



**U.S. Department of Veterans Affairs
Veterans Health Administration**

Functional Statement

OFFICIAL POSITION TITLE	ORGANIZATIONAL TITLE	SERVICE LINE
Healthcare Engineer	Energy Engineer	Engineering
PAY PLAN-SERIES- GRADE	GEOGRAPHIC LOCATION(S)	FUNCTIONAL STATEMENT #
GS-0801-12	Wilmington, DE	

GENERAL DESCRIPTION OF ASSIGNED DUTIES

Describe the general nature and purpose of the work.

The position serves as the Energy Engineer at the Wilmington VAMC. This position performs project planning, produces designs, manages designs, manages construction, and provides construction administration for Non-Recurring Maintenance (NRM) Projects, Station Level Projects, and Leases, including all areas and aspects related to energy management: electrical, life safety, mechanical, etc.) and associated Community Based Outpatient Clinic (CBOC)'s. In addition, the incumbent is solely responsible for the management of the utility programs and provides upper management subject matter expertise on boilers, chillers, and other related critical utility systems for the campus.

The position serves as resident and program engineer consisting of the planning, design, and overseeing of major healthcare system projects; oversees Professional Architecture/Engineering (A/E) and Construction contracts to ensure the contractor is in compliance with all contractual requirements, healthcare regulations and codes, specifications and schedules are met in accordance with the government's requirements for VA owned and leased facilities.

The position provides engineering support to the assigned healthcare system and is responsible for maintaining construction specifications and drawings, maintaining technical reference library of codes, standards, and other regulations which are applicable to the engineering construction industries Occupational Safety and Health Administration (OSHA), National Fire Protection Association (NFPA), American National Standards Institute (ANSI), ASHRAE, and others. The position serves as a healthcare engineering advisor, with a specific focus on energy related matters. S/he is an engineer consultant, engineer designer, contract administrator, project manager, construction coordinator, and instructor during the design and construction of all projects assigned. The position is responsible for providing healthcare engineering support to all assigned projects. The position is responsible for performing the duties of a Contracting Officer Representative (COR) on professional design and construction projects, training service staff on technical issues and assisting the service staff on the completion of technical and administrative issues regarding infrastructure related operations of the medical facility.

The position serves as the Integrated Project Team (IPT) Chairperson, comprised of diverse and multi-discipline professional team members, consisting of internal and external stakeholders, and is a recognized expert in project management. The position participates in planning deliberations and contributes significantly to the management decision-making process through teamwork, innovation, coordination, and collaboration with other senior members and stakeholders to ensure objectives are met toward meeting the healthcare system's overall strategic plan goals.

The position maintains COR certification to oversee the administration of Facility Engineering Service's Architect/Engineer and Construction Contracts. The incumbent takes the lead COR for all energy related audits, studies, and evaluations determined by the VISN.

The position supports and advances patient care by applying engineering and managerial skills to healthcare engineering as demonstrated by the following major responsibilities:

- A. Conducts capital asset and infrastructure planning and design for the medical facility spanning initial strategic planning, concept development, design, construction, and effective implementation of complex buildings, utilities, and medical support systems.
- B. Manages healthcare engineering project design and administers construction in accordance with VA policies and procedures, VA Design Guides, VA Design Manuals, VA Master Specifications and related industry codes and standards.
- C. Performs healthcare engineering project construction management and post project activities while ensuring continuity of building and utility services for medical facility operations.
- D. Assists in the provision of a continuing education program for clinical staff and maintenance personnel addressing the principles and application of building and utility systems in the delivery of health care. This includes a curriculum that addresses the safe and effective use of medical gases, emergency power, ventilation, and other healthcare infrastructure related technology. This requires skill to effectively communicate, both orally and in writing, with a wide variety of individuals, including technical and professional clinical staff, to communicate technical information.
- E. Assists in development and implementation of the environment of care program that meets current Joint Commission, Food and Drug Administration (FDA), College of American Pathologists (CAP), NFPA, and VA requirements, particularly as it relates to construction safety and infection control.
- F. The incumbent identifies the budget needs for all utilities and makes budget requests to the Fiscal Office. The incumbent initiates fiscal contacts for utilities, and performs all necessary contract actions in conjunction with the Fiscal and Contracting Offices.
- G. The incumbent keeps track of all energy usages (electricity, natural gas, and fuel oil), water usage, and utility costs, including sanitary sewer and storm sewer costs for the VAMC facility, and all associated leased spaces.
- H. The incumbent coordinates all fuel oil purchases for the facility through DLA (Defence Logistics Agency). The incumbent also coordinates all vehicular fuel purchases through DLA for fuel tanks located on the VAMC campus with the Fleet Manager and Grounds Maintenance Supervisor.
- I. The incumbent reviews all projects in the FES Projects Section to ensure compliance with energy policies and to achieve optimal solutions for energy improvement and maintainability.

