Job Summary:

The Civil Engineer will design, plan, and supervise the construction of infrastructure projects such as buildings, bridges, roads, dams, pipelines, water, and sewage systems.

Supervisory Responsibilities:

- Where applicable, directs and oversees junior or subordinate staff members regarding construction, operations, and/or maintenance tasks and assignments at a project site.

Duties/Responsibilities:

- Consults with and provides guidance to project stakeholders and managerial staff regarding engineering requirements for construction of various designs, modifications, and structural repairs.
- Uses design software and drawing tools to accurately render and communicate designs; plans and designs other necessary and related systems and structures such as transportation or hydraulics.
- Assesses strength of foundations, concrete, asphalt, or steel by testing materials and soil.
- Sets design specifications by computing load and grade requirements, material stress factors, water flow rates, and similar parameters.
- Plans projects based on the analysis of relevant materials such as drawings, blueprints, aerial photography, survey reports, maps, and other geologic and topographical data.
- Drafts and presents reports on topics related to projects such as environmental impact statements and right-of-way descriptions.
- Estimates materials, equipment, and labor needed to determine project costs.
- Collaborates with architects and contractors to ensure projects progress properly.
- Collaborates with surveyors (or directs and participates in surveying) to establish installations or reference points, grades, elevations, and other factors that will affect construction.
- Monitors project progress and ensures design specifications, safety, and sanitation standards are met.
- On completion of a project, inspects, repairs, and maintains the structures as needed.
- Performs other related duties as assigned.

Required Skills/Abilities:

- Thorough understanding of civil engineering principles, practices, and tools.
- Proficient in computer-assisted design (CAD) and other design, data recording, and analyzation software.
- Thorough understanding of materials, methods, and tools involved in the construction or repair of buildings, bridges, roads, and other related structures.
- Thorough understanding of safety regulations related to assigned projects.
- Ability to identify and solve complex problems.
- Excellent verbal and written communication skills.

- Ability to be both creative and analytical.
- Extremely detail-oriented and accurate.

Education and Experience:

- Bachelor's degree in Civil Engineering required; Master's degree preferred.
- Licensure as professional engineer (PE) required.

Physical Requirements:

- Prolonged periods sitting at a desk and working on a computer.
- Must be able to lift up to 15 pounds at times.
- Must be able to travel to various project sites.
- Must be able to access and navigate job sites and construction areas.