

ENGINEERING TECHNICIAN

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.

DEFINITION

To provide technical support and assistance in the production, review and processing of various civil engineering plans, permits and specifications; to ensure completeness and accuracy of documents prior to issuance; to generate computer aided design drawings for capital projects including data entry, revision and correction of existing drawings, maps and records; to perform a variety of technical tasks relative to assigned area of responsibility.

SUPERVISION

Receives general supervision from higher-level management or supervisory staff.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS

Essential and other important responsibilities and duties may include, but are not limited to, the following:

Essential Functions:

1. Provide technical support and assistance in reviewing and processing various City engineering plans and specifications; ensure completeness and accuracy of documents prior to approval.
2. Use computer-aided drafting and design workstation to generate engineering plans and as-built drawings for capital projects using designated computer applications.
3. Prepare initial design sheets and maps to assist other staff members in project activities; provide assistance in the use of associated computer hardware and software.
4. Maintain a variety of public works department and engineering division program and project files and records.
5. Review and process encroachment applications, construction documents, agreements and other permits.
6. Update, revise and maintain the City's infrastructure records including streets and utility basemaps, geographical information systems, and pavement management database; collect data for input from plans and field measurement with GPS and other instruments.
7. Respond to public inquiries in a courteous manner; provide information within the area of assignment; resolve complaints in an efficient and timely manner.
8. Participate in professional group meetings; stay abreast of new developments in the field of computer aided design.

Marginal Functions:

1. Perform related duties and responsibilities as required.

QUALIFICATIONS

Knowledge of:

Use of computer systems for drafting, design, mapping, plotting, record keeping, and reporting. . Standard form, format, and content of engineering plans.

Basic techniques of civil engineer computer aided drafting and design.

Techniques for reviewing and revising engineering plans and specifications.

General understanding of public works infrastructure including streets, sewers, and drainage systems.

Modern office procedures, methods and equipment including computers and supporting work processing and spreadsheet applications.

Principles and procedures of record keeping. Principles of basic report preparation.

English usage, spelling, grammar and punctuation.

Pertinent Federal, State and local laws, codes and regulations.

Ability to:

Provide technical assistance in the review and processing of various plans and specifications. Read and interpret a variety of maps.

Collect and analyze project data obtained through office research and field survey.

Prepare clear and concise technical reports.

Operate a variety of computer equipment and software and other instrumentation relative to the assigned area of responsibility.

Understand and follow oral and written instructions.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work. Maintain physical condition appropriate to the performance of assigned duties and responsibilities.

EXPERIENCE AND TRAINING GUIDELINES

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

Experience:

Two years of increasingly responsible technical experience using computer systems for civil engineering drafting and design.

Training:

High school diploma or equivalent and college-level course work in engineering or computer drafting and design.

LICENSE/CERTIFICATE

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

WORKING CONDITIONS

Environmental Conditions:

Office environment with exposure to computer screens and field survey and data collection.

Physical Conditions:

Essential and marginal functions may require maintaining physical condition necessary for sitting, standing, walking, and driving for prolonged periods of time.