

**CITY OF CARLSBAD
CLASS SPECIFICATION**

JOB TITLE: PRINCIPAL ENGINEER

BASIC FUNCTION:

Under general direction, supervises engineering professionals, technical staff and administrative staff as assigned; performs responsible, difficult and professional engineering work; plans, directs and coordinates engineering activities not limited to performing plan checks, overseeing contracts, inspection and counter operations, assisting other department and divisions and other engineering functions as it may relate to areas of traffic and transportation, construction, utilities, land development or others.

DISTINGUISHING CHARACTERISTICS:

The Principal Engineer is an advanced supervisory class in the professional engineering series. Assignments are broad in scope requiring considerable independent judgment and action. Incumbent leads a group of professional, technical, managerial, and administrative staff, as well as contractors and consultants with extensive public interaction.

KEY RESPONSIBILITIES:

The following responsibilities are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

Provides assistance to the Engineering Manager and/or City Engineer in planning and organizing the department and division activities.

Oversees the management of specialized programs and functions, and persons/consultants performing services and functions. Participates in the selection, training, and evaluation of assigned professional and paraprofessional staff as well as contractors and consultants; provides or coordinates staff training; prioritizes mentorship of staff; works with employees on performance issues in coordination with Human Resources; implements discipline procedures in consultation with Human Resources; responds to staff questions and concerns.

Prioritizes, assigns, supervises, reviews, and participates in professional engineering work of staff for the design and construction of public works and private land development projects, as assigned, in accordance with regulations and standards. Directs, coordinates, and reviews work operations, services, and activities; identifies and resolves problems; reviews and evaluates work products, methods, and procedures; negotiates and resolves disputes; delivers solutions that are consistent with long-term city goals; and participates in claim defense.

Monitors workflow; identifies opportunities for improving service delivery methods and procedures; identifies resource needs; reviews with appropriate management staff; implements improvements; ensures files and records are appropriately maintained.

Maintains records concerning operations and programs; prepares and presents reports on operations and activities.

Assists in development of the division's or department's annual budget and resourcing.

Develops, updates, and approves technical directives, guidelines, standard drawings, standard specifications, and other technical and administrative policies and procedures.

Responds to and resolves citizen and staff inquiries, concerns, and complaints in a timely and effective manner. Coordinates engineering activities with other divisions, departments, consultants, contractors, engineers, and outside agencies; advises internal management and city leadership on technical matters. Establishes a professional and courteous tone to responses that promotes collaborative problem-solving and respects the needs of those involved.

Serves as project manager and city representative for multi-agency programs and projects; develops regional procedures. Serves as staff on a variety of boards, commissions, and committees including city commissions, councils, and planning groups; prepares and presents staff reports, correspondence, and other commission and council materials.

Participates in professional group meetings; maintains awareness of new trends and developments in the field of engineering; incorporates new developments as appropriate into programs.

Relieves the Engineering Manager of a wide variety of administrative detail, including representing the Engineering Manager at public and private meetings; acts as the Engineering Manager's designee as required.

Prepares and reviews correspondence, reports, memos, and analyses and makes professional recommendations. Performs the more technical and complex tasks of the work unit including preparing and reviewing plans, specifications, and calculations, and constructability reviews.

As assigned, reviews and processes development projects for discretionary approval, ensuring project compliance with city standards, regulations, and requirements, and engineering best practices. Negotiates and develops project-specific conditions of approval.

As assigned, manages city review and response to private development projects through the entitlement and construction drawing preparation and permitting stages, reviews engineering plans and technical studies for conformance with applicable laws, city regulations, and professional standards of practice.

As assigned, reviews, and analyzes subdivision and parcel maps, records of survey, traverse calculations, legal descriptions, plats, easements, and similar documents for conformance with applicable laws, city regulations, and professional standards of practice.

As assigned, oversees the engineering permit process; reviews and approves various permit applications; issues permits for private development projects; and monitors construction conformance to regulations and standard requirements.

