ENGINEERING TECHNICIAN TRAINEE

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.

**JOB OBJECTIVES**

To assist in the performance of technical level duties in support of the City’s engineering and capital improvement projects; to learn to perform construction inspection duties; to learn to provide information and assistance to contractors, developers, engineers and the general public on the City’s engineering services and activities; and to perform a variety of technical tasks relative to assigned area of responsibility.

**SUPERVISION RECEIVED AND EXERCISED**

Receives immediate supervision from higher level management or supervisory staff.

**DISTINGUISHING CHARACTERISTICS**

This is the trainee level class within the Engineering Technician series. This class is distinguished from the Engineering Technician by the receiving of additional instruction and closer supervision in the performance of job duties. Because this class is used as a training class, employees in this class may have only limited or no directly related work experience. Positions may be filled at the Engineering Technician Trainee level for training purposes with eligibility to promote to the Engineering Technician position upon successful completion of the probationary period and demonstration of ability to perform essential job functions and meet qualifications of the Engineering Technician class.

**ESSENTIAL JOB FUNCTIONS**

The following tasks are typical for positions in this classification. Any single position may not perform all of these tasks and/or may perform similar related tasks not listed here:

1. Learn to perform technical level duties, under supervision, in support of the City’s engineering and capital improvement projects including office work, drafting, surveying, construction inspection and related technical functions.

2. Provide assistance on construction inspection duties on assigned projects; under supervision, monitor and review work performed by contractor; ensure work performed complies with project standards and contracts; coordinate materials testing with contracted services; refer issues to higher level engineering staff as required.

3. Learn to perform field survey duties, under supervision; maintain accurate and legible field notes of survey work including lines, angles, distances, benchmarks and mathematical calculations.

4. Assist in the preparation of construction drawings, specifications and technical documents for assigned projects; learn to review plans and specifications; draft drawings from engineering sketches, survey field notes and other data using a variety of specialized computer software and equipment.

5. Perform drafting assignments under supervision and for review by higher level engineering staff, including complete sets of working drawings for projects; provide as-built drawings upon completion of the project and transfer information to plans; revise maps and other drawings as appropriate.

6. Learn to prepare and update maps consistent with project improvements; utilize specialized geographic systems information software to generate, update and maintain mapping systems.

7. Compile quantities to be used for engineering estimates; assist in preparing and revising specifications for bid documents.
CITY OF FOREST GROVE  
Engineering Technician Trainee (Continued)

8. Learn to provide information and assistance to contractors, developers, engineers and the general public on engineering services and activities; respond to general inquiries; ensure issues are resolved in a timely and efficient manner.

9. Perform related duties and responsibilities as required.

QUALIFICATIONS

Knowledge of:

Basic operations, services and activities of a comprehensive municipal engineering design and construction program.
Basic construction methods, procedures, standards and materials.
Basic computer aided drafting and design methods.
Basic principles and practices of geographic information systems programs.
Methods and techniques of researching, compiling, interpreting and presenting statistics and data.
Principles and practices of record keeping.
Modern office procedures, methods and computer equipment.
Pertinent Federal, State and local laws, codes and regulations.

Ability to:

Provide assistance in the performance of technical engineering duties in support of capital improvement projects.
Learn to prepare a variety of drawings, sketches, maps, graphs and related technical documents.
Learn to conduct site inspections and monitor project progress.
Learn to perform survey duties.
Prepare clear and concise technical reports.
Maintain accurate engineering files and records.
Learn to utilize drafting tools and equipment for the preparation of engineering drawings.
Perform mathematical calculations quickly and accurately.
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:

Equivalent to the completion of the twelfth grade supplemented by college level course work in engineering or a related field; current enrollment in such course work acceptable.

Experience:

One year of experience in utilities, engineering or a related field that would provide the required knowledge and skill to perform the duties of the position.

License or Certificate

Possession of, or ability to obtain, a valid appropriate driver’s license.
PHYSICAL DEMANDS AND WORKING CONDITIONS

The physical demands 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 these essential job functions.

**Environment:** Office environment; travel from site to site; field environment; exposure to construction equipment.

**Mobility:** Incumbents require sufficient mobility for walking, standing or sitting for prolonged periods of time.

**Vision:** Visual acuity to read computer screens, drawings, technical documents and to conduct site inspections.