests, assistance with the resolution of construction conflicts, and contract closeout. Work also includes but is not limited to independently conducting leak surveys and documenting the results, system survey, water sampling, pressure testing, valve exercising and mapping, hydrant work and water system flushing.

In recent years the Water Construction Inspectors have taken on duties in line with a Civil Technician. The work has progressed from simply inspecting water main construction to record

keeping, CAD work, and completing complex field surveys. Technology has evolved over the past decade requiring more expertise from field personnel. Inspectors are required to be competent in several different computer software systems including computer aided drafting. Technology is also improving efficiencies providing the opportunity for field personnel to complete office tasks. Completing record drawings from construction records, developing project base maps from survey data, completing field surveys and tracking projects using spreadsheets is now expected of field personnel.

I conducted an office visit and ride along with two of the Water Construction Inspectors, CG 16, Range 14. The office visit gave great insight into the complexity of the computer work that is completed by each of the Water Construction Inspectors throughout the year. This work includes creating ERD and CAD layouts that include field work, measurements and surveying. They also create spreadsheets used for mapping GIS and record keeping for maintenance. Each of the Water Construction Inspectors has been trained on Microstation Version 8 for mapping. They also utilize GT Viewer, mapping software used in the field to display maps of the water system along with the streets. Every project that they work on involves CAD work, data entry and record keeping. Each Water Construction Inspector on average will complete 6-8 projects over the course of a year. The proposed position description shows that this work now makes up over 20% of the work for these individuals.

The ride-along showed how the work completed on CAD and Microstation throughout the year was utilized in the field. The Construction Inspectors deal with water shut off issues that can be life threatening to various businesses while work is being completed. Area hospitals, dental offices, vet clinics all rely on water for their patients and their livelihood, so speed and safety is an everyday practice of the inspectors. The inspectors also work with private contractors and are on-site every minute of the day that they are working to ensure compliance. Water Construction Inspectors are responsible for lab reports from the State Lab of Hygiene which also creates an additional layer of safety in the field for City residents.

For comparison purposes, I also conducted a ride along with a Construction Inspector 2, CG 15, Range 11, in the Engineering Division (equivalent to a CG16, R16). The Engineering Construction Inspector 2s are more hands on with projects and responsible for everything but the water. They monitor the grading of the road, curbs, gutters, and tree removal for every project. They are responsible for payments for contractors, but don't directly create the bills of materials for a project. The Construction Inspectors in Engineering do not do any CAD work. They have a Surveyor and Engineers complete the CAD work that is used for the various projects that they oversee. On occasion, they will use a hand-held GT Viewer in the field, but only to verify the plans that were created by the Engineers. When considering a project in Engineering, all of the Streets that will need to be shut down are planned out in advance and aren't initiated the day of the project. Each Construction Inspector 2 covers one quarter of the City. Since this area of coverage is so massive, they make check-ins with contractors, but cannot be on site 24/7 to monitor their work. Engineering does not consistently deal with sensitive needs or life threatening issues that are seen in the daily work of the Water Construction Inspectors.

As mentioned above, the work of the Water Construction Inspectors requires a technical background, a strong background in public works construction, and the flexibility to complete both field and office tasks. The work of the inspection positions at the Water Utility are changing and evolving with technology and the needs of the department. Because of this, I recommend creating a new classification series of Water Civil Technician 1-3. This new job title more accurately reflects the broad nature of the work being performed. In addition, this establishes a

career progression whereby Water can train incumbents in the various levels of the work. Finally, with the Water Civil Technician 3 being in CG16, R16, this provides comparability with the similar position in the Engineering Division. Overall, the series is similar to Engineering in that Engineering hires at the entry-level Engineering Field Aide, which progresses to a Construction Inspector 1 and then a 2, depending on budgeted vacancies.

I also recommend that the incumbents of the Water Construction Inspector positions be reallocted to the level of 2 and 3 as outlined above. This determination is based on the incumbents experience in the position as outlined in the new class specifications. The necessary resolution to implement this recommendation have been drafted.

Editor's Note:

Compensation Group/Range	2016 Annual Minimum (Step 1)	2016 Annual Maximum (Step 5)	2016 Annual Maximum +12% longevity
16/12	$49,313	$54,706	$61,271
16/14	$52,010	$58,544	$65,569
16/16	$54,495	$62,503	$70,003

cc: Tom Heikkinen - Water Utility General Manager
Al Larson - Principal Engineer
Jeff Belshaw - Construction Supervisor
Mike Lipski - HR Services Manager
Greg Leifer-Employee and Labor Relations Manager