



City of Woodland

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 the Public Works 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 Branch Supervisor 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 public works 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; and 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.

Assist in the development and maintenance of traffic/transportation management and/or monitoring programs to include short and long range planning such as traffic circulation and street master plans.

Review private and public traffic/transportation design plans for compliance with local ordinances, traffic laws and regulations governing adequate and safe movement of pedestrians and vehicles; prepare necessary reports and make recommendations to senior staff.

Provide general information to other City departments, the public, development community and other government agencies.

Prepare for review by senior staff, policies and procedures to process requests for City services to process development projects. Assist in the safe efficient operation of the transportation system, construction contract administration and inspection.

Regular and consistent attendance.

Work cooperatively with others.

Determine and oversee field material testing of samples, including asphalt, concrete aggregates, cylinders and beams; and soils; monitor operational tests on civil, mechanical and electrical systems, and pneumatic and hydrostatic tests of piping systems.

Coordinate right-of-way planning and acquisition for public improvement projects such as streets, storm drains, sewers, water works, traffic and other public works.

Prepare and assist in presentations to City Council, Commissions, and local interest groups; prepare written reports on engineering-related projects.

Share in the responsibility for a sound safety program; promptly report unsafe conditions to the immediate supervisor.

Prepare data for as-built (record drawings), recording changes, dimensions, elevations, and other pertinent data.

Perform related 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.

Basic field surveying principles.

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 Public Works Department services.

Correctly apply laws, regulations, codes, and departmental policies governing the construction of assigned projects.

Review and perform a variety of complex mathematical/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.

Communicate effectively, both orally and in writing.

Establish and maintain effective working relationships with co-workers and those contacted in the performance of required duties.

Ability to:

Develop 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 space, and around power machinery and equipment. May include job site exposure to noise, dust and inclement weather.

Experience and Training

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 years of experience performing duties comparable to those of a City of Woodland Engineering Technician II or seven years of increasingly complex paraprofessional engineering experience within the Public Works Department.

Training:

Equivalent to the completion of the twelfth grade supplemented with additional college level course work in drafting, algebra, geometry, or trigonometry. 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

Must obtain within twelve (12) months of appointment, a speciality certificate such as, Construction Management, Project Management, Transportation Management, or Land Use and Environmental Planning as issued by the University of California or the equivalent. Requires possession of a valid California driver's license.

Council Action: May 18, 2004