

**CITY OF LOS ALTOS
POSITION CLASSIFICATION**

**JUNIOR ENGINEER
ASSISTANT ENGINEER**

Definition: Performs a variety of professional engineering office and field work in the design and construction of public works structures and projects. Performs a variety of engineering support services work including plan checking, legal description work, preparation of bid summaries, cost estimating, and construction inspection.

Distinguishing Characteristics:

Junior Engineer: Junior Civil Engineer is the entry-level class of this engineering series. Initially under close supervision, incumbents learn office and City procedures. As experience is gained, there is greater independence of action within established guidelines. Incumbents perform office and field engineering work of low to moderate complexity under general supervision in preparation for advancement to the next higher level of Assistant Engineer. Assignments are generally performed within a framework of established procedures.

Assistant Engineer: Works on projects of moderate complexity under the general supervision of an Associate Engineer. The Assistant Engineer is expected to be able to conceptualize engineering solutions based on observation of field conditions, and apply accepted engineering principles to develop alternative solutions and designs. The assistant Engineering will develop construction plans and specifications, manage consultant selection and work products, evaluate alternative strategies to solve engineering problems, and comply with grant and capital project work descriptions. The incumbent prepares solicitations for contractor proposals on specific projects, including minor street and drain alterations, and capital projects for streets, sewers, sewage lift stations, and building repairs. This is the first journey-level class in the professional engineering series. Positions in this class are filled by advancement from the lower class of Junior Engineer or by recruitment of individuals with prior experience. Assistant Engineers are expected to increase the breadth of their knowledge and experience, and are assigned increasingly complex and more responsible work. An Assistant Engineer is expected to have attained a minimum professional certification as an Engineer in Training issued by the State of California.

Essential Job Functions:

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

1. Assists in conducting preliminary studies of engineering projects and helps prepare plans for public improvements such as streets, storm drains, curbs, gutters, sidewalks, sewers and other public projects.
2. May act as chief of a survey crew, running a transit or level and keeping notes.
3. Makes calculations in surveying and other construction work.
4. Inspects engineering projects for conformance to established plans and specifications.

JUNIOR/ASSISTANT ENGINEER

Page 2 of 3

5. Performs office engineering work such as issuing permits, making maps, drawings, tracings, profiles, tabulating field data, designing elementary engineering structures and preparing project plans, specifications and cost estimates.
6. May conduct studies and analyses of engineering aspects of City planning activities.
7. Assists in conducting preliminary studies of engineering projects.
8. Prepares plans and specifications for public improvements such as streets, storm drains, curbs, gutters, sidewalks, sewers and other public projects.
9. Inspects engineering projects for conformance to established plans and specifications.
10. Performs office engineering work such as issuing permits, preparing maps, drawings, profiles, tabulating field data, designing elementary engineering improvement projects and preparing project plans, specifications, and cost estimates.
11. May conduct studies and analyses of engineering aspects of City planning activities.
12. Prepares plans, specifications and preliminary cost estimates.
13. Confers with contractors, engineers, consultants and the public on engineering and construction matters.
14. Prepares correspondence and reports dealing with a variety of public works projects.
15. Explains permit and work rules to the public, business owners, and contractors relating to work in the public right-of-way.
16. Performs other related duties as assigned.

Minimum Qualifications:

JUNIOR ENGINEER

Knowledge of:

- Engineering principles, drawing, AutoCAD, dimensioning protocols, formatting of construction plans, and instruments of the profession.
- Principles and practices of engineering field and office practices.

Skill in:

- Using drafting tools, surveying instruments, AutoCAD, computer and other engineering aids.
- Reading and interpreting plans and specifications.
- Understanding and following oral and written directions.
- Establishing and maintaining cooperative working relationships.

Experience and Education Guidelines:

Adopted: November 25, 2008

JUNIOR/ASSISTANT ENGINEER

Page 3 of 3

Any combination equivalent to experience and education that could likely provide the required knowledge and abilities would be qualifying. A typical way to obtain the knowledge and abilities would be:

Experience: This is an entry level position with demonstrated interest through related work experience or internship.

Education: Graduation from an accredited engineering program in Civil, Environmental, Mechanical, or Electrical Engineering, and work experience with surveying, construction, or environmental studies.

Licenses, Certificates or Special Requirements: Must possess a valid California driver's license and have a satisfactory driving record.

ASSISTANT ENGINEER

In addition to the minimum qualifications for Junior Engineer:

Knowledge of:

- Engineering mathematics, physics, drawing and instruments of the profession.
- Principles and practices of the engineering profession.

Skill in:

- Using drafting tools, surveying instruments, computer and other engineering aids.

Ability to:

- Read and interpret plans and specifications.
- Understand and follow oral and written communications.

Experience and Education Guidelines:

Any combination equivalent to experience and education that could likely provide the required knowledge and abilities would be qualifying. A typical way to obtain the knowledge and abilities would be:

Experience: Two years responsible engineering experience.

Education: Undergraduate degree in civil engineering

Licenses, Certificates or Special Requirements: Engineer in Training (EIT) certificate