Engineering Technician 2

Category: Classified
Pay Grade: C21
Job Code: 16710

To perform this job successfully, an individual must be able to perform the essential job functions satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the primary job functions herein described. Since every duty associated with this position may not be described herein, employees may be required to perform duties not specifically spelled out in the job description, but which may be reasonably considered to be incidental in the performing of their duties just as though they were actually written out in this job description.

JOB SUMMARY
Performs independent technical field and administrative work that may include assignments and responsibility to monitor and oversee different facets of standard public works or engineering activities; oversees a wide variety of activities, operations, preparing plans, specifications, and cost estimates for roadway, parks, water, sewer, or drainage projects; may also perform or complete transportation systems operator duties or traffic related studies.

ESSENTIAL JOB FUNCTIONS (examples, not all inclusive)

- Executes or assists in the preparation of plans, drawings, and specifications for a variety of public works, parks, and utilities projects;
- Performs or assists in preliminary layouts and drawings, using engineering criteria, survey notes, and basic instructions;
- Prepares contract documents and technical specifications and prepares cost and material estimates for public works, parks, and utilities projects;
- Prepares grant applications and auxiliary documents;
- Initiates engineering work orders and permits, researches right of way vacating, and provides back up to field personnel as needed;
- Performs routine to moderately complex engineering analysis and prepares technical reports.
- Reviews construction plans for estimating impact or other necessary fees;
- Obtains, analyzes, summarizes, and maintains transportation systems data and records independently under broad guidelines;
- Monitors the Automated Transportation Management System (ATMS) software programs to identify traffic signal detection problems or signal operation issues and handle or report to appropriate unit for response;
- Performs records management and research;
- Provides backup to counter operations;
- May provide information and services to utility system users;
- May perform information processing related duties including the use of available statistical packages or programs, encoding data, data entry, and retrieval and routine information terminal operations and programming/reprogramming;
- Performs other related job duties as assigned.

QUALIFICATIONS

Education and Experience:
Three (3) years of technical experience in civil engineering, construction engineering, traffic engineering, or public works; or an equivalent combination of education, training, and/or experience.
Special Qualifications (May be required depending on area of assignment):

- Florida Driver's License or Florida Commercial Driver's License and endorsement, if any.
- Assignment to work a variety of work schedules including compulsory work periods in special, emergency, and/or disaster situations.
- Candidate to possess prior job tenure and experience from within the same unit or assignments in the same line of work.
- Candidate to demonstrate more advanced proficiency, competency, and satisfactory completion of regularly assigned work in an independent manner. Appointing Authority retains discretion to employ an incumbent at this level or advance the incumbent non-competitively or competitively, after a candidate meets the minimum qualifications to an in-line career ladder position within the same organization or department.
- Other knowledge, skills, abilities, and credentials required for a specific position.

Knowledge, Skills and Abilities:

- Knowledge of principles, practices, techniques, and instruments of engineering, drafting, and survey;
- Knowledge of construction specifications, plans, and regulations relating to public works, parks, and utilities construction contracts;
- Knowledge of some advanced mathematics and mathematical applications to engineering computations;
- Knowledge of principles of civil engineering as related to surveying, drafting, simple to moderately complex design procedures, and engineering investigations;
- Knowledge of County arterial road network;
- Knowledge of the principles and procedures required to report trouble calls and manage traffic events.
- Skill in the reading and interpretation of civil or construction blueprints and plans.
- Ability to communicate well with the public and effectively relate technical information to co-workers and superiors;
- Ability to identify, analyze, and relay ITS/ATMS technical and administrative problems to repair staff and superiors;
- Ability to perform technical computations and analyze engineering drawings;
- Ability to supervise small technical groups as a lead worker;
- Ability to use small office equipment, computers, and highly technical computer applications;
- Ability to oversee the implementation of capital improvement plans.

PHYSICAL/MENTAL DEMANDS

The work is light work which requires exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force to move objects. Additionally, the following physical abilities are required:

- Balancing: Maintaining body equilibrium to prevent falling while walking, standing or crouching on narrow, slippery, or erratically moving surfaces. The amount of balancing exceeds that needed for ordinary locomotion and maintenance of body equilibrium.
- Fingering: Picking, pinching, typing, or otherwise working, primarily with fingers rather than with the whole hand as in handling.
- Grasping: Applying pressure to an object with the fingers and palm.
- Handling: Picking, holding, or otherwise working, primarily with the whole hand.
- Kneeling: Bending legs at knee to come to a rest on knee or knees.
- Lifting: Raising objects from a lower to a higher position or moving objects horizontally from position-to-position. Occurs to a considerable degree and requires substantial use of upper extremities and back muscles.
- Reaching: Extending hand(s) and arm(s) in any direction.
- Visual ability: sufficient to effectively operate office equipment including copier, computer, etc.; and to read and write reports, correspondence, instructions, etc.
- Hearing ability: sufficient to hold a conversation with other individuals both in person and over a telephone; and to hear recording on transcription device.
- Speaking ability: sufficient to communicate effectively with other individuals in person and over a telephone.
- Mental Acuity: Ability to make rational decisions through sound logic and deductive processes.
• Talking: Expressing or exchanging ideas by means of the spoken word including those activities in which they must convey detailed or important spoken instructions to other workers accurately, loudly, or quickly.
• Repetitive Motion: Substantial movements (motions) of the wrist, hands, and/or fingers.
• Standing: Particularly for sustained periods of time.
• Stooping: Bending body downward and forward by bending spine at the waist. Occurs to a considerable degree and requires full motion of the lower extremities and back muscles.
• Walking: Moving about on foot to accomplish tasks, particularly for long distances or moving from one work site to another.

WORKING CONDITIONS
Work is performed in a dynamic environment that requires me to be sensitivity to change and responsiveness to changing goals, priorities, and needs.