



Town of Moraga

Associate Engineer

Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specification **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 general supervision, performs complex and advanced professional field and office engineering work related to the diverse range of professional engineering duties in the management and administration of the Town's Capital Improvement Program (CIP), land development, traffic engineering, and public works infrastructure construction and maintenance projects; confers with developers, contractors, and representatives of other agencies regarding facility and infrastructure development; develops, negotiates, and manages professional services and construction contracts; and, where assigned, leads components of the Town's stormwater and Clean Water Program compliance; provides professional staff assistance to other engineers, 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

This is a journey-level class in the professional engineering series. Incumbents are expected to perform the full range of professional and technical engineering work for the Town's CIP, land development, traffic engineering, and public works infrastructure construction and maintenance projects. 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 ability to perform the full range of assigned duties independently, with greater responsibility for managing projects and regulatory tasks under limited oversight. This class is further distinguished from the Senior Engineer in that the latter is the full supervisory-level class in the series and/or has ultimate responsibility for organizing, assigning, supervising, and reviewing a major functional area of the Engineering Division.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from assigned supervisory and managerial staff. Exercises no direct supervision of staff but may provide technical direction, guidance, and mentoring to Assistant Engineers, Engineering Technicians, and other staff on assigned projects.

ESSENTIAL FUNCTIONS (DUTIES)

EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only)

Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

Duties may include, but are not limited to, the following:

- Performs responsible and demanding engineering and project management work in Public Works; performs a variety of administrative engineering functions. Serves as Project Manager on assigned engineering and construction projects.
- Manages the planning, design, and inspection of all phases of civil engineering public works construction projects, including defining the scope of the project; securing adequate funding from Federal and State grant programs and other funding sources; coordinating with permitting and public utility agencies; performing historical document research and review; preparing environmental documents; applying engineering principles and practices to specific problems; coordinating construction schedules with other projects and agencies; preparing and reviewing cost estimates; and inspecting construction of projects to ensure compliance with construction documents.
- Reviews various private land development applications as related to the right-of-way; provides assistance to the Planning department during the entitlement phase; serves as lead coordinator during the improvement plan and final map phase; reviews and comments on plans submitted by developers for compliance with established standards and Town policies; recommends conditions of approval; and ensures public improvements are built per approved plans.
- Performs traffic engineering and transportation planning for the planning, design, operation, and maintenance of the Town's transportation system; and ensures compliance with laws, rules, regulations, and ordinances; supports Town initiatives related to multimodal safety, Safe Routes to School, and complete streets, as assigned.
- Supports the Town's stormwater and Clean Water Program compliance (e.g., C.3, C.6) by reviewing project stormwater control plans and hydromodification management (HM) reports, coordinating with program staff and the Countywide program, and helping ensure development and capital projects meet applicable low impact development (LID) and HM requirements.
- Reviews construction plans prepared by consulting engineers and private contractors to verify compliance with Town requirements and for conformance with regulations; reviews engineering calculations of other engineers or consultants; participates in pre-design, construction, and progress meetings.
- Prepares bid advertisements for the construction of capital improvement projects; issues addenda to clarify plans and specifications; conducts pre-bid and site meetings with contractors; reviews and analyzes bid openings for the lowest responsible and responsive bidder; and prepares staff reports for award of contracts.
- Develops Requests for Qualifications (RFQs) and Request for Proposals (RFPs); participates in the selection of consulting engineers and professional services; negotiates scope-of-work, fees, and schedules; administers and tracks related contracts; and reviews and recommends the approval of contract work and invoice payments.
- Identifies and defines potential CIP projects; develops project descriptions and conceptual-level project costs; identifies potential funding sources.
- Provides construction management of municipal public work projects; performs routine field inspections, surveys, and testing; informs management of work in progress, operating problems, and

potential delays; resolves disputes between the Town and contractors; negotiates and recommends contract change orders and progress payments; and archives files, record drawings, and base maps at project closeout.

- Meets and confers with contractors, engineers, developers, architects, a variety of outside agencies, and the general public in acquiring information and coordinating engineering matters; provides information regarding Town development requirements.
- Investigates field problems affecting property owners, contractors, and maintenance operations; responds to and resolves various issues with residents, other department representatives, and outside agencies in a professional manner; identifies and reports findings and takes necessary corrective action.
- Serves as a liaison for an assigned functional area with other Town departments, divisions, and outside agencies; attends meetings, as necessary; participates on a variety of boards, commissions, committees, and task forces; attends and participates in professional groups; stays abreast of new trends and innovations.
- Develops and reviews staff reports related to engineering activities and services; may present information to the Town Council and various commissions, committees, and boards; performs a variety of public information and outreach work related to assigned activities.
- May provide technical direction and informal mentoring to Assistant Engineers, Engineering Technicians, and other staff on assigned projects to help develop staff capacity and ensure consistent application of Town standards and practices.
- Provides excellent customer service: confers and coordinates with those within or outside the Town staff and provides written and oral responses to a variety of inquiries and problems regarding municipal engineering policies, procedures, and standards.
- Performs other duties as assigned.

