



City of Duluth

411 West First Street
Duluth, Minnesota 55802

Meeting Agenda Civil Service Board.

Tuesday, December 3, 2024

4:45 PM

Council Chambers

1. ROLL CALL

2. APPROVAL OF MINUTES FROM PREVIOUS MEETING

2A. November 12, 2024

Attachments: [2A November 12, 2024 Minutes \(draft\)](#)

3. UNFINISHED BUSINESS

4. NEW BUSINESS

4A. REVIEW NEW AND REVISED JOB DESCRIPTIONS

4A1. Engineering Technician (revised)

Attachments: [4A1 Engineering Technician \(revised\)](#)

4A2. Fire Inspector (revised)

Attachments: [4A2 Fire Inspector \(revised\)](#)

4A3. Firefighter (revised)

Attachments: [4A3 Firefighter \(revised\)](#)

4A4. Lateral Firefighter (revised)

Attachments: [4A4 Lateral Firefighter \(revised\)](#)

4A5. Senior Engineering Technician (revised)

Attachments: [4A5 Senior Engineering Technician \(revised\)](#)

4A6. Water Plant Maintenance Operator (new)

Attachments: [4A6 Water Plant Maintenance Operator \(new\)](#)

5. APPEALS

6. INFORMATIONAL

6A. STATUS OF ALL NEW, PENDING, AND COMPLETE AUDITS

Notice: Item 6A contains Private Data. The information is non-public and disclosure of this material is prohibited; therefore, it has been excluded from this packet.

6B. NON-PUBLIC REVIEW OF ELIGIBLE LISTS

Notice: Item 6B Non-Public Review of New Eligible Lists will be distributed to members at the Civil Service Board meeting.

7. NEXT REGULAR MEETING SCHEDULED

January 7, 2025

8. ADJOURNMENT



City of Duluth

411 West First Street
Duluth, Minnesota 55802

Minutes - Draft

Civil Service Board.

Tuesday, November 12, 2024

4:45 PM

Lakeside Conference Room 430

1. ROLL CALL

Members Present: John Strongitharm (Acting Chair), Cliff Tanner

HR Staff Present: Laura Dahl, Heather DuVal, Amber Royer Henderson

2. APPROVAL OF MINUTES FROM PREVIOUS MEETING

October 1, 2024

Indexes:

Attachments: [10-01-2024 Draft Minutes](#)

This Civil Service Board item was approved.

3. UNFINISHED BUSINESS

4. NEW BUSINESS

4A. REVIEW NEW AND REVISED JOB DESCRIPTIONS

4A1. Fire Inspector (revised)

Indexes:

Attachments: [4A1 Fire Inspector \(revised\)](#)

This Civil Service Board item was approved.

4A2. Seasonal Utilities Laborer (revised)

Indexes:

Attachments: [4A2 Seasonal Utilities Laborer \(revised\)](#)

This Civil Service Board item was approved.

5. APPEALS

6. INFORMATIONAL

6A. STATUS OF ALL NEW, PENDING, AND COMPLETE AUDITS

This item was received.

6B. NON-PUBLIC REVIEW OF ELIGIBLE LISTS

This item was received.

7. NEXT REGULAR MEETING SCHEDULED

December 3, 2024

8. ADJOURNMENT



Human Resources

Room 340
411 West First Street
Duluth, Minnesota 55802

218-730-5210
hrinformation@duluthmn.gov

DATE: December 3, 2024
TO: Civil Service Board
FROM: Aimee Ott
Human Resources Generalist
SUBJECT: Revised Job Classification of Engineering Technician

RECOMMENDATION: APPROVAL OF THE REVISED JOB DESCRIPTION FOR THE CLASSIFICATION OF ENGINEERING TECHNICIAN.

Background Information/Summary of Job

As you are aware, the City is undertaking a job description review on all job descriptions last revised over 10 years ago. During this project, the job descriptions are being reviewed by both the supervisor of the position, as well as the incumbent(s). The intent of this process is to ensure that the description reflects the current duties of the position, as well as the education, experience, knowledge, skills, and abilities (KSAs) required to perform those duties.

In addition to the revision of the classification specific duties and KSAs, the Human Resources team has created standardized language that is included in all job descriptions and varies slightly based on their level of responsibility. You will see those language additions throughout the revised descriptions, including two new sections regarding supervision received and supervision given.

The Engineering Technician was last revised in October of 2014. The purpose of this position is to perform technical engineering work related to the design, survey, construction, and inspection of street, bridge, traffic, and utility infrastructure systems including water, gas, sanitary sewer, and storm sewer. Updates to this description include aligning the Education & Experience Requirements with our current template and adding several certifications to the License & Certification Requirements that were not previously included in the job description.

The job classification was discussed with the Basic Union, incumbents, and management, and all are agreeable to the proposed job description.

Recommendation

Based on the above information, and in accordance with Section 13-7 of the Civil Service Code, I recommend that the Civil Service Board approve the revised job description for Engineering Technician.

Engineering Technician

SUMMARY/PURPOSE

To perform technical engineering work related to the design, survey, construction, and inspection of street, bridge, traffic, and utility infrastructure systems including water, gas, sanitary sewer, and storm sewer.

SUPERVISION RECEIVED

For both one-of-a-kind and repetitive tasks, the supervisor makes specific assignments that are accompanied by clear, detailed, and specific instructions. Incumbents work as instructed and consult with the supervisor.

SUPERVISION GIVEN

Does not supervise.

ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Gather preliminary topographic surveys.
2. Provide contractors with construction control, stakes, and information required to construct public improvements.
3. Operate and maintain survey and Global Positioning System (GPS) equipment to obtain accurate survey measurements and point locations.
4. Process survey information, including computer data entry work.
5. Prepare graphic representations of Geographic Information Systems (GIS) using GIS software, review existing GIS data for accuracy, quality, and completeness, and add/or modify existing GIS databases.
6. Create roadway and public infrastructure improvement plans using Autodesk software, preliminary designs, quantity takeoffs, cost estimates, and prepare engineering reports and related studies to assist in the planning and implementation of public infrastructure projects.
7. Prepare bidding documents for public roads, trails, utilities, and other public infrastructure improvements.
8. Perform construction administration and on-site inspection to ensure that all work is constructed in conformance with the plans, specifications, and industry standards.
9. Maintain accurate recordkeeping, including daily log of construction activities, progress reports, measurements of quantities and pay items, change orders, and other documentation and reports as associated with city, municipal state aid, and/or federal aid funded projects.
10. Prepare record drawings.
11. Act as a liaison between the public, business community, contractors, and City Administration.
12. Locate underground utilities including water, gas, sanitary sewer, and storm sewer systems.
13. Investigate complaints, inquiries, and requests.
14. Study and report findings, conclusions, and recommendations in oral and/or written form.
15. Review construction plans and specifications for compliance with City standards.
16. Maintain, revise, and research manual or computer records.
17. Coordinate work activities with contractors, outside agencies, other City personnel, and property owners.
18. Assist a certified MnDOT Team Leader in completing Bridge Safety inspections of the City's bridge inventory.
19. Act as a competent person and/or incident commander during emergency situations.
20. Be an effective team member by exhibiting self-motivation, supporting other employees in handling tasks, interacting effectively and respectfully with others, showing a desire to contribute to the team effort, accepting assignments willingly, and completing tasks within agreed upon timelines.
21. Other duties may be assigned.

JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements
 - A. Associate's Degree in Civil Engineering Technology or a related professional field, and two (2) years of related professional experience in a position within the engineering field; OR a minimum of four (4) years of related education and/or full-time, verifiable professional work experience in a position within the engineering field.

2. License & Certification Requirements
 - A. Possess and maintain a valid Minnesota Class D driver's license or privilege.
 - B. Must obtain and maintain current Minnesota Department of Transportation (MnDOT) certifications for Bituminous, Concrete and Aggregate within two (2) years of date of hire.
 - C. Must obtain and maintain natural gas Operator Qualifications (OQs) within one (1) year of date of hire.
 - D. Must obtain and maintain Minnesota Erosion and Stormwater Management Certification as required within one (1) year of date of hire.
 - E. Must obtain and maintain MnDOT ADA sidewalk certification within one (1) year of date of hire.
 - F. Bridge Construction, Bridge Inspection, and Signal and Lighting certifications may be required by supervisor.

3. Knowledge Requirements
 - A. Knowledge of algebra, geometry, and trigonometry.
 - B. Knowledge of technical engineering principles and practices.
 - C. Knowledge of the principles, methods, equipment, and materials used in construction of streets, bridges, traffic, and utility infrastructure systems including water, gas, sanitary sewer, storm sewer, and various public works structures.
 - D. Knowledge of the principles of drafting.
 - E. Knowledge of applicable public safety principles and practices.
 - F. Knowledge of the principles of technical writing.
 - G. Knowledge of the principles of surveying.
 - H. Knowledge of the City of Duluth Utility Systems.
 - I. Knowledge of GIS.
 - J. Knowledge of Emergency Response procedures.
 - K. Knowledge of problem-solving and conflict-resolution techniques.
 - L. Knowledge of applicable safety requirements.
 - M. Knowledge of, or the ability to learn, City policies and procedures.

4. Skill Requirements
 - A. Skill in computers, mapping, and surveying.
 - B. Skill in the operation of computer and surveying equipment.
 - C. Skill in the operation of locating equipment and finding records.
 - D. Skill in communicating logically, persuasively, and accurately in oral and written forms to groups and individuals.
 - E. Skill in the operation of office equipment including, but not limited to, general computer systems, job required software applications, the internet, and modern office equipment.
 - F. Skill in managing one's own time.
 - G. Skill in completing assignments accurately and with attention to detail.

5. Ability Requirements
 - A. Ability to operate computers, GIS, and CAD systems.
 - B. Ability to apply standard engineering principles to utility and other public works improvements.
 - C. Ability to prepare specifications, plans, technical reports, resolutions, and petitions.

- D. Ability to perform supervised drafting and design work.
- E. Ability to communicate effectively in oral and written forms.
- F. Ability to work outside in inclement weather and traffic conditions.
- G. Ability to work at heights above an excavation and to climb into and out of excavations.
- H. Ability to communicate and interact effectively with members of the public, contractors, consultants, state and local agencies, and other City divisions.
- I. Ability to recognize, analyze, and solve a variety of problems.
- J. Ability to demonstrate dependability, integrity, responsibility, and consistency in job performance.
- K. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.
- L. Ability to understand and follow instructions.
- M. Ability to set priorities and complete assignments on time.
- N. Ability to attend work as scheduled and/or required.

Physical Demands

The work requires considerable and strenuous physical exertion such as frequent climbing of tall ladders, lifting heavy objects over 50 pounds, and/or crouching or crawling in restricted areas.

Work Environment

The work environment involves high risks with exposure to potentially dangerous situations or unusual environmental stress requiring a range of safety and other precautions (e.g., working at great heights under extreme outdoor weather conditions, or in similar situations in which conditions cannot be controlled).

