

ENGINEERING TECHNICIAN IV

DEFINITION

To perform a variety of technical engineering and surveying work involved in planning, design and construction of public works projects; to provide technical staff assistance to higher level engineering staff; to represent the department before advisory committees and to provide information to the public.

DISTINGUISHING CHARACTERISTICS

Engineering Technician IV is the supervisory classification in the technical engineering classification series. Incumbents are expected to be able to perform many of the less complex tasks typically performed by civil engineers. This classification is distinguished from the Assistant / Associate Engineer by the level of supervision received and the responsibility to perform less complex technical engineering duties. The level of independence exercised and expected in completing assigned projects distinguishes this class from the lower classifications of Engineering Technician I/II/III.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from higher level engineering staff; exercises general supervision over lower level staff in the engineering division.

EXAMPLES OF DUTIES - Duties may include, but are not limited to, the following:

Reviews and inspects land development projects related to structures including streets, curbs, gutters and sidewalks, storm drains and other off site construction; review legal descriptions on land development projects.

Review plans for conformance with regulations regarding size, elevation and location of structures; verifies calculations.

Prepares plans, profiles and drawings including calculation of grades; and preparation of quantity and cost estimates.

Performs manual and AutoCAD drafting for assigned projects.

Researches status of County-owned property; reviews lot line adjustment descriptions for recording; identifies and prepares reports on property suspected of illegal subdivision.

Reviews parcel, survey and subdivision maps and property descriptions for recording; identifies, clarifies and amends maps.

Prepares, approves and conducts inspections for encroachment permits; approves transportation permits.

Supervises and/or participates in the surveying of public works projects, including field data collection and construction staking.

Investigates field problems affecting property owners, contractors and maintenance operations.

Provides technical support services relative to assigned area of responsibility.

Provides technical supervision over lower-level staff.

Coordinates assigned activities with engineers, developers, contractors, other County departments and divisions, and with outside agencies.

Assists the public and private surveyors in property research activities as necessary.

Responds to public inquiries and requests for assistance.

Performs routine office work as required, including but not limited to preparing reports and correspondence, duplicating documents / records as needed or upon request, copying and filing documents, entering computer data, maintaining computer record-keeping operations, etc.

Perform related duties as assigned.

QUALIFICATIONS

Knowledge of:

Pertinent Federal, State, and local laws, codes and regulations.

Principles of supervision and training.

Principles and practices of civil engineering and surveying.

Manual and automated drafting techniques.

Methods, material and techniques used in the construction of public works projects.

Recent developments, current literature and sources of information regarding engineering and surveying.

English usage, spelling, grammar and punctuation.

Advanced mathematics and their application to engineering and surveying work.

Modern office practices and technology.

Principles of record keeping.

Ability to:

Understand, interpret and apply pertinent laws, codes and regulations.

Supervise and train technical staff.

Work independently with minimal supervision.

Prepare plans and drawings neatly and accurately.

Perform AutoCAD design / drafting with skill.

Perform technical research and solve engineering and surveying problems.

Operate and maintain surveying and drafting equipment.

Prepare, understand and interpret engineering construction plans, specifications and other contract documents.

Perform required mathematical computations with accuracy.

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

Communicate clearly and concisely, both orally and in writing.

Work effectively in emergency and stressful situations.

Experience and Training Guidelines

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

Experience:

Four years of recent engineering experience including at least two years at a level comparable to the Engineering Technician III; or an equivalent combination of education and experience.

Training:

High school diploma or GED equivalent. Completion of an accredited two-year college curriculum in civil engineering or a related technical field can be substituted for experience on a year-for-year basis up to a maximum of two years.

License or Certificate

Possession of, or ability to obtain, an appropriate, valid California driver's license.

Possession of an Engineer-In-Training or Land Surveyor-In-Training Certificate within one year following appointment.

Classification Code:	4753001
Bargaining unit:	12
FLSA Status:	Y
Workers' Compensation Code:	9410
Pay Range	Refer to current "Class Range Sort List"