



# City of Larkspur

## ASSISTANT/ASSOCIATE CIVIL ENGINEER

### DEFINITION

Under general supervision or direction, performs a wide variety of professional engineering activities in connection with public works construction and maintenance projects and/or private land development; provides project management and administration; confers with developers, contractors, and representatives of other agencies regarding facility and infrastructure development; administers professional services and construction contracts; provides professional staff assistance to management, other departments, and the public in areas of expertise; performs a variety of studies and prepares and presents staff reports; and performs related work as required.

### DISTINGUISHING CHARACTERISTICS

**Assistant Engineer:** Under supervision, incumbents with basic engineering experience perform professional and technical engineering work in the City's Capital Improvement Program (CIP), public works infrastructure, and/or land development in addition to providing project management and administration. As experience is gained, assignments become more varied and are performed with greater independence. Positions at this level usually perform most of the duties required of the positions at the Associate Civil level but are not expected to function at the same skill level and usually exercise less independent discretion and judgment in matters related to work procedures and methods. Work is usually supervised while in progress and fits an established structure or pattern. Exceptions or changes in procedures are explained in detail as they arise.

**Associate Civil Engineer:** This is the full journey-level class in the professional engineering series. Incumbents are expected to perform the full range of professional and technical engineering work related to the City's Capital Improvement Program (CIP), public works infrastructure, and/or land development in addition to providing project management and administration. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit. Positions at this level are distinguished from the Assistant level by the performance of the full range of duties as assigned, working independently, exercising judgment and initiative, and possession of valid registration as a Professional Engineer within two years assuming the position. This class is further distinguished from the Senior Civil Engineer in that the latter is responsible for supervising professional and technical engineering staff and for the performance of the most complex and difficult work assignments of the class series.

Positions in the Assistant Engineer/Associate Civil Engineer class series are flexibly staffed and positions at the Associate Civil level may be filled by advancement from the Assistant level requiring a minimum of two (2) years of experience at the Assistant level and after gaining the knowledge, skill, experience, and licensure which meet the qualifications for, and after demonstrating the ability to perform the work of, the higher-level class. When filled from the outside, the employee is required to have five (5) years of prior related experience that allows the employee to meet the qualification standards for the Associate level.

### **SUPERVISION RECEIVED AND EXERCISED**

Supervision is provided by the Public Works Director/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 and rehabilitation, street lighting, traffic signals, signing, striping, pavement marking, bicycle facilities, civic building construction and rehabilitation, parks facilities, 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 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:**

- Civil engineering principles, techniques, policies, and procedures.
- Methods, materials, and techniques used in the construction of public works projects, including water and wastewater systems, storm water, street, and traffic systems design.
- Basic principles, practices, procedures, and standards related to City public works, engineering infrastructure development and maintenance, and surveying.
- Basic principles and practices of capital improvement program budgeting, cost estimation, funding, project management, and contract administration.
- General design, layout, and construction practices for public improvements such as streets, storm drains, grading, and landscaping.
- Land development and subdivision procedures, plan review, mapping, and construction practices.
- Principles, practices, and techniques of floodplain management.
- Environmental review requirements for public projects, including but not limited to the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).
- Resource Agency permitting for public projects, including but not limited to Bay Area Conservation and Development Commission (BCDC), Regional Water Quality Control Board (RWQCB), US Army Corps of Engineers (USACOE), and California and US Departments of Fish and Wildlife.
- Americans with Disabilities Act (ADA) and its applicability to public places, programs and projects.
- Techniques, procedures, and equipment used for geotechnical review processes.
- Bidding requirements for public works projects.
- Project management and contract administration principles and techniques. • Engineering plan types, review practices, and permit filing and approval procedures. • Applicable Federal, State, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Federal Highway Administration (FHWA) funding, including Caltrans Office of Local Assistance Local Procedures Manual and Guidelines.
- Modern office practices and technology, including personal computer hardware and software applications related to the work, such as computer-aided drafting (CAD) concepts and applications and Geographic Information Systems (GIS) programs.
- Modern developments, current literature, and sources of information regarding engineering.
- Principles of advanced mathematics and their application to engineering work.
- Practices of researching engineering and design issues, evaluating alternatives, making sound recommendations, and preparing and presenting effective staff reports.
- Methods and techniques of effective technical report preparation and presentation.
- English usage, grammar, spelling, vocabulary, and punctuation.

- Techniques for effectively representing the City in contacts with governmental agencies, community groups, various business, professional, educational, and regulatory organizations, and with property owners, developers, contractors, and the public.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and City staff.
- 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:**

- Manage and oversees multiple capital improvement/engineering projects and programs
- Conduct complex civil engineering research projects, analyze complex problems, evaluate alternatives, make sound recommendations, and prepare effective technical staff reports.
- Prepare, understand, and interpret engineering construction plans, specifications, and other contract documents.
- Conduct comprehensive engineering studies and prepare reports with recommendations.
- Assist in and develop and administer contracts for professional services and construction in a public agency setting.
- Interpret, apply, explain, and ensure compliance with Federal, State, and local policies, procedures, laws, and regulations, technical written material, and City engineering policies and procedures.
- Design engineering projects.
- Read and understand technical drawings and specifications.
- Perform mathematical and engineering computations with precision.
- Recognize discrepancies from as-built to contract specifications and recommend reconciliation.
- Make engineering design computations and check, design, and prepare engineering plans and studies.
- Develop and implement Communication Plans for Public Works projects, including information messaging and meetings and gathering, evaluating and processing stakeholder feedback.
- Effectively represent the department and the City in meetings with governmental agencies, community groups, and various business, professional, and regulatory organizations and individuals.
- Interpret and prepare plans, maps, drawings, profiles and graphs.
- Perform detailed analyses of designs, specifications and plans.
- Direct the work of and work with contract consultants. This may involve coordinating and managing work of multi-disciplinary team of consultants on larger projects.
- Prepare and present clear, concise, and logical written and oral reports, correspondence, policies, procedures, legal descriptions, and other written materials.

- Manage construction phase of Public Works projects including contractor's progress, quality of work and conformance with contract documents, and coordination with stakeholders including utility companies, neighbors, and the public at large.
- Establish and maintain a variety of filing, record-keeping, and tracking systems.
- Make sound, independent decisions within established policy and procedural guidelines.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines
- Make and check complex engineering computations quickly and accurately.
- Use computers and software applications (CAD, GIS, MS Office and Outlook) in engineering applications.
- 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. Possession of valid Class C California driver's license with an acceptable driving record at the time of appointment and throughout employment in this classification is required.

Additional Responsibilities:

Perform as a designated Disaster Service Worker as needed during emergency situations; respond to emergency call outs for service after hours and on weekends as needed.

Assistant Engineer: Three (3) years of increasingly responsible engineering experience or (2) years of experience equivalent to Assistant Engineer in the City of Larkspur. Possession of an Engineer-In-Training Certificate issued by the State of California.

Associate Civil Engineer: Five (5) years of increasingly responsible professional engineering experience or two (2) years of experience equivalent to Associate Civil Engineer with the City of Larkspur. Registration as a professional Civil Engineer (PE) in the State of California is required.

### **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: Non-Exempt*

*Bargaining Unit: Larkspur Miscellaneous Employees Association*

*Approved by: City Manager Dan Schwarz*

*Date: May 6, 2020*