FUNCTIONS OF ASSIGNED DUTIES

Lists the major duties and responsibilities of the position.

A. Performs Healthcare Planning/Energy Management

The position determines the requirements for healthcare projects in relation to the needs of the Healthcare System, inclusive of the parent site, as well as off-site locations under the auspice of the Healthcare System, whether VA owned or leased. Project needs are determined for the organization

down to the department level based on a broad array of guidelines, standards, regulatory requirements and mission priorities. The position evaluates how to accomplish the requirements of the project and determines the associated risks necessary to complete the construction within the healthcare facility and identify ways to mitigate project risk. A unique task of an Energy Engineer during the investigation or construction phase of a project is to minimize the impact to patient care operations and utilities, and in many cases, to ensure patients are able to continue to be cared for in a safe and secure manner due to the inability for the medical center to stop seeing patients during the construction phase of a project. The position is responsible for determining what temporary means and methods are necessary to be executed to reduce any risk of danger to patients or staff while a standard of medical care is met for all patients. A detailed knowledge of healthcare operations is required to include how utilities and services support healthcare operations for each type of care provided. The position is responsible for evaluating programs and projects to assure compliance with all environmental, safety and security standards. The position plans and designs a phased approach for the means and methods of construction activities to be executed for complex medical construction projects in order to minimize risk and impact to patients and patient care operations and the daily patient treatment procedures that cannot be impacted without severe patient hazard.

The position provides a broad review of all disciplines of Engineering when applied to a healthcare environment to support construction document reviews and preparation. Work requires a broad knowledge of all Engineering disciplines, to include Mechanical, Electrical, Structural and Fire Protection. The position provides in-depth reviews on all design submissions to include healthcare code compliance and references within the documents for regulations and codes applied to healthcare. The position represents the healthcare system's quality assurance for project designs to be complete and meet all current applicable health care code requirements for all types of utility services, safety, security and operation.

A working knowledge of The Joint Commission (TJC) requirements, NFPA 101 the Life Safety Code and NFPA 99 Healthcare Facilities Code, in addition to VA design requirements is necessary to provide direction to Architectural/Engineering firms on complex healthcare designs to ensure compliance and regulatory requirements are met for the medical facility. The position has the knowledge and background of how construction work flows and products are to be used. The position plays an essential role in resolving conflicts in designs and in the construction field to reduce and prevent large cost and time impacts for projects while ensuring the project VA standards and adopted codes.

The position performs evaluations on medical care programs and services to ensure assigned projects are aligned and support the healthcare organization's needs and requirements for expansion of service and/or efficient flow of operation. The position has to learn how specialized patient services are performed for that area to become a knowledgeable proponent to provide direction to designers in how to meet users goals and intention but still manage the expectations of the stakeholders within limits of budget/space allocated for the project.

The position provides information to the Chief of the service regarding various Capital Planning needs for the facility to include information on the status of all assigned ongoing project activities. The Energy Engineer advises the Chief Engineer on needed NRM projects and collaborates with the Supervisory Healthcare Engineer (Projects) to develop the scope and financial documentation required.

The position develops initial concept documents, creates and maintains project applications in multiple VA database systems, such as the Veterans Support Service Center (VSSC), Strategic Capital Investment Planning Tool, and Capital Assets Inventory. Tracks and manages the status, changes and updates to projects over their life cycle.

Makes decisions and recommendations relating to energy conservation for feasibility and cost effectiveness and supports the facilities energy goals. Some of these methods may be new to the site or the geographic area of consideration and may require substantial research and analysis.