As assigned, prepares project certifications; prepares requests for project authorizations; prepares invoices for reimbursement; documents procedures and approvals. Ensures completion of projects within budgetary, regulatory, and time constraints.

As assigned, writes specifications and prepares cost estimates; implements Federal, State, and local zoning, planning, and land use regulations; reviews and prepares descriptions for easements and land acquisitions; reviews standard specifications and adds special provisions as necessary.

As assigned, serves as project manager for federally funded projects; prepares grant funding applications and budgets; develops project scope; reviews plans, specifications, and estimates; coordinates project approvals; prepares and monitors project schedules.

As assigned, reviews and garners approval from appropriate design persons of construction submittals, contract change order requests, schedules, and design changes and reviews schedules of construction; prepares and processes progress payments, contract change orders, statements of working days, requests for information response, reports of completion, resolutions of acceptance, and notices of completion.

Other duties as assigned.

QUALIFICATIONS:

To perform a job in this classification, an individual must be able to perform the essential duties as generally described in the specification. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential duties in a specific job. The requirements listed below are representative of the knowledge, skill and/or ability required.

Knowledge of: (May vary depending on assignment.)

- Advanced principles and practices of engineering and administration as applied to the design and construction of city facilities and projects.
- Methods of preparing designs, plans, specifications, estimates, reports and Engineering Manager recommendations relating to engineering projects.
- City policies and procedures governing engineering and traffic operations and land development.
- Applicable federal, state and local laws, rules and regulations related to the engineering, development and construction of projects.
- Principles, practices and techniques of public administration including budget and personnel administration.
- Principles of supervision, training and evaluation.
- Principles and methodologies of establishing fees and assessments and spending costs to users, permittees and property owners.

Ability to: (May vary depending on assignment.)

- Plan, organize, motivate and direct the activities of assigned area of responsibility.
- Interpret applicable laws, rules and regulations.
- Develop and administer a division budget.
- Prepare and analyze technical reports, statements, contracts and legal documents.
- Supervise, train and evaluate professional and technical staff.
- Maintain effective work relationships with staff, other governmental agencies, contractors and the general public.
- Communicate clearly and concisely, both orally and in writing.

EXPERIENCE AND EDUCATION:

Any combination of experience and education that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

A bachelor's degree in engineering from an accredited college or university with major course work in engineering or a related field. Additional course work in public administration desirable.

Eight years of increasingly responsible and varied professional engineering and engineering management experience involving the discretionary review and plan check of a variety of Engineering Manager development projects and/or design and construction of a variety of public facilities and projects, including a minimum of two years of experience in a supervisory capacity.

SPECIAL REQUIREMENTS

License or Certificates:

Possession of a valid license as a Registered Civil Engineer issued by the State of California Board for Professional Engineers, Land Surveyors and Geologists.

In addition, for Transportation, possession of a valid license as a Traffic Engineer issued by the State of California Board for Professional Engineers, Land Surveyors and Geologists.

PHYSICAL REQUIREMENTS AND ENVIRONMENTAL SETTING:

While performing the duties of this class, an employee is regularly required to sit; talk or hear, in person and by telephone; use hands to finger, handle, feel or operate standard office equipment; and reach with hands and arms. Specific vision abilities required by this job include close vision and the ability to adjust focus to read and operate office equipment as necessary during the course of the work assignments.

While performing the duties, employees of this class are regularly required to use written and oral communication skills; read and interpret financial and statistical data, information and documents; analyze and solve problems; use math and apply mathematical reasoning and abstract statistical concepts; observe and interpret people and situations; learn and apply new information or skills; perform highly detailed work on multiple, concurrent tasks; work under intensive deadlines; and interact with staff, City Council members and others encountered in the course of work.

The employee works under typical office conditions and the noise level is usually quiet. Regular duties include traveling to construction job sites and/or development properties, with the typical conditions associated with construction and/or undeveloped/underdeveloped property. Employee is regularly required to attend meetings and travel within and outside city limits during normal work hours and in the evenings and on weekends.

This is an at-will unrepresented classification.

DATE APPROVED: April 1, 2024