



Town of Moraga

Assistant (Civil) 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.

Established: August 6, 2015
Revised:
Employee Group: Moraga Employees Association
FLSA Status: Non-Exempt

CLASSIFICATION DESCRIPTION

Purpose

Under general supervision, performs professional-level engineering assistance to the Town by assisting Town capital projects at all stages of planning, design, and construction; supports the plan check process for subdivision and private developments; provides technical support for transportation planning and traffic engineering; performs a variety of technical and administrative duties relating to the maintenance, construction, inspection, survey, and ordinance enforcement of public infrastructure; receives, investigates, and responds to complaints; maintains and updates engineering maps, drawings, records, and files; and performs other related work as required.

Distinguishing Characteristics

This class is the second level in the professional engineering series. Under some supervision, incumbents act as the project engineer on major projects and project manager on minor projects. Incumbents are not as closely supervised and receive assignments of greater difficulty. Under professional review, the Assistant Engineer incumbent evaluates, selects, and applies standard engineering techniques, procedures, and criteria, using judgment in making minor adaptations, modifications, and recommendations. Assignments involve investigations with a limited number of variables. Incumbents receive instructions on specific assignments objectives, complex features, and possible solutions. Assistance is furnished regarding unusual problems and work is reviewed in detail upon completion of assignments.

Equipment, Methods and Guidelines

Uses Federal, State, County and local laws, policies, procedures, practices, building codes and civil engineering standards, standard plans and specifications; computer software programs and their capabilities and limitations; programmable calculators, motor vehicle, and engineering and survey equipment. Uses project management, scheduling, and budgeting; and surveying principles, equipment, and practices.

Working Conditions

Office and inspection site environment in all types of weather. Work may involve inconsistent work schedules to accommodate construction activities and may include work during weekends, holidays, and overtime as required.

Physical Demands

Site visits and office setting may involve stooping, crawling, climbing, balance, and lifting loads up to 50 pounds. Possible exposure to extreme hot or cold temperature; moving machinery; marked changes in temperature/humidity; dust, fumes, smoke, gases, odors, mists, or other irritating particles; toxic or caustic chemicals; excessive noise; radiation or electrical energy; solvents, greases, or oils; slippery or uneven walking surfaces; below ground and in confined spaces; vibrations; flames or burning items.

Supervision Received and Exercised

Works under close supervision and follows established procedures; work is reviewed frequently by senior staff for progress and accuracy. Independently applies applicable codes and ordinances to ensure conformance. Control over work methods is general, rather than detailed in nature; makes independent decisions when issuing permit authorizations, approving construction start dates, stopping or rejecting work, or issuing citations for violations. Work assignments, including written reports and communications, are reviewed upon completion but before submission or distribution.

EXAMPLES OF DUTIES

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

1. Assists with engineering design work in connection with municipal public work projects including engineering plans and specifications for the construction of streets, storm drains, parks, streetlights, signals, buildings, and other improvements; gathers data, makes calculations, and recommends alternatives.
2. Prepares bid advertisements for the construction of minor capital improvement projects; issues addendums to clarify plans and specifications; conducts pre-bid and site meetings with contractors; reviews and analyzes bid openings for lowest responsible and responsive bidder; and prepares staff reports for award of contracts.
3. Provides construction management of minor 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.
4. Assists with reviewing various private land development applications as related to the right-of-way; provides assistance to the Planning department during the entitlement phase; supports senior staff during the improvement plan and final map phase; reviews and comments on plans submitted by developers for compliance with established standards; and ensures public improvements are built per approved plans.
5. Performs field, office, and computer-aided basic studies; performs field work such as conducting observations, making traffic counts, and analyzing traffic flow; reviews accidents and other documentation and take measurements, researches records and other data used to compile information for decision making.
6. Maintains engineering and traffic/transportation files, including plans, studies, inspections, surveys, maps and other data related to engineering and transportation projects; updates traffic maps, engineering drawings, standard details, and information recorded in GIS.
7. Receives and responds to requests from developers, contractors, private engineers, title companies, real estate brokers, and others for base maps, property line information, encroachment permits, benchmarks, copies of maps, confirming street information and other geographical data.
8. Provides excellent customer service; responds to routine citizen inquiries and complaints relating to the Town's infrastructure, including researching archival information from the

- Town's files, seeking input from other departments as necessary, and communicating issues to appropriate supervisory or management staff for feedback or direction.
9. Processes encroachment permits involving plan review to ensure compliance with Town policy, codes, and regulations and fee, insurance, and bond requirements; coordinates and communicates with contractors, residents, other agencies, and other Town staff.
 10. Uses clearly defined practices and procedures to inspect the methods and materials used in encroachment permit work, routine construction projects, construction surveys, construction safety precautions, traffic control, and erosion and sediment control.
 11. Coordinates material testing and analyzes material test results including but not limited to relative compaction tests, gradation of aggregates, slump tests, and resistant value of soils. Inspects producers of construction materials and its sources.
 12. Reviews and interprets construction plans, specifications, encroachment permits, and other plans affecting assigned projects; maintains daily diary and field records of construction activities, contractor crew, equipment, materials and quantities; and recommends approval of progress and final payment to contractors.
 13. Participates in meetings to discuss construction details and resolves issues with contractors, other departments, other agencies, and the public; identifies construction problems, monitors the corrections of project deficiencies, and recommends approval of necessary contract change orders and plan adjustments.
 14. Conducts compliance of public's maintenance responsibilities of sidewalk, curb, gutter, private storm drainage conveyance systems, and creeks; posts liens, required repairs, and construction notices.

QUALIFICATIONS

Knowledge and Abilities

- Knowledge of the principles and practices of civil engineering.
- Knowledge of principles, techniques and terminology relating to construction inspection, construction quality, equipment/tools, materials, workmanship industry standards, and construction OSHA safety practices.
- Knowledge of traffic control, traffic safety, and MUTCD manual.
- Knowledge of storm water pollution control principles and practices.
- Knowledge of terminology, methods, practices and techniques of drafting.
- Skill in computers, various software applications, and office and field equipment.
- Skill in communicating effectively in English both orally and in writing.
- Skill in establishing and maintaining effective working relationships with others.
- Skill in organizing regulatory and control functions to win compliance, rather than to control or constrain those being regulated.
- Ability to read, interpret, and develop graphic and written materials including plans and maps.
- Ability to operate standard engineering hand held tools and surveying instruments used in construction inspection.
- Ability to work on multiple projects, effectively set priorities, and complete assigned tasks in an accurate and timely manner.
- Ability to prepare accurate notes, sketches, and daily reports.

Education and Experience

Any combination of experience and education that would likely provide the required knowledge and abilities is qualifying. Generally, this will require:

- Experience: Three (3) years of increasingly responsible professional engineering experience involving capital improvement projects, development services, and traffic engineering. Municipal engineering desired.
- Education: Bachelor of Science Degree from an accredited college or university in Civil, Structural, or related engineering curriculum.

License or Certificate

Failure to possess or maintain the valid license shall result in discipline up to and including termination of employment. This classification requires the ability to travel independently within and outside of Town limits.

- Registration as an Engineer-in-Training issued by the California State Board of Registration for Civil Engineering. Registration as a Civil Engineer issued by the California State Board of Registration for Civil Engineering can substitute for one (1) year of experience.
- A valid California Driver's License and a satisfactory driving record are conditions of initial and continued employment.