POSITION: GIS Technician / Locator

**Utility Locator/GIS Technician** 

DATE: April 2018

DEPARTMENT: Electric Department IS Department

ACCOUNTABLE TO: Electric Department IS Manager

### Primary Objective of Position:

To accurately locate the pathways of the public utilities owned and operated by the Grand Rapids Public Utilities and the City of Grand Rapids (GRPU/City).

To perform intermediate technical work maintaining an up-to-date, user friendly, Geographic Information System (GIS) electronic mapping data base of public infrastructure owned by the GRPU/City.

## Major Areas of Accountability and Job Duties:

The work completed by this position protects underground utilities from damage during projects involving excavation, trenching and/or directional drilling and keeps the public safe. The duties listed are intended only as illustrations 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 the work is similar, related or a logical assignment to that position. Other duties may be assigned.

- Receives and organizes locate tickets to ensure efficiency of work and routes of assigned sites.
- Reviews locate tickets and/or other existing or incoming information to ensure accuracy, usefulness, quality and completeness of documentation, field work and retention.
- 3. Coordinates utility locate work, both between GRPU/City departments and the public.
- 4. Reads and understands utility maps, blue prints and aerial imagery to assist in identification of underground utilities.
- 5. Travels to assigned work sites, locates and marks underground municipal utilities, including but not limited to electric, water, sanitary sewer, and storm water using spray paints, flags or other tools as directed.
- 6. Operates handheld and other necessary equipment necessary to performance of duties.

- 7. Converts data collected from field operations, uploads data, designs, programs, and updates GIS database. Transfer of data collected from field operation to the GIS system.
- 8. Gathers field data on GRPU/City assets. Collects, inputs and analyzes data relative to public infrastructure.
- 9. Supports the design, development and implementation of the GIS and integrated systems and assists in the maintenance of the asset management system. Assists in the maintenance and data sustainability of the GIS system.
- 10. Assists in preparation of information for the public and performs GIS and locating administrative duties as needed.
- 11. Attend workshops, technical classes, training sessions and safety meetings as required by utility management.
- 12. Serves on various employee or other committees as assigned or requested.
- 13. Additional duties as deemed necessary by supervision, which are of an equal or lessor nature, based on job qualifications.

### Qualifications:

The requirements listed below are representative of the knowledge, skill, ability and/or competency sets required to complete the essential functions at a satisfactory level.

- Must have a minimum of a 2-year Associates Degree in Geography & GIS with a GIS Professional Certificate or the equivalent combination of education and experience.
  - a. Preferred candidates should have experience or knowledge in GIS systems.
  - b. Preferred candidates should have experience with locating underground infrastructure that could include but not limited to Electric, Communications, Water, Sewer, Stormwater, etc.
- 2. Must be a high school graduate or possess a GED equivalent.
- 3. Must possess a minimum of a valid Minnesota State Class D driver's license.
- 4. Self-motivated and ability to schedule time effectively to meet required deadlines.
- 5. Understanding of the utility locating process and experience with utility locating equipment.
- 6. Familiarity with the basic understanding of public utilities infrastructure systems such as electrical distribution, water distribution, sanitary sewer collection, and storm water collection.
- 7. Ability to read utility system maps and relate those maps to field situations.

- 8. Ability to recognize utility system appurtenances in the field. Ability to think critically and troubleshoot complex situations in the field.
- 9. Computer experience and/or education sufficient to develop, select, install and modify the information system and solve technical problems.
- 10. Experience with map projections and coordinate systems including their transformation and use in relating objects to one another.
- 11. Must possess good verbal and written communications skills, as well as possess a working knowledge of data entry and a working knowledge of basic arithmetic.
- 12. Experience reading and writing easements and legal descriptions and capable of reading equipment specifications and blueprints.
- 13. Ability to work in inclement weather.
- 14. Ability to distinguish colors.
- 15. Familiar with application of safety policies and standards.

## **Tools and Equipment Used:**

Motorized vehicles, including front end loader, forklift, pickup truck, dump truck, hoists, power tools, computer, mobile two-way radio, pumps, generators, hand tools, are welder, cutting torch and gas welder.

Mobile device, GPS, Cable and Pipe Locator, Metal Detector

### Responsibility for work of others:

Direct supervision over: None

Indirect supervision over: Assigned employees

#### Physical Demands:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential job functions of this position. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions of this position.

While performing the duties of this job, the employee is regularly required to walk; stand; to reach with hands and arms; to use hands to finger, handle, feel or operate objects, tools, or equipment. The employee is occasionally required to sit; climb or balance; stoop, kneel, crouch, or crawl; talk or hear.

The employee must frequently lift and carry 25 pounds. Specific vision abilities required by this position includes close vision, distant vision; color vision and depth perception.

# Work Environment:

The work environment characteristics described here are representative to those an employee encounters while performing the essential job functions of this position. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job function.

While performing the duties of this job, the employee regularly works in outside weather conditions. The employee is frequently exposed to heat, wet and/or humid conditions, and uneven terrain. The employee is occasionally exposed to risk of electrical shock. The noise level in the normal work environment is moderate.