

**CITY OF CARLSBAD  
CLASS SPECIFICATION**

**JOB TITLE: ASSET MANAGEMENT PROGRAM SPECIALIST**

**DEPARTMENT: PUBLIC WORKS**

**BASIC FUNCTION:**

Under general direction of the Utilities Asset Manager, provide assistance for the Utilities Asset Management program by providing analytical and project management support, monitoring work programs and maintaining data quality in the computerized maintenance management system (CMMS) used by Utilities Maintenance & Operations.

**KEY RESPONSIBILITIES:**

Reviews and edits CCTV inspections.

Analyzes condition assessment data and makes recommendations for rehab/repairs; participates in rehab/repair discussions.

Updates data and configures new parameters upon request in the infrastructure project planning software (currently InfoAsset Planner). Publishes the project recommendations from the software to a central location.

Maintains and updates water and wastewater asset data in the CMMS and GIS systems. Performs data entry in GIS, updates attribute data in the CMMS, links photos to assets, updates asset condition data, synchronizes asset data between GIS and the CMMS.

Performs field inspections and investigations as necessary to gather asset inventory data.

Creates work orders per the schedule developed by the Utilities Maintenance Planner.

Monitors work order completion and reviews completed work orders for completeness, accuracy, comments and variances. Follows up with the Utilities Maintenance Planner and supervisors regarding additional work needed.

Coordinates the scheduling, performance and data capture of condition assessment activities. Ensures that this information is available and used to determine probability of asset or system failure.

Gathers data from the CMMS, GIS and CCTV systems that is needed to bid out maintenance and/or asset rehabilitation contracts and formats as needed for the bid documents.

Maintains the Operations & Maintenance documentation library electronically.

Maintains asset inspection data electronically. Enters inspection information into CMMS.

Uses ESRI Insights, Tableau or other Business Intelligence tools to develop, maintain and publish metrics and to analyze data. Facilitates continuous improvement using the metrics and data.

Participates in process definition, improvement and/or simplification initiatives.

Prepares reports and reviews either individually or with other departmental staff.

Creates maps showing water/wastewater assets, work order data, condition assessment data, or combinations.

Performs other duties as assigned.

## **QUALIFICATIONS:**

### **Knowledge of:**

- Standard computer software including Word, Excel, Visio and PowerPoint.
- NASSCO PACP Pipeline Assessment Codes.
- Computerized maintenance management systems and how they are used in a maintenance and operations environment.
- Advanced methods and techniques of research, data analysis and report presentation.
- Report writing concepts and tools, preferably Crystal Reports.
- GIS concepts, including techniques of spatial analysis, editing and geographical concepts of location, scale, resolution and generalization.
- Methods and techniques of creating cartographic products.
- Project management practices.
- Asset management principles, practices and methods, including how to establish business risk, how to incorporate likelihood and consequence of failure scores into asset rehabilitation and replacement planning, and how to develop condition assessment programs.
- Principles, practices, methods and equipment used in the construction, installation, maintenance and repair of water distribution facilities and equipment and wastewater collection/transmission facilities and equipment.

### **Ability to:**

- Understand and follow oral and written instructions; prepare clear and concise records, reports and other written materials.
- Establish and maintain effective relationships with those encountered in the course of work.
- Read and understand blueprints, drawings, specifications and sketches pertaining to water and wastewater infrastructure.
- Organize, plan and complete projects.
- Communicate effectively and professionally orally and in writing.
- Work with minimal supervision; schedule own time according to established priorities; work under less detailed instructions to complete assignments.
- Create specialized cartographic products from GIS.
- Write computer-generated reports using Crystal Reports and/or other reporting tools.
- Manage condition and asset failure data; assist with determining where to store it; QA/QC the data to make sure that it is correct; work with appropriate groups to request schema changes in applications used to support asset management.
- Analyze data and determine sound, logical recommendations regarding water/wastewater asset rehabilitation and replacement.

- Utilize data extraction abilities and process knowledge to participate in continuous process and data quality improvement initiatives.
- Take data from CAD files and drawings and use it to update the GIS database using ESRI's editing tools.
- Develop metrics using Tableau, Insights or other Business Intelligence tools.

