

PCN	08X123, 080425
JOB TITLE	INFRASTRUCTURE ENGINEER
LOCATION	ANCHORAGE
RANGE	23/24/25
REPORTS TO	DIRECTOR, OWNED ASSETS 08X071
FLSA EXEMPT	YES
REVIEWED BY: (NAME AND DATE)	CURTIS THAYER, DECEMBER 2024
APPROVED BY: (NAME AND DATE)	CURTIS THAYER, DECEMBER 2024
EFFECTIVE DATE	DECEMBER 13, 2024

Position Purpose:

This position is responsible for assisting in engineering studies, field investigations, and the development of engineering design for the Alaska Energy Authority’s owned assets and grant projects under the general guidance of the Director of Owned Assets.

Essential Functions:

- Reviews and analyzes technical proposals, contracts, operations and management agreements, memoranda of understanding and similar documents for owned assets projects.
- Writes engineering and technical analyses; writes and submits reports required by the Federal Energy Regulatory Commission.
- Manages legal contracts for project development with other parties.
- Collaborates with utilities, communities, Alaska Native groups, government agencies, and other local entities in developing projects with a focus on maximizing energy, local input, resources, and jobs.
- Provides technical and/or engineering subject matter expertise to Authority staff.
- Supervises project consultants in the design, construction, operation, and management of facilities that are or potentially will be owned/financed by the Authority in accordance with contractual and program requirements.
- Provides advice and technical assistance on matters relating to utility relocations, land acquisition, site control, land surveys, permitting, code compliance, variances, construction issues, start-up and commissioning, warranty, and operational issues.
- Initiates and reviews request for proposal packages and solicits professional services such as architectural, engineering, cost estimating, environmental, marketing, and project management work.
- Administers professional services contracts through to completion of the projects.
- Develops high-level project cost estimates, budgets, critical path method schedules, and cash flow projections and supervises project consultants responsible for such project planning deliverables.
- Develops and prepares project reporting systems.
- Performs asset management of Authority owned properties.
- Other duties as assigned.

Work Demands

The following identifies some of the physical and mental demands and potential hazards typically encountered by this position. These are job demands which can be *reasonably anticipated and are an expectation of the job*.

Keeping in mind the essential functional areas and duty statements described in section 2, select the rating that best matches the requirement of this position according to the following descriptions:

Rating **Description**

Not Required (N): Not required of this position.

Present (P): Requirement **is** present, but **is not** essential to the position.(For example, a receptionist may encounter aggressive or angry people, but this is not an essential assignment.)

Occasional (O): Required 33 percent of the time or less **and** essential to the position.(For example, a lifeguard swims only occasionally, but it is essential that a lifeguard be able to swim; a correctional officer must control aggressive/angry people who are life threatening.)

Frequent (F): Required over 33 percent of the time **and** essential to the position.

Physical Requirements	Rating			
	N	P	O	F
Sitting		P		
Walking		P		
Standing		P		
Running	N			
Jumping	N			
Bending or twisting	N			
Squatting or kneeling	N			
Crawling	N			
Reaching above shoulder level		P		
Reaching below shoulder level		P		
Ascending or descending using a ladder or other conveyance	N			
Climbing stairs	N			
Driving cars, light duty trucks		P		
Driving heavy duty vehicles	N			

Using floor mounted foot controls to operate equipment (e.g., not driving a car)	N			
Repetitive motion of hands/fingers (e.g., keyboarding, turning pages)				F
Fine manipulation with fingers				F
Pinching with fingers		P		
Grasping with hand, gripping		P		
Load, unload, aim, and fire handguns, shotguns or other firearms	N			
Lifting/carrying up to 25 pounds		P		
Lifting/carrying 26-50 pounds	N			
Lifting/carrying more than 50 pounds	N			
Pushing/pulling up to 25 pounds		P		
Pushing/pulling 26-50 pounds	N			
Pushing/pulling more than 50 pounds	N			
Balancing on moving surfaces	N			
Balancing on narrow surfaces	N			
Balancing on slippery surfaces	N			
Balancing on uneven surfaces	N			
Restraining/grappling with people in a public protection environment	N			
Seeing objects at a distance – when driving		P		
Seeing objects peripherally – when driving		P		
Using depth perception – when driving		P		
Seeing close work (e.g., typed print)				F
Distinguishing colors	N			
Hearing conversations or sounds				F
Hearing via radio or telephone				F
Communicating through speech				F
Communicating by writing/reading				F
Distinguishing odors by smell	N			
Distinguishing tastes	N			

