

CITY OF MARGATE, FLORIDA JOB DESCRIPTION

JOB TITLE: ASSOCIATE ENGINEER (Job Code 50).

GENERAL STATEMENT OF JOB

Under the general direction of the Senior Engineer in the Department of Environmental and Engineering Services (DEES), performs complex engineering work in support of municipal planning, land development, construction and operations.

ESSENTIAL FUNCTIONS

The following duties and functions, as outlined herein, are intended to be representative of the type of tasks performed within this position. They are not listed in any order of importance. The omission of specific statements of the duties or functions does not exclude them from the position if the work is similar, related, or a logical assignment for this description. Other duties may be required and assigned.

Consults with division managers, director and other officials as needed to review activities, provide recommendations, resolve problems, and receive advice/direction.

Assists in reviewing, permitting, inspection of new construction, assists in reviewing plans for utility improvement projects; manages construction projects; and prepares project construction schedules.

Coordinates procurement of equipment and contracted services; researches new products, systems, and materials; obtains pricing from contractors and suppliers; prepares specifications for materials, equipment, and services; writes, prepares, and reviews bid documents/specifications; recommends award of contracts; ensures contract compliance for all contracts and specifications.

Compiles or monitors various administrative and statistical data pertaining to departmental operations; performs research as needed; makes applicable calculations; analyzes data and identifies trends; prepares or generates reports; maintains records.

Prepares or completes various forms, reports, correspondence, treatment plant operational reports, regulatory reports, change orders, specifications, permit applications, budget documents, agenda items, or other documents.

Receives various forms, reports, correspondence, requisitions, purchase orders, invoices, budget reports, equipment submittals, payroll sheets, vehicle maintenance requests, accident reports, operations reports, regulatory reports, production reports, quality analysis reports, engineering reports, contract documents, construction documents, engineering plans, electrical drawings, blueprints, specifications, master plans, comprehensive plans, union agreements, codes, regulations, standards, manuals, maps, reference materials, or other documentation; reviews, completes, processes, forwards or retains as appropriate.

Responds to complaints and questions related to department operations; provides information, researches problems, and initiates problem resolution.

Assists in design, permitting and construction of municipal infrastructure, water, wastewater, reuse and storm water facilities.

Utilizes computer models to develop simulations and scenarios for operational optimization and project design.

Works with the senior staff and the regulatory agencies to develop and obtain required permits.

Maintains a current knowledge of applicable laws/regulations; maintains an awareness of new trends and advances in the profession; reads professional literature; maintains professional affiliations; attends workshops and training sessions as appropriate.

Performs other related duties as required.

MINIMUM TRAINING AND EXPERIENCE

A Bachelor's degree from an accredited college or university with major coursework in civil/environmental engineering or a closely related field. Current registration as an Engineer Intern (EIT) in the State of Florida is preferred.

Two (2) years of verifiable work experience in civil engineering, particularly in the principles, standard methods and practices of municipal engineering, operation and maintenance of water supply systems, wastewater collection, transmission, and/or treatment/reuse/disposal systems preferred. A Master's degree in engineering may be substituted for one (1) year of experience.

MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS

Physical Requirements: Requires the ability to bend, stoop, twist, climb ladders, walk over uneven, slippery surfaces, and lift and carry objects of light to moderate rate (5 to 15 pounds). Ability to sit for extended periods of time while working with computers or at work stations.

Data Conception: Requires the ability to compare and/or judge the readily observable, functional, or composite characteristics (whether similar to or divergent from obvious standards) of data, people, or things.

Interpersonal Communication: Requires the ability to speak and/or signal people to convey or exchange information. Includes giving and receiving instructions, assignments and/or directions.

Language Ability: Requires the ability to read a variety of technical materials relevant to engineering and municipality regulatory practices that range from moderate to complex levels. Requires the ability to read various discipline languages, i.e., engineering, mechanical, electrical.

Intelligence: Requires the ability to analyze and interpret a variety of technical information with abstract and/or concrete variables; identify problems, recognize symptoms, causes and alternative solutions; interpret professional periodicals and journals, technical procedures, and government regulations; research, compile and summarize a variety of informational and statistical data and materials; interpret complicated policies, procedures and protocols; apply mathematical concepts such as ratios, proportions, probability factors and statistical inference; and draw conclusions from financial and numerical materials.

Verbal Aptitude: Must communicate clearly, efficiently and effectively in standard English. Must speak with poise, confidence, and voice control.

Numerical Aptitude: Requires the ability to add, subtract, multiply and divide; interpret graphs; calculate decimals and percentages; utilize algebraic principles and descriptive statistics; utilize principles of integral and differential calculus.

Form/Spatial Aptitude: Requires the ability to inspect items for proper length, width and shape, and visually read various information.

Motor Coordination: Requires the ability to coordinate hands and eyes accurately for inspection tasks and report preparation.

Manual Dexterity: Must have minimal levels of eye/hand/foot coordination.

Color Discrimination: Requires the ability to differentiate between colors and shades of colors.

Sensory Requirements: Must have the ability to perceive and discriminate sounds and visual cues or signals, and have a sense of smell.

Interpersonal Temperament: Requires the ability to deal with people from a variety of departments and backgrounds in both giving and receiving instructions. Must be able to perform under stress of frequent deadlines.

Physical Communication: Requires the ability to talk and hear: (talking: expressing or exchanging information by means of spoken words; hearing: perceiving nature of sounds by ear).

Environmental Requirements: Must have the ability to work with and around chemicals; ability to work outdoors in all weather conditions; and ability and willingness to enter and work in confined spaces on an emergency basis.

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of utility engineering and construction principles and practices as applied to the planning, design, construction, operation, and maintenance of water and wastewater treatment facilities.

Knowledge and understanding of rules, regulations, and procedures concerning operations and maintenance of utilities systems.

Knowledge of regulatory permitting, reporting and operating requirements for utilities systems.

Knowledge of designing standards for utility infrastructure.

Knowledge of the capabilities and results of AutoCAD plans and Profile Drawings, Geographic Information Systems (GIS), and hydraulic modeling.

Ability to use hydraulic and hydrology software models.

Ability to articulate and convey presentations using multiple platforms, in a clear and concise manner.

Ability to prepare Requests for Proposals and bid specifications, and evaluate proposals.

Ability to create clear and comprehensive reports.

Ability to read and understand plans and specifications and determine engineering compliance, as specified in City, state, and local codes, ordinances, resolutions, regulations, standards, specifications, policies and procedures.

Ability to conduct field inspections for engineering compliance as specified in City, state, and local codes, ordinances, resolutions, regulations, standards, specifications, policies and procedures.

EQUAL OPPORTUNITY EMPLOYER

The City of Margate, Florida, is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act (42 U.S.C. 12101 et. seq.), the City of Margate will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer. The physical demands described are representative of those that must be met by an employee to successfully perform the essential functions of this job.

I have read and acknowledge receipt of this Job description.

Employee Name and Signature

Date