City of Milwaukee

Department of Employee Relations

Tom Barrett
Mayor

Maria Monteagudo
Director

Michael Brady
Employee Benefits Director

Troy M. Hamblin
Labor Negotiator

July 20, 2007

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

Dear Committee Members:

The following classification and pay recommendation was approved by the City Service Commission on July 10, 2007 based upon an appeal by the Department of Public Works.

> In the Department of Public Works-Infrastructure Services Division, one position of Inspection Specialist, PR 540 was recommended for reclassification to Construction Materials Inspector, PR 549.

The attached job evaluation report covering this position includes the necessary Positions Ordinance amendment. In the Salary Ordinance, under Pay Range 549, add the title "Construction Materials Inspector."

Sincerely,

Maria Monteagudo

Maria Monteagudo
Employee Relations Director

MM:fcw

Attachment: 1 classification appeal hearing memo
1 job evaluation report

c: Mark Nicolini, Renee Joos, Marianne Walsh, Troy Hamblin, Betty Schraith, Joe Alvarado, James Purko, Dale Mejaki, Jeffrey Polenske, Richard Abelson, John English, Paula Dorsey, Mill Mollenhauer, and James Fields

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TO: City Service Commission

FROM: Laura Sutherland, Human Resources Representative

DATE: July 6, 2007

RE: Classification Appeal Hearing regarding Jane Simons, Inspection Specialist, Department of Public Works, Infrastructure Services Division

The attached information is being submitted to your Commission in regard to a classification appeal involving the position of **Inspection Specialist held by Jane Simons.** On May 1, 2007, the City Engineer, Jeffrey Polenske, submitted an appeal to Maria Monteagudo, Employee Relations Director regarding a classification recommendation contained in a report submitted to your Commission on September 12, 2006.

In that report, the Department of Employee Relations **recommended that the position of Inspection Specialist be reclassified from its current title in Pay Range 540, with a maximum rate of pay of $47,245, to the title of Construction Materials Inspector in Range 550, with a maximum of $50,242**. As the result of a settlement agreement entered into between the City and Ms. Simons, any reclassification resulting in a pay increase for Ms. Simons will be retroactive to Pay Period 22, 2006.

We recommended a new higher level classification for this position in recognition of new higher level duties performed by Ms. Simons associated with the administration of a contract with an engineering firm that tests concrete and asphalt in conjunction with paving activities. These duties, which now account for about 30% of the job's time include: determining the priority of tests; scheduling personnel to perform tests in the field; monitoring the performance of the contractor's employees; reviewing monthly invoices submitted by the contractor for tests performed; and authorizing payments to the contractor. According to the City Engineer, the amount of this contract is about $110,000 per year. Although these duties were previously assigned to a Civil Engineer III, they appear to be appropriate for a position not requiring an engineering degree.

Because these new duties and the corresponding level of knowledge and skill required to perform them are the primary basis upon which a reclassification to a higher level was recommended, this communication provides two documents illustrating Ms. Simons's work in this area—two pages from a monthly invoice from the engineering contractor and a log of testing work performed by the company entitled "Daily Sampling Giles, 2007." Work products and reports pertaining to other work performed are also included. It should be noted, however, that the duties and responsibilities associated with all other work apart from the engineering testing contract have remained the same for a substantial amount of time.

Although both the Department of Employee Relations and the appellant agree that the position of Inspection Specialist should be upgraded, the parties disagree about the level to which the position should be reclassified. Ms. Simons contends that her job, which is responsible for inspecting all materials used primarily in the sewer system, should be compensated the same level as that of an Engineering Technician V located in the Milwaukee Water Works. The maximum rate of pay for an Engineering Technician

V is $58,427 with the opportunity to earn 2 additional pay steps, to a maximum of $63,981. Relevant information regarding the City's pay system may be found in the attachment entitled Job Classifications and Rates of Pay printed July 5, 2007.

This Engineering Technician V position inspects a wide range of materials and appurtenances used in the water distribution system, including pipes, valves, fitting hydrants, hydrant parts, tapping sleeves, valve box parts, service box parts, tees, repair claps, brass goods, and hardware. As stated in the classification report of September 12, 2006, the Department of Employee Relations contends that the Engineering Technician V position job requires a higher level of knowledge and skill that that of the Inspection Specialist and that the reclassification recommended is appropriate for the Inspection Specialist. Due to the fact that this comparison is expected to arise during the appeal hearing, documents regarding the Engineering Technician V position are attached to this cover letter.