QUALIFICATIONS

Education and Experience:

Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

Education:

- Equivalent to a bachelor's degree from an accredited college or university with major course work in civil, structural engineering or a related engineering curriculum. A master's degree is desirable.

Experience:

- Three (3) years of increasingly responsible professional engineering experience involving capital improvement projects, development services, stormwater management, Clean Water Program compliance, and traffic engineering. Project management and municipal engineering are desired; or at least two (2) years of experience equivalent to an Assistant Engineer with the Town.

Licenses and Certifications:

- Registration as a Civil Engineer or Traffic Engineer issued by the California State Board of Professional Engineers.
- A valid California Driver's License and a satisfactory driving record are conditions of initial and continued employment.

Knowledge of:

- Principles and practices of civil engineering as applied to the planning, design, cost estimating, construction, installation, and inspection of a wide variety of municipal facilities, miscellaneous buildings and structures, and traffic and transportation systems.
- Civil and transportation engineering principles, concepts, standards, and practices associated with public works programs and private development projects.
- Principles and practices of environmental impact assessment and related regulatory processes
- Project management and contract administration principles and techniques.
- Methods and techniques of conducting comprehensive inspections on infrastructure projects.
- Applicable Federal, State, and local laws, regulatory codes, ordinances, and procedures relevant to the assigned area of responsibility.
- Principles of advanced mathematics and their application to engineering work.
- Recent and on-going developments, current literature, and sources of information related to the engineering, development, and construction fields.
- Research principles, data gathering, analysis and presentation methods.
- Drafting and mapping principles and techniques.
- 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.
- General principles of risk management related to engineering project design and construction.
- Town and other mandated safety rules, regulations, and protocols.
- Record keeping principles and procedures.
- Modern office practices, methods, computer equipment, and applications related to the work.
- English usage, spelling, vocabulary, grammar, and punctuation.
- Techniques for providing a high level of customer service by using de-escalation techniques in effectively dealing with the public, vendors, contractors, and Town staff.

Ability to:

- Conduct complex civil engineering research projects, evaluate alternatives, make sound recommendations, and prepare effective technical reports.
- Analyze and interpret engineering plans and specifications in accordance with design requirements and applicable standards and regulations.
- Manage and monitor complex projects on-time and within budget.
- Prepare, understand, and interpret engineering construction plans, specifications, and other contract documents.
- Prepare, negotiate, and manage contracts and projects and monitor the work of contractors and consultants.
- Assist in the development and administration of contracts for professional services and construction in a public agency setting; direct the work of contract consultants.
- Understand, interpret, apply, explain, and ensure compliance with Federal, State, and local policies, procedures, laws, and regulations, technical written material, and Town engineering policies and procedures.

- Perform mathematical and engineering computations with precision.
- Effectively represent the department and the Town in meetings with governmental agencies, community groups, and various business, professional, and regulatory organizations and individuals.
- Coordinate public works construction improvements with the utility companies and other agencies such as relocation, removal, or installation of utility improvements.
- Conduct comprehensive construction project inspections.
- Prepare and present clear, concise, and logical written and oral reports, correspondence, policies, procedures, legal descriptions, and other written materials.
- Establish and maintain a variety of filing, record keeping, and tracking systems.
- 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.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

OTHER REQUIREMENTS

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer, to inspect Town development sites, including traversing uneven terrain, climbing ladders, stairs, and other temporary or construction access points, to operate a motor vehicle, and to visit various Town and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. This is primarily a sedentary office classification, although standing in work areas and walking between work areas to conduct inspections may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator, and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must be able to lift, carry, push, and pull materials and objects weighing up to 25 pounds or heavier weights, in all cases with the use of proper equipment and/or assistance from other staff.

When assigned to field inspection, must possess mobility to work in changing site conditions; possess the strength, stamina, and mobility to perform light to medium physical work; to sit, stand, and walk on level, uneven, or slippery surfaces; to reach, twist, turn, kneel, and bend, to climb and descend ladders; and to operate a motor vehicle and visit various Town sites; vision to inspect site conditions and work in progress. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards, with exposure to hazardous materials in some site locations.

MENTAL DEMANDS

While performing the duties of this class, the incumbent is regularly required to use written and oral communication skills; read and interpret data, information and documents; analyze and solve complex problems; use math and mathematical reasoning; perform highly detailed work under changing, intensive deadlines, on multiple concurrent tasks; work with constant interruptions; and interact with other staff, officials and the public. Employees may interact with upset staff and/or public and private representatives and contractors in interpreting and enforcing departmental policies and procedures.

ENVIRONMENTAL CONDITIONS

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with challenging individuals while interpreting and enforcing policies and procedures.

Employees also work in the field and are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, vermin, insects, and parasites, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes.

WORKING CONDITIONS

Town employees are expected to work overtime, weekends, evenings, and holidays as required to accommodate the Town's needs and attend events/meetings, in addition to responding as a Disaster Services Emergency Worker.

****The employer will make reasonable accommodation in compliance with the Americans with Disabilities Act of 1990.***