

**City of Dunedin, Florida**  
Class Description

**JOB TITLE: CAD/GIS System Administrator**  
Public Works & Utilities Department  
Engineering Section

**GENERAL STATEMENT OF JOB**

Under general supervision, manages the City's GIS system and information flow inside and outside the organization. Works with County agencies, software providers, internal users and the general public to provide access to wide variety of information and mapping. Provides para-professional engineering design and drafting for various City projects. Provides information and assistance to contractors, consultants, developers and the public regarding division projects and activities. Performs related work as directed. Reports to the City Engineer.

**SPECIFIC DUTIES AND RESPONSIBILITIES**

**ESSENTIAL JOB FUNCTIONS**

***The duties recorded below are representative of the duties of the class and are not intended to cover all the duties performed by incumbents(s) of any particular position.***

Drafts and maintains drawings, using AutoCAD software; Drawings include City utilities and City atlas files. Works with City staff or contractors to prepare and or design civil engineering projects using City, F.D.O.T, and ADA standards.

Administers and maintains the enterprise GIS Solution; integrates GIS database, SQL dataset, AutoCAD, and EGIS dataset.

Prepares electrical, mechanical, and architectural plans, as well as plans streetscapes, city utility design projects, concept drawings, and specialty maps, etc.

Creates and maintains all City standards that are used in AutoCAD, along with all customized functions that better suit the needs of the users. Creates and maintains block library, layers Library, line types, menus and VBA modules using the following Autodesk languages: AutoLISP, script, menu, VBA and as needed a few macros.

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Acts as the contact for all Autodesk related needs, as well as yearly subscriptions; installs and configures Autodesk products, along with applying all City Standard files in the AutoCAD environment; and assists coworkers with complicated AutoCAD functionality solutions.

Creates and maintains methods of interlacing GIS information within AutoCAD based drawings with proper placement and standards; interlaces .net web applications to work within the Autodesk environment as needed.

Installs and configures the ESRI for AutoCAD tools for the use of daily public works designs and other engineering CAD related functions will be imperative. Cross talk between software's will be a must using all resources available for the City.

Installs configure ESRI for AutoCAD tools.

Completes conversions as required to maintain all City standards and functionality; tests and reconfigures current City Standard files to new AutoCAD versions as needed; and deploys new work flow to other AutoCAD computers and maintain as needed.

Performs functions in Microsoft Visual Studio Express to write and maintain custom web applications; may use other .net languages such as asp, asp.net, aspx, vb, vb.net, php, script, javascripts and html.

Acts as systems administrator for the City's GIS website and servers, maintaining user access rights.

Configures existing web applications, server connections or work flows as needed for GIS capabilities.

Maintains AutoCAD server and engineering large format scanning computer, along with the Administration of users and rights.

Obtains, cleans, and merges data from outside sources to be used with existing City data.

Maintains documentation of the work flows and/or dataset fields for future expansions or major software changes.

Writes or assists in writing procedures and work flows for City departments that have data dependent upon the land parcel dataset.

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### **ADDITIONAL JOB FUNCTIONS**

Performs routine office work as required, including but not limited to attending meetings, answering the telephone, typing reports and correspondence, copying and filing documents, faxing information, etc.

Performs related duties as required.

### **MINIMUM TRAINING AND EXPERIENCE**

Requires an Associate's degree in engineering or architectural design with six years of experience in project design and drafting.

An equivalent combination of training and experience which provides the required skills, knowledge and abilities may be considered.

### **SPECIAL REQUIREMENTS**

GISP certification.

### **PERFORMANCE INDICATORS**

**Knowledge of Job:** Has knowledge of the methods, procedures and policies of the City of Dunedin as they pertain to the performance of essential duties of the Cad/GIS System Administrator. Is knowledgeable in the laws, ordinances, standards and regulations pertaining to the specific duties and responsibilities of the position. Has knowledge of the principles, theories, practices and methodologies of engineering, drafting and other fields applicable to the requirements of the position. Understands specific City and county ordinances as they apply to the duties and responsibilities of the position. Is able to make sound, educated decisions. Is able to react professionally at all times, dealing with sensitive situations with tact and diplomacy. Clearly understands any occupational hazards and adheres to all safety precautions inherent in performing the essential functions of the work. Has the ability to speak and understand the English language.

### **PERFORMANCE APTITUDES**

**Data Utilization:** Requires the ability to evaluate, audit, deduce and/or assess

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data and/or information using established criteria. Includes exercising discretion in determining actual or probable consequences, and in referencing such evaluation to identify and select alternatives. Is able to assemble and analyze information and make written reports and records in a concise, clear and effective manner.

**Human Interaction:** Requires the ability to provide guidance, assistance and/or interpretation to others on how to apply procedures and standards to specific situations. Is able to coordinate department activities with other City departments, consultants, contractors and government/private agencies in order to accomplish goals and complete projects. Is able to take the initiative to complete the duties of the position without the need of direct supervision. Knows how to maintain effective relationships with personnel of other departments, professionals and members of the public through contact and cooperation.

**Equipment, Machinery, Tools and Materials Utilization:** Has knowledge of and skill in the use of computer-aided design technology. Has knowledge of and skill in the use of modern office equipment. Requires the ability to use, operate and/or handle equipment such as a computer, copier, technical calculator, telephone, engineer's scale, surveying instruments, drafting instruments.

**Verbal Aptitude:** Requires the ability to use a wide variety of reference, descriptive, advisory and/or design data and information. Has knowledge of proper English usage, grammar, vocabulary and spelling.

**Mathematical Aptitude:** Has the mathematical ability to handle required calculations. Requires the ability to apply advanced algebraic I calculus concepts and algorithmic/ modeling techniques in areas such as engineering design; to use principles of probability and statistical inference.

**Functional Reasoning:** Requires the ability to apply principles of logical or synthesis functions. Ability to exercise independent judgment to apply facts and principles for developing approaches and techniques to problem resolution. Has the ability to assimilate both technical and theoretical concepts and apply the knowledge in creative and intuitive ways to solve unique problems. Is able to read and interpret complex materials pertaining to the responsibilities of the job.

**Situational Reasoning:** Requires the ability to exercise the judgment, decisiveness and creativity required in situations involving the evaluation of information against measurable or verifiable criteria. Has the ability to plan, organize and prioritize daily assignments and work activities.

**ADA COMPLIANCE**

**Physical Ability:** Field work requires the ability to exert moderate, though not constant physical effort, typically involving some combination of climbing, balancing, stooping, kneeling, crouching and crawling, and which may involve some lifting, carrying, pushing and/or pulling of objects and materials of moderate weight (12-20 pounds). Office tasks involve the ability to exert a small amount of physical effort in sedentary to light work involving moving from one area of the office to another; some positions require sufficient hand/eye coordination to perform semi-skilled repetitive movements, such as data entry, drafting, filing and/or the use of office equipment or supplies.

**Sensory Requirements:** Some tasks require visual and auditory perception and discrimination as well as oral communications ability.

**Environmental Factors:** Office tasks are regularly performed without exposure to adverse environmental conditions; field work may require exposure to adverse weather conditions, temperature extremes, wetness/humidity, machinery and traffic hazards, smoke/dust/pollen, noise extremes. Tasks may require extensive VDT exposure.

*The City of Dunedin is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the employer will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer.*

  
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Public Works & Utilities Director

11/18/15  
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Date