



City of Phoenix

Electrical Plans Engineer

Job Code:	23520	Job Function:	Engineering & Applied Science
Salary Plan:	001	Grade:	069
FLSA:	Exempt	Labor Assign:	ASPTEA
Benefit Cat:	007	EEO-4:	Professionals
SOC:	17-2071.00	Last Revision:	April 2025

This description shall not be held to exclude other duties not specifically mentioned that are of similar kind or level of difficulty as the examples of typical functions of the classification. They are intended to describe the general nature and level of work being performed by individuals assigned to positions in this classification.

DEFINITION:

The fundamental reason this classification exists is to manage and direct the Electrical Plans Review Section in the examination of complex plans for new construction, alteration and repairs for compliance with the City electrical code. Work includes interpreting electrical plans, solving unusually difficult code interpretation and design problems, and assisting in the development of electrical construction codes.

SUPERVISION RECEIVED/GIVEN:

Supervision is received from a Deputy Planning and Development Director. Supervision is exercised over Electrical Plans Examiners I and II and technical advice and assistance is given to architects, engineers, contractors and field inspectors on electrical problems.

EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only):

- Manages and directs the Electrical Plans Review Section
- Supervises and reviews the performance of Electrical Plans Examiners I and II and initiates training programs according to demonstrated needs
- Reviews and examines complex plans and specifications for compliance with City electrical codes
- Performs engineering computations to analyze electrical systems
- Identifies inadequacies found in electrical construction documents and specifications and requires that corrections be made to meet the requirements of City codes and engineering standards
- Performs investigations and evaluates tests and other data to determine the suitability of electrical materials and methods of construction or installation
- Responds to inquiries from plan reviewers, inspectors, architects, engineers and others regarding electrical code questions
- Holds conferences with architects, engineers and electrical inspectors relating to code interpretations and electrical design problems
- Approves alternate methods or materials for code compliance within the scope of authority delegated by the Assistant Planning and Development Director who serves as the building official
- Recommends changes in codes to resolve design and interpretation problems and accommodate and control new materials and new design concepts



City of Phoenix

- Makes field inspections at construction sites of large projects at the request of electrical inspectors
- Produces written letters, memos, and code compliance reports
- Enters technical data as required for permits or plans information into the computer

REQUIRED KNOWLEDGE AND ABILITIES:

Knowledge of:

- Principles and practices of supervision
- Leadership styles and skills
- Electrical system design pertaining to building construction
- National Electrical Code, construction codes, and related laws and ordinances
- Engineering as applied to the design and installation of electrical systems and equipment in major buildings
- Standard electrical construction materials and design concepts for major structures and new electrical materials and advanced design concepts

Ability to:

- Use professional judgment and common sense in the application and enforcement of the intent of code requirements
- Read and accurately interpret building construction plans and specifications of any complexity
- Objectively interpret and consistently apply code requirements and related standards in accordance with department policies
- Make complicated engineering and mathematical calculations and to use engineering devices and reference material
- Perform a broad range of supervisory responsibilities over other
- Communicate in the English language by phone or in person in a one-to-one or group setting
- Produce written documents in the English language with clearly organized thoughts using proper sentence construction, punctuation, and grammar
- Work cooperatively with other City employees and the general public
- Use graphic instructions, such as blueprints, schematic drawings, layouts, or other visual aids
- Comprehend and make inferences from written material
- Work safely without presenting a direct threat to self or others

Additional Requirements:

- By the end of the twelve (12) month probationary period, must be a Registered Professional Engineer/Electrical (PE) in the State of Arizona
- Obtaining a combination of discipline specific commercial certifications or licenses may be required for some positions depending on department or section assignment
- Some positions require the use of personal or City vehicles on City business. Individuals must be physically capable of operating the vehicles safely, possess a valid driver's



City of Phoenix

license and have an acceptable driving record. Use of a personal vehicle for City business will be prohibited if the employee does not have personal insurance coverage

- Some positions will require the performance of other essential and marginal functions

ACCEPTABLE EXPERIENCE AND TRAINING:

Three years of experience in the building construction industry relating to electrical work and electrical engineering, and a bachelor's degree in electrical engineering. Other combinations of experience and education that meet the minimum requirements may be substituted.