

**CITY OF POMPANO BEACH  
CLASS DESCRIPTION**

**JOB CODE 608**

**ENGINEERING TECHNICIAN**

**GENERAL**

This is a technical position that works with Geographic Information System (GIS) and assists in the review of plans, designs and field work related to analysis and observation of engineering projects.

Employees in this class process complex line work and basic GIS analyses; prepare and assemble detailed maps; and prepare graphic presentations. Duties include reading and interpreting source documents, such as civil engineering plans, plot maps, legal descriptions, and entering required data into the GIS. Work involves assisting engineers, project managers, the GIS Coordinator, and contractors in the review and correction of engineering plans, and designs for a variety of City projects. Work requires the exercise of independent judgment in planning and carrying out assignments with a professional superior available for assistance in handling complex work situations.

**EXAMPLES OF ESSENTIAL DUTIES**

*The examples as listed are descriptions of essential functions and are not necessarily all inclusive. The omission of an essential function of work does not preclude management from assigning duties not listed herein. Assigned duties, which are essential function of work not listed herein, are permissible if such functions are a logical assignment to the position.*

- Assists with the development and maintains the geographic information systems (GIS) databases, map documents, and online assets, using Environmental Systems Research Institute's (ESRI) GIS software, and AutoCAD software; performs quality control checks to ensure the integrity of the databases.
- Assists creating maps and drawings, such as site plans, floor plans, engineering standards, utility plans, using GIS and AutoCAD software.
- Reviews and analyzes plans and design specifications with professional engineers, contractors, project managers and other interested parties.
- Assists in the revisions and preparation of final plans and designs for a variety of City projects; tabulates quantities and cost estimates.
- Performs GIS software operations such as topological processing and spatial queries.
- Generates and assembles computer maps for specific purposes.
- May collect field data utilizing Global Positioning System (GPS) technology.
- Provides City GIS data, Utility Maps, Right of Way Maps, City Standards, and As Built Drawings for use by consultants, contractors, developers, architects, engineers, planners, land surveyors, utility companies, other government agencies and the general public.
- Conducts mapping research, in the field and office, to resolve conflicting information and to verify the accuracy of data.
- Prepares graphic presentations.
- Performs related work as required.

**KNOWLEDGE, SKILLS AND ABILITIES**

- Knowledge of the standard terminology, techniques, and practices of engineering technology appropriate to the area of assignment.
- Knowledge of Environmental Systems Research Institute's (ESRI) GIS software and Computer Aided Design AutoCAD software.
- Knowledge of the principles, practices, techniques, and instruments of engineering drafting.

- Ability to perform technical computations, analyze complex data, and prepare plans based on findings.
- Ability to read and interpret maps, construction plans, plats and legal descriptions, pertinent to the area of assignment.
- Ability to make independent investigations to verify the accuracy of data.
- Knowledge of computers and operating systems.
- Knowledge of graphic workstations.
- Knowledge of input/output devices such as scanners and large format printers.
- Knowledge of relational databases and basic Structural Query Language (SQL).
- Knowledge of GPS technology and data collection techniques, as required, depending on the area of assignment.
- Ability to work cooperatively with other city departments.
- Ability to serve the public and fellow employees with honesty and integrity in full accord with the letter and spirit of all city ethics and conflicts of interest policies. Ability to establish and maintain effective working relationships with the general public, co-workers, city officials and members of diverse cultural and linguistic backgrounds regardless of race, religion, age, sex, disability or political affiliation.

### **MINIMUM QUALIFICATIONS**

Have successfully graduated from a standard high school or possess a G.E.D. certificate from an accredited issuing agency, preferably supplemented by college-level coursework in Geographic Information Systems, computer science, civil engineering, urban planning, geography, engineering technology or a related field. Possess at least one (2) year of paid work experience using Environmental Systems Research Institute's (ESRI) ArcMap GIS software and AutoCAD software. Completion of two years of coursework at an accredited college or university in one of the fields described above, which included at least six (6) semester hours of GIS coursework, may be substituted for the experience requirement.

*A comparable amount of training and experience may be substituted for the minimum qualifications.*

### **PHYSICAL REQUIREMENTS**

Must have the use of sensory skills in order to effectively communicate and interact with other employees and the public through the use of the telephone and personal contact as nominally defined by the ability to see, read, talk, hear, handle or feel objects and controls. Physical capability to effectively use and operate various items of office related equipment, such as, but not limited to a, personal computer, calculator, copier, and fax machine. Some standing, walking, moving, climbing, carrying, bending, kneeling, crawling, reaching, and handling, pushing, and pulling. Lift to medium lifting.

*Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

### **SPECIAL REQUIREMENTS**

Possession of a valid, appropriate driver's license and an acceptable driving record.

**Rev 10/15**

**Bargaining Unit:** Bargaining

**FLSA:** Non-Exempt

**Classification:** 24/42

**Location:** Engineering

**GERS:** Regular Class