# ELECTRIC DRAFTING TECHNICIAN II ELECTRIC DRAFTING TECHNICIAN II

#### **DEFINITION**

To perform a variety of technical engineering drafting and mapping duties related to the design, construction, maintenance, and removal of electric utility facilities.

#### DISTINGUISHING CHARACTERISTICS

<u>Electric Drafting Technician I</u> - This is the entry level class in the Electric Drafting Technician series. Positions in this class typically have little or no directly related work experience and work under immediate supervision while learning job tasks. The Electric Drafting Technician I class is distinguished from the II level by the performance of less than the full range of duties assigned to the II level. Incumbents work under immediate supervision while learning job tasks, progressing to general supervision as procedures and processes of assigned area of responsibility are learned.

<u>Electric Drafting Technician II</u> - This is the journey level class in the Electric Drafting Technician series and is distinguished from the I level by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the I level.

#### SUPERVISION RECEIVED AND EXERCISED

## **Electric Drafting Technician I**

Receives immediate supervision from the Electric Engineering Technician Supervisor.

#### **Electric Drafting Technician II**

Receives general supervision from the Electric Engineering Technician Supervisor.

# <u>EXAMPLES OF ESSENTIAL DUTIES</u> – Duties may include, but are not limited to, the following:

Research, design, and prepare technical drawings and specifications related to the construction, maintenance, and modification of street lighting, substation, and related electric utility facilities; assist in developing associated standards.

Prepare and maintain maps of the City's electric system and related electric facilities and maintain associated database; produce computerized plotted maps, specifications, and materials for presentations.

Research existing facilities, rights-of-ways, and future developments; determine and document site elevations; make site plans and profiles for intended construction sites; perform skilled drafting work in preparing original construction drawings involving plans, profiles, cross-sections, elevations, schematics and construction details.

Respond to questions from the public regarding construction standards and requirements and street lighting concerns; explain policies and regulations.

Perform field verifications and inspections; prepare reports documenting operating conditions and make recommendations as appropriate.

Coordinate with a variety of other City staff and outside agencies regarding electric utility mapping and facilities design, construction, and/or modifications.

Maintain files, records, maps; prepare reports.

May serve on committees as assigned.

Build and maintain positive working relationships with co-workers, other City employees, and the public using principles of good customer service.

Perform related duties as assigned.

#### MINIMUM QUALIFICATIONS

#### Electric Drafting Technician I

#### Knowledge of:

Basic principles of construction and architecture.

Algebra, trigonometry and geometry as applied to technical engineering work.

Fundamental principles of electricity.

Methods, techniques, instruments, and equipment used technical engineering work such as drafting, mapping, and surveying.

Use and application of computer aided design and drafting software (AutoCAD).

Modern office procedures, methods and computer equipment including word processing, database and spreadsheet applications.

## Ability to:

Learn to perform technical engineering drafting and mapping duties related to electric utility distribution, operations and related facilities; learn line construction methods and materials.

On a continuous basis, know and understand all aspects of the job; intermittently analyze work papers, reports and special projects; identify and interpret technical and numerical information; observe and problem solve operational and technical policies and procedures.

On a continuous basis sit at a desk or workstation for long periods of time; intermittently, walk, stand, kneel, climb, and bend when working at field/inspection sites; perform simple and power grasping, pushing, pulling, and fine manipulation; use a telephone, and write or use a keyboard to communicate, and occasionally lift or carry weight of 10 pounds or less.

Learn uses and applications of geographic information systems (GIS) in preparation of maps related to electric utility facilities.

Learn department policies and procedures and pertinent local, State, and Federal codes, regulations, and laws, and electric utility industry standards.

Perform mathematical and technical engineering computations related to design and construction.

Operate computer aide design and drafting software (AutoCAD).

Maintain records related to work activities; prepare reports.

Communicate clearly and concisely, both orally and in writing.

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

#### **Experience and Training**

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

## Experience:

No experience is required.

AND

## **Training:**

Equivalent to the completion of the twelfth grade supplemented by college level course work in automated drafting technology, engineering, mathematics or a related field.

## License and Certificate

Possession of, or ability to obtain, a valid California driver's license.

## Electric Drafting Technician II

In addition to the qualifications for the Electric Drafting Technician I:

## Knowledge of:

Electric utility distribution, operations and related facilities.

Departmental policies and procedures and pertinent local, State, and Federal codes, regulations, and laws, and electric utility industry standards.

Line construction methods and materials.

#### Ability to:

Independently perform technical engineering drafting and mapping duties related to electric utility distribution, operations, and related facilities.

Use geographic information systems (GIS) to map and document location of electric utility facilities.

Prepare, correct, and follow electric diagrams and designs.

## Experience and Training

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

## Experience:

Two years of responsible experience performing duties similar to that of an Electric Drafting Technician I with the City of Roseville.

## **AND**

# **Training:**

Equivalent to the completion of the twelfth grade supplemented by college level course work in automated drafting technology, engineering, mathematics or a related field.

# License and Certificate

Possession of, or ability to obtain, a valid California driver's license.

# 02-09-13 Electric Drafting Technician I/II

Electrical Drafting Technician I	Electrical Drafting Technician II
08-30-05	08-30-05
01-22-99	01-22-99
10-01-88	10-01-88 Electrical Drafting Technician II
07-01-87	
07-01-79 Electrical Drafting Technician	
01-10-78	
10-30-73 Electrical Draftsman	
-67 Engineering Draftsman	