Title changed to Engineering Aide (July 2002)

ENGINEERING AIDE II

DEFINITION

This is para-professional office and field engineering work of a technical support nature. Under general supervision, participates in a variety of engineering projects and related tasks as required. Work performance is reviewed and evaluated through observation and examination of completed projects for technical accuracy, drafting skills, and adaptability to various assignments.

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

Participates in a wide variety of engineering assignments including, but not limited to, the following:

- Routine design, plan checking, manual and automated drafting and calculation responsibilities in conjunction with preparation of plans, specifications and cost estimates for roadway, water, sewer, storm drain, traffic signal and street light plans, traffic studies, etc.; field survey work and interpretation of field survey data; routine construction inspection and/or site investigation; preparation of display maps or exhibits for meetings; routine research work; maintenance of maps, records, etc.; collection of information, water and/or waste water samples for data analysis; basic computer operations, including word processing, database, and spreadsheet applications; providing information to the general public. May oversee the work of subordinate personnel as assigned.

OTHER JOB RELATED DUTIES

Performs other job related duties and responsibilities as required.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

MINIMUM:

Equivalent to graduation from high school, supplemented by technical courses in civil, environmental and/or related engineering subjects including basic computer operations; one (1) year of related experience as an engineering aide or technician.

Knowledge: Knowledge of engineering maps and records; knowledge of manual, computer and computer-aided drafting techniques, practices, terminology, and symbols; knowledge of mathematics, including algebra and trigonometry, as applied to surveying and design; basic engineering techniques, principles, and practices related to area of assignment; knowledge of surveying techniques and practices; knowledge of municipal engineering policies and procedures; knowledge of methods and materials used in the design and construction of municipal facilities including streets, sewers, storm drains, and water utility, depending on area of assignment; knowledge of the methods and techniques of estimating.

(continued)
Ability to: perform moderately complex engineering calculations with speed and accuracy; operate equipment and utilize tools appropriate to area of assignment, including surveying equipment, blueprint and photocopy machines, computers and peripheral equipment, etc.; perform routine testing and inspection functions; prepare and maintain appropriate records and reports; to oversee the work of subordinate personnel; establish, foster and maintain positive, harmonious working relationships with other employees, officials, the public, and others contacted in the course of work.

Skill in: freehand and mechanical lettering; the use of drafting instruments or equipment, including computer-aided drafting, appropriate to area of assignment; technical report writing, exhibit preparation, and oral communication; the use of computers and computer programs used for word processing, database and spreadsheet applications.

Required License or Certificate: Valid California Class C driver's license.

Desirable:

Three (3) years of para-professional drafting/design, office and field engineering work in a municipal government setting; knowledge of city ordinances and policies and other regulations as they relate to engineering matters.