

## CITY OF MARGATE, FLORIDA JOB DESCRIPTION

**JOB TITLE: CADD TECHNICIAN/UTILITY LOCATOR (Job Code 315).**

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### GENERAL STATEMENT OF JOB

Under the supervision of the Director of the Department of Environmental and Engineering Services (DEES) or the Director's designee, performs skilled technical work in Computer Aided Design and Drafting (CADD) and performs utility locates for all City maintained utility systems. Work is reviewed through observation for accuracy and compliance with the desired results.

### 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.**

Prepares preliminary and final drawings and plans for construction projects using principles of civil engineering design and computer drawing techniques as required; performs routine utility, road, and site layout work; sets preliminary grades, slopes, and invert elevations; creates profiles and cross-section views; drafts details; tabulates quantities and cost estimates; calculates cut and fill; drafts property boundaries and easements from legal descriptions.

Develops presentation drawings and graphics for projects through use of computer software; presentation drawing and graphics include, but are not limited to, maps, renderings, slides, charts, and graphs.

Prepares as-built drawings based on construction information collected personally or provided by others.

Plots, prints, and reproduces drawings and maps.

Provides drafting support for City Geographic Information System (GIS) efforts and GIS personnel.

Organizes and maintains Department design, survey plats, as-builts, and other drawings, or related records, in both hardcopy and electronic format.

Responds to requests for drafting and utility information received from contractors, developers, engineers, and the public.

Reviews project drawings to identify potential conflicts with existing utilities.

Monitors and prioritizes incoming utility locate requests.

Performs utility locates for all City maintained utility systems (water, wastewater, reclaimed water, storm drainage, fiber optic, and associated electrical lines).

Performs work of a specialized nature involving interpretation of utility plans and operation of electronic utility locating equipment (ground penetrating radar, cable/wire tracers, toners, etc.).

Performs related work as required.

## MINIMUM TRAINING AND EXPERIENCE

Associate's degree in Engineering Technology, or closely related field; supplemented by vocational training in computer aided design and drafting; three (3) years of work experience in sub-professional engineering or architectural drafting including two (2) years of work experience in computer aided design and drafting; or an equivalent combination of education, training, and experience.

## MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS

Physical Requirements: Requires the ability to bend, stoop, twist, walk over uneven, slippery surfaces, and lift and carry objects of moderate to heavy weight (20 to 50 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 receiving instructions, assignments and/or directions.

Language Ability: Requires the ability to read various discipline languages, i.e., engineering, mechanical, electrical.

Intelligence: Requires the ability to apply principals and methods of engineering to engineering construction plans.

Verbal Aptitude: Must communicate efficiently and effectively in standard English. Must speak with poise, confidence and voice control. Must communicate in professional engineering terminology as needed.

Numerical Aptitude: Requires the ability to add, subtract, multiply and divide; interpret graphs; calculate decimals and percentages; utilize algebraic, geometric, and trigonometric principles.

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 drafting tasks and in handling materials and instruments.

Manual Dexterity: Requires the ability to utilize a variety of modern office equipment. Must have minimal levels of eye/hand/foot coordination.

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

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

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

Environmental Requirements: Tasks require frequent exposure to adverse environmental conditions.

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

Knowledge of basic construction terminology and basic concepts of construction of municipal projects.

Knowledge of surveying principles.

Knowledge of standard terminology, techniques, and practices of drafting.

Knowledge of various drafting and reproduction equipment, media, and computer aided drafting and design equipment.

Knowledge of mathematics including algebra, trigonometry, and plane geometry.

Knowledge of the standard practices used for locating utilities lines.

Knowledge of and the ability to operate state-of-the-art utility location equipment.

Ability to prepare drawings neatly, accurately, and expeditiously.

Ability to read and comprehend architectural and engineering drawings, maps, and legal descriptions.

Ability to establish and maintain effective working relationships with associates, municipal officials, representatives of other agencies, contractors, developers, and the general public.

## **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

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Date