

CITY OF LAS VEGAS
AGENDA DOCUMENTATION

Date: June 28, 2017

TO: CIVIL SERVICE BOARD OF TRUSTEES FROM: DAN TARWATER, SECRETARY

SUBJECT: 6. CLASSIFICATION SPECIFICATIONS FOR APPROVAL

BOARD ACTION: DISCUSSION AND POSSIBLE ACTION

CLASSIFICATION SPECIFICATIONS: 1

NEW

1. Underground Utility Technician

The above classification specifications were created at the request of the department.

RECOMMENDATION

The City recommends approval of the new classification specifications.

UNDERGROUND UTILITY TECHNICIAN

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DEFINITION

Performs skilled and semi-skilled work identifying, locating, and physically marking the location of subsurface underground utility lines prior to and throughout construction excavation activities; coordinates efforts with excavators to facilitate safe excavation; and performs a variety of technical tasks relative to assigned areas of responsibility.

SUPERVISION RECEIVED

Receives general supervision from the Traffic Field Supervisor or higher-level staff. May receive functional and technical supervision from a Senior Traffic Systems Technician.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS

Essential and other important responsibilities and duties may include, but are not limited to, the following:

Essential Functions:

1. Conducts research, locates and marks out underground and subsurface installations in accordance with federal, state and local requirements; operates equipment used to identify underground and subsurface assets including electronic tracking, GPS, and other types of tracking technologies; accurately marks out the location of the subsurface facilities according to industry practices.
2. Works independently in accurately locating and marking all types of existing City-owned underground infrastructure including, but not limited to: electric company feeders, storm water collection/distribution facilities, wastewater collection lines, streetlights, area lighting, traffic signals, telephone cables, utilities serving city facilities, and fiber optic systems.
3. Reads and accurately interprets maps, GIS data, blueprints, schematic drawings, archives, and related symbols and markings; coordinates changes and corrections.
4. Meets with excavators, property owners, contractors, city employees in other departments and divisions, and developers to assist in identifying subsurface installations; explain service locations and responsibilities; attend pre-job meetings with excavators as needed.
5. Reviews the work of the contractors in reference to their hitting or damaging a city-owned utility during excavation; responds to emergency calls when unknown utility is located; identifies utility and notifies contractor or citizen.

CITY OF LAS VEGAS
Underground Utility Technician (*continued*)

Essential Functions (*continued*):

6. Investigates and prepares detailed written documentation on excavation which results in damage to underground and subsurface assets owned/maintained by the City; prepares and maintains a variety of reports. Makes field notes on the locations of underground utility lines.
7. Uses hand tools such as shovels, picks, and lid pullers to open, find, and uncover vaults, valve boxes, conduit, pipes, sewer manholes, utility boxes, and other underground assets.
8. Uses computer system to update incorrect or missing assets; enters data into a One-Call system; correctly uses GPS receivers to locate facilities; retrieves and resolves work using office and field computer systems.
9. Reads maps and GIS systems, assists in updating when deficiencies are noted between field conditions and the map and GIS data.
10. Adheres to all related codes and regulations for duties assigned; adheres to safe work practices and procedures; maintains repairs and sets up devices for work zone traffic control and worker safety; ensures public safety is maintained during work activities.
11. Shares technical knowledge and information in areas of expertise with other employees with whom the individual is assigned to work.
12. Assists in emergency repairs of underground and subsurface infrastructure as needed.

Marginal Functions:

1. Represents the City of Las Vegas in the Underground Damage Prevention field as needed.
2. Performs related duties and responsibilities as required.

QUALIFICATIONS

Knowledge of:

Basic properties and principles of accurately identifying all types of underground facilities.
Basic principles, practices, theories, and materials of the underground utility field.
Reading and interpreting blueprints, maps, GIS, as-built drawings, schematics, symbols, drawings and related materials.
Occupational hazards and standard safety practices necessary in the area of work assigned.
Pertinent federal, state, and local laws and regulations.
Principles and practices of subsurface construction and installations.
Traffic work zone safety practices.
Modern office procedures, methods and computer equipment, including common office software.

CITY OF LAS VEGAS
Underground Utility Technician (*continued*)

Knowledge of (continued):

Geography of the City of Las Vegas and adjacent area.
Components and operational characteristics of wastewater, storm drains, sewer, electric, telemetry, fiber optic and cable lines.
All types of equipment used to locate utility lines.
Computer programs used to create and update GIS maps.
Methods and procedures of GPS handheld receivers and associated software.
Basic installation practices of wastewater collection, potable water, storm water, and flood control systems.
Basic installation practices of fiber optic systems, electrical systems, traffic signal systems, and other utilities owned operated and maintained by municipalities.
Basic markings and symbols used on maps, project plans, and blueprints.
National Electrical Code as it applies to area of assignment.
Underground Service Alert and pertinent State regulations.
Confined space entry procedures.