The position is a member as assigned to certain key committees including A/E Selection Committee, Construction Technical Evaluation Committee, and various Design Teams including construction projects where the incumbent acts as a project lead and may chair the committees. The incumbent reviews all engineering designs to ensure that the government has made the utmost effort to conserve energy and is designed in accordance with applicable laws and executive orders.

The position coordinates construction activities for a wide range and variety of interrelated systems and services. Coordinates and monitors planning and answers design problems for the multi-disciplinary projects including all components of the project life cycle from initial planning and concept to design to construction, project completion and warranty periods.

The position utilizes skillsets encompassing a wide range of engineering fields including, but not limited to identifying and defining assigned problems dealing with structures, mechanical, HVAC, sprinkler, fire and life safety, architectural, and electrical systems. Many of the problems have indistinct origins and require extensive research and analysis of data from a wide range of engineering specialty areas within numerous and diverse sources. The position is expected to work independently to solve issues and determine a workable and cost-effective solution. Plans and evaluates potential construction and maintenance projects, including preparation of project application documents, work scope statements, prepares designs, justifications, and cost estimates.

Applies a broad knowledge of methods, precedents, and standards to significantly diverse and intense work complexities. Work complexities require not only adaptation or modification of precedents but a versatile and innovative approach to solve problems where serious conflicts exist between management requirements and engineering principles.

Performs an array of pre-planning activities that include coordinating cross-departmental planning meetings, developing Scopes of Work, conceptual project designs, and government cost estimates, and ensures project documents are produced in accordance with VA Contracting and Information Security requirements.

Performs planning and analysis activities that includes conducting or directly overseeing surveys and site investigations to establish baseline data necessary to initiate design for renovations, alterations, and additions to the existing hospital, patient care facilities, administrative buildings, grounds, utility plants and systems, and historic buildings listed on the national registry.

Develops specifications and plans for alterations, additions to existing buildings, grounds, utility plants and systems, as well as for preparing the site for the installation of highly complex medical equipment ranging from smaller Ultrasound type equipment to larger Magnetic Resonance Imaging (MRI) type equipment. Provides direct project support or direction to large maintenance activities which take facility wide coordination and efforts to accomplish. The position will be the lead in these activities to assist with customers' requests and questions along with providing guidance and options to services impacted.

Reviews A/E documentations as the technical authority and quality assurance for the medical center for various Minor, Non-Recurring Maintenance (NRM), and other construction projects related to submissions of reports, drawings, specifications and literature consisting of adequacy of content, correctness, consistency with VA standards and goals, design principles and guidelines, cost effectiveness, compliance to healthcare codes and VA standards, and professional appearance. Recommends sound advice and presents alternatives that will enable management to accomplish

the desired energy management results or objectives within the framework of sound engineering practices and standards of project execution.

Ensures implementation of sound decisions and guidance dealing with compromises and changes in project objectives. The position provides evaluations of existing utility systems for capacity, redundancy and life cycle for consideration of improvement on a routine basis. Assures and defines resolution of complex project problems and issues whenever possible or makes sound engineering recommendations in support of.

As the leader of the IPT the position oversees all phases (planning, design, construction) of assigned projects to ensure integration and coordination within established time frames, maintains agency goals and objectives consistent with commitments and policy, as well as measurable performance criteria. The position chairs and documents regular project meetings with members of the IPT, facility leadership and stakeholders to manage the project through the various project phases.

To ensure successful project execution the incumbent communicates with multiple individuals and groups from outside the agency, including federal officials, state officials, city officials, consultants, contractors; Veteran Service Organizations, and professional associations, in structured and unstructured settings.

B. Manages Healthcare Design and Construction Administration

The position uses independent seasoned engineering judgment in evaluating and performing scheduling and layout of operations, inspection, and surveillance of materials, methods, and equipment used in construction. This role may also serve as a utility and HVAC subject-matter expert to other projects and CORs. This position is seen as a senior engineer and may be called upon to assist other CORs with technical problems. Responsible for reviewing contractor submittals, contractor change order requests, assuring project compliance with drawings and specifications, administering A/E and VA Headquarters review processes, assuring safety practices, and making sound engineering recommendations to appropriate leadership for action. Coordinating and overseeing work in a healthcare environment requires the incumbent to have knowledge of complex medical systems and is responsible to coordinate work while keeping patients safe and the medical facility operational.

