



Department of Employee Relations

Tom Barrett
Mayor

Maria Monteagudo
Director

Michael Brady
Employee Benefits Director

Troy M. Hamblin
Labor Negotiator

September 11, 2007

To the Honorable
The Committee on Finance and Personnel
Common Council
City of Milwaukee

Dear Committee Members:

Re: Common Council File Number 070595

The following classification and pay recommendations were approved by the City Service Commission on August 28, 2007:

In the DPW-Water Works, four positions of Civil Engineer II, PR 626 was recommended for reclassification to three positions of Civil Engineer II, PR 626 and one position of Civil Engineer III, PR 628.

The Job evaluation report covering the above positions, including the necessary Salary and Positions Ordinance amendments, are attached.

Sincerely,

Maria Monteagudo
Employee Relations Director

MM:fcw

Attachments: Job Evaluation Report
Fiscal Note

C: Mark Nicolini, Renee Joos, Marianne Walsh, Troy Hamblin, Betty Schraith, Joe Alvarado, Carrie Lewis, Laura Daniels, Jeffery Mantes, Dan Thomas, Mark Scheller, Dinah Gant and Roger Reed (TEAM)

JOB EVALUATION REPORT

City Service Commission Meeting Date: August 28, 2007

Department: Department of Public Works – Water Works

Current	Request	Recommendation
Civil Engineer II Pay Range 626 (\$53,646 - \$63,981) (Four Positions)	Civil Engineer III Pay Range 628 (\$60,954 - \$72,671) (Four Positions)	Civil Engineer II (Three Positions) Pay Range 626 (\$53,646 - \$63,981) Civil Engineer III (One Position) Pay Range 628 (\$60,954 - \$72,671)
<p>Rationale:</p> <p>Due to changes in duties and responsibilities as a result of reorganizing the Water Engineering Section of the Milwaukee Water Works we recommend one of the four positions of Civil Engineer II in Pay Range 626 be reclassified to Civil Engineer III in Pay Range 628.</p>		

Action Required

In the Positions Ordinance, under Department of Public Works – Water Works, Engineering Organization, Engineering Design, delete three positions of “Civil Engineer III (X)” and add three positions of “Civil Engineer II (X)”.

Background

The Department of Employee Relations (DER) received a letter from the Department of Public Works – Milwaukee Water Works (MWW) requesting a reclassification study of four positions of Civil Engineer II (CE II) in the Water Engineering Section. MWW indicated that prior to 2001 they had two distinct Design Units in their Engineering Section, Water Mains Design and Water Plants Design. MWW reorganized the Engineering Section so there is now one Design Unit, and over the past several years has begun to cross train the staff. This cross training allowed MWW to be better able to respond to variations in workload and made the transition to one Design Unit easier. An updated job description and questionnaire were submitted and discussions were held with one of the incumbents, Karl Rohrbach; the immediate supervisor, Mark Scheller, Management Civil Engineer – Senior; Dinah Gant, Civil Engineer V; Dale Mejaki, Infrastructure Operations Manager; Laura Daniels, Administration and Projects Manager; and Carrie Lewis, Superintendent of Water Works.

Duties and Responsibilities

According to the questionnaire completed by one of the incumbents, the basic function of these CE II positions is to develop an understanding of the processes of the MWW and effectively complete assigned projects and studies. This work often involves working with other sections in MWW and other Divisions of the Department of Public Works. The duties and responsibilities are as follows:

40% Water Main Design Projects

Design and prepare plans and specifications for installation of water main distribution and feeder mains; review and make modifications to plans prepared by others; check and review

suburban water main plans for adherence to City specifications; prepare resolution requests for Common Council approval; prepare necessary documentation, cost estimates, contract award analysis, and correspondence as required; prepare annual replacement program utilizing the experience index database; and attend meetings to represent the interests of MWW with developers, consultants, and other city departments.

40% Analysis of Milwaukee Water Works Distribution System

Prepare necessary engineering reports, documentation, cost estimates, and correspondence as required; conduct field testing involving flow testing, pressure monitoring, "C" factor testing, and pump testing; establish and maintain material specifications, and conduct field inspection of materials; develop and maintain the MWW hydraulic model; develop contract specifications for professional services contracts; respond to consultant engineers, plumbers, and fire protection requests for information regarding system capacities; prepare engineering feasibility reports on serving suburban customers; maintain database of water main failure records; and manage other databases.

20% Water Plant Facility Projects

Design, prepare plans and specification for modification to existing facilities of the MWW; prepare payments and progress reports; review requisitions and bids; prepare necessary engineering reports, documentation, cost estimates, contract award analysis, and correspondence; and perform field inspections of plant projects under construction.

Requirements include a Bachelor's Degree in Civil Engineering, two years of professional engineering experience in the design of water main construction plans, water system analysis, computer hydraulic modeling, and preparation of specifications and contracts for water mains and plants. Other requirements include knowledge of drafting software, microsoft office products, and other job specific computer software; and an ability to effectively communicate orally and in writing when conducting work with others including engineers, consultants and constituents.

Changes in the Positions

Changes in the positions include the additional duties and responsibilities:

- Contract origination and award which includes preparing contract documents, advertising and award evaluations; reviewing bids and making recommendations; and working with other sections in MWW regarding construction projects.
- Determining and recommending proposed alterations, representing MWW interests at meetings with developers and consultants, and assessing impacts of a development and required alterations.
- Serving as the principle engineer, preparing requests for proposal and contract documents, coordinating field work, making recommendations for proposed changes to the standard operations of the utility, and working closely with consultants to complete projects.

