



City of Woodland

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## **ENGINEERING TECHNICIAN III**

### **DEFINITION**

To coordinate and perform advanced paraprofessional and highly technical field and office engineering work in one or more of the functional areas of City's Departments such as Public Works or Community Development Department (CDD) Department.

### **DISTINGUISHING CHARACTERISTICS**

This is the advanced journey-level class of the Engineering Technician series. It is distinguished from the Engineering Technician II classification in that employees are expected to function as a project leader within one of the functional areas of the engineering division, including the coordination of public works/engineering projects from design through construction.

### **SUPERVISION RECEIVED AND EXERCISED**

General direction is provided by the Engineering Assistant, or his/her designee. Responsibilities may include direct and indirect supervision of lower-level paraprofessional engineering personnel.

### **EXAMPLES OF DUTIES**

The following are typical illustrations of duties encompassed by the job class, not an all inclusive or limiting list:

### **ESSENTIAL JOB FUNCTIONS**

- Coordinate the department's projects from planning stage through project acceptance by conducting preliminary engineering studies.
- Prepare plans, specifications, reports, and cost estimates for public improvements such as streets, storm drains, sewers, water works, traffic signals/controls, and other public projects.
- Make calculations for engineering/surveying and other related work.
- Obtain and provide field data and recommendations for preparation of modifications involving technical or monetary changes.
- Assist project engineer in performing survey work and obtaining field data for preparation and planning of proposed projects.

- Provide design, construction or consultant contract administration and management or inspection of capital improvement, repair, and maintenance projects.
- Establish schedules and methods of providing construction inspection services.
- Resolve conflicts between inspectors, contractors and facility owners.
- Prepare, review and maintain various data, reports, documents, and project files, such as, but not limited to, inspection logs, daily construction logs, change order requests, quantities and material estimates, progress reports, site plans, subdivision improvement plans, development agreements, real property documents, submittals and as-built drawings.
- Review improvement plans, maps, specifications, cost estimates, and other work for accuracy, presentation, and conformance with established engineering practices, City Standards, General Plans, and Specific Plans.
- Provide general information to other City departments, the public, development community and other government agencies.
- Prepare for review by senior staff policies and procedures for processing requests of the City for City services to facilitate development projects.
- Determine and oversee field material testing of samples of materials routinely used in construction projects. (For example concrete, asphalts, soils, etc.).
- Monitor operational tests on civil, mechanical and electrical systems. Perform pneumatic and hydrostatic test of piping systems as appropriate.
- Coordinate right-of-way planning and acquisition for public improvement projects such as streets, storm drains, sewers, water works, traffic and other public work projects.
- Prepare and assist in presentations to City Council, various Commissions and local interest groups.
- Share in the responsibility for a sound safety program; promptly report unsafe conditions to the immediate supervisor.
- Prepare data for as-built utilizing GPS equipment, recording changes, dimensions, etc.
- Regular, predictable, consistent and timely attendance is an essential function of the position, in that the Employee must be present to complete assigned tasks.
- Work cooperatively with others including other City departments/division and the public.
- Other duties as assigned.

## **QUALIFICATIONS**

### **Knowledge of:**

- Techniques for preparing designs, plans, specifications, estimates, reports, and recommendations related to public works.
- Mathematics including algebra, geometry, and trigonometry.
- Applicable laws regarding traffic and transportation, capital project design and construction management, and/or subdivision and land development.
- Engineering methods and techniques used in the development, management, and execution of public works projects and private developments impacting public works infrastructure.
- Techniques of construction contract administration and inspection.

- Basic soil mechanics/testing.
- Basic field surveying principles.
- Practices, methods, materials, equipment used in construction safety.
- Operation and basic programs of a personal computer.

**Skill to:**

- Provide information to the general public regarding the Department services.
- Correctly apply laws, regulations, codes, and departmental policies governing the construction of assigned projects.
- Review and perform a variety of complex mathematical and engineering computations.
- Prepare plans, specifications, cost estimates and engineering reports with minimal assistance.
- Plan, assign and direct the work of lower-level personnel.
- Develop and update Department, Division, or Branch Standard Operating Process and Procedures.
- Establish and maintain effective working relationships with co-workers and those contacted in the performance of required duties.
- Communicate effectively, both orally and in writing.

**Ability to:**

- Develop and maintain cooperative public relations with developers, other City departments, businesses, and the general public.
- Meet the physical requirements necessary to safely and effectively perform the assigned duties, including the ability to work indoors and outdoors, at high elevations, in confined spaces, and around power machinery and equipment.

**Experience and Education**

Any combination of experience and training that provides the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

**Experience:** Two (2) years of experience performing duties comparable to those of a City of Woodland Engineering Technician II or seven (7) years of increasingly complex paraprofessional engineering experience within the Department, or approved comparable experience.

**Education:** Equivalent to the completion of the twelfth grade, supplemented with at least six (6) months of college level course work in drafting, algebra, geometry, chemistry, or trigonometry, or related field. Additional coursework in civil engineering, construction technology, land development, project management or a closely related field from an accredited college is highly desirable.

**License or Certificate:**

Specialty certificate such as, Construction Management, Project Management, Transportation Management, or Land Use and Environmental Planning, or the equivalent is desired.

Requires possession of a valid California driver's license upon hire.

## **ADA COMPLIANCE**

**Physical Ability:** Positions in this class typically require climbing, balancing, stooping, kneeling, crouching, reaching, standing, walking, pushing, climbing, pulling, lifting, fingering, grasping, talking, hearing, seeing, and repetitive motions.

**Light Work:** Exerting in excess of 100 pounds of force occasionally, and/or in excess of 25 pounds of force constantly to move objects.

## **Other Requirements**

**Sensory Requirements:** Requires the ability to recognize and identify similarities and differences between shade, degree or value of colors, shapes, sounds, forms, textures or physical appearance associated with objects and people.

**Environmental Factors:** May be subjected to moving mechanical parts, electrical currents, vibrations, fumes, odors, dusts, gases, poor ventilation, chemicals, oils, extreme temperatures, work space restrictions, intense noises, and environmental dangers.

Council Action: August 20, 2019