PROFESSIONAL ENGINEER

BASIC PURPOSE:

Positions in this job family are assigned responsibility for providing engineering expertise, guidance and technical assistance to state agencies, consultants, and the public. Incumbents accomplish this by performing professional engineering tasks and by managing, reviewing and evaluating the work of consultants, contractors and facility operators.

TYPICAL FUNCTIONS:

The functions performed by employees in this job family will vary by level, but may include the following:

- Develops, prepares and/or reviews engineering plans and designs for structures, facilities and/or systems.
- Develops, prepares and reviews reports and studies to identify and recommend engineering solutions.
- Performs engineering inspections of systems operations and of structures and facilities during construction.
- Interprets, develops and implements statutes and regulations.
- Reviews applications and issues permits.
- Performs physical and chemical tests to assure the quality of construction and facility operations and ambient conditions.
- Reviews engineering program activities to make recommendations for changes in policy and procedures.
- Conducts engineering research and provides technical assistance to consulting engineers, contractors, public officials, municipalities and industry.

LEVEL DESCRIPTORS:

The Professional Engineer job family has three levels that are distinguished based on the complexity of the engineering assignment, the level of expertise required by a specific position, and responsibility for providing leadership to others.

Level I: Code: S11A Salary Band: M

This is the basic level of professional engineering. Incumbents perform entry level professional engineering tasks and direct engineering activities in all but the most difficult and complex projects/programs, and provide technical advice and guidance to other professionals.

Knowledge, Skills and Abilities required to perform duties at this level include knowledge of engineering principles and techniques; of engineering planning; of equipment and materials used in engineering operations; of specialized subjects used in the fields of engineering, such as mathematics, statistics, mechanics, power, physics and chemistry; and of strength of materials. Ability is required to apply engineering principles to practical engineering problems; to use engineering equipment and tools, including computer applications; to make, read and interpret engineering drawings and specifications; to express ideas clearly and concisely, both orally and in writing; to relate abstract ideas to actual needs and adopt an effective course of action; to establish and maintain effective working relationships with others; to analyze situations and determine a sound course of action; to organize and conduct several activities simultaneously; and to write reports.

Education and Experience requirements at this level consist of registration as a professional engineer with the Oklahoma State Board of Registration for Professional Engineers and Land Surveyors.

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Professional Engineer -- continued

Level II:  
Code:  S11B  
Salary Band:  N

This is the career level of professional engineers and represents the full performance level of the job family. Incumbents perform engineering duties at all levels of complexity.

Knowledge, Skills and Abilities required at this level are the same as those required at Level I plus ability to perform and direct difficult and complex engineering projects.

Education and Experience requirements at this level consist of registration as a professional engineer with the Oklahoma State Board of Registration for Professional Engineers and Land Surveyors and a master’s degree in engineering and one year of professional engineering experience subsequent to registration or an equivalent combination of education and experience, substituting one year of professional engineering experience subsequent to registration for the required master’s degree in engineering.

Level III:  
Code:  S11C  
Salary Band:  O

This is the specialist level where incumbents routinely serve as technical advisors to other professionals and the agency. They work in a consultative role with knowledge in a specific area of engineering. Duties may include supervising the work activities of an assigned program or project.

Examples of work performed may include but will not be limited to: (1) Development of design standards and/or Agency Policies, Rules and Regulations, (2) representation of the Agency on national and regional committees, (3) coordination of specialized agency programs, functions, and activities.

Knowledge, Skills and Abilities required at this level are the same as those required at Level II, plus the knowledge of engineering as it relates to a specific job responsibility.

Education and Experience requirements at this level consist of registration as a professional engineer with the Oklahoma State Board of Registration for Professional Engineers and Land Surveyors, a master’s degree in engineering and three years of professional engineering experience subsequent to registration; or an equivalent combination of education and experience, substituting one year of professional engineering experience, subsequent to registration, for the required master’s degree.