HR: AO	Union: Basic	EEOC: Technicians	CSB:	Class No: 4106
WC: 9410	Pay:	EEOF: Utilities/Transportation	CC:	Resolution:

Engineering Technician

SUMMARY/PURPOSE

To perform technical ~~and paraprofessional~~ engineering work ~~in~~related to the ~~areas~~design, survey, construction, and inspection of street, bridge, traffic, ~~and utility infrastructure systems including~~ water, gas, sanitary sewer, and storm sewer ~~infrastructure systems~~.

SUPERVISION RECEIVED

For both one-of-a-kind and repetitive tasks, the supervisor makes specific assignments that are accompanied by clear, detailed, and specific instructions. Incumbents work as instructed and consult with the supervisor.

SUPERVISION GIVEN

Does not supervise.

ESSENTIAL DUTIES AND RESPONSIBILITIES ~~(other duties may be assigned)~~

1. ~~Assist in the analysis of~~Gather preliminary topographic surveys.
1. ~~Provide contractors with~~ construction plans~~control, stakes, and specifications for survey purposes.~~
2. ~~Perform work~~information required to locate survey points.
3. ~~Prepare survey field notes.~~
- 1.2. ~~Direct the activities of other survey party members~~construct public improvements.
- 2.3. Operate and maintain survey and ~~GPS~~ (Global Positioning System (GPS) equipment to obtain accurate survey measurements and point locations.
4. ~~Collect, analyze, and record data.~~
5. ~~Create construction plans, maps, and charts manually or using a computer aided design (CAD) system.~~
6. ~~Prepare graphic representations of Geographic Information Systems (GIS) using GIS software.~~
- 3.4. Process survey information, including computer data entry work.
7. ~~Estimate construction quantities and prepare appropriate charts.~~
8. ~~Recommend upgrades and revisions to project procedures and practices.~~
5. Prepare graphic representations of Geographic Information Systems (GIS) using GIS software, review existing GIS data for accuracy, quality, and completeness, and add/or modify existing GIS databases.
6. Create roadway and public infrastructure improvement plans using Autodesk software, preliminary designs, quantity takeoffs, cost estimates, and prepare engineering reports and related studies to assist in the planning and implementation of public infrastructure projects.
7. Prepare bidding documents for public roads, trails, utilities, and other public infrastructure improvements.
8. Perform construction administration and on-site inspection to ensure that all work is constructed in conformance with the plans, specifications, and industry standards.
9. ~~Maintain accurate recordkeeping, including~~ daily log of construction activities ~~and write,~~ progress ~~and final reports.~~
- 4.9. ~~Assist in preparing, measurements of quantities and pay items, change orders and supplemental agreements for approval, and other documentation and reports as associated with city, municipal state aid, and/or federal aid funded projects.~~
10. ~~Document construction quantities.~~
11. ~~Perform quality control tests on construction materials.~~
10. Prepare record drawings.
11. Act as a liaison between the public, business community, contractors, and City Administration.
- 5.12. Locate underground utilities including water, gas, sanitary sewer, and storm sewer systems.
- 6.13. Investigate complaints, inquiries, and requests.
- 7.14. Study and report findings, conclusions, and recommendations in oral ~~and/or~~ written form.
- 8.15. Review construction plans and specifications for compliance with City standards.

- 9.16. Maintain, revise, and research manual or computer records.
- ~~12. Participate in technical engineering studies and provide recommendations.~~
- ~~13. Maintain, add, or modify existing GIS databases.~~
- ~~14. Review existing or incoming GIS data for accuracy, quality, and completeness.~~
17. Coordinate work activities with contractors, outside agencies, other City personnel, and property owners.
18. Assist a certified MnDOT Team Leader in completing Bridge Safety inspections of the City's bridge inventory.
19. Act as a competent person and/or incident commander during emergency situations.
20. Be an effective team member by exhibiting self-motivation, supporting other employees in handling tasks, interacting effectively and respectfully with others, showing a desire to contribute to the team effort, accepting assignments willingly, and completing tasks within agreed upon timelines.
21. Other duties may be assigned.

JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed ~~below~~ are representative of the knowledge, skills, and abilities required.

~~1. License Requirements~~

- ~~A. Possession of a valid Minnesota Class "D" driver's license or privilege by date of appointment and thereafter in order to operate city vehicle.~~

1. Education & Experience Requirements

- ~~A. Completion of a two-year Associate's Degree in Civil Engineering Technology degree, or equivalent; a related professional field, and two (2) years of verifiable work-related professional experience in a position within the engineering position; or~~
- A. A combination field; OR a minimum of four (4) years of related education and/or experience determined to be equivalent full-time, verifiable professional work experience in a position within the engineering field.

2. License & Certification Requirements

- ~~A. Possess and maintain a valid Minnesota Class D driver's license or privilege.~~
- ~~B. Must obtain and maintain current Minnesota Department of Transportation (MnDOT) certifications for Bituminous, Concrete and Aggregate within two (2) years of date of hire.~~
- ~~C. Must obtain and maintain natural gas Operator Qualifications (OQs) within one (1) year of date of hire.~~
- ~~D. Must obtain and maintain Minnesota Erosion and Stormwater Management Certification as required within one (1) year of date of hire.~~
- ~~E. Must obtain and maintain MnDOT ADA sidewalk certification within one (1) year of date of hire.~~
- ~~F. Bridge Construction, Bridge Inspection, and Signal and Lighting certifications may be required by supervisor.~~

2.3. Knowledge Requirements

- ~~A. Knowledge of algebra, geometry, and trigonometry.~~
- ~~B. Knowledge of technical engineering principles and practices.~~
- ~~C. Knowledge of the principles, methods, equipment, and materials used in construction of streets, sidewalks, bridges, traffic, and utility infrastructure systems including water and gas mains, sanitary and sewer, storm sewers, and various public works structures.~~
- ~~D. Knowledge of the principles of drafting.~~
- ~~E. Knowledge of applicable public safety principles and practices.~~
- ~~F. Knowledge of the principles of technical writing.~~
- ~~G. Knowledge of the principles of surveying.~~

- H. Knowledge of the City of Duluth Utility Systems.
- I. Knowledge of GIS.
- J. Knowledge of Emergency Response procedures.
- K. Knowledge of problem-solving and conflict-resolution techniques.
- L. Knowledge of applicable safety requirements.
- M. Knowledge of, or the ability to learn, City policies and procedures.

3.4. Skill Requirements

- A. Skill in drafting computers, mapping, and surveying.
- B. Skill in the operation of drafting computer and surveying equipment.
- C. Skill in the operation of locating equipment and finding records.
- D. Skill in communicating logically, persuasively, and accurately in oral and written forms to groups and individuals.
- E. Skill in the operation of office equipment including, but not limited to, general computer systems, job required software applications, the internet, and modern office equipment.
- F. Skill in managing one's own time.
- G. Skill in completing assignments accurately and with attention to detail.

4.5. Ability Requirements

- A. Ability to operate computers, GIS, and CAD systems.
- B. Ability to apply standard engineering principles to utility and other public workworks improvements.
- C. Ability to prepare specifications, plans, technical reports, resolutions, and petitions.
- D. Ability to perform supervised drafting and design work.
- E. Ability to communicate effectively in oral and written forms.
- F. Ability to attain and maintain state certification requirements work outside in inclement weather and traffic conditions.
- G. Ability to establish and maintain effective working relationships with co-workers, supervisors work at heights above an excavation and to climb into and out of excavations.
- G-H. Ability to communicate and interact effectively with members of the public, contractors, consultants, outside state and local agencies, and the general public other City divisions.
- A. Ability to attend work on a regular basis.

2. ~~Physical Ability Requirements~~

- H-I. Ability to transport oneself to, from, and around work sites recognize, analyze, and solve a variety of problems.
 - A. Ability to work outdoors year round.
 - B. Ability to walk for long distances.
- J. Ability to demonstrate dependability, integrity, responsibility, and consistency in job performance.
- K. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.
- L. Ability to understand and follow instructions.
- M. Ability to transport set priorities and erect survey equipment up complete assignments on time.
- N. Ability to attend work as scheduled and/or required.

Physical Demands

The work requires considerable and strenuous physical exertion such as frequent climbing of tall ladders, lifting heavy objects over 50 pounds, and/or crouching or crawling in restricted areas.

- C. Ability to frequently stand, walk, sit, type, talk, hear, use near, mid, and far vision with frequent field-of-vision.
- D. Ability to occasionally lift, carry, push, pull, climb, balance, stoop, crouch, reach, handle, smell, and use depth perception, visual accommodation, and color vision.

Work Environment

The work environment involves high risks with exposure to potentially dangerous situations or unusual environmental stress requiring a range of safety and other precautions (e.g., working at great heights under extreme outdoor weather conditions, or in similar situations in which conditions cannot be controlled).

HR: <u>MSAO</u>	Union: Basic	EEOC: Technicians	CSB: 12/10/2013	Class No: 4106
WC: 9410	Pay: 28	EEOF: Utilities/Transportation	CC: 10/13/2014	Resolution: 14- 0533R



Human Resources

Room 340
411 West First Street
Duluth, Minnesota 55802

 218-730-5210
 hrinformation@duluthmn.gov

DATE: October 29, 2024
TO: Civil Service Board
FROM: Heather DuVal
Human Resources Supervisor
SUBJECT: Revised Job Classification of Fire Inspector

RECOMMENDATION: APPROVAL OF THE REVISED JOB DESCRIPTION FOR THE CLASSIFICATION OF FIRE INSPECTOR.

Background Information/Summary of Job

The Fire Inspector job classification was most recently revised in September 2002. The purpose of this position is to enforce regulatory fire codes and educate the public which includes conducting plan reviews and inspections to ensure compliance with federal, state, and local fire codes and recordkeeping requirements. This position has not been filled permanently in at least a decade. The updates reflect the entry level nature of the position and is intended to be more inclusive. The revised job description focuses the job duties on the actual inspection and education duties and removes some of the fire investigation duties that require significantly more training and experience.

The proposed revisions to this job description were discussed with the Fire Union and they are in agreement with the proposed updates.

Recommendation

Based on the above information, and in accordance with Section 13-7 of the Civil Service Code, I recommend that the Civil Service Board approve the revised job description for Fire Inspector.

Fire Inspector

SUMMARY/PURPOSE

The Fire Inspector is a skilled position in the Fire Prevention Bureau focused on fire prevention through the enforcement of regulatory fire codes and education of the public. Duties of this position include, but are not limited to, conducting plan reviews and inspections to ensure compliance with federal, state, and local fire codes and recordkeeping requirements; and conducting public information and education programs.

SUPERVISION RECEIVED

The supervisor makes assignments by defining objectives, priorities, and deadlines and assists incumbents with unusual situations which do not have clear precedents. Incumbents plan and carry out the successive steps and handle problems and deviations in the work assignment in accordance with instructions, policies, previous training, or accepted practices in the occupation.

