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.

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.

By position, may be required to be on-call to address emergent needs.

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.

Level of Supervision Exercised

None

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.

<table>
<thead>
<tr>
<th>Level of Physical Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Medium (20-50 lbs.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Demands</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Physical Demands are a general guide and specific positions will vary based on working conditions, locations, and agency/department needs.):</td>
</tr>
</tbody>
</table>

- Agility: Ability to move quickly and easily.
- Balancing: Maintaining equilibrium.
- Carrying: Transporting or moving an object.
- Climbing/Balancing: Ascending walls, fences, and other obstacles and maintaining equilibrium.
- Climbing: Ascending or descending an object or ladder.
- Color vision: Ability to distinguish and identify different colors.
- Crawling: Moving about in a low or crouched position.
- Crouching: Positioning body downward and forward.
- Depth Perception: Ability to judge distances and space relationships.
- Endurance: Ability to restrain animals for a substantial period of time.
- Eye/Hand/Foot Coordination: Performing work through using two or more body parts or other devices.
- Feeling: Perceiving attributes of objects by means of skin receptors, communication, or otherwise.
- Field of Vision: Ability to sharply detect or perceive objects peripherally.
- Fine Dexterity: Sufficient coordination to operate a vehicle and manipulate objects.
- Fingering: Picking and pinching, through use of fingers or otherwise.
- Handling: Seizing, holding, grasping, through use of hands, fingers, or other means.
- Hazards: Conditions where there is danger to life, body and/or health.
- Hearing/Talking: Perceiving and comprehending the nature and direction of sounds/ability to communicate ideas.
- Hearing: Perceiving and comprehending the nature and direction of sounds.
- Kneeling: Assuming a lowered position.
- Lifting: Moving objects weighing no more than 50 pounds from one level to another.
- Neck Flexion: Perceiving objects located above or below.
- Oral Comprehension: Ability to discern the meaning of oral speech.
- Physical Strength: Exerts force to transport objects of 50 pounds or more.
- Pulling: Exerting force upon an object so that it is moving to the person.
- Pushing: Exerting force upon object so that it moves away from the person.
- Reaching: Extending the hands and arms or other device in any direction.
- Repetitive motions: Making frequent or continuous movements.
- Sitting: Remaining in a stationary position.
- Stamina: Ability to work over long periods of time without tiring.
- Standing: Remaining in a stationary position.
- Stooping: Positioning oneself low to the ground.
- Talking: Communicating ideas or exchanging information.
- Vision Far Acuity: Ability to perceive or detect objects clearly at 20 feet or more.
- Vision Near Acuity: Ability to perceive or detect objects at 20 inches or less.
Vision: Ability to perceive animal behavior, comprehend signs, and detect color.
Walking: Ability to move or traverse from one location to another.
Written Comprehension: Ability to discern the meaning of written words.

**Background Check Requirement**

- Criminal Check
- Employment Verification

**Assessment Requirement**

None

**Probation Period**

Six (6) months.

**Class Detail**

- Pay Grade: J-621
- FLSA Code: N
- Established Date: 9/21/2018
- Established By: LS
- Revised Date:
- Revised By:
- Class History: