

## Job Posting GIS Technician

Department: Engineering	Pay Grade:17
Report to: City Engineer	Hiring Salary Range: \$35,631 - \$53,447
FLSA Status: Non-Exempt	Deadline to Apply: Open Until Filled

### General Statement of Duties

Performs responsible technical mapping and database up-keep to maintain the utility GIS land records and produce varied land maps.

### Distinguishing Features of the Class

An employee in this class is responsible for the technical design of land maps and maintenance of the utility GIS database. Work includes entering data to update regional map database in the GIS system; digitizing new orthophoto updates; developing new map products; and assisting the public and local governments with locating information and maps. Independent judgment and initiative are exercised within established system structure and standards. Work involves public contact and requires tact and courtesy, and teamwork to accomplish the duties. Accuracy and attention to detail in entering data is critical in performing the work. Duties require working with hardware and software configurations; adding layers of information to system; and coordination of GIS data and applications with other departments. Work is performed under the supervision of the City Engineer. Work is reviewed by observation, review of products produced, and feedback from the public.

### Duties and Responsibilities

#### Essential Duties and Tasks

- Gathers, prioritizes, digitizes codes, enters, and manages spatial data into the GIS system.
- Develops procedures, processes, and applications to access, operate, and control the GIS; develops written instructions for its internal use.
- Maintains and updates geodatabase structure of GIS including database design, schema, domains, and data types of GIS data.
- Correcting GIS data by updating and correcting attribute and positional accuracy of spatial data features.
- Maintains and reproduces maps from the system.
- Makes notations, changes, diagrams, and sketches to update and maintain data bases and maps.
- Amends maps to reconcile with surveys and deed descriptions, adding road rights-of-way, dimensions of parcels, easements, centroid and polygon codes, etc.
- Verifies and edits the information entered into the system; verifying information with tax records and deeds.
- Designs and creates maps; creates layers of information; searches information as requested by City, economic developers, and property owners; enters coding required to create maps.
- Digitizes information; enters numbers and codes and defines cross-hairs and coordinates; registers map in GIS and to the digital table; follows menu to enter codes; verifies maps once completed on the table; tags the map; creates files for each update; etc.
- Adapts and performs spatial analysis to resolve complex GIS mapping problems and develops solutions.
- Coordinates and researches the purchasing of GIS software and hardware to identify needs for upgrades, improvement, and periodic replacement of equipment.
- Performs related duties as required.

## Recruitment and Selection Guidelines

### Knowledges, Skills, and Abilities

- Considerable knowledge of associated software and hardware which import or export into the databases, including digitizing, editing, plotting, script writing, and mapping.
- Considerable knowledge of personal computers, computer work stations, GPS equipment, and applications relating to GIS.
- Considerable knowledge in analyzing and diagnosing problems associated with an automated GIS environment.
- Considerable knowledge of design and operations as related to GIS and their specialized hardware and software applications.
- Considerable knowledge of real estate laws, deed interpretation, and title searches.
- General knowledge of the NC Machinery Act as it relates to real property listing and assessing.
- General knowledge of related operational utilities, databases, mapping, and analytical system requirements.
- Working knowledge of drafting, cartography, and related terminology.
- Working knowledge of geographical areas and subdivisions in the City.
- Ability to develop and maintain effective working relationships with departments, property owners, users, and employees using the system.
- Ability to read, compare, and interpret property maps, surveys, aerial photographs, and records accurately.
- Ability to deal tactfully and courteously with the public while handling requests for maps and map overlays, etc.
- Skill in computer-aided mapping functions.
- Ability to establish and maintain effective working relationships with peers, supervisors, employees in other departments, and the general public.
- Ability to communicate effectively in oral and written forms.

### Physical Requirements

Must be able to physically perform the basic life operational functions of pushing, pulling, fingering, grasping, talking, hearing, and repetitive motions. Must be able to perform sedentary work and exert up to 10 pounds of force occasionally to move objects. Must possess the visual acuity to operate a computer terminal, to use measuring devices to inspect small parts, to prepare and analyze data and figures, and to determine neatness, accuracy and thoroughness of completed work.

### Desirable Education and Experience

Graduation from a community college with an Associate degree in Drafting, or related field with specialized mapping courses and some related GIS mapping experience; or an equivalent combination of education and experience