The position is responsible for managing and dealing with constantly changing priorities and deadlines based on engineering workload. Utility and equipment failures must be addressed immediately for continuation of patient care and mission of the medical facility which often disrupts the intended work flow and takes priority for staff to address. The position is responsible for prioritizing frequent requests and demands while still maintaining continuity of utility operations of the medical facility. The position uses engineering judgment, initiative, and resourcefulness in deviating from established methods to modify, adapt, and/or refine broader guidelines to resolve specific complex or intricate issues and problems, research trends and patterns; develop new methods and criteria; or propose new energy policies and sound practices.

The position is responsible for training the facility maintenance staff on new equipment or complex utility systems to ensure the staff have the comprehensions, qualifications and understanding of the systems to maintain and operate. The position provides guidance to management and staff for TJC Accreditation for Medical Centers Review preparation efforts and mitigation to ensure the facility achieves the highest level of score for all engineered medical components.

The position provides technical troubleshooting techniques to evaluate and provide in-depth forensic data to why specialized medical systems, utility and/or components of the facility have failed.

The position responsible for providing guidance, development and coordination for the planning, design, and oversight of utility and energy-related projects. Plans specific objectives for those projects. The position is responsible for preparing detailed cost estimates for use in obtaining maintenance funding and bid evaluation. The position consults with contractor personnel to resolve difficult and complex unforeseen problems and latent conditions developing during maintenance. Prepares sketches or changes drawings and specifications solving the problem and incorporates these change documents into the contract performance documents.

The position prepares correspondence, technical reports, estimates, fact sheets, progress reports, schedules, progress payments, and close-out documents as required to complete project assignments. Responsible for verifying daily logs and contractor's payrolls for accuracy. Determines percentage or work complete prior to authorizing progress payment. The position is certified as required in areas of OSHA competent person safety training, infection control and COR.

Consults with contractor personnel to resolve difficult and complex, unforeseen problems and latent defect conditions developing during construction. The position prepares sketches or changes to drawings and specifications solving problems and incorporating change documents into the contract performance documents. The position is responsible for reviewing and evaluating shop drawings, samples and material certifications submitted by contractor for contract and performance requirements, recommending approval, rejection or receipt. This may require interaction and coordination with outside agencies such as State Historical Preservation Office (SHPO), Federal and State OSHA, Environmental Protection Agency (EPA) and local utility companies.

Provides guidance and insight to other engineering staff in revising as-built drawings or project plans after construction completion of their project and will research information on existing building and utility systems as needed.

The position maintains a library file of current documents, codes and publications used in the development of bid documents and reports.

The position is the lead COR on most design and construction projects at the facility and leads inspectors in the oversight of the construction activities along with coordination with the contracted architect and engineering firm of record for the project. Determines efficiency and effectiveness of the project progress and conformance with contract requirements and communicates issues with the contractor including justification of actions and inspection results.

Uses originality to develop new and modify existing methods, techniques, and procedures, in discerning new patterns of phenomena, and in correlating and substantiating already developed hypotheses.

Develops and reviews competitive bidding cost estimates for a variety of projects of multiple-use nature. The position must be knowledgeable on the utilization construction cost software and products along with understanding the current market trends and impact of cost occurring within the area of the projects. The position prepares detailed independent government estimates utilizing cost estimating tools and market research for use in obtaining project funding, bid evaluations, change orders and supplemental agreements.

The position investigates a variety of problems experienced in construction requiring modification to the original design of the project. The Energy Engineer coordinates with the designer, contractor, and Contracting Officer in making design changes based on recommendations, user requests or resolving conflicts. The position assures quality control and adequacy of contractor's means and methods of operations and confers with contractor to obtain corrective action when needed.

The position applies working knowledge of Federal Acquisition Regulations (FAR) and VA Acquisition Regulations (VAAR), as well as VA mandated set-aside requirements to effectively provide procurement support to the Contracting Officer. A detailed knowledge of construction means and methods is required to allow for accurate estimates of changes to contract.

Provides Engineering and Architectural advice to peers, subordinates, non-professional administrators, or managers.