SUPERVISION GIVEN

Does not have direct supervisory responsibility

ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Enforce federal, state, and local fire codes and comply with recordkeeping requirements.
2. Inspect Commercial and residential units to ensure compliance with safety laws and ordinances.
3. Inspect new building sites according to applicable State and Federal regulations.
4. Assist in preparation, planning, and presentation of fire and life safety training programs to the public.
5. Investigate complaints and respond to questions regarding hazards and violations of regulations.
6. Prepare routine documents, forms, and reports related to inspections, investigations, and compliance.
7. Respond to emergency calls and fire scenes as directed for the purpose of inspecting or assisting with investigations.
8. Represent the Fire Department to individuals, groups, and the media upon direction or request.
9. Attend seminars, conferences, and meetings as required for continuing education or to represent the City.
10. Be an effective team member by exhibiting self-motivation, supporting other employees in handling tasks, interacting effectively and respectfully with others, showing a desire to contribute to the team effort, accepting assignments willingly, and completing tasks within agreed upon timelines.
11. Coordinate with various City departments, other government agencies, and community groups to develop methods of sharing resources, minimizing duplication, and simplifying procedures.
12. Provide training on new or modified procedures and policies to all affected parties.
13. Coordinate and perform Fire Inspector functions and programs for the City.
14. In collaboration with the supervisor, organize and direct the work activities of assigned team, and determine work priorities, assignments, and work schedules.
15. Provide input on decisions regarding the hiring processes and onboarding procedures of personnel.
16. Establish and maintain positive working relationship with the supervisor and employees by maintaining two-way communication, producing consistent results, advocating for the team when appropriate, and offering expertise to improve processes, systems, and the organization.
17. Other duties may be assigned.

JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements
 - A. Completion of a recognized certification program in code enforcement, firefighting, fire science, fire protection engineering, building construction, education, fire investigation, or a related field; AND
 - B. One (1) year of field experience in firefighting, design, installation, and/or maintenance of fire protection systems, code enforcement, facilities management, or a related field; OR
 - C. A combination of related education and experience equaling two (2) years; OR
 - D. A minimum of one (1) year of experience as a Firefighter with the City of Duluth Fire Department.

2. License Requirements
 - A. Possess and maintain a valid Minnesota Class D driver's license or privilege.
 - B. Obtain and maintain Minnesota Fire Service Certification Board certification (or equivalent) as Fire Inspector I within one year of hire.
 - C. Possess and maintain Minnesota Fire Service Certification Board certification (or equivalent) as a Firefighter.

3. Knowledge Requirements
 - A. Knowledge of fire prevention and safety principles, rules, codes, regulations, and ordinances.
 - B. Knowledge of chemicals, explosives, gases, and flammable liquids.
 - C. Knowledge of building construction methods
 - D. Knowledge of applicable Minnesota state codes and local codes and ordinances.
 - E. Knowledge of problem-solving and conflict-resolution techniques.
 - F. Knowledge of applicable safety requirements.
 - G. Knowledge of, or the ability to learn, City policies and procedures.
 - H. Knowledge of federal, state, and local laws, statutes, regulations, codes, and standards related to the area of responsibility.
 - I. Knowledge of effective leadership and personnel practices.

4. Skill Requirements
 - A. Skill in identifying fire hazards.
 - B. Skill in communicating one-on-one and in front of groups for the purpose of obtaining or providing information.
 - C. Skill in the operation of office equipment including, but not limited to, general computer systems, job required software applications, the internet, and modern office equipment.
 - D. Skill in managing one's own time and the time of others.
 - E. Skill in completing assignments accurately and with attention to detail.
 - F. Skill in using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.

5. Ability Requirements
 - A. Ability to explain and enforce regulatory provisions with firmness, tact, and courtesy.
 - B. Ability to assist in preparation, planning, and presentation of public fire education lessons.
 - C. Ability to read and write technical reports.
 - D. Ability to conduct inspections and investigations, analyze findings, and make recommendations.
 - E. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.
 - F. Ability to communicate and interact effectively with members of the public.
 - G. Ability to communicate effectively both orally and in writing.
 - H. Ability to recognize, analyze, and solve a variety of problems.

- I. Ability to organize and prioritize work while meeting multiple deadlines.
- J. Ability to handle difficult and stressful situations with professional composure.
- K. Ability to work successfully as a member of a team and independently with minimal supervision.
- L. Ability to train and lead others.
- M. Ability to interpret and apply laws, contracts, regulations, policies, and procedures.
- N. Ability to enforce safety rules and regulations.
- O. Ability to maintain confidential information.
- P. Ability to demonstrate dependability, responsibility, and consistency in job performance.
- Q. Ability to attend work as scheduled and/or required.

Physical Demands

The work requires some physical exertion such as long periods of standing; walking over rough, uneven, or rocky surfaces; recurring bending, crouching, stooping, stretching, reaching, or similar activities; recurring lifting of moderately heavy items such as record boxes. The work may require specific, but common, physical characteristics and abilities such as above.

Work Environment

The work environment involves moderate risks or discomforts requiring special safety precautions (e.g., working around moving parts, carts, or machines, or with contagious diseases or irritant chemicals). Employees may be required to use protective clothing or gear such as masks, gowns, coats, boots, goggles, gloves, or shields.

HR:	Union:	EEOC:	CSB:	Class No:
WC:	Pay:	EEOF:	CC:	Resolution:

Fire Inspector

SUMMARY/PURPOSE: ~~_____ To plan and conduct programs of public education regarding fire prevention and to participate~~

~~The Fire Inspector is a skilled position in the inspection and investigation activities of the Fire Prevention Bureau focused on fire prevention through the enforcement of regulatory fire codes and education of the public. Duties of this position include, but are not limited to, conducting plan reviews and inspections to ensure compliance with federal, state, and local fire codes and recordkeeping requirements; and conducting public information and education programs.~~

SUPERVISION RECEIVED

~~The supervisor makes assignments by defining objectives, priorities, and deadlines and assists incumbents with unusual situations which do not have clear precedents. Incumbents plan and carry out the successive steps and handle problems and deviations in the City of Duluth Fire Department work assignment in accordance with instructions, policies, previous training, or accepted practices in the occupation.~~

FUNCTIONAL AREAS:

~~1. _____ Participate in Fire Prevention Bureau inspections and investigations.~~

~~*A. _____ SUPERVISION GIVEN~~

~~Does not have direct supervisory responsibility~~

ESSENTIAL DUTIES AND RESPONSIBILITIES

~~1. _____ Enforce federal, state, and local fire codes and comply with recordkeeping requirements.~~

~~4.2. _____ Inspect businessCommercial and residential units to ensure compliance with safety laws and ordinances.~~

~~2.3. _____ *B. _____ Inspect new building sites according to applicable State and Federal regulations.~~

~~*C. _____ Review plans of new construction, remodeling and all commercial and public assembly buildings.~~

~~*D. _____ Assist in enforcement of the Uniform Fire Code.~~

~~2. _____ Conduct education and information preparation, planning, and presentation of fire and life safety training programs regarding fire prevention.~~

~~3.4. _____ *A. _____ Perform the task of educating to the public in the detection and elimination of fire hazards.~~

~~4.5. _____ *B. _____ Investigate complaints and respond to questions regarding hazards and violations of regulations.~~

~~*C. _____ Present information to civic organizations and school groups.~~

~~*D. _____ Conduct fire drills in schools, hospitals and convalescent homes.~~

~~3. _____ Perform other related duties as assigned.~~

~~*A. _____ Maintain records and prepare required reports.~~

~~6. _____ *B. _____ Prepare routine documents, forms, and reports related to inspections, investigations, and compliance.~~

~~5.7. _____ Respond to emergency calls and fire scenes as directed for the purpose of inspecting or assisting with investigations.~~

~~6.8. _____ *C. _____ Represent the Fire Department to individuals, groups, and the media upon direction or request.~~

7.9. ~~*D.~~ Attend seminars, conferences, and meetings as required for continuing education or to represent the City.

MINIMUM QUALIFICATIONS

1. License:

10. A. Possession of a Be an effective team member by exhibiting self-motivation, supporting other employees in handling tasks, interacting effectively and respectfully with others, showing a desire to contribute to the team effort, accepting assignments willingly, and completing tasks within agreed upon timelines.
11. Coordinate with various City departments, other government agencies, and community groups to develop methods of sharing resources, minimizing duplication, and simplifying procedures.
12. Provide training on new or modified procedures and policies to all affected parties.
13. Coordinate and perform Fire Inspector functions and programs for the City.
14. In collaboration with the supervisor, organize and direct the work activities of assigned team, and determine work priorities, assignments, and work schedules.
15. Provide input on decisions regarding the hiring processes and onboarding procedures of personnel.
16. Establish and maintain positive working relationship with the supervisor and employees by maintaining two-way communication, producing consistent results, advocating for the team when appropriate, and offering expertise to improve processes, systems, and the organization.
17. Other duties may be assigned.

JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements

- A. Completion of a recognized certification program in code enforcement, firefighting, fire science, fire protection engineering, building construction, education, fire investigation, or a related field; AND
- B. One (1) year of field experience in firefighting, design, installation, and/or maintenance of fire protection systems, code enforcement, facilities management, or a related field; OR
- C. A combination of related education and experience equaling two (2) years; OR
- D. A minimum of one (1) year of experience as a Firefighter with the City of Duluth Fire Department.

2. License Requirements

- A. Possess and maintain a valid Minnesota Class AD ~~at driver's~~ driver's license or privilege-at the time of appointment and thereafter.

2. ~~Education~~ Obtain and ~~Experience:~~

- B. ~~*A. Four (4) years experience as a maintain Minnesota Fire Fighter and/Service Certification Board certification (or equivalent) as Fire Equipment Operator with the City Inspector I within one year of Duluth Fire Department hire.~~
- C. ~~3. Possess and maintain Minnesota Fire Service Certification Board certification (or equivalent) as a Firefighter.~~

4.3. Knowledge: Requirements

- A. ~~**A.~~ Knowledge of fire prevention and safety principles, rules, codes, regulations, and ordinances.
- B. ~~**B.~~ Knowledge of chemicals, explosives, gases, and flammable liquids.

4. Skills:

- C. ~~**A.~~ Skill in modern fire fighting Knowledge of building construction methods
- D. Knowledge of applicable Minnesota state codes and local codes and ordinances.
- ~~C.E.~~ Knowledge of problem-solving and conflict-resolution techniques and equipment operation.
- F. ~~**B.~~ Knowledge of applicable safety requirements.
- G. Knowledge of, or the ability to learn, City policies and procedures.
- H. Knowledge of federal, state, and local laws, statutes, regulations, codes, and standards related to the area of responsibility.
- I. Knowledge of effective leadership and personnel practices.

4. Skill Requirements

- A. Skill in identifying fire hazards.