### **EXPERIENCE AND EDUCATION:**

Bachelor's degree in Computer Science, Information Technology, Business Administration, Public Administration or related field, or commensurate experience. College courses and/or completion of recognized specialized training courses relating to asset management or water/wastewater equipment is desirable.

Minimum of three to five years of progressively responsible asset management experience. Experience performing a variety of professional support and analytical activities with a computerized maintenance management system. Proficiency with ESRI's ArcGIS platform. Proficiency with Microsoft Word, Excel, Visio and PowerPoint. Experience running queries/reports and managing documents. Experience within the water/wastewater industry is preferred.

### **Special Requirements:**

Possession of a valid California Driver's License.

NASSCO PACP certification is desirable.

CWEA Collections Grade 1 Certificate is desirable.

California Department of Health Water Distribution Grade 1 is desirable.

### **ESSENTIAL FUNCTIONS FOR ALL POSITIONS IN THE JOB SERIES:**

*The conditions below are representative of those that must be met by an employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.*

#### **Language Ability:**

- Requires ability to compare, count, differentiate, measure and/or sort, assemble, copy, record and transcribe data and information. Must be able to classify, compute, tabulate, and categorize data. Must be able to advise and provide interpretation to others on how to apply policies, procedures and standards to specific situations. Needs to be able to use a variety of descriptive data and information such as: a variety of plans, resolutions, maps, reports, operating manuals, procedures, guidelines, and routine correspondence.
- Must be able to communicate orally and in writing, clearly and concisely and in a non-technical manner with city personnel at all levels, consultants, vendors and the general public.
- Ability to read, analyze, and interpret general industry periodicals and professional journals, technical procedures or governmental regulations. Must be able to write reports, business correspondence, and procedure manuals. Able to effectively present information and respond to questions from groups of managers, clients, and the general public.

**Mathematical Ability:**

- Knows how to apply mathematics, including basic water/wastewater mathematical concepts.
- Must be able to interpret basic, descriptive statistical reports.

**Judgment and Situational Reasoning Ability:**

- Must be able to use functional reasoning and apply rational judgment when performing diversified work activities. Needs to be able to analyze data and information using established criteria in order to determine consequences and identify and select alternatives.

**PHYSICAL REQUIREMENTS AND ENVIRONMENTAL SETTING:**

- While performing duties of this class, an employee is regularly required to sit, walk and stand; talk or hear, in person and by telephone; use hands to finger, handle, feel or operate objects, tools or controls, reach with hands and arms; perform repetitive movements of hands or wrists; climb or balance on ladders or stairs, and stoop, kneel, bench at the waist, crouch or crawl. The employee is frequently required to lift up to 50 pounds unaided. Specific vision abilities required by this job include close vision, distance vision, the ability to adjust focus, depth perception and color vision.
- While performing the duties, employees of this class are regularly required to use written and oral communication skills; properly read and interpret data, information and documents; analyze and solve problems; use math and apply mathematical reasoning; observe and interpret people and situations; learn and apply new information or skills; perform highly detailed and complex work on multiple, concurrent tasks; work with changing deadlines and frequent interruptions; and interact with staff, Council members and others encountered in the course of work.
- Work is performed mainly in an office environment; however an employee may be required to operate in a field setting, and as a result may be exposed to weather conditions and loud noises, extreme heat or cold, or wet or humid conditions; employee may also be required to work in confined spaces, on ladders/scaffolding or in high, precarious places, on uneven or slippery surfaces, near moving mechanical parts and/or near moving equipment. The employee is required to meet with other staff, the public and officials at various city locations and may travel to off-site locations as necessary.
- Must be able to drive and maintain a California Class C Driver's License or have the ability to arrange transportation for fieldwork or visits to other city facilities.
- Employee may be required to attend meetings and travel within and outside city limits during normal work hours and periodically on evenings and weekends.

This classification specification does not constitute an employment agreement between the employer and employee and is subject to change by the city as the needs of the city and the requirements of the job change.

The City of Carlsbad is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the city will provide reasonable accommodation to qualified individuals with disabilities and encourages both current and prospective employees to discuss potential accommodations with the employer.

This position is a represented position in the Carlsbad City Employee Association.

DATE APPROVED: Aug. 17, 2021