The job analysis conducted by the Department of Employee Relations indicates that the minimum qualifications for the Engineering Technician V and inspection Specialist are as follows. What is stated below is a revision of the minimum qualifications as stated on the report of September 12, 2006 for the position of Inspection Specialist. These revisions have been made because the City Engineer submitted a revised job description for the position of Inspection Specialist to the Department of Employee Relations on May 1, 2007, triggering a reconsideration of minimum qualifications for the position.

Minimum Qualifications

Inspection Specialist
High school diploma and 4 years of work experience in an area related to construction inspection or the inspection of construction materials.

Engineering Technician V
An associate's degree in civil engineering technology and 5 years of work experience in the installation, construction, inspection or maintenance of water distribution systems.

It should be noted that the minimum qualifications stated on the job descriptions for these two positions differ from the minimum qualifications stated above. The reason for this lies in the fact that managers in respective departments write job descriptions. In most cases minimum qualifications written by managers in departments agree with those established by the Department of Employee Relations. In some cases, however, the Department of Employee Relations is called upon to develop minimum qualifications. When this happens the information used by the Department is wider in scope and the processes used to determine minimum qualifications conforms to professionally accepted standards of job analysis. For this reason, minimum qualifications as stated on job descriptions written by departmental representatives sometimes differ from those established by the Department of Employee Relations.

Lastly, it should be noted that after this appeal was received in May of this year the Department of Employee Relations met with Ms. Simons for a second time to review the duties and responsibilities of her position and receive feedback regarding the classification report of September 12, 2006. As a result of that meeting we are offering the following:

- The City Engineer submitted a new job description for the position of Inspection Specialist dated May 1, 2007.

- Although the job description for the Inspection Specialist states that the Ms. Simons "assists" in training City employees in performing tests, she actually performs this duty independently and does not assist anyone is doing so.
- The report of September 12, 2006 failed to state that Ms. Simons is sometimes called upon to inspect large pipes used in water main construction. Although this duty is performed rarely, it is performed.

Department of Employee Relations
REVISED

JOB EVALUATION REPORT

City Service Commission Meeting Date: September 12, 2006

Incumbent: Jane Simons

Department: Department of Public Works-Infrastructure Services Division

Present	Request
Title: Inspection Specialist	Title: Not Stated
Salary: Pay Range 540 ($41,368 - $47,245) Plus the potential to earn three additional M-steps: $49,037, $50,508, $52,024	Salary: Not Stated
Rate: Step 5 $47,245	Source: Department

Recommendation:

Title: Construction Materials Inspector
Salary: Pay Range 550 ($43,910-$50,242)
New Rate: Step 4, $48,478

Rationale:

Additional administrative duties and responsibilities have raised the level of responsibility as well as knowledge and skill required of this position. We recommend a new title of Construction Materials Inspector at the higher Pay Range 550.

Action Required

In the Salary Ordinance, under Pay Range 550, add the title "Construction Materials Inspector."

In the Positions Ordinance, under Department of Public Works-Infrastructure Services Division, Construction Decision Unit, Contract Administration, delete one position of "Inspection Specialist (X)" and add one position of "Construction Materials Inspector (X)".

Background

In March of 2006, the Department of Employee Relations received a Job Analysis Questionnaire for the position of Inspection Specialist, completed by the incumbent Ms. Jane Simons, and reviewed by her department. After staff review of the documentation, Ms. Simons was interviewed at her office worksite and discussions were held with her immediate supervisor, Mr. Ghassan Korban, Civil Engineer V in charge of private construction contracts for streets and all Public Works Inspectors.

Duties and Responsibilities

The basic function of this position is to test and inspect pipes and castings used in sewer construction in the field at manufacturing facilities and to schedule personnel from an engineering consulting firm to conduct tests of asphalt and concrete. Approximately 60% of this position's time is spent in the field, driving about 45 miles per day. The duties and responsibilities of this position are outlined below. The sources of information used to describe the job as it appears below were the Job Analysis Questionnaire completed by the employee, which included comments from supervisors, an interview with the employee holding the job, and discussions from the position's supervisor. The area of responsibility consuming the most time is listed first, followed by the area requiring the second most time, and so forth.

Inspection of Precast Materials Used Primarily in Sewer Construction
This area of responsibility includes inspecting precast materials used in sewer construction, such as concrete pipe, catch basins, and manholes, at construction sites and the manufacturing facility, Northwind Concrete Products, located in South Beloit, WI. It also includes inspecting PVC pipe at suppliers' sites. The employee filling this position must also record information regarding test results and send that information to the manufacturer, and also send invoices to manufacturers for her inspection services.

