

Job Description

Position Title: GIS Specialist

Department: Information Technology

Reports to: IT Director

FLSA Status: Non-exempt

Status: Regular Full-Time

Grade: VI

Hours of Work: Primarily regular dayshift office hours

Statement of Duties

Position is responsible for creating, designing, and implementing systems and data to store and access spatial data sets. The work involves analysis, cartography, and data management, including designing and producing maps for mobile apps, online access, and paper production.

Supervision and Responsibilities

Employee works under the general supervision direction of the Director of Information Technology. Employee plans and carries out regular work in accordance with standard practices and previous training, with considerable responsibility for determining the sequencing and timing of action and substantial independence in planning and organizing work activities, including determining the work methods.

The employee is expected to solve, through experienced judgment, most problems of detail or unusual situations by adapting methods or interpreting instructions to resolve the problem. Instructions for new assignments or special projects usually consist of statements of desired objectives, deadlines, and priorities. Technical and policy problems or changes in procedures are discussed with the supervisor. Work is generally reviewed for technical adequacy, appropriateness of actions or decisions, and conformance with policy or other requirements; the methods used in arriving at the result are not usually reviewed in detail.

Employee does not have any supervisory responsibilities, but may occasionally direct the work of seasonal employees or interns.

Employee occasionally may be required to work outside of normal business hours to perform position duties.

Job Environment

The work consists of the practical application of a variety of concepts, practices and specialized techniques relating to a professional or technical field. Assignments typically involve gathering, analyzing and interpretating information, conditions or unusual circumstances; inspecting, testing or evaluating compliance with established standards or criteria; or determining the methods to accomplish the work. Guidelines include a large body of policies, practices, and precedents that may be complex or conflicting at times. Judgment is used in analyzing specific situations to determine appropriate actions.

Position frequently interacts with all Village departments, consultants and private organization. Interactions requires ordinary courtesy and tact to give and receive information regarding work. Contact with the public may be required on an occasional basis. Other contacts may be with governmental agencies and possibly vendors for the purpose of giving or receiving information and assistance in coordinating work. Contact usually occurs in person, in writing, or on the telephone.

Position Functions

The essential functions or duties listed below are intended only as illustration of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if work is similar, related, or a logical assignment to, or extension of, the position.

- 1. Responsible for building and maintaining GIS databases and utilizing the GIS software to analyze the spatial and non-spatial information in the databases.
- 2. Uses various criteria to examine and analyze information, designing databases, connecting GIS with other technologies, and cooperating with other organizations.
- 3. Using GIS to create maps for internal purposes and participate in the launching and supporting of online and mobile maps for public consumption.
- 4. Oversees all GIS applications for the Village, including interfacing with various departments to maintain, produce and access GIS data as needed.
- 5. Utilize ArcGIS Portal/Online for development of web applications.
- 6. Perform spatial and tabular analysis and create workflow models and analysis.
- 7. Perform maintenance and quality control of the Village's planimetric, base data and utility datasets.
- 8. Collect geospatial data using Global Positioning System (GPS) equipment, drones, and other methods.

- 9. Deploy map services, geoprocessing services, geocoding services, and data services using ArcGIS Portal and ArcGIS Server.
- 10. Write stored procedures, functions, and triggers.
- 11. Create automation with geoprocessing models and scripts for routine tasks.
- 12. Protect the integrity of the Village's GIS data and applications.

Physical and Mental Requirements

Employee works in a moderately loud office and sporadically works outdoors. Employee may occasionally work in dusty and noisy environments and deal with inclement weather. Employee is required to stand, walk, sit, talk, listen, use hands, stoop, kneel, and reach with hands and arms while performing duties. Employee may be required to lift objects up to 20 lbs., and seldom lifts up to 30 lbs. Normal vision is required for position. Equipment operated includes motor vehicle, office machines, mobile devices and personal computers.

Occupational Risk

Duties generally do not present occupational risk. Minor injury could occur, however, through employee failure to properly follow common safety precautions or procedures.

Education and Experience

A candidate for this position should have a bachelor's degree in GIS, Geography, Computer Science, Civil Engineering, Planning, or a related field. At least one year of experience working with and configuring global positioning systems and maintaining a geographic information system is required. Experience with ArcGIS Pro and Online architecture, GIS editing functions, spatial analysis, Python programming, geoprocessing model fundamentals, relational database design and implementation is required. GIS Professional Certification through the GIS Certification Institute (GISCI) preferred.

Required Certifications

- Valid driver's license
- Professional GIS Certificate (or the ability to acquire within 10 months of hire)

Key Knowledge and Skills

Knowledge of:

- ESRI software suite
- Data Analysis, Mapping, Databases
- Legal terminology

Skill in:

- Mathematical concepts and calculations
- ArcGIS Pro and online architecture

- GIS editing and geoprocessing modeling
- Relational database design and implementation
- Knowledge in several programming languages like Python, .Net or JavaScript
- Organization and attention to detail
- Analytical and critical thinking
- Project management

And ability to:

- Read and understand legal descriptions, plats, plans, and drawings
- Establish and maintain courteous and effective working relationships with other employees, public officials, contractors, developers, architects, and general public
- Communicate effectively in person, over the phone, and in writing
- Work under pressure with frequent interruptions