

## **GAS ENGINEERING TECHNICIAN TRAINEE**

### **JOB DESCRIPTION**

**Classification Responsibilities:** Under close supervision, progressing to general supervision, learns to perform skilled, technical, paraprofessional gas engineering work; performs related work as required.

**Distinguishing Features:** This is a trainee class in which the employee learns to perform the full scope of duties of a Gas Engineering Technician through an on-the-job training program. An employee of this class is trained in assignments involving the application of gas system engineering knowledge and City of Mesa policies. Training and close supervision is provided by the Senior Gas Engineer and the Engineering Designer. As training progresses, the incumbent is expected to exercise semi-independent to independent judgment in selecting work methods. The Gas Engineering Technician Trainee can progress by noncompetitive, criteria-based promotion to Gas Engineering Technician after successfully completing the on-the-job training program, achieving satisfactory performance appraisals, and meeting the minimum qualifications of the Gas Engineering Technician class. This class is FLSA nonexempt.

### **QUALIFICATIONS**

**Minimum Qualification(s) Required.** Any combination of training, education, and experience equivalent to graduation from high school or GED. One year recent drafting experience using AutoCad, OR one year of full-time employment with the City of Mesa as an Engineering Technician I, OR any combination of training, education, (coursework in geometry, trigonometry, computer-aided drafting (CAD), or related course of study), and experience equivalent to at least one year experience using AutoCad.

**Special Requirement(s).** Must possess an Arizona Driver's License by hire date.

**Substance Abuse Testing.** None.

**Preferred/Desirable Qualification(s).** Coursework and experience in gas, survey and/or global positioning systems (GPS) or civil engineering and experience involving the interpretation of architectural and civil engineering plans are highly desirable.

### **ESSENTIAL FUNCTIONS**

**Communication:** Communicates with the general public, other City employees, management, contractors, architects and engineers in order to design natural gas mains and services. Prepares gas service applications, material quantities, cost estimates, letters to customers, transmittals, and plan review requirements sheets with clearly organized thoughts and using proper sentence structure, punctuation, and grammar in order to convey instructions to correct customers' plans.

**Manual/Physical:** Evaluates information to determine compliance with minimum federal safety standards, Part 192, for natural gas pipelines. Distinguishes colors to verify underground utility lines.

Operates a 1/2 ton pickup truck or sedan requiring a standard Driver's License. Uses common hand tools such as measuring wheel and measuring tape to take field measurements. Operates a variety of standard office equipment such as copy machine, telephone, and personal computer to perform daily office tasks. Enters data or information into a personal computer to maintain records and obtain utility records and customer information. Sorts and files quarter section maps and plans. Works with cleaning fluids and agents to clean workstation. Works in a variety of weather conditions while performing field verifications. Meets scheduling and attendance requirements.

**Mental:** Coordinates work activities with other City departments, other agencies and architectural and engineering companies. Conducts research and analyzes utility records and as-built drawings to prepare construction plans and drawings. Understands and interprets blueprints, schematic drawings and layouts to design gas services and systems. Estimates labor and material costs from blueprints. Learns job-related material through on-the-job training regarding safety codes for natural gas pipelines.

**Knowledge/Skill/Abilities:**

Knowledge of:

civil engineering principles and practices;  
the symbols and terminology used in civil engineering drawings; and  
personal computer (windows operating environment).

Skill in:

the use of AutoCAD software; and  
the use of drafting tools and equipment.

Ability to:

design and draft natural gas mains and services for major commercial developments, individual business enterprises, major subdivision developments, and individual residences;  
design and draft major arterial high pressure gas lines;  
design and draft gas systems in conjunction with the engineering requirements of other ongoing utility projects;  
design and draft gas systems using survey generated topographical information and data;  
review customers' plans to ensure conformity to established gas engineering principles and practices;  
calculate the size of gas equipment and supplies needed for a project by the use of standardized formulae;  
research existing topographical representations of the area involved and existing utility records and take actual on-site, in-field measurements;  
liaison with the individual or individuals requesting services either in person or by telephone;  
compute the materials used and estimate a cost for an entire project by tabulating items and costs on a spread sheet and transferring them to the original plans;  
update plats, lists and other records pertaining to the City of Mesa utility systems;  
initiate descriptive maps and diagrams for use by interested parties for presentations or graphic displays;  
apply the practices and techniques of drafting to produce neat, precise drawings from sketches, verbal

descriptions, and specifications;

perform basic engineering calculations; and establish and maintain effective working relationships with management, coworkers, and the general public.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

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PAY GRADE: 41

EEO-Tech

NDOT SAFETY-No

SECURITY-No

NDOT RANDOM-No

DOT SAFETY-No

CDL-No

RESP-No

IND-9410

JOB FCTN-ENG

SWORN-No

INCREMENTS 55-200