



CITY OF BIG BEAR LAKE

CITY ENGINEER

*Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specifications **may not include all** duties performed by individuals within a classification. In addition, specifications are intended to outline the **minimum** qualifications necessary for entry into the class and do not necessarily convey the qualifications of incumbents within the position.*

DEFINITION:

Under the general supervision of the Director of Public Works & Engineering or his/her designee, this position provides a variety of high level Professional Engineering functions for the department. This includes, but is not limited to; designing capital improvement projects, developing bid documents, reviewing plan submittals, preparing various construction documents, addendums and reports, responding to Requests for Information, processing change orders, developing grant applications, and tracking budgets. Performs other related duties as assigned.

DISTINGUISHING CHARACTERISTICS:

The **City Engineer** position is responsible for complex Civil Engineering design work and construction management. Responsibilities include all aspects of Professional Engineering generally spanning the areas of transportation, parks, utilities, and facilities.

SUPERVISION RECEIVED/EXERCISED:

Minimal supervision is received from the Director of Public Works & Engineering or his/her designee. Incumbent is expected to maintain professional working relationships with employees at all levels within the organization and may provide direction to lower level technical, clerical, and field level staff.

ESSENTIAL FUNCTIONS: *(include but are not limited to the following)*

- Plans, designs, organizes, and directs activities relating to the construction and maintenance of public improvement projects such as; street improvements, sidewalks, drainage structures, sewer systems, parks, trails and other public facilities. Responsible for managing the overall contract scope, schedule, and budget from the conception thru completion of assigned projects.
- Researches project design requirements and then creates design plans for capital improvement projects using AutoCAD software, performs complex calculations; prepares estimates of time and material costs; reviews plans for accuracy, suitability, completeness and conformity with engineering principle.
- Prepares Requests for Qualifications/Requests for Proposals/Notices for Bids and other documents related to the procurement of private consultants and contractors to perform surveying, design, engineering studies, and other construction and engineering services; evaluates and ranks bids and proposals; prepares and reviews staff reports to justify contractor/consultant selection, verify funding, and recommend award of contracts and professional services agreements.
- Administers design and construction contracts; coordinates and reviews the work of outside consultants and contractors; prepares purchase orders; reviews and recommends disbursement of funds for contracted progress payments related to assigned projects; negotiates prices, schedules and processes change orders, as necessary.
- Evaluates construction methods and determine cost-effectiveness of plans; requisitions supplies and materials needed to complete construction projects; obtains all necessary permits and licenses; coordinates work schedules with other City departments, private properties, and outside agencies; continually works to minimize the City's exposure and risk during the project.

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- Performs field inspections of construction and maintenance projects and certifies that projects are constructed in accordance with engineering design and construction standards, plans and specifications, the general plan, and other regulatory and guidance documents.
- Interprets and explains plans and contract terms to consultants, contractors, and field level workers, representing the City in a professional manner.
- Implements quality assurance and quality control procedures to ensure successful project outcomes as measured by project goals and community satisfaction.
- Investigates damage, accidents, or delays at construction sites, to ensure that proper procedures are carried out; takes action to deal with the results of delays, bad weather, or emergencies during the project.
- Coordinates and/or participates in departmental meetings related to project activity such as pre-construction and interim construction meetings.
- Performs long-range planning and budgeting for Capital Improvement Projects including the City's sanitary sewer collection system, storm drain conveyance system, city parks, transportation system, and city facilities; participates in identification and prioritization of Capital Improvement Projects.
- Participates in plan check, review and processing of plans for private developments affecting City streets, drains and related public works facilities; assures compliance with appropriate laws, codes, ordinances, rules and regulations.
- Reviews and issues surface alteration permits for driveway, utility cuts, or other construction activities within the public rights-of-way and prepares, reviews, and approves traffic control plans for construction work on city streets.
- Assists the public at the counter by calculating fees, issuing permits, and dispensing general and technical information regarding the City's engineering policies and procedures, related codes, ordinances, and regulations.
- Oversees the administration of grants, including the application process, City Council approval, contract preparation, coordination of grant funded construction projects, prepares/submits required grant reporting documentation and maintains required engineering records for grant audit purposes.
- Serves as the City's Floodplain Administrator and Municipal Separate Storm Sewer System (MS4) legal contact, ensures California Environmental Quality Act (CEQA) compliance is obtained for all public works projects, oversees compliance with the National Pollutant Discharge Elimination System (NPDES) program and all other environmental regulatory agency requirements.
- Provides assistance to the Director of Public Works & Engineering; conducts a variety of organizational studies, investigations, and operational studies; recommends modifications to engineering programs, policies, and procedures as appropriate; assists with the City's documentation of infrastructure inventories and maintenance of infrastructure records.
- Manages the City's engineering design manuals, construction standards, and specifications; updates and revises when necessary; participates in the development and implementation of goals, objectives and policies for assigned programs.
- Represents the Engineering department at Planning Commission, City Council, Design Review Committee,

and outside agency meetings; serves on a variety of professional boards and committees.

