

**CITY OF FONTANA
GIS/CAD ENGINEERING TECHNICIAN**

DEFINITION: Under general supervision, performs technical sub-professional CAD/GIS data input, editing, and maintenance to provide a wide variety of mapping products and services.

CLASS CHARACTERISTICS: This class differs from the Engineering Technician II in that incumbents holding this position will perform GIS duties that includes extraction and interpretation of raw data received from outside agencies such as the County Assessor and preparation of the overlay of that information to the City's base map.

ESSENTIAL FUNCTIONS: The incumbent must have the ability to:

- Interpret information from recorded maps, land grants, deeds and other source documents.
- Transpose data from source documents (recorded maps, deeds, etc.) using coordinate geometry (cogo), digitizing or scanning methods into CAD and GIS files and related databases. Data types include landbase, streets, sewers, storm drains, traffic systems or City annexations.
- Review and verify CAD and GIS digital files and related databases for accuracy and completeness and compliance with established formats.
- Generate and distribute standard and custom products such as reports, maps, diagrams, exhibits and displays using GIS and CAD software and related equipment.
- Determine effective presentation of information and select appropriate cartographic elements, including map projects, scale, color, shading, symbols, and additional elements such as images, graphs, tables and overlays.
- Update routine GIS and CAD data layers and perform quality control checks on mapping products to insure accuracy and consistency with database.

THE ABOVE LIST OF ESSENTIAL FUNCTIONS IS NOT EXHAUSTIVE AND MAY BE SUPPLEMENTED AS NECESSARY BY THE EMPLOYER.

WORKING CONDITIONS: Position requires prolonged sitting, standing, walking, reaching, twisting, turning, kneeling, bending, squatting and stooping in the performance of daily activities. The position also requires grasping, repetitive hand movement and fine coordination in preparing reports using a computer keyboard. Additionally, the position requires far and near vision in reading written reports and other work-related documents. Acute hearing is required when providing telephone and counter assistance.

EXPERIENCE AND TRAINING GUIDELINES: Incumbents must have the knowledge of and a background in:

- Principles and practices of GIS and CAD.
- Functions and procedures of GIS/CAD software.
- Basic principles and practices of civil engineering.

Experience: Two years of experience derived from the technical operation of GIS/CAD systems including the use of the software ARC View and ARC Info; additionally, incumbent must have experience using AutoCAD in a commercial or governmental environment.

Education: Requires completion of the twelfth grade or equivalency, supplemented by college level coursework and significant training or certification in GIS/CAD software products.

Licenses/Certifications: Possession of, and continuously throughout employment, a valid CA Class "C" driver's license/