

ENGINEERING TECHNICIAN III

MAJOR FUNCTION

This is a responsible and technical position relating to highway design involving the design and drafting of urban and rural highway projects, along with other public works projects. This position also requires the training and supervising of the other technicians on new computer technology and drafting methodologies.

ESSENTIAL FUNCTIONS

The following statements describe the principal functions of this job and its scope of responsibility, but should not be considered an all-inclusive listing of work requirements. Individuals may perform other duties as assigned, including working in other functional areas to cover absences or relief, to equalize peak work periods, or otherwise to balance the work load.

- Coordinates weekly/biweekly meetings with other technicians to answer technical questions and train them on the latest computer/drafting technology.
- Coordinates preparation of plans for road and site plan projects with the design engineer. Coordinates the standardization of the engineering plans (cover sheet, details, etc.). Checks the estimates of quantities for road projects.
- Creates a complete working set of construction plans, including but not limited to plan/profile, cross sections and surface, based on the design provided by the Project Engineer.
- Responsible for providing the information (maps, details, etc.) needed by all Engineering Divisions (i.e., Drainage, Survey, Traffic, etc.). Prepares plans, maps, and illustrations from legal descriptions, survey field notes, and other sources.
- Updates the filing system for engineering plans and the system for plan retrieval.
- Works independently to create the initial maps for road and site plan projects.
- Obtains and/or verifies on-site measurements and site specific information for use in the design process.
- Assists the project manager/engineer in the research, compilation, and preparation of applications for water management district permits.
- Provides technical support and assigns tasks to Engineering Technicians I and II.
- Integrates design information (traffic, soils, drainage, etc.) provided by the Project Engineer to create functional construction plans.
- Develops and maintains technical manual on an ongoing basis. Coordinates the development of design standards and procedures.

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- Required to report to work at the appointed hour, as scheduled, and to work the entire assigned schedule.

SECONDARY FUNCTIONS

- Communicates with the public and public officials on a limited basis regarding highway and other public works projects.
- Performs other duties as assigned.

CUSTOMER SERVICE

This is a front-line position for providing excellent customer service to members of the general public and other County employees. Personal contact occurs with other employees of the unit, employees of other departments in the County, citizens, and customers of the department. Service is provided in person and by phone contact.

SUPERVISION

Officially designated as a lead worker over one or more employees. Provides continual work guidance, review of work product, and resolution of work problems. May provide some input regarding job performance.

EDUCATION, EXPERIENCE, LICENSES, CERTIFICATIONS

Education and Experience.

Associate degree in civil engineering technology; or equivalent from a two-year college or technical school; and three years related experience and/or training; or equivalent combination of education and experience.

Licenses.

Must maintain a valid Florida Drivers License.

Certifications.

AutoCad Level II Preferred.

JOB SKILLS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements are representative of the required knowledge, skills, and abilities.

Language Skills

- Ability to read and interpret documents such as safety rules, operating and maintenance

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instructions, and procedural manuals.

- Ability to write routine reports and correspondence.
- Ability to speak effectively before groups of customers or employees of organization.

Mathematical Skills

- Ability to work with mathematical concepts such as fundamentals of plane and solid geometry and trigonometry.
- Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

Problem Solving Ability

- Ability to define problems, collect data, establish facts, and draw valid conclusions.
- Ability to interpret an extensive variety of technical instructions in diagram form and deal with several abstract and concrete variables.
- Assists in development of policy, plans, programs or procedures.
- Functions independently as an expert in matters of specialized code, rules, policy, analysis, or complex technical systems.

Specialized Skills and Abilities

- Advanced knowledge of Computer Aided Design (CAD) software and ability to provide training to other technicians.
- Highly knowledgeable in engineering, surveying, and drafting principles and practices.
- Ability to read and interpret aerial maps, legal descriptions, and courthouse records.
- Ability to deal tactfully and effectively with the public, public officials, contractors, etc.
- Ability to analyze data and use land survey information to produce plans and drawings.
- Ability to plan and organize work and meet multiple deadlines.
- Ability to follow complex written and oral instructions.
- Ability to operate presentation media.

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- Ability to remain calm in stressful situations.
- Ability to take a teamwork approach to the job by cooperating with others, offering to help others when needed, and considering larger organization or team goals rather than individual concerns. Includes the ability to build a constructive team spirit where team members are committed to the goals and objectives of the team.

Machines and Equipment

To accomplish the tasks of this position, the employee will be required to operate all types of drafting equipment, a computer, calculator, telephone, and hand-held radio, blueprinting equipment, digital camera, x-acto knife, plotter, scanner, and digital measuring instrument. This employee will also be required to drive an automobile and pick-up truck.

PHYSICAL DEMANDS

While performing the duties of this job, the employee will occasionally be required to stand, walk, climb or balance, and stoop, kneel, crouch, or crawl, and lift up to twenty-five pounds; and will frequently be required to sit, use hands to finger, handle, or feel, reach with hands and arms, and talk or hear. Special vision requirements are close, distance, color, and peripheral vision, depth perception, and the ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. While performing the duties of this job, the employee will occasionally be exposed to moving mechanical parts, fumes or airborne particles, toxic or caustic chemicals, and outdoor weather conditions. The noise level for this environment is moderate.

Established: 10/99

Pay grade: 14

Job Description Number: 3031

Category: 3

Status: NE

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