## CITY OF MADISON POSITION DESCRIPTION

1. Name of Employee (or "vacant"): Jonathan Geiger

Work Phone: 608.261.9832

2. Class Title (i.e. payroll title):

Engineering Program Specialist I

3. Working Title (if any):

**GIS** Analyst

4. Name & Class of First-Line Supervisor:

Peter Braselton, Computer Mapping/GIS Coordinator

Work Phone: 608.261.9834

5. Department, Division & Section:

Water Utility, Engineering, Mapping

6. Work Address:

119 E. Olin Ave, Madison, WI, 53713

7. Hours/Week: 38.75

Start time: 7:30 End time: 4:00

8. Date of hire in this position: 9/15/2014

- 9. From approximately what date has employee performed the work currently assigned:
- 10. Position Summary:

This is responsible program coordination, technical and professional work in the Water Utility. The position assists Mapping Section program coordinator in mapping system activities, providing technical support to Utility Engineering and field staff. This position has responsibility for implementation of the Utility's field record system (field viewing computer records) and use of the automated mapping system by staff at all levels. In addition the position performs technical and professional functions in preparing reports and maps. Under the general direction of Mapping/GIS Coordinator, the position is responsible for providing support to planning and implementation efforts.

11. Functions and Worker Activities: (Do NOT include duties done on an "Out-of-Class" basis.)

#### 60% A Prioritize and maintain Water Utility computer mapping system.

- 1. Coordinate recording of Water Utility Construction Records.
  - a. Includes maintenance WU Engineering Construction Database (non-mapping).
- 2. Coordinates review and GIS updates of project (preconstruction) surveys
- 3. Provide technical assistance to Water Utility staff in use of computer mapping/GIS.
- 4. Provide feedback and assistance in compiling Standard Operating Procedures related to mapping.
- 5. Coordinate and record daily system updates
  - a. New services
  - b. System repairs
  - c. Main and service failures
  - d. Hydrant Flow Tests

### 20% B (GIS) Data Analysis

- 1. Create custom maps.
- 2. Mine data (for mapping and reporting) from multiple sources (CIS, AMI, External GIS databases, Spreadsheets, ...)
- 3. Create and generate tabular reports to support Water Utility functions. Includes (but not limited to):
  - a. QA/QC of mapping records.
  - b. P&P Reports to support finance.

## 10% C Database Design

- Create custom Access databases and Excel Spreadsheets that can be consumed by the GIS for custom maps
- 2. Design GIS databases and applications to support MWU functions.

# 10% D Review street opening permits.

#### 12. Primary knowledge, skills and abilities required:

Knowledge of standard engineering, computer mapping and/or drafting systems and other specialized computer programs. Knowledge of drafting, surveying and engineering design practices and techniques. Working knowledge of Water Utility policies, practices, procedures governing laws, ordinances and regulations. Strong working knowledge of computer terminology, engineering applications, GIS, relational databases, and database reporting applications. Ability to plan, coordinate and carry out ongoing programs or areas of responsibility. Ability to interpret and explain engineering plans, specifications and other technical documents and projects to other staff, agencies and the public. Ability to perform and coordinate the performance of technical work, including drafting, and the assembly, recording, compilation, and tabulation of data. Ability to maintain good working relationships with staff, members of other agencies and the general public. Ability to communicate effectively orally and in writing. Ability to follow oral and written instructions. Ability to communicate technical information accurately and in a timely, tactful and courteous manner by phone, in writing and in person to staff and members of the general public.

Technical Skills needed: Knowledge and experience with RDBMS systems such as SQL Server or Oracle, ESRI GIS products (Arc Pro 2.x, ArcGIS 10.x, ArcInfo, ArcView, ArcSDE, ArcGIS Server), graphical user interfaces, maps/map projections, spatial geometry, and vector and raster data types, SQL Syntax, and business reporting applications such as Crystal Reports or SSRS, Windows 2000/XP/7 desktop OS and database servers. Strong familiarity of the Microsoft Office Suite of products including MS Access. Experience with Bentley Microstation, AutoCad, Accela, CityWorks, Asset Management, SCADA, Python, Javascript, or T-SQL a plus.

### 13. Special tools and equipment required:

CADD/GIS workstation, software and plotters GPS data collection hardware and software.

14.	Required licenses and/or registration:	
	Valid Wisconsin driver's license.	
15.	Physical requirements:	
	Ability to work at computer work station and desk for long hours.	
16.	Supervision received (level and type):	
	Computer Mapping/GIS Coordinator. Supervision is, most often, review upon completion. Parameters for the job are given and ideas are then put on paper or in the computer. The final product is then reviewed by the supervisor.	
17.	Leadership Responsibilities:	
	This position:  is responsible for supervisory activities (Subastructure) has no leadership responsibility. provides general leadership (please provides)	
18.	Employee Acknowledgment:	
	<ul> <li>☐ I prepared this form and believe that it accurately describes my position.</li> <li>☐ I have been provided with this description of my assignment by my supervisor.</li> <li>☐ Other comments (see attached).</li> </ul>	
	Jonathan A Geiger	6/21/2022
	EMPLOYEE	DATE
19.	Supervisor Statement:	
	<ul><li>I have prepared this form and believe that it accurately describes this position.</li><li>I have reviewed this form, as prepared by the employee, and believe that it accurately describes this position.</li></ul>	
	I have reviewed this form, as prepared by the employee, and find that it differs from my assessment of the position. I have discussed these concerns with the employee and provided them with my	
	written comments (which are attached).  I do <u>not</u> believe that the document should be used as the official description of this position (i.e., for purposes of official decisions).	
	Other comments (see attached).	
	SUPERVISOR	DATE

Note: Instructions and additional forms are available from the Human Resources Dept., Room 501, City-County Bldg. or by calling 266-4615.