5. Abilities:

- B. ~~**A.~~ Skill in communicating one-on-one and in front of groups for the purpose of obtaining or providing information.
- C. Skill in the operation of office equipment including, but not limited to, general computer systems, job required software applications, the internet, and modern office equipment.
- D. Skill in managing one's own time and the time of others.
- E. Skill in completing assignments accurately and with attention to detail.
- F. Skill in using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.

5. Ability to prepare Requirements

- A. Ability to explain and enforce regulatory provisions with firmness, tact, and courtesy.
- ~~A.B.~~ Ability to assist in preparation, planning, and presentation of public fire education lessons and conduct presentations.
 - ~~**B.~~ Ability to assist in planning of an educational fire prevention program.
 - ~~**C.~~ Ability to conduct an educational fire prevention program.
 - ~~**D.~~ Ability to speak before groups in public.
- ~~B.C.~~ ~~**E.~~ Ability to read and write technical reports.
- ~~C.D.~~ ~~**F.~~ Ability to conduct ~~inspection~~ inspections and investigations, analyze findings, and make recommendations.
- E. ~~**G.~~ Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.
- ~~D.F.~~ Ability to work communicate and interact effectively with co-workers, administrators, employees, media representatives and members of the general public.
- ~~E.G.~~ ~~**H.~~ Ability to occasionally climb, balance, crouch, and reach communicate effectively both orally and in writing.
- ~~F.H.~~ ~~**I.~~ Ability to lift recognize, analyze, and carry items weighing up to 50 pounds, such as debris from solve a fire scene variety of problems.
- ~~**J.~~ Ability to perform all tasks which require use of a self-contained breathing apparatus, as recommended by ANSI Z88.5-1981 and required by OSHA 1910.134.

~~**K. Ability to physically perform all duties which may be assigned during emergencies, as required by OSHA 1910.156.~~

~~6. Other Requirements:~~

~~**A. Must pass periodic medical examinations to verify the ability to physically perform all duties which may be assigned during emergencies, including task requiring the use of a self-contained breathing apparatus.~~

~~**B. Must not use, by smoking, ingestion, or otherwise, any tobacco products.~~

~~* Essential functions of the job.~~

~~I. ** Job requirements necessary on the first day of employment. Ability to organize and prioritize work while meeting multiple deadlines.~~

~~J. Ability to handle difficult and stressful situations with professional composure.~~

~~K. Ability to work successfully as a member of a team and independently with minimal supervision.~~

~~L. Ability to train and lead others.~~

~~M. Ability to interpret and apply laws, contracts, regulations, policies, and procedures.~~

~~N. Ability to enforce safety rules and regulations.~~

~~O. Ability to maintain confidential information.~~

~~P. Ability to demonstrate dependability, responsibility, and consistency in job performance.~~

~~Q. Ability to attend work as scheduled and/or required.~~

Physical Demands

The work requires some physical exertion such as long periods of standing; walking over rough, uneven, or rocky surfaces; recurring bending, crouching, stooping, stretching, reaching, or similar activities; recurring lifting of moderately heavy items such as record boxes. The work may require specific, but common, physical characteristics and abilities such as above.

Work Environment

The work environment involves moderate risks or discomforts requiring special safety precautions (e.g., working around moving parts, carts, or machines, or with contagious diseases or irritant chemicals). Employees may be required to use protective clothing or gear such as masks, gowns, coats, boots, goggles, gloves, or shields.

HR:	Union: Fire	EEOC: Protective Services	CSB: 20020806	Class No: 4110
WC: 06	77 Pay: 228	EEOF: Fire Protection	CC: 20020909	Resolution: 02-0604R



Human Resources

Room 340
411 West First Street
Duluth, Minnesota 55802

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DATE: December 3, 2024
TO: Civil Service Board
FROM: Aimee Ott
Human Resources Generalist
SUBJECT: Revised Job Classification of Firefighter

RECOMMENDATION: APPROVAL OF THE REVISED JOB DESCRIPTION FOR THE CLASSIFICATION OF FIREFIGHTER.

Background Information/Summary of Job

The Firefighter job classification was most recently revised in 2021. The purpose of this position is to safeguard lives and property by fighting and preventing fires and performing rescues under crisis and threatening situations. When the job description was revised in 2021, language was added to accommodate for the closure or limited hours at CPAT testing facilities during the COVID-19 pandemic. At this time, that language has been removed, as it is no longer relevant. Additionally, the previous CPAT language required candidates to submit CPAT results from a test taken within the previous six months; the timeframe for the requirement has been increased to 12 months to allow candidates more time to complete their CPAT and gives the City the potential to broaden the applicant pool.

The proposed revisions to this job description were discussed with the management and the Fire Union, and they are supportive of these updates.

Recommendation

Based on the above information, and in accordance with Section 13-7 of the Civil Service Code, I recommend that the Civil Service Board approve the revised job description for Firefighter.

Firefighter

SUMMARY/PURPOSE

To safeguard lives and property by fighting and preventing fires and performing rescues under crisis and threatening situations.

ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Fight, control, and extinguish fires using all available technology and equipment in accordance with accepted practices.
2. Prevent fires and other disasters through education, inspection, and any other available and practical means.
3. Rescue life, prevent injury, and salvage property under crisis and threatening situations.
4. Limit or prevent the escape of hazardous materials into the environment.
5. Operate, repair, and maintain equipment, systems, buildings, grounds, and other items and equipment used by the Fire Department.
6. Other duties as assigned.

JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements
 - A. Completion of an accepted program of training in firefighting equivalent to IFSTA Firefighter II, or an equivalent combination of education and experience at time of application.
 - B. Current Firefighter II certification from the Minnesota Fire Service Certification Board or equivalent certification accredited through IFSAC or NFPA Pro Board required at the time of interview scheduling.
2. License Requirements
 - A. Current certification at the level of Emergency Medical Technician or higher with the National Registry of Emergency Medical Technicians required at the completion of probation.
 - B. Ability to obtain and maintain a current MN State firefighter license per MN Statute 299N at the completion of probation.
3. Preferred Requirements
 - A. A valid vehicle operator's license equivalent to a Minnesota Class "D" Driver's License.
4. CPAT Requirements
 - A. Must provide proof of passing the IAFF/IAFC CPAT test within previous 12 months of application period closing date.
5. Knowledge Requirements
 - A. Knowledge of firefighting, rescue, hazardous materials, and fire prevention basic practices.
 - B. Knowledge of mechanical systems in order to effectively maintain and operate firefighting apparatus, equipment, and tools.
 - C. Knowledge of basic national, state and local codes, statutes, ordinances, and laws as they relate to the Fire Department mission.
 - D. Knowledge of the properties and reactions of common and uncommon chemicals and products.
 - E. Knowledge of general physics, hydraulics, and technical math as they relate to firefighting.
6. Skill Requirements

- A. Skill in communicating one-on-one and in front of groups for the purpose of obtaining or providing information.
- B. Skill in rapidly analyzing critical situations and determining appropriate course of action.
- C. Skill in building community relationships.
- D. Skill in establishing and maintaining effective working relationships with peers.

7. Ability Requirements

- A. Ability to fight, control, and extinguish fires and effect rescues under threatening conditions using all available technology and equipment in accordance with accepted practices, including those defined by OSHA, NFPA, ANSI, and others.
- B. Ability to understand, implement, and give oral instructions.
- C. Ability to understand and use advancing technology in the Fire Service.
- D. Ability to establish good working relationships with the public and other public safety organizations.
- E. Ability to be courageous and careful, and to use good judgment in crisis and threatening situations.
- F. Ability to discriminate visually and aurally in order to assess and neutralize threats during crisis and threatening situations.
- G. Ability to operate and maintain equipment used while performing the above job functions.
- H. Ability to write and understand fire and medical reports.
- I. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.

8. Physical Ability Requirements

- A. Ability to physically perform all duties that may be assigned during emergencies as required by OSHA 1910.156.
- B. Ability to perform all tasks which require the use of a self-contained breathing apparatus, as recommended by ANSI Z88.5-1981 and required by OSHA 1910.134.
- C. Ability to climb/descend ladder carrying heavy load.
- D. Ability to drag heavy objects such as victims or fire hoses.
- E. Ability to hold, control, and aim fire hoses in operation under high pressures.
- F. Ability to affect forceful entry into structure.
- G. Ability to use a pike pole, axe, and/or power saw to ventilate a roof while on ladder.
- H. Ability to balance while carrying heavy load and crossing narrow and/or high pathway.
- I. Ability to climb/descend vertically using rope climbing techniques while carrying or guiding a heavy load.

9. Other Requirements

- A. Must pass extensive physical and medical examinations.
- B. Must pass periodic physical and medical examinations to verify the continued ability to perform all duties that may be assigned during crisis and threatening situations.
- C. Must not use by any method any tobacco or similar product.
- D. Must, within six months of appointment, reside within 25 miles of Headquarters Fire Station or at a location from which they can respond by vehicle to Headquarters Fire Station within 30 minutes of being notified, given normal driving conditions.

HR: AO	Union: Fire	EEOC: Protective Services	CSB:	Class No: 4401
WC: 7706	Pay: 226	EEOF: Fire Protection	CC:	Resolution:

Firefighter

SUMMARY/PURPOSE

To safeguard lives and property by fighting and preventing fires and performing rescues under crisis and threatening situations.

ESSENTIAL DUTIES AND RESPONSIBILITIES ~~(other duties may be assigned)~~

1. Fight, control, and extinguish fires using all available technology and equipment in accordance with accepted practices.
2. Prevent fires and other disasters through education, inspection, and any other available and practical means.
3. Rescue life, prevent injury, and salvage property under crisis and threatening situations.
4. Limit or prevent the escape of hazardous materials into the environment.
5. Operate, repair, and maintain equipment, systems, buildings, grounds, and other items and equipment used by the Fire Department.
6. Other duties as assigned.

JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements
 - A. Completion of an accepted program of training in firefighting equivalent to IFSTA Firefighter II, or an equivalent combination of education and experience at time of application.
 - B. Current Firefighter II certification from the Minnesota Fire Service Certification Board or equivalent certification accredited through IFSAC or NFPA Pro Board required at the time of interview scheduling.
2. License Requirements
 - A. Current certification at the level of Emergency Medical Technician or higher with the National Registry of Emergency Medical Technicians required at the completion of probation.
 - B. Ability to obtain and maintain a current MN State firefighter license per MN Statute 299N at the completion of probation.
3. Preferred Requirements
 - A. A valid vehicle operator's license equivalent to a Minnesota Class "D" Driver's License.
4. CPAT Requirements
 - A. Must provide proof of passing the IAFF/IAFC CPAT test within previous ~~six months of written exam date. This requirement may be delayed if local testing facilities are unavailable. Must provide proof of passing the IAFF/IAFC CPAT within three months once testing becomes available~~ 12 months of application period closing date.
5. Knowledge Requirements
 - A. Knowledge of firefighting, rescue, hazardous materials, and fire prevention basic practices.
 - B. Knowledge of mechanical systems in order to effectively maintain and operate firefighting apparatus, equipment, and tools.
 - C. Knowledge of basic national, state and local codes, statutes, ordinances, and laws as they relate to the Fire Department mission.
 - D. Knowledge of the properties and reactions of common and uncommon chemicals and products.
 - E. Knowledge of general physics, hydraulics, and technical math as they relate to firefighting.

