

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

**TITLE: ENGINEERING ~~TechnicianAide~~ —(FIBER) (JOB CODE 460F)**

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

**CLASS SUMMARY**

The Engineering TechnicianAide (-Fiber) is an one-of-the entry-level classifications in the paraprofessional Engineering TechnicianAide series. An incumbent in this classification performs routine technical office and field work in support of various projects as generated by the Electric Utility Silicon Valley Power Fiber Enterprise Program. Specific responsibilities will vary according to assignment. ~~The Engineering Aide Fiber is distinguished from the other Engineer Aide and Senior Engineering Aide by its focus on routine paraprofessional fiber engineering duties and the performance of duties under more immediate supervision.~~ Performs related duties as assigned.

**DISTINGUISHING CHARACTERISTICS**

The Engineering Technician (Fiber) is distinguished from the other Engineering Technician and Senior Engineering Technician classifications by its focus on routine paraprofessional fiber 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~~possession of a GED, including satisfactory completion of courses in algebra, geometry, trigonometry, and
- One (1) year working with Computer Aided Drafting (CAD~~D~~).~~in fiber network design~~

**DESIRABLE QUALIFICATIONS**~~Desirable Qualifications:~~

- Experience with geographic information system (GIS) tools and software is desirable
- Proficiency in using ~~Auto~~CAD for fiber network design and outside plant construction (e.g., handle basic and advance drawing design, plot schematic and technical drawings) is desirable
- Completion of courses in mechanical drawing is desirable
- Experience in Outside Plant (OSP) dark fiber route design and mapping in the electric utility is desirable
- Proficiency in standard Adobe Acrobat, Visio, Google Earth, BlueBeam or other collaboration software tool, and Microsoft Office (Word, Power Point, Excel, Access) is desirable

**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.

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### LICENSES/CERTIFICATIONS

#### LICENSE

Possession of a valid California Class C Driver's License is required at the time of appointment, and for duration of employment

### OTHER REQUIREMENTS

Must be able to perform the essential functions of the job assignment, with or without reasonable accommodations.

### TYPICAL DUTIES

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

~~Duties may include, but are not limited to, the following.~~

~~Under immediate supervision, the incumbent will:~~~~Under direct supervision:~~

- Reviews Outside Plant (OSP) Fiber map drawings, uses ~~AutoCAD~~ applications to map and update OSP fiber networks and route maps
- Inputs fiber map data into central database for sorting and filtering of data used in surveying and repairs
- Updates ~~CAD AutoCad system~~ and geographic information system (GIS) mapping systems for fiber network layout, ~~and GIS mapping system~~ as required
- Performs data input into fiber optic database system, including computerization of distribution points of fiber optic cable, fiber locations, and aerial locations
- Participates in Silicon Valley Power Fiber Program field survey activities such as organizing and recording fiber splice points
- Researches fiber mapping records on routine matters, and compiles basic reports
- Creates and updates fiber engineering plans, maps, drawings, diagrams, and charts using manual and computer-aided methods
- Creates Encroachment Permit Drawings, to scale, as requested by SVP Electric Engineering
- Maintains electronic and paper files and databases of engineering documents such as plans, specifications, drawings, and maps
- Performs field inspections to obtain and verify engineering data
- Maintain records of field inspections
- Verifies the accuracy of engineering documents using mathematical calculations
- Provides Fiber Electric Utility staff with technical information as requested
- May be required to open fiber box lids on occasion
- Performs other related duties as assigned

### KNOWLEDGE, SKILLS, & ABILITIES

Knowledge of:

- Mathematical principles, including algebra, geometry and trigonometry
- The principles and practices of engineering drafting and graphic design

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- Specialized fiber engineering software and equipment used for drafting fiber route maps
- Methods, procedures, and materials used in area of assignment
- Standard personal computer hardware and software, including word processing, spreadsheet, and database programs
- Environmental and safety practices, procedures and standards
- Office safety practices, procedures and standards

### Ability to:

- Interpret, apply, and explain maps, engineering drawings, and building plans
- Prepare neat and accurate drawings, diagrams, dimensions, representations, and schematics
- Perform engineering mathematical calculations with accuracy
- Communicate clearly and effectively, both verbally and in writing
- Write basic technical reports on routine matters
- Establish and maintain effective working relationships with those contacted in the course of work including coworkers and the general public
- Work in a team-based environment to achieve common goals
- Effectively handle multiple priorities, organize and meet strict deadlines
- Evaluate situations, identify problems, and exercise sound independent judgment within established guidelines
- Walk or stand for extended periods of time and bend, stoop, crawl, climb, and lift as necessary to perform assigned duties
- Lift, carry, and relocate a variety of equipment weighing up to 25 pounds on a regular basis; may be required to open fiber box lids weighing up to 1250 pounds on occasion

### **SUPERVISION RECEIVED**

Receives immediate supervision from a Senior Engineering AideTechnician, Engineer, or other supervisor as assigned.

### **SUPERVISION EXERCISED**

May assist in the training of personnel as assigned.

### **CLASSIFICATION HISTORY**

Established 9/2014; Revised 10/2024