UTILITY OPERATOR APPRENTICE

SUMMARY/PURPOSE:

As part of an approved Joint Apprenticeship Training Program, to acquire the knowledge, skills and abilities to perform skilled and semiskilled work in order to install, maintain, and repair the water and gas distribution systems, and sanitary and storm water collection systems..

DISTINGUISHING FEATURES OF THE CLASS:

Employees at this level are distinguished from the Utility Operator level by the amount of guidance and instruction needed to perform duties as assigned, and are not expected to function with the same amount of knowledge, proficiency, or skill level as the Utility Operator. Work is supervised while in progress and fits an established structure or pattern of the Joint Apprenticeship Training Program. Positions at the Utility Operator Apprentice level are normally filled by advancement from the Utility Maintenance Worker classification.

ESSENTIAL FUNCTIONS AND RESPONSIBILITIES (Other duties may be assigned):

1. Operate and maintain equipment in order to repair, clean, install, and maintain water and gas distribution systems and sanitary and storm water collection systems.
   A. Perform routine maintenance checks on vehicles and equipment.
   B. Operate and maintain equipment used in sewer line and distribution line maintenance and repair, including high pressure jet rodder, mechanical rodder, cleaning bucket machine, trenchers, mobile steamer, backhoe, loader, excavators, and hydro-excavator, cable crane, and closed circuit television equipment.
   C. Assist in the preparation of work sites to include the erection of appropriate barricades, warning devices, equipment, and shoring equipment.
   D. Operate and maintain equipment used in ditch, open channel, and shoreline maintenance and repair, including excavators and backhoes.
2. Perform routine service work in order to maintain water, sanitary and storm water pumping stations, and regulator stations.
   A. Analyze and record hour meter data at pump stations.
   B. Record and report defects or failures in collection, filtration, and conveyance of wastewater, gas, water, and storm water.
   C. Assist in the maintenance and repair of motors and pumps and report equipment defects or failures.
   D. Assist in cleaning wet wells and bar screens in sanitary pump stations.
   E. Assist in the removal of filter media at the City of Duluth Water Treatment Plant.
   F. Assist in snow removal at pump stations.
   G. Assist in wastewater and storm water flow monitoring and sampling.
3. Perform skilled and semiskilled work in order to install, maintain, and repair the water and gas distribution and sanitary and storm sewer collection systems and assist in the training of apprentices.
   A. Install and maintain water mains, valves, hydrants, gas mains, and sanitary and storm sewer mains, services, manholes, catch basins and leads.

B. Prepare work site by setting up traffic control, breaking street surfaces, digging, and shoring.

C. Make repairs to work sites by refilling trenches, mixing, pouring, and smoothing asphalt, gravel and other materials to replace street surfaces, including landscaping.

D. Perform work to cut, thread and tap pipes.

E. Install pipe sections by positioning, joining, aligning, calking, and sealing joints.

F. Install valves and stops.

G. Operate, inspect, repair, and test hydrants, valves, services, and mains.

H. Operate and maintain tools and equipment such as compressors, pneumatic hammers, taping machines, and hand tools in a safe and efficient manner.

I. Operate water and gas valves and stop boxes.

J. Install and replace water and gas services and sewer wye connections.

K. Instruct apprentices in all areas of the Utility Operator apprenticeship program, as assigned.

L. Respond to emergencies and act to control water, gas, and sewage leaks in a manner that is safe for self and public and to minimize environmental impact.

M. Provide information to customers related to utility operations in a professional manner.

4. Perform maintenance duties within and around Utility Operations facilities including work sites.

A. Perform routine cleaning and maintenance of vehicle wash rack and garage areas, including sweeping, hosing floors, washing walls, and cleaning wash rack pits.

B. Maintain stock piles of materials such as gravel, blacktop, and sand, and operate a gravel pit burner to keep materials from freezing.

C. Maintain accessibility to vehicles, equipment, materials, pump stations, and work sites by plowing, shoveling, and removing snow.

D. Organize disposal of demolition debris such as broken concrete, blacktop, and pipe materials and deliver to appropriate dump sites.

E. Perform related duties and assignments as directed.

<u>JOB REQUIREMENTS:</u>

To perform this job successfully, an individual must be able to learn and perform each essential duty satisfactorily by the completion of the apprenticeship program. The requirements listed below are representative of the knowledge, skill, and/or ability required.

1. Education and Experience requirements:

A. Completion of one (1) year of employment as a Utility Maintenance Worker; or

B. Two (2) years full-time equivalent education and/or experience in water, wastewater, storm water or gas utility construction or maintenance.

2. License Requirements:

A. Possess and maintain a valid Minnesota Class “A” Commercial Driver’s License including Tanker and Combination Vehicle Endorsement or equivalent.

B. Ability to obtain a valid Minnesota class “D” Water Operators license and/or a valid Minnesota Wastewater Facility Operator Class SD Certificate by the end of the apprenticeship period.

3. Knowledge Requirements:

A. Knowledge of gas and diesel powered equipment used in the repair, installation, and maintenance of a utility operations system.

B. Knowledge of all safety rules and regulations related to a utility operations system.

C. Knowledge of the materials, equipment, procedures, and practices used in a utility operations system.

D. Knowledge of policies and procedures used in the construction, repair, and maintenance of the utility operations system.

E. Knowledge of OSHA, CDL, and MNOPS regulations.

F. Knowledge of flow monitoring and sampling of water, wastewater, and storm water.

4. Skill Requirements:

A. Skill in inspecting, diagnosing, and repairing the distribution and

B. Collection systems.

C. Skill in setting up appropriate traffic controls.

D. Skill in using hand and power tools used in the construction, repair, installation, and maintenance of the utility operations system.

E. Skill in operating and maintaining vehicles and equipment used in utility operations.

5. Abilities Requirements:

A. Ability to read maps, specifications, and construction plans used in utility construction work.

B. Ability to use good judgment and work independently under limited supervision.

C. Ability to communicate and to follow written and oral directions.

D. Ability to establish and maintain effective working relationships with supervisors, other employees, and the public.

E. Ability to prepare clear, concise reports.

F. Ability to identify excess clear water flows in the sanitary collection system.

6. Physical Abilities Requirements:

A. Ability to work outside in inclement weather.

B. Ability to enter manholes, catch basins, and to work in confined spaces.

C. Ability to remove and replace manhole and catch basin covers.

D. Ability to lift and carry supplies and equipment up to 50 pounds, and occasionally carry up to 90 pounds.

E. Ability to take samples of city water, wastewater, and storm water.

F. Ability to work expanded shifts and/or be called in for emergency work with little or no advance notice.

G. Ability to complete the training program as approved by the Joint Apprenticeship Training Committee (J.A.T.C.).

H. Ability to successfully complete a “Competent Person” training program.

I. Ability to successfully complete a Gas Operator Qualifications program.

J. Ability to stand, kneel, stoop, and crouch for extended periods.

K. Ability to attend work on a regular basis.

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