



City of Larkspur

JUNIOR ENGINEER

DEFINITION

Under direct supervision, the Junior Engineer learns and performs a variety of professional engineering work in the research, design, construction, and inspection of public work and transportation projects.

DISTINGUISHING CHARACTERISTICS

This is a professional job class in the engineering series which does not require registration as a Professional Engineer. This class works under direct supervision within a framework of established policies and procedures, and incumbents perform a broad range of routine professional engineering and administrative assignments. As experience and proficiency are gained, incumbents are expected to work with less supervision and to exercise gradually increasing discretion within the legal limits permitted by qualifications. This class is distinguished from the Assistant Engineer class by the routine nature and limited level of complexity of work assignments; and by the requirement for an Assistant Engineer to possess registration as a Professional Engineer, issued by the State of California.

SUPERVISION RECEIVED AND EXERCISED

Supervision is provided by the Director of Public Works/City Engineer. Although there are no direct reports, responsibilities may include providing project-based task direction to technical and/or administrative personnel.

ESSENTIAL DUTIES AND RESPONSIBILITIES (Include but are not limited to the following:)

- Manages projects (street construction, street lighting, traffic signals, signing, striping, pavement marking, parks and recreation, storm drain, etc.) of limited to moderate complexity and size from initial planning and design through construction.
- Researches, analyzes and evaluates existing Public Works, improvement districts, and flood control, street and utilities system in order to determine system capacities and plan the improvement or existing facilities or the construction of new ones.
- Reviews and prepares traffic studies to determine traffic impact and mitigations of transportation proposals.
- Utilizes personal computer based software applicable to functional responsibilities.
- Prepares technical documents and may represent the City at public traffic-related meetings.
- Compiles and analyzes statistical data and prepares technical reports for public works projects and programs.
- Assists in the preparation of cost projections.

- Performs engineering plan checks, review and processing of maps, plans and specifications for conformance to State and City standards.
- Researches citizen complaints with regard to drainage, grading, offsite and utility improvements and resolves problems by providing information and possible solutions; acts as City liaison with community.
- Provides direction and feedback regarding the design efforts of consultants and in-house staff on public works projects.
- Manages and oversees multiple capital improvement/engineering projects and programs.
- May prepare agenda items, recommendations, and reports and provide backup information to be reviewed and accepted by City Council, outside agencies and other constituencies for public works construction projects.
- May be required to attend public meetings as the City's representative on projects.

REQUIREMENTS

Knowledge of:

- Principles, terms and practices of civil engineering as applies to public works, including planning and development, design and construction, operation and maintenance.
- Construction materials, methods and equipment.
- Engineering mathematics through calculus and statistical analysis methods.
- Engineering economics and specification and contract procedures.
- Cost estimating methods.
- Pertinent Federal, State and local laws, codes and regulations used in the design and construction of public works, traffic and related engineering projects.
- Safe work practices as they relate to the position.
- Computer engineering programs (Auto CAD, GIS (ESRI), Project Management and Microsoft Office (Excel, Word, Project, Power Point) applications.
- Standard administrative engineering office practices and procedures.

Skill and Ability to:

- Manages and oversees multiple capital improvement/engineering projects and programs
- Interpret and prepare plans, maps, drawings, profiles and graphs.
- Perform detailed analyses of designs, specifications and plans.
- Apply engineering principles and techniques to evaluate and solve civil engineering problems.
- Make and check complex engineering computations quickly and accurately.
- Use computers and software applications (CAD, GIS, MS Office and Outlook) in engineering applications.
- Exercise sound judgment in performing assigned projects.
- Maintain accurate records and prepare a variety of memos, letters and technical reports and specifications that are clear and concise.
- Communicate clearly and effectively both orally and in writing.
- Establish and maintain effective working relationships with the public, City staff, engineering firms, contractors, developers, manufactures and others.

EDUCATION AND/OR EXPERIENCE

Sufficient experience and education related to professional public works engineering practices to demonstrate the knowledge and skills listed and to perform the essential duties is required. A typical way of obtaining the required qualifications is:

Possession of: a Bachelor's Degree in Civil Engineering or a closely related field; and possession of an Engineer-In-Training Certificate issued by the State of California. No work experience is required.

In addition, qualified candidates must:

- Show proof of citizenship or eligibility to work in the United States.
- Pass a physical exam as established by City Policy.

PHYSICAL WORKING CONDITIONS

The essential functions of the job require the ability to sit for extended periods of time when performing office tasks; reach above or below shoulder height; finger dexterity to operate a computer and other office equipment; speak and hear in person and on the phone; see sufficiently to perform assignments; periodically drive a vehicle from site to site to conduct inspections under a variety of climatic and geographic conditions in a field environment with potential exposure to loud noise, chemicals, fumes and other environmental substances; traverse uneven terrain; stand for long periods of time; work long or unusual hours as situations demand; and frequently lift and/or carry objects weighing up to 25 pounds and occasionally up to 55 pounds.

OTHER:

FLSA Status: Exempt
Bargaining Unit: Larkspur Miscellaneous Employees Association
Approved by: City Manager Dan Schwarz
Date: April 2, 2014