

CITY OF CEDAR RAPIDS POSITION PROFILE	JOB CODE #/TITLE: NB482 Geospatial Data Technician
POSITION #/TITLE: 345 Geospatial Data Technician	Adopted: 12-15
	Revised:

POSITION DESCRIPTION

Dept /Division: Utilities/Water or PW/Sewer	Manager Level: Non-Manager
Salary Plan/Description: NBU/Non-Bargaining Unit	Salary Grade: 07
FLSA Status: Non-Exempt	City Overtime Status: Non-Exempt
Physical Demand Rating: Medium	Work Environment: Controlled
Pre-employment Testing: Drug and health screening after contingent offer.	Position Testing: Strength and agility, typing
Personal Protective Equipment: Eye, Hand, Reflective Vest, Foot, Hearing	

General Statement of Duties

Provides GIS mapping and Computer Aided Drafting (CAD) of utility system features and support for Utilities or Public Works Department projects and infrastructure management programs. Maintains detailed distribution system maps and record drawings, responds to requests for such information, collects utility system features using Global Positioning System (GPS) Technology, equipment and software. Performs related work as required.

Distinguishing Features of the Class

Some leeway is granted for the exercise of independent judgment and initiative

Examples of Essential Work (Illustrative Only)

Provides customer service to City employees and the general public;
Digitizes, maintains, and analyzes geographic data;
Updates, verifies, and maintains GIS database layers and tables;
Researches and compiles utility infrastructure and related data from hard copy maps, engineering drawings, and database tables for entry into GIS;
Utilizes Global Positioning System (GPS) equipment and software to collect, record, and download field data to the GIS;
Provides support for field personnel regarding the locations of utility infrastructure features;
Generates and produces a wide variety of maps, reports, and other cartographic products;
Uses GIS software analysis tools to run queries, generate reports, and customize maps as needed;
Operates and maintains various GIS-related hardware including plotters, scanners, digitizers, and Windows-based workstations/PCs;
Recommends and implements efficiencies and enhancements;
Attends meetings, conferences, and workshops;
Performs all work duties and activities in accordance with City policies, procedures, and safety practices;
Attends work regularly at the designated place and time;
Supports continuous process improvement initiatives;
Performs related work as required.

Required Knowledge and Abilities

Basic knowledge of computer software applications for GIS and CAD mapping, drafting and engineering design, including GPS applications;

Some knowledge of computer operating systems, network structure, together with software applications and utilities used as tools for utility infrastructure records development;
Ability to operate a personal computer using program applications appropriate to the assigned duties and responsibilities, including word processing, spreadsheet and database applications, and specialized software for GIS, CAD and GPS activities;
Ability to instruct personnel in the operation of computers, mapping software and GPS equipment;
Some knowledge of engineering principles, practices and techniques;
Ability to read and interpret engineering plans, specifications, construction documents, maps, plats and legal descriptions;
Some knowledge of underground utility construction methods and materials;
Ability to read and interpret applicable federal, state and local laws, regulations and standards governing water distribution system construction, operation and maintenance;
Some knowledge of safety regulations, principles, protocols, practices and procedures;
Ability to properly wear and use personal protective equipment without undue impairment of senses or mobility;
Ability to work outdoors, year-round, in uncontrolled environments;
Good knowledge of local geography;
Ability to communicate effectively and maintain working relationships with engineers, contractors, utility representatives, other City employees, supervisory personnel, and the public, both orally and in writing, using both technical and non-technical language;
Ability to work cooperatively and to maintain effective working relationships to accomplish job responsibilities;
Ability to quickly learn and put to use new skills and knowledge brought about by rapidly changing information and/or technology;
Ingenuity and inventiveness in the performance of assigned tasks.

Acceptable Experience and Training

Graduation from an accredited college or university with a Bachelor's Degree in Geographic Information Systems (GIS) or a related field such as Geography, Planning, Natural Resources, or Computer Science with an emphasis in GIS coursework or training; or
Graduation from an accredited college or university with an Associate's Degree in Geographic Information Systems (GIS) and an internship or some experience with geographic information systems mapping and database management using ESRI ArcGIS software or its equivalent; or
Any equivalent combination of experience and training which provides the knowledge and abilities necessary to perform the work.

Required Special Qualifications

Valid Iowa Driver's License.

Essential Physical Abilities

Requires the following, with or without reasonable accommodation:
Sufficient clarity of speech and hearing which permits the employee to communicate effectively;
Sufficient vision, with or without reasonable accommodation, which permits the employee to perform manual and computerized drafting, inspect engineering plans and develop construction specifications; to observe a wide variety of engineering and construction projects on site and to review a variety of written materials;
Sufficient agility, acuteness of senses, and presence of mind to safely navigate construction sites, high traffic areas on foot, and to function safely in an uncontrolled environment when necessary.