General Statement of Duties

Performs journey level skilled trades work to install, maintain, repair, inspect, and troubleshoot fire sprinkler piping, valves, accessories, and other related systems and equipment for City facilities.

Distinguishing Characteristics

This is a unique classification in the skilled trades and is distinguished from other trades classes due to the specialized training and experience required for each classification.

Guidelines, Difficulty and Decision-Making Level

Guidelines are generally but not always clearly applicable, requiring the employee to exercise judgment in selecting the most pertinent guideline, interpret precedents, adapt standard practices to differing situations, and recommend alternative actions in situations without precedent.

Duties assigned are generally complex and may be of substantial intricacy. Work assignment is performed within an established framework under general instructions but requires simultaneous coordination of assigned functions or projects in various stages of completion.

Employee is responsible for determining time, place, and sequence of actions to be taken. Unusual problems or proposed deviations from guidelines, practices, or precedents may be discussed with the supervisor before being initiated.

Level of Supervision Received & Quality Review

Under general supervision, the employee receives assignments and is expected to carry them through to completion with substantial independence. Work is reviewed for adherence to instructions, accuracy, completeness, and conformance to standard practice or precedent. Recurring work clearly covered by guidelines may or may not be reviewed.

Interpersonal Communication & Purpose

Contacts with the public or employees where explanatory or interpretive information is exchanged, defended, and gathered and discretion and judgment are required within the parameters of the job function.

Level of Supervision Exercised

None

Essential Duties

Install, maintain, and repair fire protection and sprinkler systems, including pipes and fixtures and related systems and equipment, nitrogen generators, air compressors, valves and related trim, and pressure and flow switches.

Operate and test pump controllers.

Cut, thread and groove all types of piping.

Determine the amount of material and type of equipment needed.
Inspect, test, and perform maintenance of installed diesel and electric fire pumps, and related pipe systems and pipelines.

Troubleshoot systems that are not working.

Replace worn parts.

Prepares working sketches and works from blueprints, schematics, and written or verbal instructions.

Prioritizes daily work orders and repairs.

Estimates materials, labor, and equipment costs.

Maintains records and prepares daily activity reports and follow applicable building codes.

Assists in the maintenance and repair work in a variety of skilled trades areas.

By position, perform snow removal duties.

Performs other related duties as assigned.

Any one position may not include all of the duties listed. However, the allocation of positions will be determined by the amount of time spent in performing the essential duties listed above.

**Competencies**

Arithmetic – Performs computations such as addition, subtraction, multiplication, and division correctly using whole numbers, fractions, decimals, and percentages.

Oral Communication - Expresses information to individuals or groups effectively; taking into account the audience and nature of the information; makes clear and convincing oral presentations; listens to others, attends to nonverbal cues and responds appropriately.

Reading – Understands and interprets written material, including technical materials, rules, regulations, instructions, reports, charts, graphs, or tables; applies what is learned from written material to specific situations.

Self Management – Sets well-defined and realistic personal goals; displays a high level of initiative, effort, and commitment towards completing assignments in a timely manner; works with minimal supervision; is motivated to achieve; demonstrates responsible behavior.

Technical Competence – Uses knowledge that is acquired through formal training or extensive on-the-job experience to perform one’s job; works with, understands, and evaluates technical information related to the job; advises others on technical issues.

Technical Problem Solving – Troubleshoots, diagnoses, analyzes, and identifies system malfunctions to determine the source and cause of the problem.

**Knowledge & Skills**

Knowledge of plumbing sufficient to be able to identify appropriate construction, installation, and alteration of new or existing plumbing, and/or the operation of related systems.

Knowledge of wet and dry fire protection systems sufficient to be able to maintain in proper working condition.
Knowledge of standard practices, methods, tools and materials used in several trades areas sufficient to be able to make minor repairs to facilities and equipment.

Knowledge of safety hazards and necessary safety precautions sufficient to be able to establish a safe work environment for self and others.

Skill in using hand and power tools and equipment common to the plumbing trade.

Skill in reading and interpreting work orders, plans, sketches, blue prints, and/or schematics.

Skill in estimating the cost of materials and equipment.

Skill in preparing working sketches.

Skill in maintaining, testing, and installing devices for the prevention of backflow, back siphonages, or cross connection.

**Education Requirement**

Graduation from high school or the possession of a GED, HiSET or TASC Certificate.

**Experience Requirement**

Completion of a Sprinkler Fitter apprenticeship program, or four (4) years of documented experience as an apprentice.

**Education & Experience Equivalency**

No substitution of experience for education is permitted.

**Licensure & Certification**

By position, possession of a Colorado Commercial Driver's License (CDL "B") with appropriate endorsements by the end of probation.

Must possess a Fire Sprinkler System Installer license from Denver Fire Department.

Licenses and certifications must be kept current as a condition of employment.

**Working Environment**

Atmospheric Conditions: conditions that affect the skin, eyes or respiratory system.

