

**CITY OF SANTA CLARA, CALIFORNIA  
CLASS SPECIFICATION**

**TITLE: ENGINEERING TECHNICIAN (ELECTRIC) (JOB CODE 460A)**

<b>DEPARTMENT</b>	<b>ACCOUNTABLE TO</b>	<b>FLSA STATUS</b>
Electric Utility	Various	Non-Exempt

**CLASS SUMMARY**

The Engineering Technician (Electric) is an entry-level classification in the paraprofessional Engineering Technician series. An incumbent in this classification performs routine technical office and field work in support of various engineering projects in the Electric Utility Department. Specific responsibilities will vary according to assignment. Performs related duties as assigned.

**DISTINGUISHING CHARACTERISTICS**

The Engineering Technician (Electric) is distinguished from the Senior Engineering Technician by its focus on routine paraprofessional engineering duties and the performance of duties under more immediate supervision. Incumbents' work is closely supervised, work methods are explained in specific terms and work is subject to frequent review.

**MINIMUM QUALIFICATIONS**

***EDUCATION AND EXPERIENCE***

- Graduation from high school or tested equivalent, and
- One (1) year working with geographic information system (GIS) tools and systems OR one (1) year working with computer-aided drafting (CAD).

***DESIRABLE QUALIFICATIONS***

- GIS AND CAD experience
- Completion of post-secondary coursework in GIS and CAD.

***ACCEPTABLE SUBSTITUTION***

Post-secondary education equivalent to thirty (30) semester units or forty-five (45) quarter units including satisfactory completion of courses in mathematics, engineering, CAD, GIS, or related subjects may be substituted for the experience requirement

***LICENSES/CERTIFICATIONS***

Possession of a valid California Class C driver's license is required at the time of appointment and for the duration of employment.

***OTHER REQUIREMENTS***

- Employees are required to pass initial and periodic comprehensive background checks, which may include fingerprinting, to meet Federal, State and/or industry security requirements.
- Must be able to perform all the essential functions of the job assignment, with or without reasonable accommodations.

## **ENGINEERING TECHNICIAN (ELECTRIC) (460A)**

### **TYPICAL DUTIES**

This description may not include all the duties listed below, nor do the examples cover all duties that may be performed.

Under immediate supervision, the incumbent will:

- Participate in field survey activities such as assisting with measuring and recording distances and elevation using Global Positioning System (GPS) equipment
- Prepare maps and drawings using geographic information system (GIS) tools to place symbols and apply color codes for the identification of facilities
- Receive, review, provide comments, file, and return maps, documents, and plans using CAD
- Perform scaling and dimensioning to verify the accuracy of maps and plans
- Assist in conducting field inventory of existing primary and secondary conductors, transformers, switches, poles, pole attachments, manholes, and conduit locations
- Draw and update electrical schematic diagrams, panel wiring diagrams, substation layout drawings using CAD, and organizes associated documentation
- Prepare scaled and dimensioned plans, using CAD based on sketches prepared by engineering/estimating personnel
- Operate a computer and standard office plotting/copying equipment
- Conduct records research including job files, property ownership, easement and right-of-way records
- Maintain records of equipment databases, log books, and map inventories
- Operate passenger vehicles requiring Class C driver's license
- Order office drafting supplies, manages outside reproduction services, and coordinates vendor services for office drafting equipment maintenance

Perform other related duties as assigned

### **KNOWLEDGE, SKILLS, & ABILITIES**

Knowledge of:

- General principles of algebra, geometry, trigonometry, and mechanical drawing
- Principles and practices of engineering drafting and basic graphic design
- Standard personal computer hardware and software, including word processing, spreadsheet, and database programs
- Document control, retrieval, and filing systems

Ability to:

- Prepare neat and accurate drawings, diagrams, dimensions, representations, and schematics using GIS and CAD tools and applications
- Select and use appropriate drafting, and duplicating equipment and materials
- Read, interpret and apply engineering terminology and symbols
- Retrieve, file, and code drawings and diagrams and prepare brief reports
- Maintain organized and complete records
- Communicate effectively, both orally and in writing
- Understand and comprehend oral and written directions and instructions
- Effectively handle multiple priorities, organize workload, and meet strict deadlines

## **ENGINEERING TECHNICIAN (ELECTRIC) (460A)**

- Establish and maintain effective working relationships with those contacted in the course of work, including the public
- Work in a team-based environment and achieve common goals
- Deal tactfully and courteously with others
- Walk, sit, or stand for extended periods of time
- Perform moderate physical labor including bending, stooping, crawling, climbing, and lifting as necessary to perform assigned duties

### **SUPERVISION RECEIVED**

Works under the immediate supervision of a Senior Engineering Technician, Engineer, or other supervisor as assigned.

### **SUPERVISION EXERCISED**

May assist in the training of personnel as assigned.

### **CLASSIFICATION HISTORY**

Established 10/1997; Rev 10/2018; Rev. 9/2024