

## CIVIL ENGINEERING AIDE SPECIALIST II

### **PURPOSE AND NATURE OF WORK**

Positions in this classification perform non-routine and complex technical work on civil engineering projects, with responsibility for applying theory and principles of civil engineering toward planning, designing, and conducting a complete project or a portion of a larger and more diverse project. Work involves solving problems by reviewing standard civil engineering guidelines, technical manuals, and/or administrative procedures and may involve modification of the aforementioned for unusual situations. Independent judgment is required to study previously established, often only partially relevant, guidelines, plan various interrelated activities, and coordinate such activities while completing a project. Work is performed under the direct supervision of a Professional Engineer, who will outline objectives, requirements, and/or design approaches. Nature of the work may involve supervising subordinate employees.

**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 project manager/designer for “in-house” design projects, such as streets, sidewalks, bridges, water/wastewater systems, facilities, and other similar civil engineering projects. Serves as, or works closely with, inspector to ensure proper methods, design specifications, and budgetary allocations are being adhered to during construction phase.

Serves as project manager for consultant designed projects, which involves meeting with consultants to discuss the scope of the project, guiding/directing consultants during their preparation of preliminary plans, reviewing and finalizing said plans, coordinating the bid process of the project, reviews bid submittals, and recommends contract approval. Monitors construction methods for design adherence, handles payment reviews/recommendations, approves contract and administrative change orders, and accepts project upon completion.

Coordinates utility relocation with public and private utility companies to remove conflicts with construction projects. Assists utility companies in preparation of reimbursement agreements, reviews such agreements, and prepares submittal forms for LCG execution.

Supervises and participates in inspection of roads, bridges, water/wastewater systems, and facilities to monitor conditions, identify maintenance needs, and recommend maintenance strategies.

Reviews engineering designs submitted for building permits for compliance with LCG Standards and Subdivision regulations. Reviews drainage, street construction, legal compliance, etc.

Administers permit management for construction work involving LCG right-of-way, off-road, Corps of Engineering, etc. and maintains files for such.

Supervises and coordinates the daily surveying tasks related to civil engineering projects, including coordinating and scheduling survey requests, gathering/maintaining documents needed for surveys, maintaining/purchasing survey equipment, meeting with engineering staff to coordinate project phases to schedule surveying tasks, and preparing boundary, right-of-way, and servitude plats.

Inputs and maintains complex layers for civil engineering information in the geographic information system (GIS), updating as necessary.

Applies civil engineering principles to computer modeling programs to test new construction feasibility. Identifies and formulates solutions to any problems found.

As supervisor, conducts performance evaluations, employment interviewing, disciplining, approval of leave, etc. for subordinate employees.

Performs related work as required.

### **NECESSARY KNOWLEDGE, ABILITIES, AND SKILLS**

Knowledge of civil engineering principles and practices and ability to independently apply those principles and practices towards accomplishing tasks.

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

Knowledge of construction techniques and practices.

Knowledge of related building regulations and codes.

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 facilitate and coordinate the work of several technicians, contractors, and others involved in the design and/or construction of projects.

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

Ability to inspect, investigate, and recommend courses of action related to the position.

Ability to independently solve complex civil engineering related problems related to area of assignment.

Ability to work independently to accomplish tasks.

### **DESIRED EDUCATION AND EXPERIENCE**

Associate’s Degree or completion of a technical specialty program of eighteen months – three years duration in civil engineering technology (or closely related field) and significant prior working experience in the civil engineering field incorporating the necessary knowledge, skills, and abilities required for the specific position.