Participates in the negotiation and pre-selection, and actively manages design A/E contracts. The position reviews or directs the review of plans, specifications, and analyses of designs as submitted by subordinate engineers and A/E firms. Provides professional engineering advice to improve such plans, specifications and analyses on matters involving planning, programming, executing, inspecting, and accepting new Minor Construction, NRM, Real Property Maintenance, and Repair Projects. Directs necessary changes and provides professional assistance required. This may require interaction and coordination with outside agencies such as SHPO, Federal and State OSH, EPA and local utility companies.

Participates in the development of the independent government estimate (IGE) and negotiations with A/Es to develop professional engineer design products. Incumbent supports A/E responsibility actions and resolves outstanding A/E claims. Assures A/E submittals are in accordance with contract requirements and project deliverables. Validates A/E progress payments and provides reviews and evaluations of A/E performance upon completion of contract services.

Position requires frequent interdependent modifications, adaptations, or compromises for successful integration with the existing architectural, structural, mechanical, and electrical systems and environmental conditions, diverse special equipment or functional requirements, and future long-range plans. The incumbent participates in resolving complex technical issues which integrate multi-discipline activities throughout the facility as well as with outside organizations such as the OSHA, Department of Labor (DOL), EPA, City and County Departments of Health, and the SHPO. Contacts are used to plan, coordinate, or advise on work efforts or resolve operating problems in dealings with others who are working toward mutual goals.

The position develops reports for supervisor's review.

C. Performs Healthcare Construction Management and Post Project Activities

The position provides direction and guidance to the contractor for construction within the facility, when assigned. The incumbent may also provide technical direction to the CORs as needed. Provides approvals on means and methods performance of work and how it is conducted within a medical environment to ensure impacts of the construction does not impact patient care operation or provides a risk to patients or staff.

The position provides training and guidance to the contractor to improve the contractor's ability to work within the medical facility requirements and confinements to better perform the scope of work and the engineering design.

The position is responsible for a working knowledge of Infection Control and the requirements to be followed included in the Risk Assessments, their application in the health care environment, and methods necessary to retain separation of active construction from the healthcare environment. Failure to maintain these requirements and separation has severe consequences that could lead to patient sickness and even death. The position is required to have knowledge and training of how to respond, safely define work performance in or around hazardous material such as lead paint and asbestos for abatement or encapsulation.

The position plans specific objectives for the program, including required innovations and improvisations to patient care services and efficiencies. The position is responsible for preparing detailed cost estimates for use in obtaining project funding and bid abstract evaluation. Prepares correspondence, technical reports, estimates, fact sheets, status reports and schedules as required to complete project assignments. The position consults with contractor personnel to resolve difficult and complex unforeseen problems and latent defect conditions developing during construction. Prepares sketches or changes to construction drawings and specifications providing solutions to problems and incorporates these change documents into the contract performance documents. The position reviews and evaluates shop drawings, samples and material certifications submitted by contractor for contract and performance requirements, recommending approval, rejection or receipt.

The position provides professional advice to peers, non-professional administrators, or managers and is considered to be an expert authority in the medical construction field. The position provides professional advisory services to managers and administrators that cover complex situations that require adaptation or modification of precedents typical of the work environment.

The position conducts investigations to obtain factual information pertaining to a variety of issues. Explores background information (literature, reports, and discussions with others having specialized knowledge of the issue) including code reference checks (National Fire Protection Act, International Building Code, Americans with Disabilities Act), and multiple other related jurisdictional codes.

The position refers to VA guidelines and standards and consults with supervisor, if necessary, and provides an expert advice in evaluating information and in presenting the information in an effective manner.

The position is responsible for exercising sound judgment in the execution of professional project management processes as a certified project manager for construction projects and Non-Recurring Maintenance construction projects which are important aspects to supporting the agency's operating programs and the overall environment of patient care and safety. The position independently carries out work to be done and serves as the technical authority on these medical center projects.

Responsible for inspecting and coordinating the work of contractors and vendors during completion of projects and recommends payment or acceptance or rejection of work performed.

Analyzes problems that arise in relation to the operation and maintenance of the facility and devises the proper solution for these problems, recommends and/or seeks the special professional skill for problems beyond the technical ability of facility staff.

Generates, collects, analyzes, and verifies data required by the facility and in response to Veterans Integrated Service Networks (VISN) and Central Office inquiries and provides the information directly to the Chief of the service, as required.

