TITLE:	CADD/GIS Technician		GRADE: 14	DATE: 8/5/2020
SERIES:	Information Technology	CODE: 1356	EEO: Technician	FLSA: Non-Exempt

Class Definition:

Under general supervision, performs technical work involving the production of graphics, technical drawings, maps and related materials using computer aided design and drafting (CADD) and Geographic Information System (GIS) technologies. Work involves conferring with higher grade staff to ensure understanding of assignments; collecting data and information needed to prepare, and then produce, drawings, maps and graphics; and digitalizing and entering data into base map databases. Some work may be confidential or sensitive. The work contributes to the accuracy, adequacy, timeliness and other facets of CADD and GIS support of the unit or work program of assignment. Applies knowledge of the principles, methods, practices and equipment of modern design and drafting, GIS layering/mapping and graphic representation. Follows procedures and applies standard solutions to a range of common or recurring problems in design and drafting, GIS layering/mapping and graphic representation. Interacts with people inside and outside the organization to exchange information, coordinate, instruct and guide. Performs other duties, as assigned.

Assignments are made in terms of requirements and anticipated problems. The incumbent plans and carries out the work in conformance with established policies and procedures and accepted design/mapping methods and practices, resolves commonly encountered work problems and deviations by selecting and applying the appropriate guideline(s), and brings uncommon problems to the supervisor's attention for guidance or resolution. The work is expected to be accurate and is subject to check for conformance with guidelines, quality, quantity, timeliness, teamwork, customer service and other factors.

Examples of Important Duties:

- 1. CADD and Graphics
 - Updates and prepares new maps and graphics manually and uses computer aided software (CADD or GIS) in support of departmental staff of planners, architects, engineers, landscape architects, surveyors and cartographers in the development of master plans, functional plans, site plans and project plans.
 - Assists with preparing maps or site plans to scale using legal descriptions, ownership information and other information pertaining to topography, variances, restrictions and closures. Plots angles and closures; draws curvilinear and irregular features.
 - Posts record plats using CADD or GIS software.
 - Prepares displays, graphics and charts with computer software.
 - Generates maps from GIS databases and supports data translations to/from CADD data.

TITLE:	CADD/GIS Technician		GRADE: 14	DATE: 8/5/2020
SERIES:	Information Technology	CODE: 1356	EEO: Technician	FLSA: Non-Exempt

- Collects data/information to be plotted from various records and official documents. Maintains hard copies of products and various files.
- Uses and maintains plotters and related equipment. Supports scanning and indexing of maps, drawings and documents.
- 2. Geographic Information Systems (GIS):
 - Enters record plat information (survey data) from non-digitized and digitized drawings and from raw data into the database. From non-digitized drawings and raw data, enters coordinate and dimension data (property lines) and uses coordinate geometry software (COGO) to generate digital line work from digital plat submittals (CADD generated drawings). Transfers plat data isolating the line work and text that are to be reflected on the property map and imports the data into the correct location.
 - Updates GIS databases by collecting, digitizing, and entering data (property boundaries, political boundaries, infrastructure layers, land use data, planimetric data, topographic data, set-backs) into GIS databases. Collects information from planners, contractors, official documents/records and other sources for incorporation into GIS databases. Identifies source data to be entered into the database. Assists with converting data, if necessary, from non-digital maps and raw data into digital form using specialized software and enters other data elements.
 - Assists with performing GIS digital map maintenance routines (feature coding, attributing, annotating and adding record plat information) using industry standard GIS.
 - Performs (or assists in) quality control checks.
 - Assists with developing and documenting procedures for entering and manipulating GIS data.
 - Uses databases or spreadsheets software to populate GIS databases or to process information from GIS databases.
 - Maintains hard copies of digitized products and records of work performed.
- 3. Other
 - Prepares reports of work status. Uses document management systems, including the Enterprise Asset Management (EAM) system.

TITLE:	CADD/GIS Technician		GRADE: 14	DATE: 8/5/2020
SERIES:	Information Technology	CODE: 1356	EEO: Technician	FLSA: Non-Exempt

- Learns to improve one's knowledge and skills in computerized drafting, graphics and GIS methods and techniques.
- Communicates and interacts effectively with business contacts; establishes and maintains or enhances working relationships, including teamwork, with internal and external contacts. Communicates and coordinates with staff regarding project requirements, expectations, and work status; communicates and coordinates with vendors, suppliers and members of the public to provide property information/data, maps.
- Uses and performs operator level maintenance on large format copiers, plotters, cameras and related equipment. Ensures adequate supplies, recommends procurement of equipment and materials, helps ensure adequate vendor maintenance service and helps arrange for repairs.

Important Worker Characteristics:

A. Knowledge of: (1) principles, methods, practices and equipment of modern design and drafting, GIS layering/mapping and graphic representation including, but not limited to: acquisition, compilation, development and maintenance of map products, graphic design, CADD and GIS hardware and software (e.g., AutoCAD, ArcGIS and Adobe products) to produce artistic renderings, detailed drawings of spaces and layered maps from source data, sketches, prints and verbal instructions, large format plan scanners and copiers, and document management systems; (2) CADD, GIS and cartographic standards for drawings/maps; (3) numerical comprehension and computation sufficient to determine or verify and portray exact elevations, sizes, angles and other design/mapping measurements, and to make other calculations; and (4) Commission organization, policies, and procedures.*

*Typically acquired or fully developed primarily after employment in this job class.

- B. Skill in problem solving to select, organize and logically process relevant information (verbal, numerical or abstract) to solve a problem. Examples include operating a variety of technical equipment and using a range of graphic, projection and mapping techniques to produce graphics, drawings and maps that are neat, accurate, appropriately dimensioned and logically arranged, and applying a variety of mathematical formulae to CADD/GIS problems.
- C. Skill in communication to understand verbal and written information (including facts, descriptions and ideas) and to express such information so that others will understand.
- D. Interpersonal skills to interact effectively with business contacts in a businesslike, customer service-oriented manner; this includes skill in establishing and maintaining effective working relationships and working as a member of a team.

TITLE:	CADD/GIS Technician		GRADE: 14	DATE: 8/5/2020
SERIES:	Information Technology	CODE: 1356	EEO: Technician	FLSA: Non-Exempt

E. Skill in using a computer, modern office suite software (such as MS Office), enterprise and specialized software.

Minimum Qualifications (MQs):

- 1. High school diploma or a Certificate of General Educational Development (GED).
- 2. Two (2) years of experience in computer aided design/drafting or GIS mapping, and graphics work.
- 3. An equivalent combination of education and experience may be substituted, which together total 2 years.

Working Conditions:

Primarily works in office, may also work outdoors at field sites on an incidental basis. Moves, bends and stoops or otherwise positions self, and operates equipment. May lift, carry or otherwise move objects weighing up to (or requiring force of) 20 pounds on own and heavier objects with assistance or mechanical advantage. Is occasionally exposed to inclement weather. May be subject to various job demands such as high volume of work and tight deadlines.