The refinement and completion of the MWW Hydraulic Model has required additional knowledge of the associated technology and how MWW operates each facility. Cross training of these positions on work with the plant facility projects has also required additional knowledge regarding these facilities.

Analysis

To study these positions we looked at the changes in MWW and specifically in the duties and responsibilities of the positions under study. We also compared these positions to other Civil Engineer II and III positions throughout the Department of Public Works.

The department indicated that the Water Engineering Section previously had a total of 31 staff including 11 Civil Engineer positions at different levels. The number of staff has now been reduced to 20 with 9 Civil Engineer positions. The engineers in the Water Plants Design Unit were all at Level III or above. Four of the engineers in the Water Mains Design Unit were at Level II and two were at Level III. In 2000 the MWW began to cross train the engineers in the two units to help balance the workload between the two units. The staff of the two units began to coordinate and collaborate more on projects and rotate among assignments.

The department stated that previously the four Civil Engineer II positions under study were responsible for duties more consistent with the classification of Civil Engineer I/II such as compiling and updating data, investigating consumer service complaints, and performing analyses and planning activities. Now, these positions have taken on some higher level duties such as conducting negotiations regarding contracts and claims, working closely with Plant Operations, and coordinating improvements in infrastructure at MWW facilities. The department also indicated that the new duties and responsibilities require a higher level of knowledge and skills.

The department submitted a new standard job description for Civil Engineer III in MWW that indicates their basic function is to provide in-house engineering services for MWW. The duties and responsibilities are listed as follows:

- 85% Be responsible for new and modifications to existing MWW facilities which includes engineering designs, estimates, development of contract documents, requests for proposals; and activities associated with bid and award, construction management, and the eventual closeout of projects.
- 5% Prepare appropriate legal documents associated with maintaining MWW facilities or development of new facilities.
- 5% Maintain liaison with plant operating, maintenance, distribution and business staff in an effort to provide technical assistance when needed.
- 5% Recommend changes in specifications, existing methods, and procedures related to the engineering discipline.

These positions may also, at times, act as a leadworker on various projects for an Engineering Technician and two Engineering Drafting Technicians.

Traditionally the distinction between a II and III level for engineering positions was that the III level had the following duties and responsibilities:

- A more full and complete responsibility for accomplishment of assignments
- Assignments involved a broader scope of activities
- Significant leadworker duties of a complete unit or function and/or assisting with leadworker duties of a larger unit. This may involve overseeing the work of Engineering Technicians, Engineering Drafting Technicians, and/or Engineers at the I or II level.

Other indicators of III level work is serving as a project manager that sees a project through from start to finish. It should be kept in mind that a Civil Engineer II is considered a full journey level position that can perform a wide variety of Civil Engineering functions.

Comparison to Other Positions

In comparing the new duties and responsibilities with those of other Civil Engineer II positions in the City we found that although some duties may be considered higher level, other new duties are at the

II level such as preparing contract documents, performing field investigations and inspections, and working with other sections. These positions may, at times, perform some leadworker duties but that is also consistent with the duties of a Civil Engineer II and does not rise to the Civil Engineer III level of "significant leadworker duties of a complete unit or function and/or assisting with leadworker duties of a larger unit".

The use of the hydraulic model has required some additional technical knowledge and skill. This measurement tool helps to better perform the job duty of data collection and analysis but doesn't change the fundamental nature of the work. Although this model may involve some higher level of analysis it would not be an amount that would justify reclassifying all four positions. Instead, due to the changes in duties and responsibilities listed above we recommend one position be reclassified to Civil Engineer III in Pay Range 628. The MWW can conduct an internal selection process and higher level duties, including more extensive leadworker functions, can be assigned to this position on a more regular basis.

This recommendation is more consistent with the majority of other groupings of Civil Engineers within the Department of Public Works as shown in the chart below. Generally, the percentage of Civil Engineers at the III and IV level are close to 50% as opposed to the requested level of 100%.

Civil Engineer Positions I – IV

Department/Section	Civil Eng I & II	Civil Eng III & IV	Total
DPW-Water Works Engineering Design (Current)	4 (50%)	4 (50%)	8
DPW-Infrastructure Transportation	9 (53%)	8 (47%)	17
DPW-Infrastructure Construction	0 (0%)	4 (100%)	4
DPW-Infrastructure Field Operations	4 (57%)	3 (43%)	7
DPW-Infrastructure Environmental	13 (68%)	6 (32%)	19
Total DPW	30 (55%)	25 (45%)	55
DPW – Water Works Engineering Design (Current)	4 (50%)	4 (50%)	8
DPW-Water Works Engineering Design (Proposed)	0 (0%)	8 (100%)	8
DPW – Water Works Engineering Design (Recommended)	3 (38%)	5 (63%)	8

Recommendation

Based on the above analysis we recommend one of the four positions of Civil Engineer II in Pay Range 626 be reclassified to Civil Engineer III in Pay Range 628.

Prepared by: 
Sarah Trotter, Human Resources Representative

Reviewed by: 
Maria Monteagudo, Employee Relations Director