Union Status: Represented December 2007

ENGINEERING TECHNICIAN

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are <u>not</u> intended to reflect all duties performed within the job.

JOB OBJECTIVES

Under general supervision, to perform technical level duties in support of the City's engineering and capital improvement projects; 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.

DISTINGUISHING CHARACTERISTICS

This is the entry level class within the Engineering Technician series. Employees within this class are distinguished from the Senior Engineering Technician by the performance of the more routine duties as assigned including basic drafting, surveying and office work. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the work unit. This class is distinguished from the Senior Engineering Technician in that the latter assumes responsibility for more complex technical engineering functions.

ESSENTIAL FUNCTION STATEMENTS

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. Perform drafting, surveying and office work for City capital improvement projects including streets, storm sewer, sanitary sewer and water supply systems.
- 2. Perform construction inspection duties on assigned projects; 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. Assist in the preparation of construction drawings, details and maps for assigned projects; draft drawings from engineering sketches, survey field notes and other data using a variety of specialized computer software and equipment.
- 4. Perform drafting assignments including complete sets of working drawings for projects; provide asbuilt drawings upon completion of the project and transfer information to plans; revise utility maps and other drawings as appropriate.
- 5. Compile quantities to be used for engineering estimates; assist in preparing and revising specifications for bid documents.
- 6. Perform a variety of field assignments including locating sewer and water lines, locating right-of-ways, responding to public complaints and taking traffic counts.
- 7. Provide information and assistance to contractors, developers, engineers and the general public on engineering services and activities; respond to general inquiries concerning permit requirements, utility locations, property title and related issues; ensure issues are resolved in a timely and efficient manner.
- 8. Provide technical support to a variety of engineering studies; research, collect, interpret and record data; prepare maps, graphs, drawings and reports to present study results.

AUXILIARY FUNCTION STATEMENTS

- 1. Assist other departments with special engineering drawings as needed.
- 2. Follow all safety rules and procedures established for work area.
- 3. Perform related duties and responsibilities as required.

QUALIFICATIONS

Knowledge of:

Operations, services and activities of a comprehensive municipal engineering design and construction program.

Computer aided drafting and design methods.

Methods and equipment used in surveying and drafting.

Methods and techniques of conducting site and field investigations and surveys.

Methods and techniques of researching, compiling, interpreting and presenting statistics and data.

Mathematical principles as applied to engineering work.

Principles and practices of record keeping.

Modern office procedures, methods and computer equipment.

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

Ability to:

Produce engineering drawings.

Prepare a variety of drawings, sketches, maps, graphs and related technical documents.

Utilize drafting tools and equipment for the preparation of engineering drawings.

Perform mathematical calculations quickly and accurately.

Perform construction project inspection duties.

Research, collect and interpret survey plats, deeds, notes and other legal records.

Maintain accurate engineering file and records.

Prepare clear and concise reports.

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.

Experience:

Two years of increasingly responsible technical engineering experience.

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: Field environment; occasional office environment; exposure to computer screens.

<u>Mobility</u>: Walking, standing or sitting for prolonged periods of time; extensive use of computer keyboard.

Vision: Visual acuity to read computer screens

<u>Other Factors</u>: Incumbents may be required to work extended hours including evenings and weekends. Incumbents may be required to travel outside City boundaries to attend meetings.