Class Description

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JOB TITLE: GIS Technician
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 Computer Aided Design (CAD) systems to support various engineering & mapping projects for municipal operations. The incumbent will perform technical engineering and computer work related to drafting tasks and developing & maintaining databases utilizing GIS. Works with internal users, other government agencies, software providers, and the general public to provide access to wide variety of information and mapping. 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.

Develop and update projects, plats, maps, and atlases using GIS and/or CADD software.

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

Translate, decode, and analyze data; enter and maintain the GIS database to ensure it meets all applicable standards.

Draft detailed construction drawings, topographical profiles and related maps of City projects and infrastructure. Perform computations to convert field survey data to computer form and language.

Install, upgrade, configure and maintain and Esri and Autodesk products and applications such as AutoCad 3D, ArcGIS Enterprise, ArcGIS Online, and other ESRI applications.

Manage users, groups, security and procedures for all Esri, Autodesk and and custom web based applications.

Develop and update 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

Train coworkers on GIS workflows, procedures, layer symbology, maps, layouts and theming to City standards.

Develop simple to complex procedures, triggers, database views, and job automations.

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

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

Documentation of the workflows and/or datasets.

Monitor and maintain the Autodesk, ArcGIS 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 one year 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 as they pertain to the performance of essential duties of the GIS Technician. Is knowledgeable in the laws, ordinances, standards and regulations pertaining to the specific duties and responsibilities of the position. Has knowledge of principles and practices of engineering drafting and civil engineering related to public works. Mathematics as applied to sub-professional engineering and survey computations. Cartographic techniques, computers and peripherals. Survey and construction methods and practices. Understands specific City policies and protocols. 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. 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 Autodesk Products including

AutoCAD for ArcGIS Plugin. Understanding and experience with database design, database security, database monitoring and database tuning.

PERFORMANCE APTITUDES

<u>Data Utilization</u>: 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.

<u>Human Interaction</u>: 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.

<u>Verbal Aptitude</u>: 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. Has the ability to speak and understand the English language.

<u>Mathematical Aptitude</u>: Has the mathematical ability to handle required calculations. Requires the ability to apply geometric and trigonometric computations as related to survey, design and mapping applications.

<u>Functional Reasoning</u>: 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.

<u>Situational Reasoning</u>: 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.

<u>Sensory Requirements</u>: Some tasks require visual and auditory perception and discrimination as well as oral communications ability.

<u>Environmental Factors</u>: 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 sedentary work and video display terminal (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	27 DEC 2024
Utilities Director	Date