

ENGINEERING TECHNICIAN I

DEFINITION

Under general supervision, performs a variety of routine office and/or field technical work related to construction plan review, surveying, inspection, contract administration, drafting, design and office research; performs related work as assigned.

CLASS CHARACTERISTICS

Engineering Technician I is the entry level in the flexible Engineering Technician III I/III classification series and is responsible for routine and/or less difficult projects. The Engineering Technician classification is distinguished from Engineering Aide and Drafting Technician by assignments demanding more experience, skill and/or specialized training. Promotion to Engineering Technician II is considered on a merit basis subject to the recommendation of the department head.

ESSENTIAL FUNCTIONS

These functions may not be present in all positions in multiple position classes. When a position is to be filled, the essential functions will be noted in the announcement of position availability.

Conducts trigonometric and other mathematical calculations related to surveying, design and/or inspection; conducts inspections on minor maintenance projects, construction projects, and at waste facilities.

Performs preliminary and control material testing.

Assists engineers in preparing plans, specifications and estimates; reviews construction plans, calculations and maps submitted by private design firms; prepares legal descriptions of real property.

Conducts inspections to assure compliance with regulatory requirements for various programs administered by the City.

Utilizes personal computer and a variety of software programs to prepare drawings, analyze data, and other similar tasks; keeps records and prepares reports.

May act as field party chief of survey crew.

CADD Designer Assignments

Utilizes Engineering Computer Aided Design and Drafting (CADD) hardware and software systems to prepare designs, maps, and legal documents, analyze data and other related tasks.

QUALIFICATIONS GUIDELINES

Education and/or Experience

Any combination of education and/or experience that has provided the knowledge, skills, and abilities necessary for acceptable job performance. Example combinations include successful completion of 60 semester or 90 quarter units with course work in architecture, surveying, engineering, construction management or related field, or possession of a valid Land Surveyor-in-Training (LSIT) certificate, AND two years of experience as an Engineering Aide III; OR graduation from high school or equivalent AND four (4) years of experience as an Engineering Aide III; OR any equivalent combination of training and experience. In addition to above, proficiency in the utilization of current computer aided design and drafting (CADD) and/or Geographic Information System (GIS) software may be required for some assignments.

Knowledge, Skills, and Abilities

Working knowledge of mathematical calculations; survey and inspection techniques; contract administration; drafting and design; personal computers; Civil Engineering Design hardware and software systems.

Ability to maintain effective working relationships with other City departments, engineers, architects, contractors, the public and other governmental entities; direct the work of Engineering Aides and other personnel as necessary; communicate effectively both orally and in writing; operate a personal computer and various software programs; demonstrate proficiency in the utilization of Computer Aided Design and Drafting (CADD) and/or Geographic Information System (GIS) software (may be required for some assignments.)

Special Requirements

Possession of or ability to obtain a Class C California driver's license and a satisfactory driving record (may be required for some assignments).

PHYSICAL PROFILE: Category I; 4, 5, 6, 7, 12, 13, 18, 19, 20.

ENGTECH1.SPC