As the technical expert responsible for the project oversight of multi-million-dollar, complex healthcare projects, the position reviews work performed by inspectors, internal and contracted, to ensure project requirements are being met. Reviews work assigned to the section and determines what tasks or operations will be required to complete the assignment. As work on a project progresses, reviews inspectors work to determine that the proper procedures are being followed and that the work is accomplished accordingly.

The position is a vital team member of interdisciplinary design review teams for healthcare construction projects and is called upon to be the overall project manager to lead meetings as appropriate using established procedures where possible and adapting and changing processes and procedures as necessary.

The position oversees the administration of architect-engineer and construction contracts in their role as the COR. The position is responsible, as assigned, for conducting engineering surveys and evaluations; determining engineering and construction requirements and ensuring contract compliance; developing preliminary plans, cost estimates, project proposals and justifications for contract changes or modifications; review of and assistance in the design and preparation of architectural and engineering plans and specifications; and supervision, inspection, and acceptance of construction. This requires constant coordination with outside agencies such as SHPO, OSHA, EPA, City and County Health Departments, local utility companies, as well as internal user groups such as Surgery, Dental, Primary Care, outpatient and inpatient clinics, Radiology, and Telehealth, Pharmacy, labor unions, etc.

The position plans and carries out the projects by defining objectives; interprets policies promulgated by authorities which are senior to the immediate supervisor and determines their effect on program needs; independently plans, designs, and carries out work to be done; and serves as a technical authority. Incumbent is responsible for modifying, adapting, and refining guidelines which are broad in nature to appropriately apply guidance to assigned tasks.

The position consults with contractor personnel to resolve difficult and complex unforeseen problems and latent conditions that develop during construction. Incumbent researches, analyzes, tests, and evaluates information, unusual circumstances, unconventional issues, conditions, and problems; considering different, incomplete, and often conflicting information and alternatives; and determines efficient, effective, and feasible solutions to meet the project or situation requirements and constraints both during design and construction.

The position must deal with constantly changing priorities and deadlines. Utility and equipment failures must be addressed immediately which often disrupts the intended work flow. The position must be able to prioritize frequent requests and demands while still maintaining continuity of operations of the medical facility. The position uses judgment, initiative, and resourcefulness in deviating from established methods to modify, adapt, and/or refine broader guidelines to resolve specific complex or intricate issues and problems, research trends and patterns; develop new methods and Criteria; or propose new policies and practices.

D. Medical Infrastructure Planning

The position assists on the medical center construction projects, space functional changes, and associated planning with respect to medical technologies and medical-related technologies. This includes site preparation for medical equipment, station level projects, non-recurring maintenance projects, and minor construction project designs. Infrastructure planning support often involves conceptual design, as well as very detailed planning activities.

The position advises and works with clinical staff and the Biomedical Engineering staff on design and planning of construction of clinical spaces, specification development, and design reviews, sometimes entailing visits to other facilities to research current design trends for medical space.

E. Regulatory Agencies

The position assists in monitoring and reporting on construction and utilities management program that allows the Veterans Health Administration to meet the requirements set by accrediting organizations such as TJC. The position remains current with standards interpretation, implementation objectives, and regular reporting requirements. The position assists by presenting details regarding the facility Construction Management Program to the accreditation bodies.

F. Network Security

The position shares responsibility in ensuring that information security issues are managed effectively for engineering databases and building automation systems. Documentation of such systems including details such as backup, disaster recover, security, etc. is difficult in scope but critical to management of the networked systems.

SUPERVISORY CONTROLS

Describe supervision as related to the clinical and administrative aspects of the work of the position.

The supervisor establishes overall objectives and resources available. The supervisor and position jointly develop projects, priorities and deadlines. The position independently plans and carries out assignments, interprets policy, coordinates work with others, resolves most of the conflicts that arise, and keeps the supervisor informed of far-reaching implications. Completed work is reviewed from an overall standpoint in terms of feasibility, and effectiveness in meeting requirements.

The position functions under the general supervision of the assigned supervisor and performs the duties of the position with significant independence. Work is assigned in terms of broad, general objectives and related priority for completion of work. The position serves as the technical authority and independently plans, designs and carries out the work.

