

SENIOR ENGINEERING TECHNICIAN

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

SUMMARY DESCRIPTION

Under direction, performs advanced, technical paraprofessional engineering office and field work involving drafting and design of public works facilities, construction inspection and surveying. Responsibilities may include technical and functional supervision of subordinate paraprofessional positions.

DISTINGUISHING CHARACTERISTICS

This is the advanced journey level class in the Engineering Technician series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed, and complexity of duties assigned as well as the additional years of experience working on similar assignments and projects, and becoming an expert in one or more related, specialized areas.

REPRESENTATIVE DUTIES

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

1. Inspect a variety of public works construction and street maintenance projects to ensure compliance with plans, specifications, City standards, State and Federal Law and acceptable industry standards.
2. Maintain necessary records of daily operations including man-hours, equipment hours and materials on site.
3. Perform contract administration duties as assigned, including preparing cost/quantity estimates as well as preparing and making recommendations on change orders.
4. Review and interpret construction plans and specifications.
5. Meet and confer with contractors, engineers, representatives of utility companies and other public agencies regarding construction plans and specifications.
6. Perform design and drafting using current AutoCAD or equivalent software, to complete construction plans and specifications for complex Public Works projects, as well as maps, plans, deeds, descriptions, exhibits, records or surveys.
7. Research project design requirements and perform calculations and prepare estimates of time and material costs.
8. Check improvement plans for compliance with master plan, design criteria, special conditions and City standards.
9. Prepare engineering and surveying field reports and related documents.
10. Operate survey instruments as the party chief using total stations, GPS/GNSS equipment, transits, levels, and other instruments in the performance of paraprofessional land surveying.
11. Create, update, and maintain the City's GIS map using ArcGIS or equivalent software, including importing and exporting shapefiles using accurate and precise coordinate systems.
12. Perform related duties as assigned.

QUALIFICATIONS

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Knowledge of:

Civil engineering principles, practices and methods applicable to office and field work involving the use of civil engineering software and associated equipment in the design, construction and maintenance of City public works projects.

Drafting and surveying principles, techniques, practices, equipment, and computer programs.

Safe work practices and methods.

Mathematical concepts applicable to engineering.

Construction practices and methods.

Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.

Operation of CAD systems.

Standard drafting tools and equipment.

Ability to:

Learn and understand City engineering policies and procedures.

Prepare accurate plans, specifications, cost estimates and technical engineering reports.

Perform engineering design computations.

Check, design, and prepare engineering plans and studies.

Interpret complex construction plans and specifications.

Use and care for engineering and drafting instruments and equipment.

Operate office equipment including computers and supporting word processing, spreadsheet, and database applications.

Learn pertinent federal, state, and local codes, laws, and regulations.

Understand and follow oral and written instructions.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Education and Experience Guidelines - *Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:*

Education/Training:

Equivalent to the completion of the twelfth grade supplemented by college level courses in math, drafting, engineering, surveying, or a related field.

Experience:

Eight (8) years of increasingly responsible, journey level field and/or office experience performing complex municipal engineering; or four (4) years equivalent to an Engineering Technician II with the City of Ceres.

License or Certificate:

Possession of a valid, California Driver License.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

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

Environment: Work is performed in an indoor and outdoor setting with exposure to all types of

weather and temperature conditions, and travel from site to site.

Physical: Primary functions require sufficient physical ability and mobility to work in an office setting and field environment; to walk, stand, and sit for prolonged periods of time; to frequently stoop, bend, kneel, crouch, crawl, climb, reach, twist, grasp, and make repetitive hand movement in the performance of daily duties; to lift, carry, push, and/or pull moderate amounts of weight; to operate assigned equipment and vehicles; and to verbally communicate to exchange information.

Vision: See in the normal visual range with or without correction.

Hearing: Hear in the normal audio range with or without correction.

Bargaining Group: Miscellaneous

FLSA Status: Non-Exempt

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*Management has the right to add or change these duties of the position at any time.