

CITY OF SIMI VALLEY

ASSOCIATE 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 direction, supervises, assigns, reviews and participates in the work of staff responsible for performing professional and technical engineering services; ensures work quality and adherence to established policies and procedures; and performs the more technical and complex tasks relative to assigned area of responsibility.

This is a broad classification with individual positions assigned to specific functional areas; duties and assignments may overlap depending on the operational needs of the department and staffing levels.

DISTINGUISHING CHARACTERISTICS

This is the full journey level class within the professional engineer series. Employees within this class are distinguished from the Assistant Engineer by the performance of the full range of duties as assigned including preparation and review of more complex plans and specifications and the supervision of technical engineers. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise, possess either an Engineering In Training (EIT) certificate or two years of architectural experience (working under the direction of a licensed architect), and are fully aware of the operating procedures and policies of the work unit. This class is distinguished from the Senior Engineer in that the latter supervises professional engineering staff, manages the most complex projects and is registered as a professional 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. Establish schedules and methods for providing engineering services; identify resource needs; review needs with appropriate management staff; allocate resources accordingly.
2. Participate in the development of policies and procedures; monitor work activities to ensure compliance with established policies and procedures; make recommendations for changes and improvements to existing standards and procedures.
3. Recommend and assist in the implementation of goals and objectives; implement approved policies and procedures.
4. Perform the more technical and complex tasks of the work unit including administration of construction and professional services contracts during construction including contract compliance, regulations, and budget monitoring.
5. Prepare professional civil engineering designs for assigned projects utilizing a variety of computer software programs; perform detailed calculations and computations; prepare and/or review the adequacy and accuracy of computations, preliminary layouts and design work from field and survey data.
6. Plan, prioritize, assign, supervise, review and participate in the work of staff responsible for providing professional and technical engineering services.

7. Exercise professional engineering judgment in accordance with current accepted practices of civil engineering and appropriate laws and codes.
8. Answer questions and inquiries from the public, architects, builders, engineering staff, public works department employees, and other city department; perform field inspections as necessary to resolve questions and code interpretations.
9. Participate in the preparation of requests for proposals and bids; review contract bids and proposals; participate in the review of contractor work activities.
10. Participate in the selection of technical engineering staff; provide or coordinate staff training; work with employees to correct deficiencies; implement discipline procedures.
11. Perform related duties as required.

When assigned to Capital Projects:

12. Perform initial design studies for capital improvement projects; prepare project plans, specifications, cost estimates and project schedules.
13. Conduct field inspections of capital projects during construction; ensure compliance with applicable codes and regulations; provide resolutions to construction problems.
14. Prepare final designs of capital improvement projects including roads and drainage, water and sewer facilities and systems.
15. Prepare and examine maps, deeds, legal descriptions and other documents for land acquisition and easements.

When assigned to Land Development:

16. Review and approve land development plans, maps, drainage studies, cost estimates, subdivision maps, lot line adjustments, change orders, legal descriptions and grading plans for compliance with applicable laws, codes and regulations.
17. Conduct final inspections of subdivision improvements; prepare punch list items for developer.
18. Process and issue grading, encroachment and flood development permits; attend pre-construction meetings to issue permits.
19. Perform research for deed documents, maps and plans; organize and update filing systems.

When assigned to Utilities:

20. Review a variety of plans for water and sewer improvements; review cost estimates, tract maps, legal descriptions, easements, master plans and hydraulic calculations.
21. Oversee construction progress of water and sewer improvements; review, approve and process change orders; ensure compliance with applicable codes and regulations.
22. Prepare a variety of technical reports including water and sewer rate reports, water rate surveys and other projects as needed.

When assigned to Traffic:

23. Perform a variety of traffic engineering functions including administration of traffic signal maintenance; review and approve traffic signal plans and project specifications.
24. Program traffic signal controllers; ensure proper adjustments and maintenance requirements are made as needed.
25. Conduct a variety of traffic impact studies and analyze results; prepare analytical and statistical reports; recommend traffic condition improvements.
26. Participate in traffic signal construction inspections; ensure compliance with applicable codes and ordinances.
27. Maintain, update and operate the City's traffic model for long range traffic projections and planning.

When assigned to Building and Safety:

28. Perform comprehensive engineering review of building construction plans for structural integrity and code compliance.
29. Review engineering reports and cost estimates for construction in the floodplain.
30. Perform plan check for residential, commercial and industrial projects; make recommendations on engineering problems as necessary.
31. Facilitate communication and coordination with the various individuals involved in the permitting and construction process.
32. Assist in updating building and safety codes and in the development of plan check procedures.
33. Assist in providing supervision and participation in the operation of the public counter; utilize appropriate computer software programs to process building permits and to prepare monthly and quarterly reports.

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:

- Operations, services and activities of assigned municipal engineering program.
- Operations, services and activities of building permit procedures.
- Methods and techniques of engineering project management.
- Principles of supervision, training and performance evaluation.
- Modern and complex principles and practices of engineering construction.
- Principles and practices of civil engineering and administration.
- Principles and practices of project and construction management.
- Principles and practices of engineering design.
- Principles and practices of structural engineering, geotechnical engineering and architectural design.
- Terminology, methods, practices and techniques used in technical civil engineering report preparation.
- Principles and practices of budget preparation and control.
- Principles of mathematics as applied to engineering work.
- Recent developments, current literature and sources of information regarding civil engineering.
- Pertinent federal, state and local laws, codes and regulations.

Ability to:

Supervise, organize and review the work of lower level staff.
Select, supervise, train and evaluate staff.
Manage large and complex engineering projects.
Ensure project compliance with appropriate federal, state and local rules, laws and regulations.
Coordinate phases of construction projects and prepare progress reports.
Analyze problems, identify alternative solutions, project consequences of proposed actions, communicate with affected parties and implement recommendations in support of goals.
Conduct comprehensive engineering studies and develop appropriate recommendations.
Perform technical research and solve difficult engineering problems.
Prepare and maintain technical civil engineering records and prepare comprehensive reports.
Compile rough technical data and prepare statistical and narrative reports from field studies.
Develop, review and modify civil engineering plans, designs, and specifications.
Read, review and comment on architectural and engineering plans, designs, calculations, material specifications and geotechnical reports.
Exercise professional engineering judgment to achieve results consistent with objectives.
Coordinate with inspectors and various staff assigned to projects.
Interpret and explain City policies and procedures.
Prepare clear and concise reports.
Communicate clearly and concisely, both orally and in writing.
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 a Bachelor's degree from an accredited college or university with major course work in engineering, architecture, or a related field.

Experience:

Three years of increasingly responsible engineering experience, or two years of architecture experience (when assigned to Building & Safety).

License or Certificate:

Possession of, or ability to obtain, an appropriate, valid driver's license.

Possession of an Engineer in Training (EIT) certificate or two years of architectural experience (working under the direction of a licensed architect).

Possession of, or ability to obtain, a Plans Examiner certificate may be required depending on area of assignment.

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: Office and field environment; travel from site to site; works with computers; exposure to noise and poisonous gases and liquids.

Physical: Sufficient physical ability to work in an office setting and operate office equipment; sit, stand, and walk for prolonged periods of time; climb ladders and slopes; operate motorized vehicles.

Vision: See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents and to operate vehicles.

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Associate Engineer (*Continued*)

Hearing: Hear in the normal audio range with or without correction.

Adopted: August 2003

Johnson & Associates

Revised: July 2016; October 2019