

City of Dunedin, Florida
Class Description

JOB TITLE: CAD/GIS Database Administrator
Utilities Department
Engineering Division

GENERAL STATEMENT OF JOB

Under general supervision, this position is responsible for managing, maintaining, and enhancing the Geographic Information System (GIS) and database management systems to support various engineering projects and municipal operations. The incumbent will collaborate with other departments and organizations to ensure efficient data utilization and contribute to the overall technological advancement of the city. Works with County agencies, software providers, internal users and the general public to provide access to wide variety of information and mapping. Provides information and assistance to contractors, consultants, developers and the public regarding division projects and activities. Performs related work as directed. Reports to the Assistant Director of Utilities/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.

Install, upgrade, configure and maintain Autodesk Products, Esri and Web applications SQL servers, ESRI ArcGIS Enterprise, ArcGIS Online, and other ESRI applications.

Manage users, groups, security and procedures for all Esri ArcGIS Enterprise, ArcGIS Online, SQL Database and Custom based Web applications.

Build and support mapping applications, tools, dashboards and templates and other GIS services for public use, the City's enterprise software data or staff resource center, and field data collections such as asset GPS collections

Develop and maintain Spatial (feature classes and domains) and Non-Spatial datasets (custom based Web applications).

Train Coworkers on GIS workflows, procedures, layer symbology, Maps, Layouts

and theming to City Standards.

Manage, construct, update and maintains spatial data within the GIS system that are required by a variety of departments.

Develop simple to complex Procedures, Triggers, Database Views, SQL, TSQL scripting and job automations.

Data mining, scrubbing, conversions, Integrations and/or Import and export data to or from the City's enterprise software system, 3rd party software's or other datasets

Develop and maintain web applications that can be used to: create, update or retire records, these could be used or from spatial or non-spatial datasets developed from the SQL server. Web applications could include multiple data or table relations to achieve desired results within a work flow that could be integrated with GIS or standalone as needed.

Facilitate data sharing, integration and automation between CAD and GIS, including moving from a CAD based spatial data editing to ArcGIS editing infrastructure.

Meets with consultants/vendors/contractors for GIS matters as needed.

Documentation of the workflows and/or datasets.

Monitor and maintain the SQL servers, EsriArcGIS Enterprise, ArcGIS Online day-to-day operations.

Ability to work collaboratively in a team environment.

Strong problem-solving skills with an attention to detail.

Works with staff and departments to understand needs.

Ability and willingness to multitask or change direction as needed.

Keeps current with changing technology.

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 computer science, computer information systems, GIS/geography or a related field, 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 is preferred.

This is a Category B position for the purposes of Emergency Management. Employees in this category may be assigned to work a variety of schedules, including compulsory work periods in special, emergency, and/or disaster situations. Category B employees may be required to stay on premises during a declared state of emergency, or as otherwise mandated.

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 Database 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.

Strong Proficiency in ESRI ArcGIS Server and ArcGIS Online administration and configuration. Knowledge of ArcGIS Enterprise and related applications such as Portal for ArcGIS, ArcPro, ArcMap and Esri Fieldmaps. Understanding of GIS data management, analysis, and visualization. Proficiency and understanding of GIS and non-Spatial asset management. Working knowledge of Web Development software such as Visual Studio. Working knowledge of Autodesk Products including AutoCAD for ArcGIS Plugin. Understanding and experience with database design, database security, database monitoring and database tuning. Sound knowledge of

Programming/scripting skills (SQL, TSQL, Python, ArcPy, Arcade, VBA, VB Script, VB.net, HTML, Javascript, AutoLISP, and VisualLISP).

PERFORMANCE APTITUDES

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

Janice "Nan" Bennett

Utilities Director

27 NOV 2023

Date

