

Associate Civil Engineer

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

SUMMARY DESCRIPTION

Under general supervision, plans, coordinates, administers and participates in the development and review of traffic engineering, transportation related capital improvements, drainage, and special projects; to provide professional technical engineering support relative to assigned area of responsibility; to develop and implement long range planning; and to apply state and federal funding to roadway and other capital projects. Performs complex professional and technical staff; performs related work as assigned.

IDENTIFYING CHARACTERISTICS

This is the journey level class within the professional Civil Engineer series. Employees at this level perform the full range of duties and receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies within the work unit. This class is distinguished from the Assistant Engineer in that the Assistant Engineer is not registered as a Professional Civil Engineer.

REPRESENTATIVE DUTIES

The following duties 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.

1. Plans, assigns, provides lead direction and reviews the work of a professional and technical project team or unit performing engineering duties in the areas of design, construction, transportation planning, traffic engineering and/or real property.
2. Trains assigned staff in areas of responsibility and provides for their development.
3. Assists in budget preparation for projects and monitors project expenditures.
4. Provides technical and professional assistance to staff; reviews plans, specifications, contract documents and other reports and documents to ensure compliance with applicable codes, policies and procedures.
5. Assist in policy and procedure development and implementation.
6. Performs the most difficult and complex engineering assignments; plans, reviews and participates in design work, contract administration and land use activities.
7. Prepares and reviews project quantity and cost estimates; analyzes structures, roadways and other project sites for engineering, economic, legal, and other considerations.
8. Performs complex project engineering work for a group of smaller projects or for major construction projects; inspects and monitors contract work for compliance with plans, specifications, codes and deadlines.

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9. Coordinates the activities of the unit with other divisions, departments, and public and private organizations and individuals.
10. Represents the department and the City in meetings with property owners, engineers, contractors, developers, attorneys and representatives of other organizations.
11. Prepares and maintains a variety of records and reports related to unit activities.
12. Acts as “engineer in responsible charge” on assigned projects of a less complex nature, may approve and sign off on drawings and project documents.
13. Monitors and evaluates the efficiency and effectiveness of service delivery methods and procedures; recommends, within departmental policy, appropriate service and staffing levels.
14. Estimates staff time, equipment, and materials needed for planned projects; orders necessary supplies and equipment.
15. Participates in the development and administration of the Division’s annual budget; participates in the forecast of funds needed for staffing, equipment, materials, and supplies; monitors and approves expenditures; implements adjustments.
16. Plans and oversees construction of City facilities and construction inspection activities; ensures activities are in compliance with applicable codes, plans and City standards.
17. Oversees and ensures conformance of all City services and activities with appropriate federal, state, and local laws, codes, and regulations.
18. Negotiates and administers contracts with outside contractor; resolves problems and complaints as necessary.
19. Reviews and signs engineering plan for CIP and development projects.
20. Directs and participates in the preparation, development and evaluation of technical studies, reports and analyses related to Public Works Department activities; analyzes and evaluates study results.
21. Provides responsible staff assistance to the Public Works Director; conducts a variety of organizational studies, investigations, and operational studies; recommends modifications to public works engineering programs, policies, and procedures as appropriate.
22. Attends and participates in professional group meetings; maintains awareness of new trends and developments in the field of engineering.
23. Responds to and resolves difficult and sensitive citizen inquiries and complaints.
24. Performs related duties as required.

QUALIFICATIONS

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Knowledge of:

1. Basic supervisory principles and practices including work planning, scheduling, review and employee training.

2. Principles and practices of civil engineering design and construction.
3. Principles and practices of land development and transportation planning.
4. Principles and practices of traffic engineering.
5. Principles and practices of structural engineering.
6. Principles and practices of contract administration and project management and evaluation.
7. Construction materials, methods, and equipment.
8. Basic principles and budget development and administration.
9. Office administrative principles and practices.
10. Principles and practices of contract administration.
11. Mathematical principles as applied to civil engineering work.
12. Modern office procedures, methods, and equipment including computers and supporting software applications.
13. Principles of business letter writing and report preparation.
14. Occupational hazards and standard safety precautions.
15. Pertinent federal, state, and local laws, codes, and regulations.

Ability to:

1. Perform detailed analysis of designs, specifications, and plans.
2. Apply engineering principles and techniques to the solution of complex civil engineering problems.
3. Plan, assign, provide direction, and review the work of others.
4. Train others in work procedures.
5. Organize work, set priorities, and exercise independent judgement within policy guidelines.
6. Deal tactfully and effectively with the public, staff, other agencies, engineering firms, contractors, developers, manufacturers and others
7. Prepare clear, concise and accurate reports, records and correspondence.
8. Analyze complex civil engineering data and reports, evaluating alternatives and reaching sound conclusions.
9. Participate in the development and administration of division goals, objectives, and

- procedures.
10. Analyze problems, identify alternative solutions, project consequences of proposed actions, and implement recommendations in support of goals.
 11. Research, analyze, and evaluate new service delivery methods and techniques.
 12. Interpret and apply federal, state, and local policies, laws, and regulations.
 13. Ensure adherence to established safety rules, regulations and guidelines.
 14. Develop, review, and approve construction standards, plans, and specifications.
 15. Prepare accurate descriptions of project requirements.
 16. Understand and interpret complex engineering construction plans, specifications, and other contract documents.
 17. Perform technical research and solve difficult engineering problems.
 18. Make advanced engineering design computations.
 19. Develop, review, and modify engineering and construction drawings, plans, and specifications.
 20. Operate office equipment including computers and supporting word processing, spreadsheet, and database applications.
 21. Communicate clearly and concisely, both orally and in writing.
 22. Establish and maintain effective working relationships with those contacted in the course of work.

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

Education/Training:

Equivalent to graduation from a four-year college or university with major coursework in civil engineering, design, construction, and/or right-of-way work at a level equivalent to the City's Assistant Engineering class.

Experience:

Three years of increasingly responsible professional civil engineering experience.

License or Certificate:

Possession of, or ability to obtain by date of appointment, an appropriate driver's license.

Possession of valid Registration as a Professional Civil Engineer in the State of California or obtain licensure in California by comity (reciprocity) within the one-year probationary

period.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environment:

Standard office setting and outdoor field environment; travel from site to site; some exposure to noise, dust, grease, smoke, fumes, noxious odors, gases, and all types of weather and temperature conditions; work and/or walk on various types of surfaces including slippery or uneven surfaces and rough terrain; incumbents may be required to work extended hours including evenings and weekends.

Physical:

Primary functions require sufficient physical ability and mobility to work in an office setting and in a field environment; to walk, stand, and sit for prolonged periods of time; to climb up or down on ladders, to reach, twist, turn, kneel, bend, stoop, squat, grasp, and make repetitive hand movements; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate assigned equipment and vehicles; to travel to other locations using various modes of private and commercial transportations; and to verbally communicate to exchange information

Vision:

See in the normal visual range with or without correction.

Hearing:

Hear in the normal audio range with or without correction.

Date Established: 3-27-07, Resolution No. 7493

Date Revised:

Johnson & Associates