

**ENGINEERING TECHNICIAN I
ENGINEERING TECHNICIAN II**

*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.*

SUMMARY DESCRIPTION

Under immediate supervision (Engineering Technician I) or general supervision (Engineering Technician II), performs paraprofessional engineering office and field work involving surveying, design of Public Works facilities, construction inspection, and drafting.

DISTINGUISHING CHARACTERISTICS

Engineering Technician I - This is the entry level class in the Engineering Technician series. This class is distinguished from the Engineering Technician II series by the performance of the more routine tasks and duties assigned to positions within this series. Employees at this level are not expected to perform with the same independence of direction and judgement on matters related to established procedures and guidelines as are positions allocated to the II level. Since this class is typically used as a training class, employees may have only limited or no directly related work experience. Employees work under immediate supervision while learning job tasks.

Engineering Technician II - This is the full journey level class within the Engineering Technician series. This class is distinguished from the Engineering Technician I by the assignment of the full range of duties assigned. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise and they are fully aware of the operating procedures and policies within the work unit.

REPRESENTATIVE DUTIES

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

1. Design and prepare plans and specifications for public works projects, including pumping stations, streets, storm drains, and sewer lines.
2. Research project design requirements; perform calculations and prepare estimates of time and material costs.
3. Perform data collection and design for capital improvements.
4. Make and check computations and record field data.
5. Use CAD to perform moderate to difficult drafting work to prepare maps, plans, deeds, descriptions, exhibits, records, or surveys.
6. Develop revised design and construction standards for public works structures and appurtenances.
7. Check improvement plans for compliance with master plan, design criteria, special conditions, and City standards.
8. Prepare engineering field reports and related documents.

CITY OF CERES

Engineering Technician I/II (Continued)

9. Answer inquiries from realtors, developers, engineers and the general public.
10. Serve as construction inspector to ensure compliance on City projects, subdivisions, and encroachments.
11. Update and maintain City basemap information.
12. Issue encroachment, water, and sewer permits.
13. May perform traffic counts and other special studies.
14. Operate total station, transit, level, and other survey instruments in the performance of control, preliminary, and construction surveys, monument checks and related projects.
15. Perform related duties as required.

QUALIFICATIONS

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Knowledge of:

Civil engineering principles, practices and methods applicable to office and field work involving the use of civil engineering software and associated equipment in the design, construction and maintenance of City public works projects.

Drafting and surveying principles, techniques, practices, equipment, and computer programs,.

Safe work practices and methods.

Mathematical concepts applicable to engineering.

Construction practices and methods.

Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.

Operation of CAD systems.

Standard drafting tools and equipment.

Ability to:

Learn and understand City engineering policies and procedures.

Prepare accurate plans, specifications, cost estimates and technical engineering reports.

Perform engineering design computations.

Check, design, and prepare engineering plans and studies.

Interpret complex construction plans and specifications.

Use and care for engineering and drafting instruments and equipment.

Operate office equipment including computers and supporting word processing, spreadsheet, and database applications.

Learn pertinent federal, state, and local codes, laws, and regulations.

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.

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:

Engineering Technician I

Education/Training:

Equivalent to the completion of the twelfth grade supplemented by college level courses in math, drafting, engineering, surveying, or a related field.

Experience:

Two years of increasingly responsible engineering, surveying, or drafting experience.

License or Certificate:

Possession of an appropriate, valid driver's license.

Engineering Technician II

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/Training:

Equivalent to the completion of the twelfth grade supplemented by college level courses in math, drafting, engineering, surveying, or a related field.

Experience:

Two years of responsible municipal engineering experience equivalent to an Engineering Technician I in the City of Ceres.

License or Certificate:

Possession of an appropriate, valid driver's license.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions 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 the essential job functions.

Environment: Work is performed in an indoor and outdoor setting with exposure to all types of weather and temperature conditions, and travel from site to site.

Physical: Primary functions require sufficient physical ability and mobility to work in an office setting and field environment; to walk, stand, and sit for prolonged periods of time; to frequently stoop, bend, kneel, crouch, crawl, climb, reach, twist, grasp, and make repetitive hand movement in the performance of daily duties; to lift, carry, push, and/or pull moderate amounts of weight; to operate assigned equipment and vehicles; and to verbally communicate to exchange information.

Vision: See in the normal visual range with or without correction.

Hearing: Hear in the normal audio range with or without correction.

