



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

SURVEYING AND MAPPING TECHNICIAN IV

Group-Section: Engineering Services Section	FLSA Status: Non-Exempt Bargaining Unit: AFSCME	Salary Grade: 53 Job #: XA54A
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JOB SUMMARY

This is the advanced journey level position performing Surveying and Mapping Technician IV job duties.

DISTINGUISHING CHARACTERISTICS

Positions at this level are recognized as technical specialist using professional initiative and resourcefulness in deviating from traditional methods or researching trends and patterns to develop new methods, criteria, or proposed new policies. Decisions regarding what needs to be done include interpreting data, planning of the work, or refining the methods and techniques to be used. The work involves establishing criteria and professional standards; formulating projects; assessing program effectiveness; or analyzing variety of unusual conditions, problems, or questions and authenticating accuracy of final deliverables. The work product or service may affect activities or the operation of other organizations.

OVERSIGHT

Supervision Received: The supervisor sets the overall objectives and resources available. The employee and supervisor, in consultation, develop the deadlines, projects, and work to be done. At this level, the employee, having developed expertise in the line of work, is responsible for planning and carrying out the assignment; resolving most of the conflicts that arise; coordinating the work with others as necessary; and interpreting policy on own initiative in terms of established objectives. In some assignments, the employee also determines the approach to be taken and the methodology to be used. The employee keeps the supervisor informed of progress, potentially controversial matters, or far-reaching implications. Completed work is reviewed only from an overall standpoint in terms of feasibility, compatibility with other work, or effectiveness in meeting requirements or expected results.

Supervision Given: Acts as a lead. Coordinates and reviews work assignments of employees performing the same general work as the lead on a day-to-day basis. Responsibilities may involve solving problems and providing instructions on work procedures.

JOB DUTIES

1. Leads staff to ensure projects, program objectives, and other assignments are accurately completed. Evaluates and reviews analytical data. Establishes methodology and techniques for use of electronic field survey equipment and software.
2. Leads and performs survey projects, researches technical information; develops and monitors schedules, work plans, budgets; and ensures specifications and standards are met.
3. Prepares and reviews records of survey maps, legal descriptions, exhibit maps, topographic mapping, and deformation-monitoring reports.
4. Prepares and reviews, digital terrain modeling, Geographic Information Systems mapping, and geospatial analyses.

5. Participates in the development and administration of contracts and agreements; oversees the work of vendors, consultants and contractors.
6. Leads, performs, and reviews survey measurements, calculations, and field notes for mapping, design, and construction projects.
7. Leads, designs, installs and maintains automated monitoring systems.
8. Leads and performs special assignments in support of Metropolitan initiatives.
9. May perform site inspections.
10. Represents Metropolitan within area of responsibility with external entities; negotiates and resolves issues.
11. Performs other related Surveying and Mapping Technician job duties as required.

EMPLOYMENT STANDARDS

MINIMUM QUALIFICATIONS

Education and Experience: A high school diploma or general education test (GED) and eight years of progressively increasing responsibility work experience in field and/or office survey work; or Associate's degree from an accredited college or university and six years of relevant experience; or two years in a MWD Survey and Mapping Technician III classification.

Required Knowledge of: Geodetic/survey engineering principles, practices, and standards; photogrammetry; advanced Geographic Information Systems, Computer-Aided Designs, or other survey related software; applicable federal, state, and local laws, codes and regulations including the Land Surveyors Act and the Subdivision Map Act; project management; work site safety; and current office technology and equipment.

Required Skills and Abilities to: Lead project work; coordinate and collaborate with external agencies; read and interpret maps, legal descriptions, diagrams, construction drawings, and specifications; use a variety of business, Geographic Information Systems, Computer-Aided Designs and other engineering/survey applications; operate a variety of electronic survey equipment; use independent judgment and exercise discretion; problem solve; prioritize and multi-task; communicate clearly and concisely, both verbally and in writing; establish and maintain effective working relationships with those contacted in the course of work; work independently and in a team environment; lead and train; and operate current office equipment including computers and supporting applications.

CERTIFICATES, LICENSES, AND REGISTRATIONS REQUIREMENTS

Employees in this position may be required to obtain and maintain the following certifications, licensing and registrations:

Certificates

- None

Licenses

- Valid California Class C Driver License that allows you to drive in the course of your employment

Registrations

- None

PHYSICAL DEMANDS, WORK ENVIRONMENT, AND VISION REQUIREMENTS

The physical demands and work environment characteristics described here are representative of those that must be met or may be encountered by an employee to successfully perform the job duties of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the job duties.

Physical Demands: The work requires some physical exertion such as long periods of standing; walking over rough, uneven, or rocky surfaces; recurring bending, crouching, stooping, stretching, reaching, or similar activities; recurring lifting of moderately heavy items such as personal computers and record boxes. The work may require specific, but common, physical characteristics and abilities such as above-average agility and dexterity.

Work Environment: The work involves moderate risks or discomforts that require special safety precautions, e.g., working around moving parts, carts, or machines, or irritant chemicals; etc. Employees may be required to use protective clothing or gear such as masks, gowns, coats, boots, goggles, gloves, or shields.

Vision Requirements: No special vision requirements