

ELECTRICAL ENGINEERING AIDE III

PURPOSE AND NATURE OF WORK

Positions in this classification perform technical work on electrical engineering projects, with responsibility for performing prescribed assignments involving a sequence of related operations. Work involves solving routine problems by selecting from specific choices defined in standard work policies or procedures. Some independent judgment is required to select and apply the most appropriate of available procedures. Work is performed under the direct supervision of a higher level technician or engineer, who will convey objectives, give technical advice, and review project/solution before it is accepted. Nature of the work is not supervisory; however, incumbents may be assisted by lower-level technicians.

ILLUSTRATIVE EXAMPLES OF WORK (Note: These examples are intended only to illustrate the various types of work performed by incumbents in this class. All of the duties performed by any one incumbent may not be listed, nor does any incumbent necessarily perform all of these duties.)

Serves as a mapping technician by identifying and compiling database information to create maps in response to requests, checking/monitoring map layers for accuracy and making corrections as needed, producing and updating overlay maps, using resources such as survey maps and legal descriptions to verify property lines, easements, and rights-of-way to obtain information needed for mapping.

Performs drawing, mapping, and provisioning work related to the fiber system. Receives information detailing completed work orders and updates the master file showing fiber installation as well as plans fiber installation for subdivisions/businesses that are known to be opening in an area. Prepares, designs, and submits, to applicable agencies, requests to deploy fiber lines with rights of way.

Attends meetings concerning public work road projects and helps determine how projects will affect any existing facilities. Coordinates with various outside personnel, including contractors, developers, customers, etc. for design planning.

Maintains electrical drawings to accurately reflect existing electrical hardware in the city. Drafts electric line extensions and/or relocations, designs/revises outdated electrical standard specifications, downloads global positioning system information from hand-helds and provides those coordinates to relocate utilities, and drafts site plans showing routes of existing utilities, streets, property boundaries, and right-of-way acquisitions.

Maintains all electrical substation drawings, files, and supervisory control and data acquisition (SCADA) drawings. Receives marked-up drawings from engineers with changes and draws those changes in AutoCAD (computer aided drafting). Prints large scale drawing sets and copies and converts "hand drawings" to AutoCAD.

Assists network engineers in the maintenance of computer network infrastructure by planning and installing network upgrades, troubleshooting connectivity problems, and generating/preparing specifications for equipment.

Performs related work as required.

NECESSARY KNOWLEDGE, ABILITIES AND SKILLS

Knowledge of and ability to perform mathematical operations specifically related to engineering.

Knowledge of and ability to use computer systems and software appropriate to the nature and level of work.

Ability to communicate effectively by telephone, in person, or in writing to both individuals and small groups.

Ability to produce, read, analyze, and comprehend job-related specifications, plans, and/or drawings.

Ability to set up and use appropriate instruments to take measurements accurately.

Ability to learn job-related material through oral instruction, field experience, and/or specialized training.

Ability to independently solve problems associated with day-to-day activities.

Ability to work independently to accomplish tasks.

DESIRED EDUCATION AND EXPERIENCE

Twelve to eighteen months education and formal training beyond high school specific to the individual position and prior work experience in the electrical engineering field incorporating the necessary knowledge, skills, and abilities required for the specific position.