Asphalt Testing
Duties within this area include scheduling personnel from Giles Engineering Associates, Waukesha, Wisconsin, the current testing contractor, to perform required tests in the field and laboratory; reviewing reports from Giles; and reviewing invoices for payments. Scheduling is done on a daily basis.

Test and Inspection of materials Used in Street Construction and Maintenance
Although Giles Engineering performs some of this testing, the employee also tests asphalt and soils, inspects concrete on project locations, samples aggregates, and reviews reports provided by private vendors.

Inspection of Gray Iron Sewer Castings
Specific duties within this area include: inspecting casting at place of manufacture (Neenah Foundry Company, Neenah, Wisconsin) performing field checks of manholes and catch basins; writing standard reports; and invoicing manufacturers for inspection services.

Knowledge, Skills, Abilities (KSAs), and Competencies

The job analysis indicates that the most significant knowledge, skills, abilities and competencies required for successful job performance are:

- Good time management skill
- Good organizational skills
- Good interpersonal skills
- Ability to schedule personnel to conduct testing.
- Ability to create one's own work schedule and work independently
- Ability to create and maintain detailed records
- General knowledge of sewer construction and the materials and structures used
- General knowledge of street resurfacing and the materials used

- Ability to calculate areas of reinforcing on sewer pipe and other concrete
- Ability to understand shop drawings
- Ability to calculate tensile strength of quality control test bars
- Knowledge of standards established by the City of Milwaukee and State of Wisconsin for precast structures used in sewers, PVC pipe, and iron sewer castings
- Knowledge of standards for concrete and asphalt
- Ability to discern whether materials meet prescribed standards
- Ability to perform detailed office support work
- Ability to drive a vehicle to travel to work sites
- Ability to perform some work outside

It should be noted that these KSAs and competencies reflect those that of a fully experienced employee, not necessarily the KSAs that a new a new hire would be required to possess.

The minimum qualifications required to enter the job are a high school diploma, two and one-half years of experience inspecting and/or testing construction materials, and valid Wisconsin Drivers License, availability of a personal automobile, and the ability to travel to construction sites and several manufacturing facilities.

History of the Position and Changes in Duties and Responsibilities

In 1995 the City closed the materials Testing Laboratory where Ms. Simons was employed as a Testing Laboratory Specialist. Like other Testing Laboratory Specialists, Ms. Simons's duties consisted of field and laboratory work that included sampling materials; testing pipes to be used in sewer construction; inspecting precast materials at foundries; recording data regarding tests; and serving as a lead worker for Testing Laboratory Assistants.

At that time the Laboratory closed, Ms. Simons was the only Testing Laboratory Specialist remaining in the City's employ and the position was transferred to the Construction Section of Infrastructure Services. The title of her position was changed from Testing Laboratory Specialist to Inspection Specialist to reflect the fact that the Testing Laboratory had closed. Many of her duties, though, remained the same as they had been when the Laboratory was in operation.

A 1998 job description for the Inspection Specialist stated the following duties and responsibilities:

- Inspecting PVC pipe, concrete, pipe, concrete manholes, and other materials for sewer usage
- Testing asphalt and soil for City/State construction projects by field nuclear metering
- Assisting with the coordination of the testing services provided by an outside consultant
- Compiling concrete test results for annual summary of street construction projects
- Compiling work for the annual sidewalk replacement program
- Determining the condition of sidewalks for annual sidewalk replacement program
- Inspecting gray iron sewer castings for sewer and street construction usage
- Responding to telephone inquiries and complaints concerning the annual sidewalk replacement program
- Other related duties as assigned

During this period the position reported to a Civil Engineer IV who, by virtue of his management style, provided significant oversight to Ms. Simons's work. In October of 2000 this Civil Engineer IV retired, and his position was subsequently eliminated. A new Civil Engineer III was then assigned to manage all aspects of the contract bidding process. Sometime during the period from 1998 and 2002, the position stopped performing duties associated with the annual sidewalk replacement program that were stated on the 1998 job description.

In 2001 the position was reallocated from Pay Range 535 to 540, equivalent to the job classification of Public Works Inspector II, as the result of a collective bargaining agreement. Considering the maximum of each Pay Range in 2006 rates, the rate of pay for this position increased $1,650 annually, from $45,595 - $47,245 annually, which represents a 3.4% increase. As a part of this reallocation, the Inspection Specialist was also given the opportunity to earn up to three additional pay steps for education and work experience, like other Public Works Inspectors II. These additional pay steps, in 2006 rates, are: $49,037, $50,508, and $52,024.

