CITY OF ROSEVILLE

JUNIOR ENGINEER
ASSISTANT ENGINEER

DEFINITION

To perform professional engineering work in the investigation, planning, design, construction, and maintenance/operation of a variety of public works facilities, systems, projects and/or private development projects.

DISTINGUISING CHARACTERICS

Junior Engineer - This is the trainee level in the professional engineering series. Positions in this class possess the applicable educational background required of classes in the professional engineering series, yet typically lack practical professional engineering experience. Incumbents learn and perform less complex office and field engineering work in preparation for advancement to the Assistant Engineer level. Assignments are generally limited in scope and are performed within a procedural framework established by higher level staff. Employees work under immediate supervision while learning job tasks.

Assistant Engineer – This is the entry level in the professional engineering series. This class is distinguished from the Junior Engineer by the performance of the more routine tasks and duties assigned to positions within this class. Employees at this level are not expected to perform with the same level of independence of direction and judgment on matters allocated to the Associate Engineer. Since this class is typically used as a training class, employees have only limited or no directly related professional engineering work experience. Employees work under general supervision while learning job tasks.

This class is distinguished from the Associate Engineer in that the latter is a journey level professional engineering class expected to perform the full range of professional engineering duties. Positions in the Associate Engineer class may exercise direct supervision over technical engineering staff.

SUPERVISION RECEIVED AND EXERCISED

Junior Engineer

Receives immediate supervision from higher level engineering staff.

Assistant Engineer

Receives general supervision from higher level engineering staff.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Participate in the preparation of plans and specifications for the design, construction, and maintenance/operation of a variety of public works facilities and projects, including water and wastewater utility, solid waste, street, storm drain, storm water management and traffic/transportation systems; ensure conformance to City standards and practices.

Research project design requirements and perform routine calculations; conduct plan checks to ensure contractor and/or enforce compliance with City and various environmental regulatory standards; prepare time and material cost estimates, especially as related to existing or anticipated project budgets.

May delegate routine research, design, and drafting tasks to technical staff; review completed work and assist in identifying solutions for solving routine problems; research publications and industry information sources as needed.

Survey, map, and collect data related to area of assignment, as appropriate; perform field inspections, including survey work as necessary, to investigate and resolve routine field problems affecting property owners, contractors and maintenance operations; prepare estimates and feasibility reports for new or modified services and structures.

Participate in the review and processing of private development plans as related to streets, storm drains, traffic/transportation, water/wastewater utilities, solid waste systems, and related public works facilities and systems; ensure that such plans comply with City standards and requirements.

Participate in the preparation of engineering studies and reports; participate in coordinating public works-related activities with other City departments, divisions, and sections, outside agencies, citizens, consultants, and developers; provide staff support to a variety of City boards, commissions, and committees as assigned.

Build and maintain positive working relationships with co-workers, other City employees, and the public using principles of good customer service.

Perform related duties as assigned.

MINIMUM QUALIFICATIONS

Junior Engineer

Knowledge of:

Principles and practices of professional engineering as applied to a variety of public works, utilities, building/facilities construction, traffic, water quality, and/or private development projects.

Basic methods, materials, and techniques used in the design, construction, and maintenance/operation of public works and utilities programs and activities.

Basic surveying, drafting, computer-aided design and modeling techniques and technology.

Current developments and trends related to professional public works engineering.

Modern office procedures, methods and computer equipment, including use and application of word processing, spreadsheet, graphics, and database programs.

English usage, spelling, punctuation, and grammar.

Principles and practices of work safety.

Ability to:

Perform professional engineering computations and learn to check, design, and prepare engineering plans, studies, profiles, and maps.

On a continuous basis, know and understand all aspects of the job; intermittently analyze work papers, reports and special projects; identify and interpret technical and numerical information; observe and problem solve operational and technical policy and procedures.

On a continuous basis, sit at desk for long periods of time; intermittently bend, squat, climb, kneel or twist while performing field work; intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone, and write or use keyboard to communicate through written means; and lift or carry weight of 10 pounds or less.

Use and care for engineering surveying instruments and computer equipment.

Learn modern office procedures and computer equipment and software such as AutoCAD, GPS, GIS, ArcView, ArcInfo and software related to specific department operations.

Learn and understand City standards and regulations and engineering policies and procedures.

Learn applicable laws and regulations related to area of assignment.

Learn to prepare accurate cost estimates and make related recommendations.

Learn to analyze and prepare technical reports.

Learn to obtain information through interview, to handle multiple assignments, to work with interruption, and to deal firmly and courteously with citizens, developers, consultants, and contractors.

Establish and maintain effective working relationships with those contacted in the course of work.

Prepare clear, complete, accurate, timely and concise written correspondence and reports.

Communicate clearly and concisely, both orally and in writing.

Experience and Training

Experience:

No professional experience is required; one year of technical engineering experience is desirable.

Training:

A Bachelor's degree from an accredited college or university, preferably with major course work in civil, environmental engineering or a closely related field;

OR

Possession of a current Engineer in Training (EIT) certificate as issued by the State of California.

License or Certificate

Possession of a valid California driver’s license by date of appointment.

Assistant Engineer

In addition to the qualifications for the Junior Engineer:

Knowledge of:

Pertinent local, State, federal rules, regulations and laws related to area of engineering assignment.

Methods, materials, and techniques used in the area of engineering assignment.

Ability to:

Check engineering plans and specifications; prepare and check engineering reports and studies.

Interpret and explain City policies, procedures, regulations and engineering policies and procedures.

Obtain information through interview, to handle multiple assignments, to work with interruption, and to deal firmly and courteously with citizens, developers, consultants, and contractors.

Experience and Training

Experience:

One year of responsible professional engineering work similar to that of a Junior Engineer with the City of Roseville.

Training:

A Bachelor's degree from an accredited college or university, preferably with major course work in civil, environmental engineering or a closely related field;

OR

Possession of a current Engineer in Training (EIT) certificate as issued by the State of California.

License or Certificate

Possession of a valid California driver’s license by date of appointment.

08-24-18
04-15-06 Junior Engineer/Assistant Engineer
10/20/03
12-23-98
06-27-95
01-26-90 Assistant Engineer I/II
10-01-88
07-01-79
10-30-73 Assistant Civil Engineer

-67
-65
-64 Assistant Engineer