- Potential exposure to cement dust
- Potential exposure to chemicals, gas and low-level radiation
- Potential exposure to cold temperature, cold enough to cause bodily discomfort
- Potential exposure to cold weather conditions (indoor/outdoor)
- Potential exposure to conditions that affect the skin or respiratory system.
- Potential exposure to dust
- Potential exposure to extreme temperature changes
- Potential exposure to hazardous anesthetic agents, body fluids, and bio-wastes
- Potential exposure to hazardous conditions where there is a danger to life, body, and/or health
- Potential exposure to hazardous/toxic chemicals
- Potential exposure to hazards from electro/mechanical/power equipment.
- Potential exposure to hazards of steam and heat
- Potential exposure to heat temperatures, hot enough to cause bodily discomfort
- Potential exposure to hot and humid work environment
Potential exposure to housekeeping/cleaning agents/chemicals.
Potential exposure to humid conditions with high moisture content to cause bodily reactions
Potential exposure to odorous chemicals
Potential exposure to odors in animal areas
Potential exposure to odors in kitchen and animal areas
Potential exposure to temperature changes: variations in temperature from hot too cold
Potential exposure to toxic chemicals.
Potential exposure to unpleasant elements (accidents, injuries, and illness).
Extreme cold conditions
Handles emergency or crisis situations
Noise sufficient to cause distraction or possible hearing loss
Personal Safety: aware of surroundings, people, and events
Pressure due to multiple calls and inquiries
Subject to burns and cuts
Subject to electrical and radiant energy hazards
Subject to hazards of flammable or explosive gases
Subject to injury from moving parts of equipment or vehicles
Subject to precarious or high locations
Subject to pressure for multiple calls, inquiries, and interruptions
Subject to varying and unpredictable situations
Subject to traffic, roadways, and pedestrians
Subject to vibrations and strain on the body to cause bodily harm if endured daily
Temperature Changes: variations in temperature from hot too cold.
Temperature Changes: variations in temperatures from hot too cold when works in field
Wet: frequent contact with water or other liquid.
Wet: frequent contact with water, liquid, chemicals, or sanitary sewage
Works in confined, uncomfortable or awkward locations
Works in precarious or high locations.

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<th>Level of Physical Demand</th>
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<td>3-Medium (20-50 lbs.)</td>
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<td>(Physical Demands are a general guide and specific positions will vary based on working conditions, locations, and agency/department needs.):</td>
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Agility: bends, stretches, twists, or reaches out with the body, arms or legs.
Balancing: maintaining body equilibrium to prevent falling over.
Carrying: transporting an object, usually by hand, arm, or shoulder.
Climbing/Balancing: climbing walls, fences and other obstacles and balancing.
Climbing: ascending or descending objects usually with hands/feet.
Climbing: ascending or descending objects.
Color vision: ability to distinguish and identify different colors.
Crawling: moving about on hands and knees or hands and feet.
Crouching: bending body downward and forward by bending legs.
Depth Perception: ability to judge distances and space relationships.
Endurance: exert physical efforts restrain animals for a substantial period.
Eye/Hand/Foot Coordination: performing work through the use of two or more.
Feeling: perceiving attributes of objects by means of skin receptors.
Feeling: perceiving attributes of objects by means of spoken word.
Field of Vision: ability to adjust vision to bring objects into focus.
Field of Vision: ability to see peripherally.
Fine Dexterity: coordinator eye-hand to operate a vehicle, reach, hold, grasp and turn objects.
Fingering: picking, pinching, or otherwise working with fingers.
Handling: seizing, holding, grasping, or otherwise working with hand(s).
Hazards: conditions where there is danger to life, body and/or health.
Hearing/Talking: hear and determine direction of sound.
Hearing: perceiving the nature of sound by the ear.
Kneeling: bending legs to come to rest on one or both knees.
Lifting: raising or lowering objects weighing no more than 50 pounds, from one level to another.
Mathematical reasoning:
Mental Demands: mathematical reasoning, memorization, oral comprehension, spatial orientation, and written comprehension.
Neck Flexion: moving neck upward/downward.
Oral comprehension:
Physical Strength: exerts maximum muscle force to lift, push, pull or carrying objects and performs laboring work.
Pulling: exerting force upon an object so that it is moving to the person.
Pushing: exerting force upon an object so that it is moving away from the person.
Reaching: extending the hand(s) and arm(s) in any direction.
Repetitive motions: making frequent movements with a part of the body.
Sitting: remaining in the normal seated position.
Stamina: exerts oneself physically over long periods of time without tiring. (which may include performing repetitive tasks such as hammering or lifting objects).
Standing: remaining on one’s feet in an upward position.
Stooping: bending the body by bending the spine at the waist.
Talking: expressing or exchanging ideas by means of spoken words.
Vision Far Acuity: ability to see clearly at 20 feet or more.
Vision Near Acuity: ability to see clearly at 20 inches or less.
Vision: to observe animal behavior, read signs, and reading colors.
Walking: moving about on foot on uneven surfaces.
Written Comprehension.

**Background Check Requirement**

Criminal Check
Employment Verification

**Assessment Requirement**

None

**Probation Period**

Six (6) months.
Class Detail

Pay Grade: J-621
FLSA Code: N
Management Level: 10
Established Date: 9/21/2018
Established By: Lori Schumann
Revised Date: 6/11/2019
Revised By: Ryland Feno
Class History:
6/11/19 - Updated working environment verbiage.