6. Skill Requirements
 - A. Skill in communicating one-on-one and in front of groups for the purpose of obtaining or providing information.
 - B. Skill in rapidly analyzing critical situations and determining appropriate course of action.
 - C. Skill in building community relationships.
 - D. Skill in establishing and maintaining effective working relationships with peers.

7. Ability Requirements
 - A. Ability to fight, control, and extinguish fires and effect rescues under threatening conditions using all available technology and equipment in accordance with accepted practices, including those defined by OSHA, NFPA, ANSI, and others.
 - B. Ability to understand, implement, and give oral instructions.
 - C. Ability to understand and use advancing technology in the Fire Service.
 - D. Ability to establish good working relationships with the public and other public safety organizations.
 - E. Ability to be courageous and careful, and to use good judgment in crisis and threatening situations.
 - F. Ability to discriminate visually and aurally in order to assess and neutralize threats during crisis and threatening situations.
 - G. Ability to operate and maintain equipment used while performing the above job functions.
 - H. Ability to write and understand fire and medical reports.
 - I. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.

8. Physical Ability Requirements
 - A. Ability to physically perform all duties that may be assigned during emergencies as required by OSHA 1910.156.
 - B. Ability to perform all tasks which require the use of a self-contained breathing apparatus, as recommended by ANSI Z88.5-1981 and required by OSHA 1910.134.
 - C. Ability to climb/descend ladder carrying heavy load.
 - D. Ability to drag heavy objects such as victims or fire hoses.
 - E. Ability to hold, control, and aim fire hoses in operation under high pressures.
 - F. Ability to affect forceful entry ~~in~~into structure.
 - G. Ability to use a pike pole, axe, and/or power saw to ventilate a roof while on ladder.
 - H. Ability to balance while carrying heavy load and crossing narrow and/or high pathway.
 - I. Ability to climb/descend vertically using rope climbing techniques while carrying or guiding a heavy load.

9. Other Requirements
 - A. Must pass extensive physical and medical examinations.
 - B. Must pass periodic physical and medical examinations to verify the continued ability to perform all duties that may be assigned during crisis and threatening situations.
 - C. Must not use by any method any tobacco or similar product.
 - D. Must, within six months of appointment, reside within 25 miles of Headquarters Fire Station or at a location from which they can respond by vehicle to Headquarters Fire Station within 30 minutes of being notified, given normal driving conditions.

HR: L <u>BAO</u>	Union: Fire	EEOC: Protective Services	CSB: 09/01/2021	Class No: 4401
WC: 7706	Pay: 226	EEOF: Fire Protection	CC: 09/13/2021	Resolution: 21-0686R



Human Resources

Room 340
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Duluth, Minnesota 55802

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DATE: December 3, 2024
TO: Civil Service Board
FROM: Aimee Ott
Human Resources Generalist
SUBJECT: Revised Job Classification of Lateral Firefighter

RECOMMENDATION: APPROVAL OF THE REVISED JOB DESCRIPTION FOR THE CLASSIFICATION OF LATERAL FIREFIGHTER.

Background Information/Summary of Job

The Lateral Firefighter job classification was most recently revised in 2021. The purpose of this position is to safeguard lives and property by fighting and preventing fires and performing rescues under crisis and threatening situations. When the job description was revised in 2021, language was added to accommodate for the closure or limited hours at CPAT testing facilities during the COVID-19 pandemic. At this time, that language has been removed, as it is no longer relevant. Additionally, the previous CPAT language required candidates to submit CPAT results from a test taken within the previous six months; the timeframe for the requirement has been increased to 12 months to allow candidates more time to complete their CPAT and gives the City the potential to broaden the applicant pool.

The proposed revisions to this job description were discussed with the management and the Fire Union, and they are supportive of these updates.

Recommendation

Based on the above information, and in accordance with Section 13-7 of the Civil Service Code, I recommend that the Civil Service Board approve the revised job description for Lateral Firefighter.

Lateral Firefighter

SUMMARY/PURPOSE

To safeguard lives and property by fighting and preventing fires and performing rescues under crisis and threatening situations.

ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Fight, control, and extinguish fires using all available technology and equipment in accordance with accepted practices.
2. Prevent fires and other disasters through education, inspection, and any other available and practical means.
3. Rescue life, prevent injury, and salvage property under crisis and threatening situations.
4. Limit or prevent the escape of hazardous materials into the environment.
5. Operate, repair, and maintain equipment, systems, buildings, grounds, and other items and equipment used by the Fire Department.
6. Other duties as assigned.

JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements
 - A. Completion of an accepted program of training in firefighting equivalent to IFSTA Firefighter II, or an equivalent combination of education and experience at time of application.
 - B. Current Firefighter II certification from the Minnesota Fire Service Certification Board or equivalent certification accredited through IFSAC or NFPA Pro Board required at the time of interview scheduling; AND
 - C. A minimum of three (3) years of experience as a full-time career Firefighter.
2. License Requirements
 - A. Current certification at the level of Emergency Medical Technician or higher in the state of current employment, and a certification with the National Registry of Emergency Medical Technicians required at the completion of probation.
 - B. Ability to obtain and maintain a current MN State Firefighter License per MN Statute 299N at the completion of probation.
3. Preferred Requirements
 - A. A valid vehicle operator's license equivalent to a Minnesota Class "D" Driver's License.
4. CPAT Requirements
 - A. Must provide proof of passing the IAFF/IAFC CPAT test within previous 12 months of application period closing date.
5. Knowledge Requirements
 - A. Knowledge of firefighting, rescue, hazardous materials, and fire prevention basic practices.
 - B. Knowledge of mechanical systems in order to effectively maintain and operate firefighting apparatus, equipment, and tools.
 - C. Knowledge of basic national, state and local codes, statutes, ordinances, and laws as they relate to the Fire Department mission.
 - D. Knowledge of the properties and reactions of common and uncommon chemicals and products.
 - E. Knowledge of general physics, hydraulics, and technical math as they relate to firefighting.
6. Skill Requirements

- A. Skill in communicating one-on-one and in front of groups for the purpose of obtaining or providing information.
- B. Skill in rapidly analyzing critical situations and determining appropriate course of action.
- C. Skill in building community relationships.
- D. Skill in establishing and maintaining effective working relationships with peers.

7. Ability Requirements

- A. Ability to fight, control, and extinguish fires and effect rescues under threatening conditions using all available technology and equipment in accordance with accepted practices, including those defined by OSHA, NFPA, ANSI, and others.
- B. Ability to understand, implement, and give oral instructions.
- C. Ability to understand and use advancing technology in the Fire Service.
- D. Ability to establish good working relationships with the public and other public safety organizations.
- E. Ability to be courageous and careful, and to use good judgment in crisis and threatening situations.
- F. Ability to discriminate visually and aurally in order to assess and neutralize threats during crisis and threatening situations.
- G. Ability to operate and maintain equipment used while performing the above job functions.
- H. Ability to write and understand fire and medical reports.
- I. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.

8. Physical Ability Requirements

- A. Ability to physically perform all duties that may be assigned during emergencies as required by OSHA 1910.156.
- B. Ability to perform all tasks which require the use of a self-contained breathing apparatus, as recommended by ANSI Z88.5-1981 and required by OSHA 1910.134.
- C. Ability to climb/descend ladder carrying heavy load.
- D. Ability to drag heavy objects such as victims or fire hoses.
- E. Ability to hold, control, and aim fire hoses in operation under high pressures.
- F. Ability to affect forceful entry into structure.
- G. Ability to use a pike pole, axe, and/or power saw to ventilate a roof while on ladder.
- H. Ability to balance while carrying heavy load and crossing narrow and/or high pathway.
- I. Ability to climb/descend vertically using rope climbing techniques while carrying or guiding a heavy load.

9. Other Requirements

- A. Must pass extensive physical and medical examinations.
- B. Must pass periodic physical and medical examinations to verify the continued ability to perform all duties that may be assigned during crisis and threatening situations.
- C. Must not use by any method any tobacco or similar product.
- D. Must, within six months of appointment, reside within 25 miles of Headquarters Fire Station or at a location from which they can respond by vehicle to Headquarters Fire Station within 30 minutes of being notified, given normal driving conditions.

HR: AO	Union: Fire	EEOC: Protective Services	CSB:	Class No: 4427
WC: 7706	Pay: 226E	EEOF: Fire Protection	CC:	Resolution:

Lateral Firefighter

SUMMARY/PURPOSE

To safeguard lives and property by fighting and preventing fires and performing rescues under crisis and threatening situations.

ESSENTIAL DUTIES AND RESPONSIBILITIES ~~(other duties may be assigned)~~

1. Fight, control, and extinguish fires using all available technology and equipment in accordance with accepted practices.
2. Prevent fires and other disasters through education, inspection, and any other available and practical means.
3. Rescue life, prevent injury, and salvage property under crisis and threatening situations.
4. Limit or prevent the escape of hazardous materials into the environment.
5. Operate, repair, and maintain equipment, systems, buildings, grounds, and other items and equipment used by the Fire Department.
6. Other duties as assigned.

JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements
 - A. Completion of an accepted program of training in firefighting equivalent to IFSTA Firefighter II, or an equivalent combination of education and experience at time of application.
 - B. Current Firefighter II certification from the Minnesota Fire Service Certification Board or equivalent certification accredited through IFSAC or NFPA Pro Board required at the time of interview scheduling; AND
 - C. A minimum of three (3) years of experience as a full-time career Firefighter.
2. License Requirements
 - A. Current certification at the level of Emergency Medical Technician or higher in the state of current employment, and a certification with the National Registry of Emergency Medical Technicians required at the completion of probation.
 - B. Ability to obtain and maintain a current MN State Firefighter License per MN Statute 299N at the completion of probation.
3. Preferred Requirements
 - A. A valid vehicle operator's license equivalent to a Minnesota Class "D" Driver's License.
4. CPAT Requirements
 - A. Must provide proof of passing the IAFF/IAFC CPAT test within previous ~~six months from the date of application. This requirement may be delayed if local testing facilities are unavailable. Must provide proof of passing the IAFF/IAFC CPAT within three months once testing becomes available~~ 12 months of application period closing date.
5. Knowledge Requirements
 - A. Knowledge of firefighting, rescue, hazardous materials, and fire prevention basic practices.
 - B. Knowledge of mechanical systems in order to effectively maintain and operate firefighting apparatus, equipment, and tools.
 - C. Knowledge of basic national, state and local codes, statutes, ordinances, and laws as they relate to the Fire Department mission.
 - D. Knowledge of the properties and reactions of common and uncommon chemicals and products.
 - E. Knowledge of general physics, hydraulics, and technical math as they relate to firefighting.

