ENGINEER IV

Class Code: 2155
Salary Group: B25
Salary Range: $63,104 - $103,491

GENERAL DESCRIPTION

Performs advanced (senior-level) engineering work. Work involves planning, interpreting, organizing, coordinating, and executing engineering projects and activities; and reviewing and issuing permits or authorizations. May supervise the work of others. Works under limited supervision, with considerable latitude for the use of initiative and independent judgment.

EXAMPLES OF WORK PERFORMED

Performs, monitors, and reviews engineering work related to civil or mechanical engineering (in areas such as materials management and construction, traffic, bridge, roadway, or mechanical systems design and maintenance) or engineering work related to environmental, agricultural, or energy engineering (in areas such as water or air pollution, solid waste management, water supply sanitation, insect vector control, energy efficiency and management, and health and radiation control).

Prepares, modifies, and/or reviews detailed engineering or construction designs, plans, specifications, and estimates; and reviews and approves payments to contractors.

Reviews costs of materials and estimates of geometrics, hydraulics, grades, quantities, and related areas.

Reviews applications, approves and issues permits or authorizations, and approves reimbursements.

Conducts and/or reviews environmental studies, such as assessing air, water, solid waste and hazardous materials, and pollution control methods; and approves related reports, plans, and specifications.

Conducts highly complex technical reviews on engineering proposals and reports.

Conducts or coordinates field visits, surveys, and inspections; and monitors contractor performance.

Meets with the general public, engineers, developers, landowners, and interest groups concerning zoning; subdivision and building projects; and engineering regulations, standards, or policies.
Designs, installs, maintains, and provides advice on computer systems and equipment; and evaluates, designs, and programs computer hardware and software for engineering design applications.

Plans, develops, and coordinates engineering projects; and plans, conducts, and monitors research projects in problem areas.

Provides consultant and liaison services to internal and external organizations regarding new design concepts, solutions to problems, and changes in policies and laws.

May assist in preparing budgets and contracts.

May supervise the work of others.

Performs related work as assigned.

GENERAL QUALIFICATION GUIDELINES

EXPERIENCE AND EDUCATION

Experience in engineering work. Graduation from an accredited four-year college or university with major coursework in engineering or a related field is generally preferred. Experience and education may be substituted for one another.

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of engineering principles, practices, techniques, and procedures; of applicable laws, regulations, and rules; of mathematics; and of project engineering development.

Skill in the use of computer-aided design techniques.

Ability to plan, design, evaluate, and coordinate engineering projects; to communicate effectively; and to supervise the work of others.

REGISTRATION, CERTIFICATION, OR LICENSURE

Must be licensed as a Professional Engineer by the State of Texas.