

COUNTY OF SOLANO

ENGINEERING TECHNICIAN (ENTRY)

DEFINITION

Learns to perform technical engineering duties in the office and in the field related to construction, drafting, office research and/or surveying.

CLASS CHARACTERISTICS

This is the entry level in the Engineering Technician series. Incumbents perform a variety of technical engineering tasks. This class is distinguished from Engineering Technician in that the latter is the experienced journey level performing more complex tasks under a lesser degree of supervision.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from an assigned engineer or Chief of Surveys, and may receive technical guidance from a higher level technician.

Exercises no supervision.

EXAMPLES OF DUTIES –*Duties may include but are not limited to the following:*

Assists in performing engineering survey field work; measures distances with chain as rear chain person or head chain person; sets grades for road construction using applicable surveying equipment.

Conducts control surveys for locating right-of-ways, property corners and recording surveys; conducts topographic and construction surveys for roads and bridges; conducts boundary surveys.

Researches records for survey projects.

Performs routine engineering office work such as conducting record searches, checking legal descriptions, reproducing and indexing records of survey, parcel maps and subdivision maps; gathers data for various reports and the public.

Assists engineers with design work by preparing engineering drawings and performing calculations.

Assists engineers with construction work such as grading and paving to ensure that applicable regulations and specifications are met.

Assists in gathering material samples and testing materials in the file and laboratory.

Sets up traffic signs and cones; may act as flagman so that a safe working environment exists at the job site.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Working knowledge of the basic principles of algebra, trigonometry and drafting.

Skill to:

Operate office equipment including a personal computer, copy and fax machines and printers.

Drive a motor vehicle.

Ability to:

Ability to work effectively with professional and technical staff members in carrying out work assignments.

Learn to draft plans and maps.

Learn to interpret records and maps;

Maintain accurate records and document actions taken.

Learn to research regulations, procedures and/or technical reference materials.

EXPERIENCE AND EDUCATION/TRAINING

Experience:

No experience required.

Education/Training:

Completion of 15 semester units or equivalent from an accredited college or university in mathematics, engineering design, construction inspection, traffic engineering, surveying or other related fields.

SPECIAL REQUIREMENTS

Possession of or ability to obtain a valid Class C California driver's license is required.

SUPPLEMENTAL INFORMATION

Incumbents may be required to work outdoors in all types of weather conditions.

Incumbents of this class should demonstrate necessary knowledge and abilities to be promoted to Engineering Technician within eighteen (18) months of appointment.

ADA COMPLIANCE

Physical Ability: Tasks require the ability to exert moderate, though not constant physical effort, typically involving some combination of climbing and balancing, stooping, kneeling, crouching, and crawling, and which may involve occasional lifting, carrying, pushing and/or pulling of objects and materials of heavy weight (20 - 60 pounds).

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 job-related objects, materials, tasks or people; some tasks require ability to speak in a clear and audible manner

Environmental Factors: Performance of essential functions may require occasional exposure to adverse environmental conditions including dirt, dust, wetness, rain, heat, cold, noise, machinery or traffic hazards.

Director of Human Resources

Established Date: May 1991

Revised Date: November 2002

Revised Date: May 2003

BOS Date: June 30, 2003