6. Skill Requirements
 - A. Skill in communicating one-on-one and in front of groups for the purpose of obtaining or providing information.
 - B. Skill in rapidly analyzing critical situations and determining appropriate course of action.
 - C. Skill in building community relationships.
 - D. Skill in establishing and maintaining effective working relationships with peers.

7. Ability Requirements
 - A. Ability to fight, control, and extinguish fires and effect rescues under threatening conditions using all available technology and equipment in accordance with accepted practices, including those defined by OSHA, NFPA, ANSI, and others.
 - B. Ability to understand, implement, and give oral instructions.
 - C. Ability to understand and use advancing technology in the Fire Service.
 - D. Ability to establish good working relationships with the public and other public safety organizations.
 - E. Ability to be courageous and careful, and to use good judgment in crisis and threatening situations.
 - F. Ability to discriminate visually and aurally in order to assess and neutralize threats during crisis and threatening situations.
 - G. Ability to operate and maintain equipment used while performing the above job functions.
 - H. Ability to write and understand fire and medical reports.
 - I. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.

8. Physical Ability Requirements
 - A. Ability to physically perform all duties that may be assigned during emergencies as required by OSHA 1910.156.
 - B. Ability to perform all tasks which require the use of a self-contained breathing apparatus, as recommended by ANSI Z88.5-1981 and required by OSHA 1910.134.
 - C. Ability to climb/descend ladder carrying heavy load.
 - D. Ability to drag heavy objects such as victims or fire hoses.
 - E. Ability to hold, control, and aim fire hoses in operation under high pressures.
 - F. Ability to affect forceful entry ~~in~~ into structure.
 - G. Ability to use a pike pole, axe, and/or power saw to ventilate a roof while on ladder.
 - H. Ability to balance while carrying heavy load and crossing narrow and/or high pathway.
 - I. Ability to climb/descend vertically using rope climbing techniques while carrying or guiding a heavy load.

9. Other Requirements
 - A. Must pass extensive physical and medical examinations.
 - B. Must pass periodic physical and medical examinations to verify the continued ability to perform all duties that may be assigned during crisis and threatening situations.
 - C. Must not use by any method any tobacco or similar product.
 - D. Must, within six months of appointment, reside within 25 miles of Headquarters Fire Station or at a location from which they can respond by vehicle to Headquarters Fire Station within 30 minutes of being notified, given normal driving conditions.

HR: LDAO	Union: Fire	EEOC: Protective Services	CSB: 09/01/2021	Class No: 4427
WC: 7706	Pay: 226E	EEOF: Fire Protection	CC: 09/13/2021	Resolution: 21-0710R



Human Resources

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DATE: December 3, 2024
TO: Civil Service Board
FROM: Aimee Ott
Human Resources Generalist
SUBJECT: Revised Job Classification of Senior Engineering Technician

RECOMMENDATION: APPROVAL OF THE REVISED JOB DESCRIPTION FOR THE CLASSIFICATION OF SENIOR ENGINEERING TECHNICIAN.

Background Information/Summary of Job

As you are aware, the City is undertaking a job description review on all job descriptions last revised over 10 years ago. During this project, the job descriptions are being reviewed by both the supervisor of the position, as well as the incumbent(s). The intent of this process is to ensure that the description reflects the current duties of the position, as well as the education, experience, knowledge, skills, and abilities (KSAs) required to perform those duties.

In addition to the revision of the classification specific duties and KSAs, the Human Resources team has created standardized language that is included in all job descriptions and varies slightly based on their level of responsibility. You will see those language additions throughout the revised descriptions, including two new sections regarding supervision received and supervision given.

The Senior Engineering Technician was last revised in October of 2014. The purpose of this position is to perform technical and complex engineering work related to the design, survey, construction, and inspection of street, bridge, traffic, and utility infrastructure systems including water, gas, sanitary sewer, and storm sewer. Updates to this description include aligning the requirements with our current template, broadening the Education & Experience Requirements to accommodate external candidates, and adding several specific certifications to the License & Certification Requirements that were not previously included in the job description.

The job classification was discussed with the Basic Union, incumbents, and management, and all are agreeable to the proposed job description.

Recommendation

Based on the above information, and in accordance with Section 13-7 of the Civil Service Code, I recommend that the Civil Service Board approve the revised job description for Senior Engineering Technician.

Senior Engineering Technician

SUMMARY/PURPOSE

To perform technical and complex engineering work related to the design, survey, construction, and inspection of street, bridge, traffic, and utility infrastructure systems including water, gas, sanitary sewer, and storm sewer.

DISTINGUISHING FEATURES OF THE CLASS

Employees at this level are distinguished from the Engineering Technician by the level of responsibility assumed, complexity of projects, and the experience held.

SUPERVISION RECEIVED

The supervision provides minimal guidance on day-to-day operations indicating generally what is to be done, the limitations, quality and quantity expected, deadlines, and priority of assignments. The supervisor provides additional, specific instructions for new, difficult, or unusual assignments, including suggested work methods or resources.

SUPERVISION GIVEN

Does not have direct supervisory responsibility but does have some oversight of employees or projects that require delegation and direction over the work of others.

ESSENTIAL DUTIES & RESPONSIBILITIES

1. Perform all duties listed under the Engineering Technician job duties and responsibilities.
2. Conduct field surveys of project sites to obtain and analyze project-related data and field information.
3. Provide construction staking to ensure projects are built to the designed alignment, profile grade, and cross section.
4. Lead staff on complex construction and preliminary surveys.
5. Prepare engineering and construction project plans using Autodesk software for street, bridge, traffic, and/or utility infrastructure systems including water, gas, sanitary sewer, and storm sewer; prepare project specifications, assist with coordination of required advertising for bids, review of construction bids, and other project-related activities.
6. Direct and participate in project construction inspection work on major projects, including coordinating engineering and contractor work details, ensuring compliance with project/design specifications, coordination of material testing, evaluating field conditions, recommending field design changes, preparing progress reports and construction records.
7. Lead personnel in survey, inspection, drafting and design work as assigned.
8. Draft and calculate field notes to document quantities, alignment, grade, and locations according to project plans or to document monthly and final progress payment estimates and change orders.
9. Research records and maps to obtain engineering data such as location of survey monuments, sewer stubs, water mains, water services, hydrants, gas mains, and gas services.
10. Maintain engineering, survey, and infrastructure records.
11. Prepare and draft record drawings for street, water, sewer, gas, and storm infrastructure.
12. Perform a variety of office related functions, including preparing permits, correspondence, maps, presentation materials, brochures, reducing field notes, printing materials, answering phones, and responding to inquiries from contractors, developers, property owners, staff, and the general public.
13. Coordinate with other city departments and private property owners, related to changes of Right-of-Way, property lines, and easement disputes due to current and proposed infrastructure work.
14. Assist in the development of long-range infrastructure studies and plans, maintenance management plans, and environmental assessments.
15. Act as a competent person and incident commander during emergency situations.

JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements

- A. Associate's Degree in Civil Engineering Technology or a related professional field, and five (5) years of verifiable professional work experience in a position within the engineering field with similar complexity and level of responsibility; OR a minimum of seven (7) years of related education and/or full-time, verifiable professional experience in a position within the engineering field with similar complexity and level of responsibility; OR current classification as a City of Duluth Engineering Technician at Step E of the associated pay range.

2. License & Certification Requirements

- A. Possess and maintain a valid Minnesota Class D driver's license or privilege.
- B. Must obtain and maintain, at a minimum, current Minnesota Department of Transportation (MnDOT) certifications for Bituminous, Concrete and Aggregate within two (2) years of date of hire.
- C. Must obtain and maintain natural gas Operator Qualifications (OQs) within one (1) year of date of hire.
- D. Must obtain and maintain Minnesota Erosion and Stormwater Management certification as required within one (1) year of date of hire.
- E. Must obtain and maintain MnDOT ADA sidewalk certification within one (1) year of date of hire.
- F. Bridge Construction, Bridge Inspection, and Signal and Lighting certifications may be required by supervisor.

3. Knowledge Requirements

- A. Knowledge of algebra, geometry, and trigonometry.
- B. Knowledge of technical engineering principles and practices.
- C. Knowledge of the principles, methods, equipment, and materials used in construction of streets, bridges, traffic, and utility infrastructure systems including water, gas, sanitary and storm sewers, and various public work structures.
- D. Knowledge of traffic engineering principles.
- E. Knowledge of design and layout methods.
- F. Knowledge of regulatory agencies affecting design and construction.
- G. Knowledge of applicable safety principles and practices.
- H. Knowledge of the principles of technical writing.
- I. Knowledge of federal, state, and local legislation affecting departmental operations and appropriate professional design standards.
- J. Knowledge of principles of surveying.
- K. Knowledge of City of Duluth Utility systems.
- L. Knowledge of Geographic Information Systems (GIS).
- M. Knowledge of effective leadership and personal practices.
- N. Knowledge of public works design and construction principles, practices, and methods.
- O. Knowledge of applicable City policies, laws, and regulations affecting engineering and public works activities.
- P. Knowledge of Emergency Response Procedures.
- Q. Knowledge of Minnesota Uniform Traffic Control Devices manual.
- R. Knowledge of problem-solving and conflict-resolution techniques.
- S. Knowledge of, or the ability to learn, City policies and procedures.

4. Skill Requirements

- A. Skill in AutoCAD, GIS applications, and surveying.

- B. Skill in the operation of computer and surveying equipment.
- C. Skill in the operation of locating equipment and finding records.
- D. Skill in communicating logically, persuasively, and accurately in oral and written forms to groups and individuals.
- E. Skill in the operation of office equipment including, but not limited to, general computer systems, job required software applications, the internet, and modern office equipment.
- F. Skill in managing one's own time and the time of others.
- G. Skill in completing assignments accurately and with attention to detail.
- H. Skill in using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.

