

CITY OF SALINAS

ENGINEERING TECHNICIAN

BARGAINING UNIT/CLASS CODE:

SMEA / G07

DEFINITION

To perform technical traffic and development related office and field engineering work; and to serve as a member of an engineering design team.

DISTINGUISHING CHARACTERISTICS

This is the journey level of the paraprofessional engineering class series. Work of this class involves performing routine to complex engineering work approaching that of the professional engineering series. Duties performed involve the application of precise paraprofessional engineering knowledge and techniques. Work is ordinarily performed under the general supervision of a professional engineer who makes general assignments and inspects work to ensure that it is conducted according to instructions and in conformity with accepted engineering standards.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from a professional engineering position; receives functional or technical supervision from design team leaders. May exercise technical supervision over lower level engineering aides or traffic student interns.

ESSENTIAL JOB FUNCTIONS OF THE POSITION Duties may include, but are not limited to the following:

Participate in the preparation, filing, and retrieval of a variety of engineering maps, documents and records. Prepare various traffic engineering plans, and capital and minor engineering projects; including design of plans, specifications and estimates by performing research, drafting, blue-print reproduction, calculations and distribution of completed projects as assigned. Perform title searches, research rights-of-way and easements based on legal descriptions. Attend staff meetings regarding public works and utility matters. Make field checks of project sites or survey areas to verify survey results or features. May perform field inspections and participate in survey work. Assist in the coordination of office and field engineering tasks with other City departments and outside agencies. Prepare a variety of special engineering-related reports and studies. Prepare and interpret legal descriptions. Respond to routine inquiries from developers, contractors, and the general public regarding the City requirements relative to the construction, alteration and maintenance of public works facilities. May perform a variety of functions related to Traffic Engineering such as: Research background information to be provided to the Traffic and Transportation Commission. Prepare aerial mylars, charts, summary reports, visual displays for overhead project presentations. Prepare diagrams, measurements, traffic counts, and conduct necessary studies/research of traffic problem areas. Coordinate with Engineering/Construction for field inspection and final approval of lane linings and channelizations. Prepare collision diagrams/accident summaries on traffic problem areas. Furnish traffic volume counts. Conduct radar survey information. Promote and maintain safety in the work place. Perform related duties as assigned.

PHYSICAL AND MENTAL CHARACTERISTICS

Physical, mental and emotional stamina to perform the duties and responsibilities of the position; manual dexterity sufficient to write, use telephone, computer, business machines and related equipment; vision sufficient to read fine printed materials, visual display terminals, and distinguish different colors; hearing sufficient to conduct in person and telephone conversations; speaking ability in an understandable voice with sufficient volume to be heard in a normal conversational distance, on the telephone and in addressing groups; physical agility to push/pull, squat, twist, turn, bend, stoop and reach overhead; physical mobility sufficient to move about the work environment; occasional work walking on uneven surfaces; physical strength to lift up to 20 lbs.; physical stamina

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sufficient to sit for prolonged periods of time; mental acuity to collect and interpret data, evaluate, reason, define problems, establish facts, draw valid conclusions, make valid judgments and decisions.

WORKING CONDITONS

Business office working environment subject to sitting at a desk, standing at a counter for long periods of time bending, crouching, or kneeling at files, pushing/pulling of file drawers and supplies, reaching in all directions and prolonged periods of time working at a computer terminal. Occasional out door work walking on uneven surfaces in all weather conditions, marking pavement with spray paint.

QUALIFICATIONS

Knowledge of:

Principles and practices of civil engineering as performed by a paraprofessional engineering position. Drafting techniques and surveying practices. Methods and materials in the construction of public works facilities. Real property legal descriptions. Policies and regulations governing the construction, extension and maintenance of systems and facilities associated with areas of assignment. Methods and techniques of engineering design, investigation, drafting, and estimating. Mathematics as required for job duties. Operation of personal computers.

Ability to:

Perform technical research and provide reliable staff support for work on engineering projects. Communicate clearly and concisely, orally and in writing. Perform engineering calculations with speed and accuracy. Prepare complete plans and estimates of routine public works projects. Facilitate the work of others. Use and care for engineering and drafting instruments and equipment. Use computer aided drafting. Prepare traffic flow diagrams as needed. Categorize traffic accidents into different types. Establish and maintain effective working relationships with others. Promote the mission, values and standards of an effective public organization, particularly in the area of customer service.

Skills to:

Assist with the preparation of plans, drawings, specifications, diagrams, and sketches pertaining to public works development and maintenance projects. Operate drafting and design equipment related to traffic, development and related project assignments.

License or Certificate:

Possession of a valid California Driver's license.

Education and Experience:

An example of the education and experience which most likely demonstrates the skills, knowledge and abilities required to perform the duties would be any combination equivalent to graduation from high school with courses in algebra, geometry, and trigonometry and three years of paraprofessional civil engineering experience, including at least one year in drafting and/or knowledge of design, engineering, and problem identification related to traffic management.

Reviewed _____
Department Director

Approved _____
Human Resources Officer

Approval Date: _____

ORIG: 2-84, REV: 1-99, REV: 4-04, REV: 7-06