- Writes and compiles staff reports and supporting documentation to be presented at City Council and Planning Commission meetings; draft memorandums and professional correspondence to staff, vendors, contractors, consultants and others.
- Coordinates assigned activities with other city departments and outside organizations, including federal, state, and local agencies.
- Responds to and resolves citizen inquiries and complaints, replies to citizen requests for service, and provides information pertaining to department activities/projects.
- Participates in professional group meetings and trainings, maintains current working knowledge of new trends and innovations in the field of Civil Engineering including existing, revised, and new applicable codes, standards and professional industry developments.
- Demonstrates an understanding of applicable policies, procedures, and work methods associated with assigned duties; responds to questions and concerns from the general public; provides information as appropriate.
- Establishes positive working relationships with representatives of community organizations, government agencies, consultants and members of the public.
- Performs other related and peripheral duties as required and necessary for the successful performance of this job.

PHYSICAL, MENTAL, AND ENVIRONMENTAL WORKING CONDITIONS:

Position requires prolonged or intermittent sitting, standing, walking on level, uneven, or slippery surfaces, reaching, twisting, turning, kneeling, bending, squatting, stooping, and crouching. The position also requires grasping, repetitive hand movement, and fine coordination in preparing reports and using a computer keyboard in the performance of daily duties. Additionally, the position requires near and far vision when reading correspondence, and using the computer, and acute hearing is required when providing phone service and communicating in person. The need to lift, carry, push and pull files, reports and other materials weighing up to forty (40) pounds is required. The employee may be required to travel to different sites and locations. When working outdoors, the incumbent may encounter extreme weather conditions, including wet, hot, cold, wind, snow, ice, and heavy vehicle traffic. The noise level in the work environment is usually quiet to moderate when indoors and moderate to loud when outdoors.

Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

QUALIFICATIONS: *(The following are minimal qualifications necessary for entry into the classification.)*

Any combination of training and experience that provides the desired knowledge, skills and abilities necessary for a City Engineer. A typical way of obtaining the required qualifications is as follows:

Education and/or Experience:

A Bachelor's degree in Civil Engineering, or a related field from an accredited college/university is required. At least three (3) years of related experience in municipal engineering, infrastructure maintenance, construction, and operation of a public utility system is preferred. In addition, an advanced knowledge of AutoCAD is highly desired.

License/Certificate:

- Possession of, or ability to obtain, a valid Class C California driver's license.
- Possession of a current Professional Engineer's License from the State of California and registration as a Civil Engineer is required.

KNOWLEDGE/ABILITIES/SKILLS: *(The following are a representative sample of the KAS's necessary to perform essential duties of the position.)*

Knowledge of:

Principles of civil engineering and engineering/construction project management; plans and specifications applicable to public infrastructure projects; cost estimation; principles and practices of engineering design as related to public infrastructure projects; methods, materials, and techniques used in the construction of public works projects; methods and techniques of drafting, mapping, and planning as they apply to land description and general public works purposes; laws, statutes and ordinances governing legal property descriptions. Current literature and sources of information regarding engineering and environmental and other state and federal laws related to project development; modern office procedures, practices, and equipment operation, including a computer and applicable software; methods and techniques for record keeping and report preparation and writing; proper English, spelling and grammar; and standard safety practices.

Ability to:

Make complex engineering, construction and related computations to design and construct public infrastructure projects; analyze problems, identify alternatives and solutions, evaluate consequences of proposed actions, and implement recommendations in support of goals and work plans; prepare accurate engineering project budgets; perform complex mathematical calculations quickly and accurately; oversee special projects and programs; interpret and apply administrative and departmental policies and procedures; maintain cooperative working relationships with City personnel, engineers, developers, contractors, outside agencies, and the public; exercise independent judgment; develop, read and interpret engineering plans, specifications, records of survey, legal descriptions, and tract descriptions; interpret, explain, and apply applicable federal/state laws, codes, regulations, local ordinances, and related standards which are applicable to the work or review; oversee special projects and/or programs; prepare clearly written correspondence and technical reports involving mathematical computation; prioritize, schedule and follow-up on work assignments; work independently and as part of a team; follow written and oral directions; observe safety principles and work in a safe manner; be able to plan, be well organized, work well under pressure, be proactive, discreet and able to maintain confidentiality on appropriate issues.

Skill to:

Operate standard office equipment, including a computer and variety of word processing, spreadsheet, database, presentation, and other related software applications; familiarity with engineering and construction management software such as AutoCAD, ArcGIS, and similar programs.