

**COMMUNITY DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION
ENGINEER II**

GENERAL DUTIES: Under direct supervision of the Senior Civil Engineer, perform sub-professional engineering work in the field and office involving the design, investigation, development and construction of a wide variety of public works facilities.

GENERAL REQUIREMENTS:

Personal Appearance - Is appropriate for the work environment and meets expectations for the proper image of the City, as per department policy.

Attendance - Follows department/City policy in regards to punctuality and attendance.

Compliance with Work Instructions - Follows all work instructions given and completes all assigned duties. Follows the policies, rules and regulations of the City and department.

Safety - Follows the Safety and Health Handbook, as well as other safety related standards, and avoids unnecessary risk to oneself, co-workers, citizens and property.

Internal Relations - Conducts work in a manner which supports the overall team effort, and which avoids disruption of one's work and the work of others. Treats all City employees with respect. Takes responsibility to resolve differences. Finds solutions to problems. Respects racial, religious, ethnic and sexual differences of others, and avoids derogatory statements regarding these differences.

Customer Service - Conducts work that fosters public support for the City, that will lead to fewer complaints and claims against the City. Treats customers with respect. Follows the same rules that one expects the customers to follow. Respects racial, religious, ethnic and sexual differences of others, and avoids derogatory statements regarding these differences.

ILLUSTRATIVE EXAMPLES OF WORK:

1. Perform as a member of a team of sub-professionals and technical assistants in the preparation of plans and specifications, perform complex engineering design and engineering technician-related work of all Capital Improvements including roads, bridges, utilities, sewers and drainage projects. Work with contractors and developers performing all types of construction management activities and inspection to ensure construction practices are in compliance with City standards.
2. Review the work of consultants including development improvement plans, maps, land subdivisions and certificates for conformance with the Subdivision Map Act, design integrity, City standards, City codes and prepare development agreements, fee schedules, cost estimates and reimbursements.

3. Assist in developing the annual Community Development Department budget and participate in all types of engineering studies requiring the gathering and analysis of data and preparation of comprehensive water, sewer, drainage, sewage treatment and transportation reports.
4. Maintain good public relations, receiving and answering public requests and concerns, providing assistance at the counter and assisting other departments with a variety of needs.
5. Participate in related work as required.

REQUIRED SKILLS, KNOWLEDGE AND ABILITIES:

SKILLS:

1. The use of surveying instruments.
2. The use of drafting equipment.
3. The use of traffic counting instruments.
4. The use of blueprint machines.

KNOWLEDGE: Knowledge of:

1. Basic supervisory principles and practices.
2. Principles and practices of contract administration in a public agency.
3. Modern principles and practices used in Civil Engineering, traffic engineering and surveying.
4. Public works construction equipment and materials.
5. Budgeting and scheduling principles, practices and techniques.
6. Basic computer applications, data base management and Civil Engineering applications.
7. City public works and building codes, statutes, regulations, laws and internal standards as applies to public works projects.
8. Interpret engineering plans, specifications and contract documents.
9. Modern methods and techniques used in the design, construction, and maintenance of public works facilities.

ABILITIES: Ability to:

1. Provide technical support and review to Engineering Division staff.

2. Establish and maintain effective working relationships with supervisors, co-workers, representatives of other agencies, contractors and the general public, using customer service techniques.
3. Express ideas effectively in writing.
4. Prioritize work load and exercise sound judgement within established procedural guidelines.
5. Make difficult engineering computations quickly and accurately, applying engineering principles, computer programs and mathematical tables to the solution of civil engineering problems.
6. Review land development plans for compliance with current law.
7. Establish project designs and specifications for solutions to problems.
8. Interpret engineering plans, specifications and contract documents.
9. Determine cost estimates of infrastructures.
10. Use hand calculator and desk-top computer.
11. Apply customer service techniques effectively.

MACHINES/TOOLS/EQUIPMENT UTILIZED:

Typical office and field environments include the following:

1. Computer, keyboard and monitor
2. Laserjet printer
3. Ink jet printer
4. Telephone or headset
5. Standard copy machine
6. Calculator
7. 10-key adding machine
8. Facsimile machine
9. Typewriter
10. Postage meter and scale
11. Lettering machine
12. Microfiche reader
13. Binding machine
14. Two-way radio
15. Polaroid or digital camera
16. Paper shredder
17. Paper cutter
18. Surveying instruments
19. Drafting equipment

20. Traffic counters
21. Engineering tools and equipment
22. Presentation equipment, microphones, easels, overhead projectors, etc.
23. Plan-copying machine
24. Specialized computer software
25. Computerized scanner
26. Automobile
27. Other related equipment