5. Ability Requirements

- A. Ability to operate computers, GIS, and CAD systems.
- B. Ability to apply standard engineering principles to utility and other public work improvements.
- C. Ability to prepare specifications, plans, technical reports, resolutions, and petitions to current standards.
- D. Ability to perform supervised and unsupervised design and layout work.
- E. Ability to establish and maintain effective working relationships with co-workers, supervisors, contractors, consultants, outside agencies, and the general public.
- F. Ability to identify and perform proper setup and removal of temporary traffic control devices and recognize improper setup.
- G. Ability to read, interpret, analyze, and explain technical manuals, data, plan sets, maps, and other complex materials.
- H. Ability to work outside in inclement weather and under traffic conditions.
- I. Ability to work at heights above an excavation and to climb into and out of excavations.
- J. Ability to mentor, train, and lead others.
- K. Ability to work unsupervised at times under the direction of Engineers and/or other co-workers, all while completing job requirements as needed.
- L. Ability to think logically, methodically, and make educated judgments using knowledge and experience.
- M. Ability to prepare, organize, and maintain engineering field and office data, reports, and systems.
- N. Ability to effectively communicate technical information, orally and in writing, to contractors, developers, property owners, employees, consultants, other governmental agency representatives, City officials, and the general public.
- O. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.
- P. Ability to communicate and interact effectively with members of the public.
- Q. Ability to communicate effectively both orally and in writing.
- R. Ability to recognize, analyze, and solve a variety of problems.
- S. Ability to organize and prioritize work while meeting multiple deadlines.
- T. Ability to handle difficult and stressful situations with professional composure.
- U. Ability to work successfully as a member of a team and independently with minimal supervision.
- V. Ability to interpret and apply laws, contracts, regulations, policies, and procedures.
- W. Ability to enforce safety rules and regulations.
- X. Ability to maintain confidential information.
- Y. Ability to demonstrate dependability, responsibility, and consistency in job performance.
- Z. Ability to attend work as scheduled and/or required.

Physical Demands

The work requires considerable and strenuous physical exertion such as frequent climbing of tall ladders, lifting heavy objects over 50 pounds, and/or crouching or crawling in restricted areas.

Work Environment

The work environment involves high risks with exposure to potentially dangerous situations or unusual environmental stress requiring a range of safety and other precautions (e.g., working at great heights under extreme outdoor weather conditions, or in similar situations in which conditions cannot be controlled).

HR: AO	Union: Basic	EEOC: Technicians	CSB:	Class No: 1801
WC: 9410	Pay:	EEOF: Utilities/Transportation	CC:	Resolution:

Senior Engineering Technician

SUMMARY/PURPOSE

To perform technical and ~~paraprofessional~~complex engineering work ~~in~~related to the areasdesign, survey, construction, and inspection of street, bridge, traffic, and utility infrastructure systems including water, gas, sanitary sewer, and storm sewer~~infrastructure systems.~~

DISTINGUISHING FEATURES OF THE CLASS

Employees at this level are distinguished from the Engineering Technician by the level of responsibility assumed, complexity of projects, and the experience held.

SUPERVISION RECEIVED

The supervision provides minimal guidance on day-to-day operations indicating generally what is to be done, the limitations, quality and quantity expected, deadlines, and priority of assignments. The supervisor provides additional, specific instructions for new, difficult, or unusual assignments, including suggested work methods or resources.

SUPERVISION GIVEN

Does not have direct supervisory responsibility but does have some oversight of employees or projects that require delegation and direction over the work of others.

ESSENTIAL DUTIES AND RESPONSIBILITIES ~~(other~~

1. Perform all duties ~~may be assigned~~listed under the Engineering Technician job duties and responsibilities.
2. Analyze~~Conduct~~ field surveys of project sites to obtain and analyze project-related data and field information.
3. Provide construction staking to ensure projects are built to the designed alignment, profile grade, and cross section.
4. Lead staff on complex construction and preliminary surveys.
- ~~2-5.~~ Prepare engineering and construction project plans and using Autodesk software for street, bridge, traffic, and/or utility infrastructure systems including water, gas, sanitary sewer, and storm sewer; prepare project specifications for survey purposes, assist with coordination of required advertising for bids, review of construction bids, and other project-related activities.
- ~~1.~~ Perform work to locate survey points.
- ~~2.~~ Prepare survey field notes.
- ~~3.~~ Direct the activities of other survey party members.
- ~~4.~~ Operate and maintain survey and GPS (Global Positioning System) equipment to obtain accurate survey measurements and point locations.
- ~~5.~~ Collect, analyze, and record data.
- ~~6.~~ Create ~~participate in project construction plans, maps, and charts manually or using a computer-aided design (CAD) system.~~
- ~~7.~~ Prepare graphic representations of Geographic Information Systems (GIS) using GIS software.
- ~~8.~~ Process survey informationinspection work on major projects, including computer data entrycoordinating engineering and contractor work.
- ~~9.~~ Estimate ~~details, ensuring compliance with project/design specifications, coordination of material testing, evaluating field conditions, recommending field design changes, preparing progress reports and construction quantities and prepare appropriate charts.~~
- ~~10.~~ Recommend upgrades and revisions to project procedures and practices.
- ~~3-6.~~ Prepare individually tailored hard copies of automated maps using computer base mapsrecords.
- ~~4-7.~~ Lead personnel in survey, inspection, drafting and design work as assigned.

- ~~8. Draft and calculate field notes to document quantities, alignment, grade, and locations according to project plans or to document monthly and final progress payment estimates and change orders.~~
- ~~9. Research records and maps to obtain engineering data such as location of survey monuments, sewer stubs, water mains, water services, hydrants, gas mains, and gas services.~~
- ~~5,10. Maintain engineering plans and survey files, and infrastructure records.~~
- ~~11. Coordinate work activities with contractors, outside agencies, other City personnel, and property owners.~~
- ~~12. Monitor and inspect construction projects to ensure conformance.~~
- ~~13. Maintain daily log of construction activities and write progress and final reports.~~
- ~~14. Prepare change orders and supplemental agreements for approval.~~
- ~~15. Document construction quantities.~~
- ~~16. Perform quality control tests on construction materials.~~
- ~~17. Lead personnel in construction inspections as assigned.~~
- ~~18. Locate underground utilities including water, gas, sanitary sewer and storm sewer systems.~~
- ~~19. Act as lead worker in assigned responsibilities.~~
- ~~20. Review construction plans and specifications for compliance with City standards.~~
- ~~21. Maintain, add, or modify existing GIS databases.~~
- ~~22. Review existing or incoming GIS data for accuracy, quality, and completeness.~~
- ~~23. Maintain, revise, and research manual or computer records.~~
- ~~24. Develop computerized record keeping procedures.~~
- ~~25. Issue required permits.~~
- ~~26. Investigate complaints, inquiries, and requests, and recommend solutions.~~
- ~~27. Prepare and interpret property descriptions.~~
11. Prepare and draft record drawings for street, water, sewer, gas, and storm infrastructure.
12. Perform a variety of office related functions, including preparing permits, correspondence, maps, presentation materials, brochures, reducing field notes, printing materials, answering phones, and responding to inquiries from contractors, developers, property owners, staff, and the general public.
13. Coordinate with other city departments and private property owners, related to changes of Right-of-Way, property lines, and easement disputes due to current and proposed infrastructure work.
- ~~6,14. Assist in the development of long-range infrastructure studies and plans, maintenance management plans, and environmental assessments.~~
- ~~28. Participate in technical engineering studies and provide recommendations.~~
- ~~29. Study and report findings, conclusions, and recommendations in oral and written form.~~
15. Act as a competent person and incident commander during emergency situations.

JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed ~~below~~ are representative of the knowledge, skills, and abilities required.

- ~~4. License Requirements~~
 - ~~A. Possession of a valid Minnesota Class "D" driver's license or privilege by date of appointment and thereafter in order to operate City vehicle.~~
1. Education and Experience Requirements
 - ~~A. Classified as a City of Duluth Engineering Technician, pay grade 28, Step E; or~~
 - ~~B. Completion of a two-year Associate's Degree in Civil Engineering Technology degree or equivalent; or a related professional field, and five (5) years of verifiable professional work experience in a position within the engineering position; or~~
 - A. A combination of field with similar complexity and level of responsibility; OR a minimum of seven (7) years of related education and/or full-time, verifiable professional experience determined to be equivalent in a position within the engineering field with similar complexity and level of responsibility; OR current classification as a City of Duluth Engineering Technician at Step E of the associated pay range.

2. License & Certification Requirements

- A. Possess and maintain a valid Minnesota Class D driver's license or privilege.
- B. Must obtain and maintain, at a minimum, current Minnesota Department of Transportation (MnDOT) certifications for Bituminous, Concrete and Aggregate within two (2) years of date of hire.
- C. Must obtain and maintain natural gas Operator Qualifications (OQs) within one (1) year of date of hire.
- D. Must obtain and maintain Minnesota Erosion and Stormwater Management certification as required within one (1) year of date of hire.
- E. Must obtain and maintain MnDOT ADA sidewalk certification within one (1) year of date of hire.
- F. Bridge Construction, Bridge Inspection, and Signal and Lighting certifications may be required by supervisor.

2.3. Knowledge Requirements

- A. Knowledge of algebra, geometry, and trigonometry.
- B. Knowledge of technical engineering principles and practices.
- C. Knowledge of the principles, methods, equipment, and materials used in construction of streets, sidewalks, bridges, traffic, and utility infrastructure systems including water-and, gas mains, sanitary and storm sewers, and various public workswork structures.
- D. Knowledge of traffic engineering principles.
- E. Knowledge of design and layout methods.
- F. Knowledge of regulatory agencies affecting design and construction.
- G. Knowledge of applicable safety principles and practices.
- H. Knowledge of the principles of technical writing.
- I. Knowledge of federal, state, and local legislation affecting departmental operations and appropriate professional design standards.
- J. Knowledge of principles of surveying.
- K. Knowledge of City of Duluth Utility systems.
- L. Knowledge of Geographic Information Systems (GIS).
- M. Knowledge of effective leadership and personal practices.
- N. Knowledge of public works design and construction principles, practices, and methods.
- O. Knowledge of applicable City policies, laws, and regulations affecting engineering and public works activities.
- P. Knowledge of Emergency Response Procedures.
- Q. Knowledge of Minnesota Uniform Traffic Control Devices manual.
- R. Knowledge of problem-solving and conflict-resolution techniques.
- S. Knowledge of, or the ability to learn, City policies and procedures.

3.4. Skill Requirements

- A. Skill in drafting, mapping, AutoCAD, GIS applications, and surveying.
- B. Skill in the operation of drafting computer and surveying equipment.
- C. Skill in the operation of locating equipment and finding records.
- D. Skill in communicating logically, persuasively, and accurately in oral and written forms to groups and individuals.
- E. Skill in the operation of office equipment including, but not limited to, general computer systems, job required software applications, the internet, and modern office equipment.
- F. Skill in managing one's own time and the time of others.
- G. Skill in completing assignments accurately and with attention to detail.
- H. Skill in using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.

