

ENGINEER**Nature of Work**

With limited supervision, performs professional engineering work in a wide variety of engineering services or creative works, the adequate performance of which requires engineering education, training and experience in the application of special knowledge of the mathematical, physical and engineering sciences to such services or creative work as consultation, investigation, evaluation, planning and design of engineering works, and systems; planning the use of land and water; teaching of advanced engineering subjects, engineering surveys and studies; review of construction projects for the purpose of assuring compliance with drawings and specifications any of which embraces such services or work, either public or private, in connection with any utilities, structures, buildings, machines, equipment, processes, work systems, projects and industrial or consumer products or equipment of a mechanical, electrical, hydraulic, pneumatic or thermal nature, insofar as they involve safeguarding life, health or property, and including such other professional services as may be necessary to the planning, progress and completion of any engineering services.

Distinguishing Characteristics

Applies engineering techniques, procedures, and criteria within rules, regulations and operating procedures of the specialty area of assignment. Will serve as staff expert in a particular area of emphasis, as assigned within the various programs. Incumbents must be licensed as a Professional Engineer by the West Virginia State Board of Registration for Professional Engineers as prescribed by WV State Code (Chapter § 30, Article 13).

Examples of Work

Performs engineering designs, plans, calculations, inspections, and for specific projects. May supervise and train lower level engineers and the assignments and performance of support and technicians assigned to specific projects.

Conducts interim and final inspections of construction projects to determine compliance with applicable laws, regulations, and specifications.

Prepares and reviews complex plans and/or contracts for projects; calculates material quantities needed for construction projects; recommends alternative construction methods.

Writes reports detailing recommendations, conclusions, and findings from inspections and reviews.

Plots cross sections and topography, computes grade lines and earthwork, draws typical sections, and figures drainage.

May independently perform studies, review and generate policy and procedures as it relates to environmental, regulatory and other agency concerns, which may include working with other state and federal entities.

Reads professional journals and trade publications to gain knowledge of new technologies; assigns reading material to subordinates.

ENGINEER - Cont'd.

Examples of Work - Cont'd.

Attends state and national meetings and seminars to improve and share engineering knowledge.

May represent the agency during legal proceedings.

Knowledge, Skills and Abilities

Knowledge of agency policies and practices pertaining to agency jurisdiction.

Knowledge of equipment and instruments used in various types of engineering.

Knowledge of fundamentals of various types of engineering.

Ability of apply engineering principles in solving engineering problems.

Ability to direct the work of technical engineering staff.

Ability to communicate effectively, both orally and in writing.

Minimum Qualifications

Training: Current license as a professional engineer with the West Virginia State Board of Registration for Professional Engineers.

Experience: Seven years of full-time or equivalent part-time paid employment in engineering experience, in which three years must be as a licensed professional engineer.

For Reallocation or Promotional Purposes Only:

Training: Current license as a registered professional engineer with the West Virginia State Board of Registration for Professional Engineers.

Experience: Seven years of full-time or equivalent part-time paid employment in engineering experience.

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ENGINEER - Cont'd.

Areas of Assignment:

Agricultural Engineering
Architectural Engineering
Chemical Engineering
Civil Engineering
Electrical Engineering
Environmental Engineering
Geological Engineering
Industrial Engineering
Mechanical Engineering
Mining Engineering
Petroleum Engineering
Photogrammetric Engineering
Public Health Engineering
Sanitary Engineering
Structural Engineering

Established: 03/20/2008

Effective: 05/01/2008