Work Environment	Rating			
	N	P	O	F

Work in/exposure to inclement weather	N			
Work in/exposure to cold water	N			
Work/live in remote field sites	N			
Work in confined areas (under desks, in heating vents, etc.)	N			
Exposure to dust, chemicals, or fumes	N			
Exposure to hazardous equipment (e.g., guns, chainsaws, explosives)	N			
Exposure to electrical current (not outlets)	N			
Swimming/scuba diving	N			
Work at heights up to 25 feet (e.g., towers, poles)	N			
Work at heights over 25 feet (e.g., towers, poles)	N			
Work in urban or highway traffic (other than driving)	N			
Work around moving machinery or mobile equipment	N			
Work around moving mechanical parts	N			
Work on and off moving equipment	N			
Work on slippery or uneven surfaces	N			
Work/travel in boat/small aircraft/helicopters	N			
Exposure to high noise levels	N			
Exposure to infection, germs, or contagious diseases (e.g., hospital, lab, clinic, etc.)	N			
Exposure to blood, body fluid, or materials potentially contaminated by blood or body fluids (e.g., hospital, lab, clinic, public protection environment)	N			
Exposure to needles or sharp implements (e.g., hospital, kitchens)	N			
Use of hot equipment (e.g., kitchen ovens, lab equipment)	N			
Exposure to wild/dangerous animals	N			
Exposure to insect bites or stings	N			
Exposure to aggressive/angry people in a public protection environment	N			

Other Work Demands	Rating			
	N	P	O	F

Explain any special physical, mental, or behavioral requirements of the position that have not already been addressed.

While performing the duties of this job, the employee is frequently required to sit; use hands or fingers; handle or feel; talk and hear. The employee is occasionally required to reach with hands and arms. This position frequently requires reading and communication through speech and writing. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision and the ability to adjust focus.

This position may require travel by small plane, helicopter, or small boats to remote sites. Field trips may require hiking through steep vegetated terrain, crossing streams, or entering confined spaces while collecting data or inspecting.

Describe the Level of Authority and Independence the Incumbent of the Position Exercises.

Reviews analyzes technical proposals, contracts, operations and management agreements, memoranda of understanding and similar documents for owned assets projects. Manages legal contracts for project development with other parties.

Special Requirements of this Position, if not listed above:

Critical Knowledge, Skills, and abilities:

- Knowledge of Alaska energy systems, economics, resources, and laws/regulations guiding energy development/policy in Alaska.
- Ability to manage multiple engineering contractors and tasks simultaneously.
- Experience with remote site work and cold climate engineering.
- Skilled in project management methodology and making technically/financially sound project management decisions.
- Experience with Federal Energy Regulatory Commission licensing.
- Ability to review a high volume of engineering reconnaissance, feasibility reports, and final design documents for completeness and accuracy of conclusions/recommendations.
- Ability to perform economic analysis of complex projects.
- Strong understanding and knowledge of environmental issues and impacts that result from the development of energy facilities; experience recommending changes in technology as required to mitigate detrimental impacts.
- Ability to present to diverse audiences on complex issues.
- Demonstrable knowledge of multiple engineering disciplines (electrical, civil, and mechanical).
- Knowledge of utility operations.
- Ability to travel throughout Alaska as needed.

Desired Qualifications:

Bachelor's degree in civil, electrical, or mechanical engineering or related field, and a minimum of 5 years of experience in engineering and project management. Master's degree in a related field may be used as substitute for two years of qualified experience. Licensure as a Registered Professional Engineer (PE) in the State of Alaska is preferred. Project Management Professional (PMP) certification

or specialty certifications from the Construction Specifications Institute (CSI) such as Construction Documents Technology (CDT) or a Certified Construction Contract Administrator (CCCA) are preferred.

Distinguishing Characteristics:

At the highest level, the position requires:

- Range 23: Minimum of 5 years of qualifying experience.
- Range 24: Minimum of 10 years of qualifying experience.
- Range 25: Minimum of 15 years of qualifying experience.

Supervision:

N/A