

### **Des Moines Water Works**

# **CAD Manager (Computer Aided Design)**

SALARY \$50.11 - \$66.65 Hourly LOCATION Des Moines, IA

\$104,233.95 - \$138,631.16 Annually

JOB TYPE Full-time JOB NUMBER 1-2423-24

**DEPARTMENT** Engineering **DIVISION** Eng/Drafters/Techs

**OPENING DATE** 04/16/2024 **CLOSING DATE** 5/1/2024 5:00 PM Central

#### **JOB SUMMARY**

#### WHY DMWW?

Each employee plays a vital role at Des Moines Water Works. We want employees who are customer-centered and dedicated to our mission to provide Water You Can Trust for Life to 600,000 central lowans. You are part of a team at DMWW that values environmental stewardship to protect our most natural resource – the water we depend upon for life – but also our company's most valuable resource – our people. Your overall wellbeing is important to us. DMWW wants you to be safe at work and to live a healthy life.

JOB SUMMARY: Under the general supervision of the Director of Engineering Services, plan, organize, direct, and manage CAD and GIS systems and personnel in support of the design, construction, and record-keeping needs of the Utility. Responsibilities include developing, implementing, and managing all necessary standards, policies, protocols, and processes associated with the efficient deployment and use of CAD and GIS hardware and software tools with a primary focus on developing and maintaining construction and record keeping drawings associated with the Utility's horizontal assets (water distribution system) and a secondary emphasis on drawings and records associated with the Utility's vertical assets (buildings, structures, and related facilities).

# **EXAMPLES OF ESSENTIAL JOB FUNCTIONS**

- Oversees CAD operations by establishing and managing drafting standards and styles; evaluating and maintaining
  necessary hardware and software; ensuring data maintenance and integrity; and creating appropriate policies,
  protocols, and processes for both CAD and GIS products and teams.
- Designs the required programs and procedures for the creation, maintenance, application, presentation, and integration of both CAD drawings and their associated spatial and relational data for engineering capital improvement projects including the preservation of construction and system details via as-builts and the systemic entry of data into GIS by the CAD and GIS teams.
- Organizes the update and maintenance of all electronic libraries of drawings, details, standard plans, and CAD styles. Develops procedures, routines, and programming scripts for drawing templates.
- Participates directly in the production of engineering drawings and other deliverables in the CAD area.
- Coordinates and oversees the effective completion of departmental and inter-departmental CAD and GIS assignments and projects.
- Writes detailed descriptions of user needs and programming functions and steps required to develop or modify programs within the CAD and GIS area. Ensures compliance with a variety of standards, laws, codes, regulations, and

- ordinances governing engineering documents, such as land surveys, easements, plans, specifications, estimates and schedules, and other responsibilities.
- Selects, trains, supervises, and evaluates the performance of employees in the CAD and GIS areas; organizes program-area activities and ensures compliance with required timelines and schedules; assigns and delegates responsibilities and workload to staff and reviews their work for accuracy and completeness.
- Evaluates new CAD and GIS hardware/software and recommends investments in new technologies to enhance the work group's effectiveness and efficiency.
- Performs other duties of a similar nature.

# **QUALIFICATIONS**

#### **Education:**

- Bachelor of Science Degree in Civil Engineering, Civil Engineering Technology, Engineering Technology, Computer Science, Geography, Cartography or a related field.
- · Additional years of applicable experience will be considered in place of the above educational requirement.

#### **Experience:**

- Five (5) years of experience in a CAD-based civil engineering production environment.
- Two (2) years of Supervisory experience leading CAD teams.
- Two (2) years of experience developing, creating, and maintaining standards, libraries, and team processes and protocols.
- Familiarity with global positioning system (GPS) products and tools.
- Familiarity with GIS.

# **Licenses/Certifications:**

• Valid lowa driver's license with a good driving record.

# **PREFERRED QUALIFICATIONS:**

• Three (3) years or more utilizing MicroStation products is preferred.

# MINIMUM KNOWLEDGE, SKILLS, and ABILITIES:

- Knowledge of computerized drafting systems and their development and application within the municipal and public works environment
- Knowledge of surveying, including satellite-based GPS, photogrammetry, cartography, and spatial analysis
- Knowledge of computer operating systems and network environments with a broad understanding of applications, their operation, and their supporting network environment
- Knowledge of common Civil Engineering drawings and plan sets and their preparation
- · Advanced knowledge of the deployment, operation, use, and maintenance of present-day CAD systems
- Basic knowledge and familiarity with present-day GIS systems.
- Advanced communication skills
- · Ability to maintain confidentiality
- Effective customer service skills
- Effective technical writing skills
- Effective project management skills
- · Advanced teamwork skills
- Advanced personnel management skills

# **DESIRED KNOWLEDGE, SKILLS, and ABILITIES:**

Hardware/Software/Equipment/Tools Needed to Perform Job:

#### Frequently/Often

- 1. CAD & GIS
- 2. Microsoft Suite of Applications (Word, Excel, Outlook, Power-Point, Others)
- 3. Smartphone
- 4. Personal Computer
- 5. Tablet or other mobile devices
- 6. General office equipment
- 7. CRM/CIS
- 8. EAM

#### **Sometimes**

- 1. SCADA
- 2. GPS Equipment
- 3. Hand Tools
- 4. Hand Power Tools
- 5. Ladders/Scaffolding
- 6. Safety Equipment

# SUPPLEMENTAL INFORMATION

#### PHYSICAL REQUIREMENTS:

- Continuously uses repetitive hand motions.
- Occasionally lifts, carries, pushes, or pulls objects weighing up to 50 pounds.
- Continuously sits at a desk in front of a computer.

#### **WORKING CONDITIONS:**

- Frequently works in an office environment.
- Occasionally works in outdoor environment, street environment, construction site, or plant environment.

# Des Moines Water Works is an Equal Opportunity Employer

The selection process consists of an evaluation of education and experience, an interview, completion of selected assessments and completion of a criminal background check, which includes a sex offender registry check. The selected Des Moines Water Works candidate must also be able to pass a preemployment drug screen and physical.

#### **E-Verify Process:**

Des Moines Water Works participates in E-Verify and will provide the Social Security

Administration (SSA) and, if necessary, the Department of Homeland Security (DHS), with information from each applicant's

Form I-9 to confirm work authorization. All candidates who are offered a position with Des Moines Water Works must

complete Section 1 of Form I-9 along with the required proof of their right to work in the United States and proof of their

identity prior to starting employment. Please be prepared to provide required documents as soon as possible after the job

offer has been made. For additional information regarding acceptable documents for this purpose, please contact Human

Resources at 515-283-8701.

Agency Address

Des Moines Water Works 2201 George Flagg Parkway

Des Moines, Iowa, 50321

Phone Website

515-283-8717 http://www.dmww.com/careers