

DESIGN ENGINEER

MAJOR FUNCTION

This is a technical position related to the engineering functions required by Marion County involving those areas of assigned function. Such areas may include, but are not necessarily limited to, drainage, stormwater, flood control, design, utilities, traffic, transportation, and roads.

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.

- Performs field review and inspection of assigned projects and improvement plans submitted to the County for approval.
- Coordinates and assists in the preparation of contract documents, permitting, agreements, and related documentation.
- Assists, participates, and coordinates public meetings, contractor meeting, consultant meetings, and other meetings related to functional area and projects under charge.
- Supervises the construction of assigned projects and assists engineering staff in the overall design and planning of County engineering projects.
- Performs preliminary and final designs on engineering projects and other public works projects under the direction of a registered Professional Engineer.
- Directs engineering and other skilled technicians according to functional area of assignment, e.g., design, surveying, geometric, traffic, soils, and drainage.
- Receives and evaluates citizen and business complaints; coordinates the correction of such problems when within assigned area or forwards to appropriate staff.
- Conducts field reviews of complaints and inquiries to analyze areas in question and provide information related to necessary corrective measures.
- Conducts field reviews of completed projects to ensure adherence to established standards, plans, specifications, and related requirements.
- Prepares regular status reports on progress of projects. Maintains documentation related to other aspects of the work, such as citizen and business inquiries and complaints.
- Conducts research and investigation related to assigned projects and functional area of responsibility. Documents findings and forwards reports/recommendations to proper staff.

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SECONDARY FUNCTIONS

- 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 or by phone contact.

SUPERVISION

Responsible for directly and regularly supervising work of a relatively small number of employees (two or more), with no indirect supervision. Includes assigning, directing, evaluating, and reviewing work of subordinate employees. Responsibilities include providing on-the-job training; evaluating job performance; recommending selection of new staff members, promotions, status changes, and discipline; and planning, scheduling, and coordinating work operations.

EDUCATION, EXPERIENCE, LICENSES, CERTIFICATIONS

Education and Experience.

Graduation from an accredited college or university with a degree in civil engineering or related field. Four years experience in roadway design, drainage design, land development, water management permitting, or other associated engineering activities, two of which will have been in a supervisory capacity.

Licenses.

Valid Florida Driver License.

Certifications.

Registrations as a Professional Engineer (PE) in the State of Florida or ability to obtain such within 6 months of assignment.

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, analyze, and interpret common scientific and technical journals, financial reports, and legal documents.

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- Ability to respond to common inquiries or complaints from customers, regulatory agencies, or members of the business community.
- Ability to write speeches and articles for publication that conform to prescribed style and format.
- Ability to read, analyze, and interpret highly complex documents. Ability to respond effectively to the highly sensitive inquiries or complaints.
- Ability to make effective and persuasive speeches and presentations on controversial or complex topics to top management, public groups, and/or boards.

Mathematical Skills

- Ability to comprehend and apply principles of advanced calculus, modern algebra, and advanced statistical theory.
- Ability to work with concepts such as limits, rings, quadratic and differential equations, and proofs of theorems.

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 mathematical or diagram form and deal with several abstract and concrete variables.
- Develops plans and specifications programs continually. Functions independently as an expert in matters of specialized code, rules, policy, analyses, or complex technical systems.

Specialized Skills and Abilities

- Knowledge of urban and rural engineering standards and specifications for design and construction.
- Ability to supervise construction of engineering projects, systems and related facilities.
- Knowledge of permitting requirements of other regulatory agencies; knowledge of overall planning for county-wide engineering requirements.
- Strong organizational skills. Ability to analyze and prioritize data. Ability to meet multiple deadlines.
- Ability to evaluate engineering problems in the field, determine whether or not there are feasible solutions and, if so, then select and implement the most cost effective solution.
- Thorough knowledge of Marion County codes.

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- Ability to deal courteously and effectively with the public.
- 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.

This employee will be required to operate a computer, blueprint machine, calculator, telephone, fax machine, copy machine, and other general office equipment, as well as various field equipment such as basic survey instruments, hand augers, and other tools of the trade in the completion of the tasks of the position.

PHYSICAL DEMANDS

While performing the duties of this job, the employee will occasionally be required to walk, climb, balance, stoop, kneel, crouch or crawl, and lift up to fifty pounds; will regularly be required to stand, sit and lift up to twenty-five pounds; and will frequently be required to use hands to finger, handle, or feel, reach with hands and arms, sit, talk or hear, and taste or smell. 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 wet or humid conditions, work near moving mechanical parts, work in high, precarious places, and vibration. The employee will be regularly exposed to outdoor weather conditions. The noise level for this environment is moderate.

Established: 10/99

Pay Grade: 27

Job Description Number: 2091

Category: 2

Status: E

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