After the Civil Engineer IV (the position's immediate supervisor) retired in 2001, Ms. Simons began to schedule her own testing appointments, something previously done by Civil Engineer IV. In addition, the incumbent of the job began recording data regarding her inspections into standard reports, calculating inspection data, and submitting invoices for her own inspections. All of these duties had been performed by the retired Civil Engineer IV.

Sometime between 2001 and 2005 the incumbent of the position began reviewing project specifications for projects from the State's Department of Transportation, which required reviewing the specifications to determine the locations of asphalt to be tested. During this period Ms. Simons also began working with other employees in researching new materials and products for sewer construction.

In July of 2005, the Inspection Specialist began scheduling personnel from Giles Engineering Associates to perform required tests on asphalt, reviewing reports submitted by Giles, and reviewing invoices for payments from the company.

The most notable knowledge, skills, abilities, and competencies required for the new duties acquired since 2001 are: the ability to create one's own work schedule and work independently; the ability to coordinate personnel to perform testing at construction sites; the ability to calculate, record, and maintain inspection data; and, the ability to submit invoices for inspections completed.

Analysis

The job analysis indicates that, beginning in 2001 when a Civil Engineer IV position to which the position reported was eliminated and replaced by a Civil Engineer III, the Inspection Specialist began to work more independently by scheduling her own inspection appointments and submitting invoices for her inspections.

The position was reallocated to Pay Range 540 in 2001 and made equivalent to other Public Works Inspectors II as the result of collective bargaining. Further, the employee filling the position was given the opportunity to earn up to three additional pay steps, to a maximum of $52,024 by earning college credits and having qualified work experience. To date, however, no additional "M-steps" have been earned.

From 2001 through July of 2005, the incumbent of the position had other duties added to her job, the most noteworthy of which were scheduling personnel from Giles Engineering to perform tests, receiving test results form Giles Engineering, and determining the location of asphalt tests for Wisconsin Department of Transportation projects. At some point in time, the employee filling this position also stopped performing related to the sidewalk replacement program.

Considering the sum of administrative duties that have been added to the position, it appears that the administrative burden now required has raised the level of skill required to perform the job. These administrative duties have also raised the responsibility level of the job somewhat. From a construction-related technical point of view, though, it does not appear that the level of knowledge required to perform the job has increased significantly since 2001. One indication of this is that the materials used for sewer construction and testing have remained the same for quite some time. Another way to look at the level of technical knowledge required is to consider how long it would require a Public Works Inspector II to learn the job. In our opinion, if a Public Works Inspector II with good organizational and record keeping skills was transferred to this position, it would require from six to nine months to learn the job, depending upon the time of year in which the employee began working. As with any position, it would be important to select an individual with an appropriate set of skills for this particular job.

Considering that the level of knowledge and skill has been raised for this job, and to some degree the responsibility exercised, we conclude that it is appropriate to recommend reallocating this position to a higher level.

In considering a pay range in which to place this position, it is necessary to compare the job with a related position in the Milwaukee the Water Works classified as an Engineering Technician V which has responsibility for inspecting and testing all materials and appurtenances used in the water system. The Pay Range for this Engineering Technician V is $49,258 to $58,427. In addition, Engineering Technicians V may earn two additional pay steps for college credits and qualifying work experience for a maximum rate of pay of $63,981. Engineering Technicians are represented by the Technicians, Engineers, and Architects of Milwaukee (TEAM) and rates of pay are collectively bargained.

The Milwaukee Water Works employs one Engineering Technician V in its Water Engineering Section to inspect, test, approve/disapprove, and submit reports on all pipes, valves, hydrants, fillings, materials, and other appurtenances installed in the water distribution system. Approximately 40% of the employee's time is spent in the field. The employee filling this position performs visual inspections of materials and fittings and conducts tests on those items including tests of hydrants (hydrostatic tests), pressure tests, torque tests, and tests of weights and measurements.

It is the responsibility of this position to accept or reject materials and appurtenances based upon conformance to standards established by the American Water Works Association and the Milwaukee Water Works. In conducting these tests, the employee must be able to use power tools, hand tools and some instruments, such as a micrometer and flow meter. In addition, the employee must be able to lift and turn heavy fittings to conduct proper inspections. Finally, the employee is required to inform inventory staff of the status of materials inspected and tested and communicate, as requested by engineering, defects in materials to vendors and manufacturers.

