

Job Title: Sr Fire Protection Engineer - 90377165 - Philadelphia

Your success is a train ride away!

As we move America's workforce toward the future, Amtrak connects businesses and communities across the country. We employ more than 20,000 diverse, energetic professionals in a variety of career fields throughout the United States. The safety of our passengers, our employees, the public and our operating environment is our priority, and the success of our railroad is due to our employees.

Are you ready to join our team?

Our values of 'Do the Right Thing, Excel Together and Put Customers First' are at the heart of what matters most to us, and our Core Capabilities, 'Building Trust, Accountability, Effective Communication, Customer Focus, and Proactive Safety & Security' are what every employee needs to know and do to be most impactful at Amtrak. By living the Amtrak values, focusing on our capabilities, and actively embracing and fostering diverse ideas, backgrounds, and perspectives, together we will honor our past and make Amtrak a company of the future.

SUMMARY OF DUTIES:

Under the direction of the Senior Principal Engineer for Amtrak's nationwide Fire and Life Safety design protocol within the Tunnels Group, the Sr. Engineer's position serves as a technical subject matter expert (SME) pertaining to fire protection, life safety, and electrical systems across the county wide Amtrak Network, with a focus on tunnels and overbuilds. The position provides service to numerous internal departments such as Stations, Planning, Mechanical and Transportation along with Engineering projects/programs. Support is provided through resolving issues related to fire protection and life safety utilizing both deterministic and performance-based methods, code consulting, and egress analysis, fire protection system design and reviews, fire hazard analysis, and computer-based modeling analysis. The Principal Engineer will also be the subject matter expert for electrical systems ranging from 120V to 480V Systems.

As an SME, the Sr Engineer position is responsible for directing, reviewing, and/or advising the design of capital improvements and state of good repair projects for Amtrak's Facilities nationwide. This includes managing project design with internal staff as well as external architecture/engineering firms and consultants. The Sr. Engineer will also collaborate and partner with internal and external stakeholders, including Amtrak's project delivery, law, real estate, transportation, mechanical, and engineering departments, as well as local and state agencies, the FRA, and freight and commuter railroads.

ESSENTIAL FUNCTIONS:

- Expert knowledge of interpreting model building/fire codes and NFPA Standards.
- The ability to provide code/standard review and interpretation for internal and external stakeholders as well as advise Amtrak's various asset owners and Project Managers on system design criteria.
- Understanding of fire protection design and evaluations encompassing fire sprinkler systems, fire alarm systems, standpipe systems, and special suppression systems
- Previous project management experience with emphasis on developing and reviewing Project Scopes, Schedules, and Budgets with ability to maintain concise and up-to-date scope I schedule/ budget status summaries for inclusion in the Facilities Database as part of internal and external stakeholder communications.
- Knowledge of Computer Fire and Egress Modeling along with hydraulic calculation software/models
- Experience with tunnel ventilation and system controls
- Ability to develop and evaluate cost effective solutions
- Understanding of and experience in design of low voltage (120v-480v)electrical systems including buildings, facilities, tunnels, pump rooms and emergency/ back-up power
- Skilled in developing and reviewing construction cost estimates for both small-scale and large-scale projects
- Proficient with the design review process and developing direct review comments, participating in page turn reviews and comment close-out
- Capability of working in a dynamic team environment successfully managing multiple projects with various deliverable deadlines
- Experience in leading/chairing meetings with local, state and federal agencies, utility companies and regulatory agencies
- Self-sufficient and able to work independently as well as contribute to team efforts

- Occasionally work nights or weekends in support of projects
- Excellent written and interpersonal communications skills

MINIMUM QUALIFICATIONS:

- Bachelor's Degree in Fire Protection Engineering or Electrical Engineering
- Licensed Professional Engineer or able to obtain within 1 year of hire
- Proficient in power system design for commercial and industrial facilities, including but not limited to tunnels and other underground installations.
- Competency of building codes, design specifications, and recommended practices for fire protection equipment, controls, power sources, and SCADA.
- Infrastructure experience in maintenance, planning, design, construction preferably in a railroad environment.
- Demonstrated experience working in a matrix organization

MIMINUM KSA (Knowledge, Skills, and Abilities):

- Excellent verbal and written communication, organizational, collaborative and relationship building skills with demonstrated experience both within and outside an organization.
- Must be able to initiate work from a bare problem statement and perform / manage all investigation, design, and contract packaging to drive toward an efficient result with minimal impact to railroad operations.
- Must be self-motivated and able to work autonomously to identify, troubleshoot and develop solutions for project-specific challenges.
- Experience in design, construction, and project management for industrial or institutional facilities.
- Experience in management and leadership of multi-discipline design projects using outside architecture and engineering consulting firms.
- Understanding of building codes, design specifications, and recommended practices.