Skills in:

Determining the correct location of underground utility lines using electronic locating equipment.
Operating various electronic and computerized devices designed to assist in the locating of subsurface utilities including, wastewater lines, fiber optic systems, reclaimed water system, storm water collection system, streetlights and traffic signals.
Operating a variety of vehicular, stationary, and computerized locating equipment in a safe and effective manner.
Reading and following underground utility damage prevention procedures.
Working near connected electrical circuits.
Distinguishing colors.
Reviewing and interpreting and updating maps, schematics, diagrams, as-built drawings, descriptions, plans, GIS maps, and blueprints to determine the locations of underground utility lines and related facilities.
Maintaining accurate records and reports on work activities via computer systems.
Manually accessing utility appurtenances such as valve boxes, meters, and wastewater manhole lids.
Working safely in heavy and hazardous traffic conditions utilizing safety devices.
Maintaining safe operation of motor vehicle and safety related equipment.
Effectively utilizing computerized systems.
Organizing daily field assignments into a route designed to minimize backtracking and increase efficiency in an assigned area.

Ability to:

Independently perform all utility line locating duties within the city.
Learn the rules, regulations, policies, and procedures of the Department of Public Works.
Read and understand department policies and procedures.

CITY OF LAS VEGAS
Underground Utility Technician *(continued)*

Ability to (continued):

Establish and maintain effective working relationships with those contacted in the course of work.

Work independently and effectively with minimal direct supervision while working in the field.

Communicate clearly and concisely, both orally and in writing.

Understand and follow oral and written instructions and sketches.

Experience and Training Requirements

Experience:

One year of experience in the construction, maintenance, surveying, or utility line locating field involving underground and subsurface assets.

Training:

Equivalent to graduation from high school.

License or Certificate

Possession of a valid driver's license on the date of application, and maintenance thereafter.

Employee must attend training in work zone safety measures as requested by department management.

Special Requirements

May be required to respond to emergency situations after normal work hours, including nights, holidays, and weekends is required.

This is staffed as a five day per week position in order for the city to comply with NRS mandates.

WORKING CONDITIONS

Constantly = more than 2/3 of the time; Frequently = 1/3 to 2/3 of the time; Occasionally = less than 1/3 of the time; Infrequently = less than 5% of the time.

Environmental Conditions:

Location: Work is primarily performed outdoors, subject to typical Nevada weather. This can include, but not limited to vibrations, unpleasant odors, and loud engine noises. May enter underground vaults using safe confined space practices.

Hazards: Exposure to noise, dust, grease, fumes, high voltage, extreme heat, electrical energy, raw sewage, on ladders, working above ground and below ground in confined spaces, on slippery and uneven surfaces, and work around moving equipment and heavy traffic in public right of way, city property and construction areas.

CITY OF LAS VEGAS
Underground Utility Technician (continued)

Environmental Conditions (continued):

Equipment Used: City vehicles, electronic locating equipment, handheld GPS devices, tablet, laptops, and a wide variety of hand and power tools.

Safety Equipment: Steel-toed shoes, gloves, safety glasses, goggles, hearing protection, safety vest, hard hat, and insulated equipment.

Physical Conditions:

Essential and marginal functions require:

Standing/walking: Frequently, throughout entire work shift.

Sitting: Frequently, while in the office, and operating vehicle to and from job assignments.

Lift/carry: Constantly, up to 30 lbs., hand and electronic tools, Usual carry between 150-200 ft. Occasionally, up to and exceeding 60 lbs., while lifting and carrying heavier materials, such as manhole covers and vault/pull box lids.

Push/pull: Frequently, using one or both arms and hands, exerting a force (typically 5-50lbs.) moving equipment other hand and mechanical tools.

Climbing: Constantly, in and out of vehicle using steps (16-18"), climbing on ladders, occasionally. Must be able to balance loads while climbing ladders.

Bending/twisting: Frequently-constantly, at waist, knees and neck throughout work shift. Assignments require constant bending and stooping while working at street level. Worker must be able to move frequently in and out of a vehicle.

Kneeling/crouching/crawling: Kneeling-frequently, while working at street level, using equipment. Crawling, infrequently.

Hands/arms: Constantly using both hands and arms in reaching, handling, grasping, fingering and gripping while handling materials, hand, locating, and power tools. Subject to excessive gripping and occasional vibration. Dexterity needed to operate knobs dials and touch screens, and mark surfaces with spray paint. Work is occasionally at or above shoulder height.

Sight: Constantly, with ability to distinguish colors, depth perception, hand, eye, read instrument dials, and foot coordination. Visual acuity in near-, mid- and far-range required, as worker is exposed to extreme traffic hazards.

Speech/hearing: Constantly, must be able to communicate clearly on two-way radio or cellular phone, work cooperatively with co-workers and the public throughout shift. Ability to discriminate between different sounds emitted from locating equipment.

Other physical demands: Assignments typically require extended stooping and bending while working at lower levels throughout work shift. May involve movement of heavy steel and concrete parts and manhole covers while locating facilities. Worker must exercise good judgment and have an ability to lift heavy items.

Maintaining mental capacity, which allows the capability of:

- *Making sound independent decisions;*
- *Effective interaction and communication with others; and*
- *Demonstrating intellectual capabilities.*

SB

NEW 5/15/17 FLSA and City: nonexempt

CSB 6/28/17

Alison Packard

From: Sue Brown
Sent: Tuesday, June 13, 2017 7:18 AM
To: Alison Packard
Subject: June 28 CSB - Underground Utility Technician

Hi Alison,

Please prepare the Underground Utility Technician class spec for the June 28th Civil Service Board agenda. It is a NEW classification, created at the request of the department. Thank you.

Sue



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