



CITY OF CITRUS HEIGHTS

JUNIOR ENGINEERING AIDE

DEFINITION

To perform a variety of entry level technical engineering services in the office and in the field, including drafting, computations, data collection and analysis. This is a temporary part-time position.

DISTINGUISHING CHARACTERISTICS

This is an entry level class in the Engineering Aide/Technician series. Junior Engineer Aides work under close supervision, and progress to general supervision as an incumbent is able to perform the assigned duties. The Junior Engineering Aide may perform routine computer-aided drafting, assist with field investigations, data collection, and other related work that does not require previous specialized experience.

SUPERVISION RECEIVED AND EXERCISED

Receives immediate supervision from management staff. May receive technical or functional supervision from a higher-level technician or engineering staff as appropriate. Work is reviewed regularly, and changes in procedures or exceptions to rules are explained in detail as they arise.

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

Provide project assistance for inspection, project reports and updates, project file maintenance, and tree inventory.

Perform computer-aided drafting of maps in ARC view.

Prepare sketches or exhibits using standard drafting equipment; assist in preparation of “as-built” construction plans; and perform civil engineering computations related to distances, ties, angles, areas, traverses, and closures.

Perform database and mapping work related to the development and maintenance of GIS needs in conjunction with the Information Technology Division.

File and retrieve a variety of engineering maps, plans, reports, and related documents.

Organize and maintain the map files, database, and other related electronic and paper filing systems.

Assist in the review of plans, descriptions, plats, maps, and a variety of survey information to ensure accuracy and conformance with City standards.

Perform field survey work such as GPS data collection, basic topographic survey, radar speed surveys, traffic sampling, pedestrian and bicycle safety studies and other related work.

Perform field work, document existing conditions, and update documents.

Evaluate problems or conditions in the field, report findings.

Utilize SCADA software and other monitoring tools and equipment to provide engineering data.

Prepare, and assist in the preparation of, a variety of technical reports and exhibits, with input from engineering staff, including the development of schedules, spreadsheets, charts, and graphics.

Report on the status of maintenance projects, construction projects, and other similar engineering projects or programs.

Follow procedures and assist in implementation of street closures for repair or construction projects.

Prepare graphs, charts, diagrams, and other aids in order to illustrate observations and conclusions.

Respond to inquiries and concerns regarding traffic complaints, engineering projects and studies, plans and maps.

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

Knowledge of:

Basic principles and practices of manual and computer-aided drafting and design and engineering computer software applications.

Operational characteristics of equipment and materials used in assigned program areas.

Algebra, geometry, and trigonometry used in drafting and other technical tasks.

General office methods, equipment use and procedures, including filing and record keeping.

Proper English usage, spelling, punctuation, and grammar.

Principles and practices of good customer service.

Techniques and principles of effective interpersonal communication.

Ability to:

Perform mathematical and basic technical engineering computations and learn to use engineering computer software applications, including computer aided design (CAD).

Learn to operate various civil and other engineering instruments and test equipment and mechanical devices.

Learn to read, understand and interpret technical reports, diagrams, maps, drawings, specifications, and legal descriptions.

Learn pertinent local, State and Federal laws, codes and ordinances

Learn and interpret City functions, and various policies, rules and regulations related to area of assignment.

Communicate clearly and concisely, both orally and in writing.

Learn and utilize new skills and information to improve job performance and efficiency.

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, stand at public counter or sit at a desk for long periods of time; intermittently stand when performing inspection duties; walk around inspection sites, kneel, twist and bend in the office while retrieving files/plans and in the field while performing site inspections; perform simple and power grasping, pushing, pulling, and fine manipulation; use a telephone, and write or use a keyboard to communicate; and lift or carry weight of 25 pounds or less; and see well enough to read documents and computer screens.

Understand the organization and operation of the City and of outside agencies as

necessary to assume assigned responsibilities.

Use principles of effective office and field safety including use of equipment in a proper and safe manner, use of preventative personal ergonomic techniques, and maintenance of safe housekeeping in personal and common workspaces.

Provide high quality, economical services to the Citrus Heights community, placing emphasis on responsive customer service.

Demonstrate a civic entrepreneurial spirit by generating new, innovative ideas and development of better methods to accomplish tasks and complete projects.

Foster an environment that embraces diversity, integrity, trust and respect.

Be an integral team player, which involves flexibility, cooperation and communication.

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

Work with various cultural and ethnic groups in a tactful and effective manner.

Communicate clearly and concisely, both orally and in writing.

Preserve confidentiality of sensitive material routinely encountered as part of work assignments.

Operate personal computer with proficiency and familiarity.

Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Experience:

None required. Six months of general experience that provides familiarity with technical engineering work is desirable.

Training:

Equivalent to the completion of the twelfth grade. Additional courses or training in computer aided drafting, engineering technology, or mathematics courses such as algebra, geometry, or trigonometry are desirable.

License or Certificate:

Possession of, or ability to obtain, a valid California driver's license and proof of automobile liability insurance are required.

Equal Opportunity Employer

It is the policy of the City of Citrus Heights not to discriminate against qualified employees or applicants because of race, color, religion, gender, sexual orientation, marital status, national origin, ancestry, citizenship, age, medical condition, physical or mental disability, or any other basis protected by law. Qualified individuals with a disability will receive reasonable accommodation, as required by the California Fair Employment and Housing Act (FEHA), and federal laws including the Americans with Disabilities Act (ADA) and Section 504, during any phase of the selection process, providing such request is made to Human Resources at least five working days in advance. Medical disability verification may be required prior to accommodation.

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