PREFERRED QUALIFICATIONS:

- 8+ years of relevant experience
- Master's Degree
- Prior work experience as an Owner's Representative performing all phases of development including planning, scoping, budgeting, estimating, constructing, and project close-out in a fast-paced environment with projects ranging in size and complexity.
- Prior design experience with building/tunnel electrical system and controls
- Prior work experience writing RFP's, bidding, and contracting with (or as an employee of) architecture and engineering consulting firms.
- Familiarity with large scale architecturally and historically sensitive facilities.
- Understanding of both passenger and freight railroad operating environments.

WORK ENVIRONMENT:

- Travel up to 25%, nationwide
- Valid driver's license required

COMMUNICATIONS AND INTERPERSONAL SKILLS:

Must have excellent oral and written communication skills.

The salary/hourly range is \$103,700-\$134,460. Pay is based on several factors including but not limited to education, work experience, certifications, etc. Depending on an employee's assigned worksite or location, Amtrak may consider a geo-pay differential to be applied to the employee's base salary. Amtrak may offer additional incentive and pay programs to recognize and reward our employees, including a short-term incentive bonus based upon factors such as individual and company performance that is commensurate with the level of the position and/or long-term incentive plan compensation. In addition to your salary, Amtrak offers a comprehensive benefit package that includes health, dental, and vision plans; health savings accounts; wellness programs; flexible spending accounts; 401K retirement plan with employer match; life insurance; short and long term disability insurance; paid time off; back-up care; adoption assistance; surrogacy assistance; reimbursement of education expenses; Public Service Loan Forgiveness eligibility; Railroad Retirement sickness and retirement benefits; and rail pass privileges. Learn more about our benefits offerings [here](#).

Requisition ID:161570

Posting Location(s):Pennsylvania

Job Family/Function:Engineering

Relocation Offered:No

Travel Requirements:Up to 25%

You power our progress through your performance.

We want your work at Amtrak to be more than a job. We want your career at Amtrak to be a fulfilling experience where you find challenging work, rewarding opportunities, respect among colleagues, and attractive compensation. Amtrak maintains a culture that values high performance and recognizes individual employee contributions.

Amtrak is committed to a safe workplace free of drugs and alcohol. All Amtrak positions requires a pre-employment background check that includes prior employment verification, a criminal history check and a pre-employment drug screen.

Candidates who test positive for marijuana will be disqualified, regardless of any state or local statute, ordinance, regulation, or other law that legalizes or decriminalizes the use or possession of marijuana, whether for medical, recreational, or other use. Amtrak's pre-employment drug testing program is administered in accordance with DOT regulations and applicable law.

In accordance with DOT regulations (49 CFR § 40.25), Amtrak is required to obtain prior drug and alcohol testing records for applicants/employees intending to perform safety-sensitive duties for covered Department of Transportation positions. If an applicant/employee refuses to provide written consent for Amtrak to obtain these records, the individual will not be permitted to perform safety-sensitive functions.

In accordance with federal law governing security checks of covered individuals for providers of public transportation (Title 6 U.S.C. §1143), Amtrak is required to screen applicants for any permanent or interim disqualifying criminal offenses.

Note that any education requirement listed above may be deemed satisfied if you have an equivalent combination of education, training and experience.

Amtrak is an EOE/Affirmative Action Minority/Female employer, and we welcome all to apply. We consider candidates regardless of race/color, religion, sex (including pregnancy, childbirth and related conditions), national origin/ethnicity, age, disability (intellectual, mental and physical), veteran status, marital status, ancestry, sexual orientation, gender identity and gender expression, genetic information, citizenship or any other personal characteristics protected by law.