Another aspect of this job is to schedule field material inspections in conjunction with construction activities and to act as a liaison between the Water Works and contractors. Another portion of the job consists of ensuring the approved materials and appurtenances are used for water main relay projects and other replacement projects. The position must also maintain detailed records of all inspections and tests performed and communicate the results to engineering management.

This position is also required to recommend changes to Water Works' specifications regarding materials and appurtenances used in the water distribution system. This requires the employee holding the position to review and research industry standards on an ongoing basis and make appropriate recommendations. The position also performs a number of other field duties related to water distribution, including performing investigations of water mains, fittings, and appurtenances; and evaluating repair that need to be made to water main caused by private utilities and contractors. In performing all of the duties listed above, the position provides guidance to an Engineering Technician II.

The most notable knowledge, skills, abilities, and competencies required for this work are:

- Knowledge of water main construction and maintenance
- Knowledge of the water distribution system
- Ability to read and analyze engineering blueprints and drawings
- Ability to operate power tools, pneumatic tools, hand tools, torque wrenches, hydrant wrenches, and other tools
- Ability to use technical tools such as micrometer and flow meters
- Ability to calculate pounds per square inch, foot per pound of torque
- Ability to perform routine maintenance on tools and equipment used
- Ability to use standard office software and hardware to produce reports
- Ability to complete detailed reports and create and maintain an electronic data bases
- Ability to lift and turn heavy fittings to conduct a proper inspection
- Ability to coordinate field material inspections in conjunction with construction activities.
- Ability to drive a motor vehicle to worksites
- Ability to perform inspection and testing work in all weather conditions

The job analysis indicates that the education and experience required to enter this job is an associate's degree in civil engineering technology and 5 years of work experience in the installation, construction, inspection or maintenance of water mains. Equivalent combination of education and experience are acceptable.

When comparing the duties and responsibilities of the Inspection Specialist under study and the Engineering Technician V in the Water Works, it would be easy to say that one position inspects materials for the sewer system, the other inspects materials for the water system, and that both positions are therefore equal. The job analysis, however, indicates that there are some important differences between the Engineering Technician V and the Inspection Specialist.

Firstly, the number of materials and appurtenances used in the water distribution system differs from the materials and pipes used in the sewer system. The water distribution system, by its nature, requires a greater variety and complexity of materials and appurtenances including two types of pipe, several types of valves, many different fittings, hydrants, hydrant parts, tapping

sleeves, valve box parts, service box parts, tees, repair clamps, brass goods, and hardware. In essence, the water system is a giant plumbing system.

In comparison, the materials and structures used in sewer construction consist of catch basins, manholes, and precast underground structures, PVC pipe, and concrete pipe. There is no plumbing in the sewer system. The variety and complexity of materials and appurtenances required drives the level of knowledge and skill required to perform each job. In our judgment, the level of knowledge and skill required to perform the Engineering Technician V in the Water Works job is greater than that required to inspect materials for the sewer system. This is illustrated by the fact that the Engineering Technician V must be able to read and analyze engineering blueprints whereas the Inspection Specialist must be able to read and analyze shop drawings.

It could also be argued that inspecting and testing materials and appurtenances for the water system carries an inherently higher consequence of error because the system carries potable drinking water. Another difference between the two jobs is the amount of physical effort required on the part of the Engineering Technician V to perform various tests; which does not exist to the same degree in the Inspection Specialist position. The most important difference between the two jobs, though, is the level of knowledge and skill required, which in our estimation is higher for the Engineering Technician V than the Inspection Specialist.

From a macro perspective, it important to note that rates of pay for all Engineering Technicians as well as the position under study in this report, have been established through collective bargaining. Although individual positions are adjusted upward or downward from time to time by action of the City Service Commission and Common Council, the primary driver of pay is collective bargaining for the vast majority of positions in City government.

Because of the differences noted between the Inspection Specialist and Engineering Technician V, we are not recommending that the Inspection Specialist be reallocated to the level of an Engineering Technician V. We do however recommend that the Inspection Specialist be given the new title of Construction Materials Inspector to more properly identify the job and be placed in Pay Range 550, which represents an upgrade at the maximum of 6.3%.

Submitted by: Laura Sutherland
Laura Sutherland, Human Resources Representative

Reviewed by: Maria Monteagudo
Maria Monteagudo, Employee Relations Director