4.5. Ability Requirements

- A. Ability to operate computers, GIS, and CAD systems.
- B. Ability to apply standard engineering principles to utility and other public work improvements.
- C. Ability to prepare specifications, plans, technical reports, resolutions, and petitions to current standards.
- D. Ability to perform supervised and unsupervised design and layout work.
 - ~~A. Ability to communicate effectively in oral and written forms.~~
 - ~~B. Ability to attain and maintain state certification requirements.~~
- E. Ability to establish and maintain effective working relationships with co-workers, supervisors, contractors, consultants, outside agencies, and the general public.
- ~~F. Ability to provide training identify and perform proper setup and removal of temporary traffic control devices and recognize improper setup.~~
- ~~G. Ability to read, interpret, analyze, and explain technical manuals, data, plan sets, maps, and other complex materials.~~
- ~~H. Ability to work outside in inclement weather and under traffic conditions.~~
- ~~I. Ability to work at heights above an excavation and to climb into and out of excavations.~~
- ~~J. Ability to mentor, train, and lead others.~~
- ~~F-K. Ability to work unsupervised at times under the direction of Engineers and/or other co-workers, all while completing job requirements as needed.~~
- ~~L. Ability to think logically, methodically, and make educated judgments using knowledge and experience.~~
- ~~M. Ability to prepare, organize, and maintain engineering field and office data, reports, and systems.~~
- ~~N. Ability to effectively communicate technical information, orally and in writing, to contractors, developers, property owners, employees, consultants, other governmental agency representatives, City officials, and the general public.~~
- O. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.
- P. Ability to communicate and interact effectively with members of the public.
- Q. Ability to communicate effectively both orally and in writing.
- R. Ability to recognize, analyze, and solve a variety of problems.
- S. Ability to organize and prioritize work while meeting multiple deadlines.
- T. Ability to handle difficult and stressful situations with professional composure.
- U. Ability to work successfully as a member of a team and independently with minimal supervision.
- V. Ability to interpret and apply laws, contracts, regulations, policies, and procedures.
- W. Ability to enforce safety rules and regulations.
- X. Ability to maintain confidential information.
- Y. Ability to demonstrate dependability, responsibility, and consistency in job performance.
- Z. Ability to attend work as scheduled and/or required.

Physical Ability Requirements Demands

- ~~A. Ability to transport oneself to, from, and around work sites.~~
- ~~B. Ability to work outdoors year round.~~
- ~~C. Ability to walk for long distances.~~
- ~~D. Ability to transport and erect survey equipment up to 50 pounds.~~
- ~~E. Ability to frequently stand, walk, sit, type, talk, hear, use near, mid, and far vision with frequent field of vision.~~
- ~~F. Ability to occasionally lift, carry, push, pull, climb, balance, stoop, crouch, reach, handle, smell, and use depth perception, visual accommodation, and color vision.~~

The work requires considerable and strenuous physical exertion such as frequent climbing of tall ladders, lifting heavy objects over 50 pounds, and/or crouching or crawling in restricted areas.

Work Environment

The work environment involves high risks with exposure to potentially dangerous situations or unusual environmental stress requiring a range of safety and other precautions (e.g., working at great heights under extreme outdoor weather conditions, or in similar situations in which conditions cannot be controlled).

HR: <u>MSAO</u>	Union: Basic	EEOC: Technicians	CSB: 12/10/2013	Class No: 1801
WC: 9410	Pay: 34	EEOF: Utilities/Transportation	CC: 10/13/2014	Resolution: 14-0534R



Human Resources

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DATE: November 26, 2024
TO: Civil Service Board
FROM: Heather DuVal
Human Resources Supervisor
SUBJECT: New Job Classification of Water Plant Maintenance Operator

RECOMMENDATION: APPROVAL OF THE JOB DESCRIPTION FOR THE NEW CLASSIFICATION OF WATER PLANT MAINTENANCE OPERATOR.

Background Information/Summary of Job

The new job classification of Water Plant Maintenance Operator is being created to assist the Water System Maintenance Foreperson with maintenance and repair of the Water Treatment Plant and pump stations and operate when necessary, including times of vacancies, illness, and emergencies. This position is to provide a continuity/redundancy in the maintenance and operations Treatment Plant Operations and Systems.

The proposed job description has been shared with the Basic Union, and they agree with the proposed.

Recommendation

Based on the above information, and in accordance with Section 13-7 of the Civil Service Code, I recommend that the Civil Service Board approve the new job classification and description for Water Plant Maintenance Operator.

Water Plant Maintenance Operator

SUMMARY/PURPOSE

To assist the Water System Maintenance Foreperson with maintenance and repair of the Water Treatment Plant and pump stations and operate when necessary, including times of vacancies, illness, and emergencies. This position is to provide a continuity/redundancy in the maintenance and operations Treatment Plant Operations and Systems.

SUPERVISION RECEIVED

The supervisor makes assignments by defining objectives, priorities, and deadlines and assists incumbents with unusual situations which do not have clear precedents. Incumbents plan and carry out the successive steps and handle problems and deviations in the work assignment in accordance with instructions, policies, previous training, or accepted practices in the occupation.

SUPERVISION GIVEN

Does not supervise.

ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Perform routine inspections of Treatment Plant, Pump House, and Stations.
2. Perform maintenance and repairs of water supply and treatment equipment, coordinate treatment and water supply operations with all staff.
3. Perform and schedule required and seasonal preventative maintenance activities for the water treatment plant, plant support equipment, and municipal water stations.
4. Perform EPA inspections at the treatment facility, including weekly, monthly and annual forms to be sent to the EPA.
5. Maintain, troubleshoot, and repair basic equipment through direction provided.
6. Perform inspections of towers, reservoirs, stations, and other water system equipment, functions, and operations.
7. Assist in chlorine cylinder changing and standby.
8. Work as a Water Plant Operator a minimum of one day each week or as needed.
9. Assist in the inspection, greasing, and changing of any belts for HVAC and exhaust fans on roof.
10. Grease all pumps, motors, gears, and fans as directed.
11. Perform daily, weekly, monthly inspections around the Treatment Plant and system.
12. Learn Basic Treatment Plant Operations and Procedures.
13. Perform basic Preventative Maintenance on the HVAC system including inspections, filters, and various settings for Winter and Summer months.
14. Adjust and assist with changing of packing for the facility and station pumps.
15. Review Operation & Maintenance manuals and assist in the performance of all recommended maintenance.
16. Communicate with others, orally and in writing in a respectful, appropriate manner.
17. Assist with the delivery of hazardous chemicals received at the treatment facility.
18. Be available in emergency situations and shift substitutions to assist in operations of treatment plant or system.
19. Document all work performed using appropriate work order system.
20. Assist in maintaining and repairing water treatment equipment as assigned.
21. Assist the Water Quality Compliance Officer with sampling as needed.
22. Assist the Water System Maintenance Foreperson with maintenance and repair as needed.
23. Be an effective team member by exhibiting self-motivation, supporting other employees in handling tasks, interacting effectively and respectfully with others, showing a desire to contribute to the team effort, accepting assignments willingly, and completing tasks within agreed upon timelines.
24. Other duties may be assigned.

JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements
 - A. 3-5 years of verifiable experience operating and performing maintenance at a certified Class C Water Treatment Facility or higher.
 - B. Ability to Operate the Water Treatment Plant

2. License Requirements
 - A. Minimum possession of a Minnesota Class "C" or "D" Water Supply System Operator's Certificate or higher.
 - B. Possess and maintain a valid Minnesota Class D driver's license or privilege.
 - C. Obtain a Minnesota Special Boiler Operator's License within twelve months of appointment and maintain thereafter

3. Knowledge Requirements
 - A. Basic knowledge of the use of tools, equipment, and chemicals, used in the treatment of water process.
 - B. Knowledge of basic electricity.
 - C. Knowledge of mechanical systems and plumbing.
 - D. Knowledge of water chemistry.
 - E. Knowledge of Supervisory Control Data Acquisition (SCADA) operations.
 - F. Knowledge of lagoon operations.
 - G. Basic operation of process meters.
 - H. Knowledge of mathematics used to calculate chemical dosages, flows, volumes and other related calculations.
 - I. Basic knowledge of electronics.
 - J. Knowledge of safe work practices associated with chemicals, high voltage electricity, large, moving equipment, gasses and liquids under pressure, and other occupational hazards.
 - K. Knowledge of computer operations.
 - L. Knowledge of federal, state, and local laws, statutes, regulations, codes, and standards related to the area of responsibility.
 - M. Knowledge of effective leadership and personnel practices
 - A. Knowledge of problem-solving and conflict-resolution techniques.
 - B. Knowledge of applicable safety requirements.
 - C. Knowledge of, or the ability to learn, City policies and procedures.

4. Skill Requirements
 - A. Extensive skill in troubleshooting, maintaining, and repairing mechanical plumbing, electrical, and electronic systems.
 - B. Skill in accurately measuring and recording data using various means, including electronic computers.
 - C. Skill to calculate and predict chemical dosages and volumes.
 - D. Skill in the operation of office equipment including, but not limited to, general computer systems, job required software applications, the internet, and modern office equipment.
 - E. Skill in managing one's own time and the time of others.
 - F. Skill in mediation and dispute resolution.
 - G. Skill in using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.
 - H. Skill in the operation of office equipment including, but not limited to, general computer systems, job required software applications, the internet, and modern office equipment.
 - I. Skill in completing assignments accurately and with attention to detail.

5. Ability Requirements
 - D. Ability to Operate the Water Treatment Plant weekly or in a time of operator shortage.
 - E. Ability to work independently under limited supervision.

- F. Ability to use good judgment in decision-making.
- G. Ability to repair/change parts on hazardous chemical feed systems using appropriate PPE.
- H. Ability to operate and maintain all of the equipment used in the treatment plant and water system.
- I. Ability to troubleshoot using schematics, blueprints, O & M manuals, and technical drawings.
- J. Ability to operate an overhead crane.
- K. Ability to run jar tests and analyze results.
- L. Ability to process information needed in operations, troubleshooting, and correcting processes.
- M. Ability to read and interpret information from charts, maps, diagrams, gauges, meters, and computers.
- N. Exhibits leadership qualities of dependability and accountability.
- O. Ability to work shifts, Holidays, weekends, and overtime and be available for on-call duty as needed.
- P. Ability to recognize, analyze, and solve a variety of problems.
- Q. Ability to organize and prioritize work while meeting multiple deadlines.
- R. Ability to handle difficult and stressful situations with professional composure.
- S. Ability to work successfully as a member of a team and independently with minimal supervision.
- T. Ability to train and lead others.
- U. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.
- V. Ability to communicate and interact effectively with members of the public.
- W. Ability to communicate effectively both orally and in writing.
- X. Ability to understand and follow instructions.
- Y. Ability to problem-solve a variety of situations.
- Z. Ability to set priorities and complete assignments on time.
- AA. Ability to attend work as scheduled and/or required.

Physical Demands

The work requires some physical exertion such as long periods of standing; walking over rough, uneven, or rocky surfaces; recurring bending, crouching, stooping, stretching, reaching, or similar activities; recurring lifting of moderately heavy items such as record boxes. The work may require specific, but common, physical characteristics and abilities such as above.

Work Environment

The work environment involves moderate risks or discomforts requiring special safety precautions (e.g., working around moving parts, carts, or machines, or with contagious diseases or irritant chemicals). Employees may be required to use protective clothing or gear such as masks, gowns, coats, boots, goggles, gloves, or shields.

HR: HD	Union:	EEOC:	CSB:	Class No:
WC:	Pay:	EEOF:	CC:	Resolution: