

**DESCRIPTION:** Under limited supervision, performs supervisory and/or complex licensed professional level engineering work for one or more office and/or field based projects with diverse engineering components and requirements. Projects may involve work related to transportation, facility, structural, water resources, utility-electrical-mechanical, industrial, or other professional level fields of engineering. Provides licensed professional engineering advice and guidance to assigned employees and to the employing agency and/or other public agencies, to ensure projects are developed and/or built according to relevant laws, professional engineering regulations and standards, and employing agency policies, and to project plans, specifications, estimates, and materials. Typically supervises a team or work unit of lower level professional Engineers, and/or technical/paraprofessional engineering employees. May have independent, complex functional and coordination responsibilities requiring advanced or comprehensive engineering knowledge; performs related work as assigned.

**DISTINGUISHING CHARACTERISTICS:** (A position is assigned to this class based on the scope and level of work performed as outlined below.)

This is the fourth full performance classification level of the Engineer class series. Positions in this series perform work based on the application of professional engineering knowledge, skills, and abilities as indicated by the required possession of an academic degree in a particular engineering discipline. The engineering work assigned can involve complex planning, designing, and/or coordinating activities involving roadway, aeronautical, structural (such as bridges, dams, or buildings), facility (such as electrical or mechanical), hydrology, water resources, industrial, or other engineering fields. Positions at this level may be supervised by another professional engineer, or by an administrative official.

Positions at this level normally supervise a number of assigned employees engaged in multiple, diverse agency-wide or locally based engineering functions or projects. Positions may exercise staff direction as principal engineers performing highly specialized or diverse professional level engineering work and/or coordinating the employing agency's professional level engineering functions. Employees supervised by positions at this level typically include lower level Engineers and/or a variety of technical and/or paraprofessional engineering workers. Highly specialized engineering work assignments would require advanced professional level knowledge in one of the engineering disciplines, and significant inter-agency or intra-agency coordination.

Any Engineer classification level is distinguished from technical or paraprofessional engineering related job classes in which incumbents perform specialized engineering support assignments that do not require the academic preparation of the Engineer class series. The professional level Engineer IV job class is distinguished from lower level Engineer classes by the performance of advanced duties and responsibilities in a specific field of work as indicated by the required possession of a Professional Engineer (P.E.) license issued by or accepted by the State of Nebraska. The Engineer IV level is distinguished from the upper levels of the Engineer series where positions are expected to administer significant engineering program functions which are state or district-wide, or equivalent in scope, and to direct multiple work units/sections and supervise assigned supervisory, professional level engineers, and other technical and/or paraprofessional level employees, and to manage or oversee program goals and budgets impacting state or district-wide program functions.

**EXAMPLES OF WORK:** (A position may not be assigned all the duties listed, nor do the listed examples include all the duties that may be assigned.)

Plans, organizes, and directs operations and schedules of assigned engineering and maintenance functions, work units, or assigned projects to ensure project development and construction/renovation conform to laws, regulations, and agency policies and standards; coordinates assigned functions/projects with employing agency divisions, offices, or sections, federal or State agencies, local governments, and/or other interested parties.

Coordinates assigned operations with other field and/or central office upper level engineers or managers to assist them in the administration of agency divisions, offices, or sections and to resolve project planning, design, bidding, and construction issues; recommends avoidance, minimization, and mitigation strategies to ensure effective development and management of engineering functions or projects.

Determines engineering function, work unit or project staffing requirements based on expertise required and specific work requirements; assigns work to, trains, supervises, and monitors assigned employees, contractors, or consultants to ensure timelines and fiscal constraints are met and projects are constructed according to plans, specifications, and special provisions; evaluates performance, addresses worker related problems, and recommends disciplinary or corrective actions.

Interprets plans for contractors and resolves problems, and organizes work activities to assist them; provides project construction information to contractors, landowners, public officials, and the public; manages and reviews work of consultants; negotiates and reviews agreements between the employing agency and local governments, utilities companies, railroads, other landowners, and/or consultants.

Manages and reviews preliminary and final construction plans, special provisions, and plan quantities to ensure constructability, completeness, accuracy, and conformance to standards and specifications; reviews consultant plans for federal aid or State supported projects; recommends solutions, changes, and ideas for construction to agency employees, consultants, and local government officials; works with them to make changes.

Conducts plan-in-hand and construction in-progress inspections to ensure construction in accordance with standards, plans, and specifications; enforces agency policies and procedures.

Collects and analyzes information on planning, design, bidding, and construction strategies; conducts research of current industry standards and test procedures; reviews professional engineering practices and policies and publications and develops/modifies engineering policies, procedures, standards and specifications, or other directives, manuals, and publications.

Serves as an expert for and provides professional engineering advice about specialized, highly complex technical/professional engineering services, and presents technical information, program plans, and proposals to higher-level management; prepares analyses and reports about and provides technical expertise on engineering technologies, materials, and procedures to enhance agency processes and results.

Oversees special or long-term feasibility or professional engineering reviews or studies conducted in-house and examines such studies conducted by consulting firms, local governments, or other public agencies; prepares or evaluates documents, reports, and agreements related to these reviews or studies.

**KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED:** (These are needed to perform the work assigned.)

Knowledge of: civil engineering theories, principles, and practices of civil engineering and design; modern methods and techniques of highway construction, maintenance, and materials; legal responsibilities and ramifications associated with the work performed; federal and agency design standards, specifications, and procedures; federal and State laws and regulations applicable to the function performed; practices and terminology of computer operation and Computer Aided Design and Drafting (CADD); Geographic Information Systems (GIS); mathematics, surveying and material testing; engineering properties of materials and surfacing types; rehabilitation and maintenance techniques; pavement management; practical engineering concepts.

Ability to: interpret, understand and implement State and federal laws and regulations, and agency standards, policies, and procedures; read interpret and evaluate engineering plans and specifications; review and approve/stamp engineering plans; understand all levels of project design; organize, analyze, and evaluate available information and draw reasonable conclusions; develop procedures and determine the logical flow of work through the work unit; plan, organize, assign and direct the work of section/unit staff; provide direction and expertise to other engineering professionals and engineering technicians; evaluate the professional and/or technical skills of assigned team members and assign work accordingly; communicate information clearly and concisely; prepare, interpret, use, and explain civil engineering plans, maps, specifications and standards and reports, communicate with the public, contractors, consultants, agency staff at all levels, and local government officials; interact with assigned worker, other agency employees, local government representatives, contractors, consultants, and the public.

**MINIMUM QUALIFICATIONS:** (Applicants will be screened for possession of these qualifications. Applicants who need accommodation in the selection process should request this in advance.)

Bachelor's degree in an engineering discipline and experience performing professional level engineering assignments in those specific fields applicable to the functions assigned to the position.

Must possess a Professional Engineer (P.E.) license at the time of application, and be licensed by the Nebraska Board of Engineers and Architects at time of employment or be able to obtain such license within 90 days of employment.

**LEGAL REQUIREMENTS:** (These qualifications are mandated by federal/state laws, statutes, and/or regulations.)

Positions in this classification are subject to Title 110, Nebraska Administrative Code, Chapter 2 – Engineering. The basic requirement is registration as a Professional Engineer (P.E.) by the Nebraska Board of Engineers and Architects; or the ability to obtain such registration within 90 days of employment. [Neb. Rev. Stat 81-3451.]

**SPECIAL NOTES:**

Bachelor's degrees outside of the United States must be ABET accredited at the time of application. Will also consider applicants with a Master's Degree in Engineering from an ABET accredited institution in the United States.

Recognized engineering disciplines include agricultural, chemical, civil, electrical, hydrology, industrial, mechanical, and structural fields.

State agencies are responsible to evaluate each of their positions to determine their individual overtime eligibility status as required by the Fair Labor Standards Act (FLSA).