PHYSICAL DEMANDS:

When working in the field or in the office, employee will perform the following physical activities including the handling of survey, drafting and engineering equipment, traffic counters, two-way radios, blueprints, plans, files, books, binders and boxes of work-related material:

1. Sitting, for prolonged periods of time while attending meetings or seminars, or when working at a computer.
2. Walking, during site visits, inspections and enforcement activities in the field.
3. Standing, for prolonged periods of time while working in the field, during Council meetings or at other public presentations.
4. Kneeling, when performing survey work or during site visits, inspections or enforcement activities.
5. Bending/stooping, when performing survey work or during site visits, inspections or enforcement activities.
6. Twisting, when performing survey work, during site visits, inspections or enforcements.
7. Reaching, when performing survey work, during site visits, inspections or enforcement activities, in addition to typical office work.
8. Carrying, survey or drafting equipment, in addition to the typical office work.
9. Pushing/pulling, utility boxes, manhole covers and other equipment or tools.
10. Lifting, up to 40 lbs., working with survey and drafting equipment or other tools.
11. Driving, to inspection or construction sites, or to perform enforcement activities.
12. Speed, in meeting deadlines and in using office equipment.

SENSORY DEMANDS:

Under typical office and field conditions, employee utilizes these senses when using a computer, typewriter, telephone, fax machine, copier, adding machine, postage meter, paper shredder, paper cutter, camera, microphone, overhead projector, easel, survey or drafting equipment or automobile:

1. Seeing, colorvision necessary when reading maps and drawings.
2. Speaking
3. Hearing
4. Touching

ENVIRONMENTAL AND FLOOR SURFACE CONDITIONS:

Office Conditions:

1. Indoors: Typical office conditions, over 80% of the time.
2. Flooring: Low level carpeting, linoleum, tile floors and some exposure to asphalt.
3. Noise Level: Conducive to office settings with phones, copiers, faxes, or typewriters.
4. Lighting: Conducive to normal office setting.
5. Ventilation: Provided by central heating and air conditioning.
6. Dust or Fumes: Normal, indoor levels associated with dust and odors from paper, blueprints, ink pens, plan copier, copy machines, or other office-related equipment.

Field Conditions:

1. Outdoors: Typical field conditions during site visits, inspections and enforcement activities, approximately 15% of the time.
2. Travel: Under varying conditions via automobile or plane, less than 5% of the time.
3. Flooring: Asphalt, grass, dirt, wood or uneven surfaces during site visits or inspections.
4. Noise Level: Varying low to high equipment noise may occur during site visit or inspection.
5. Lighting: Normal outdoor conditions, with exposure to extreme weather conditions.
6. Ventilation: Heating and air conditioning provide by a vehicle.
7. Dust or Fumes: Normal to high outdoor levels associated with dust, pollen, vehicle exhaust, and construction, inspection and enforcement activities.

HAZARDS:

Under typical office conditions, mechanical or electrical exposure is minimal while properly using office equipment such as a telephone, computer, typewriter, printer, copier, overhead projector, microphone, easel, adding machine, fax machine, paper shredder, or paper cutter.

In the field, during a site visit, inspection, or enforcement activity, there may be a higher risk of exposure to mechanical or electrical hazards due to the nature of construction sites or businesses that are manufacturing or processing materials. In addition, there is some exposure to mechanical hazards when utilizing a vehicle.

ATMOSPHERIC CONDITIONS:

Minimal to low exposure to fumes occurs in the field when visiting or inspecting construction sites or businesses. There is minimal exposure to fumes in a typical office environment which may result from use of copiers, dry erase pens, liquid paper, toner cartridges, ink pens, or other office supplies or equipment.

REQUIREMENTS, TRAINING, EXPERIENCES AND QUALIFICATIONS:

1. Graduation from an accredited college or university with a Bachelors degree in Civil Engineering (experience can be substituted for graduation at the rate of two years responsible engineering experience for one year of college).
2. Two years of progressively responsible engineering experience in work equivalent to that performed by an Engineer I (acceptable related college education or technical training can be substituted at the rate of two years education for one year of experience).

3. Registration as an Engineer-in-Training (EIT) issued by the State of California.
4. Willing to continue education and training, expand skills, attend seminars, workshops, and individual study.
5. Possess and maintain a valid California Driver License and a safe driving record necessary to operate assigned vehicle(s).
6. Pass a post-offer medical examination, which includes a drug test.
7. Pass a Department of Justice criminal record check for employment.
8. Prefer non-tobacco user.