Details and procedures are determined by the employee to meet VA and other governing criteria such as the NFPA, Federal specifications, etc. The position has considerable latitude and freedom from technical control in selecting and modifying methods, guidelines and techniques for the resolution of complex problems and situations and carrying through to successful completion. The supervisor reviews completed work for accuracy in terms of the broad objectives and for compliance with agency policies and regulations.

PHYSICAL REQUIREMENTS

Describe the physical requirements necessary in the regular and recurring work of the position.

The work environment involves everyday risks or discomforts that require normal safety precautions typical of such places as offices, training rooms, and libraries. The work area is adequately lighted, heated, and ventilated. The incumbent must also work outdoors in all types of weather. There may be occasional exposure to moderate risks or discomforts in storage areas or hazardous waste sites. The work is primarily sedentary, although some physical effort may be required, e.g., walking, standing, climbing ladders, stooping, kneeling, and carrying light items such as manuals or briefcases, or driving or traveling by motor vehicle.

QUALIFICATION REQUIREMENTS

Title 38 or Hybrid Title 38 Occupation official qualification standards of the position as stated in VA Handbook 5005, Part II, appendix G72.

Basic Requirements

Citizenship

Be a citizen of the United States (U.S.). Non-citizens may be appointed when it is not possible to recruit qualified citizens in accordance with 38 U.S.C. § 7407(a).

Education

Bachelor's degree or higher in Engineering or Architecture. To be acceptable, the curriculum must be from a school with at least one curriculum accredited by the Accreditation Board for Engineering

and Technology, Engineering Accreditation Commission (excludes engineering technology) or National Council of Architectural Registration Boards curriculum. Examples of acceptable engineering and architectural degrees include, but are not limited to: Electrical Engineering, Mechanical Engineering, Biomedical Engineering, Civil Engineering, Architecture and Architectural Engineering. Titles may vary from educational institutions and change over time;

OR

Evidence of passing the Fundamentals of Engineering Exam with a bachelor's degree. Evidence can be in the form of an Engineering in Training certificate issued from any State, the District of Columbia, Guam or Puerto Rico, or test results from the National Council of Examiners for Engineering and Surveying (NCEES) identifying a passing score;

OR

Evidence of current professional registration or licensure as a Professional Engineer or Architect from any State, the District of Columbia, Guam or Puerto Rico.

English Language Proficiency

Healthcare Engineer candidates must be proficient in spoken and written English in accordance with 38 U.S.C. § 7403 (f).

GS-12 Requirements

Experience

One year of experience equivalent to the next lower grade.

Knowledge, Skills and Abilities (KSAs) - In addition to meeting the experience requirements for this grade level, the candidate must fully demonstrate the following KSAs:

- a) Knowledge of mechanical, electrical, structural, civil and other engineering/architectural principles, practices and their applications in the healthcare environment.
- b) Knowledge of healthcare industry standards and related regulatory agency (i.e., TJC, OSHA, NFPA, etc.) regulations, requirements, guides, policies, procedures, directives and general medical program requirements as they relate to healthcare engineering.
- c) Knowledge of construction standards, methods, practices and techniques, materials and equipment to determine compliance with regulations and standards.
- d) Skill to researching and analyzing information, conditions, human factors and projections to make sound engineering and business recommendations and decisions to proactively identify problems and develop innovative solutions within the context of applicable rules, regulations and procedures.
- e) Ability to plan and execute complex, multi-faceted projects and inspections while prioritizing resources against approved scopes of work, contract documents and budgets.
- f) Ability to organize and lead multi-disciplinary task forces with members from different departments and divisions, as well as design and construction firms.

Assignment

The position works independently, under general supervision with wide latitude to exercise independent judgment. Healthcare Engineers demonstrate intimate grasp of high order healthcare engineering and capital subject matter. They serve as institutional resources for healthcare delivery processes and systems, working extensively with clinical stakeholders, acquisition staff, contractors and executive leadership by leading healthcare engineering programs, technology assessments, integration planning and implementation of both current and emerging technologies. Healthcare Engineers support the delivery of healthcare to Veterans by contributing to the education of clinical staff, planners and leadership to ensure safe and efficient healthcare delivery. Healthcare Engineers plan, execute and document highly complex, multi-faceted healthcare facility construction projects and inspections while prioritizing resources against approved scopes of work, contract documents and budgets. They identify problems and develop innovative solutions within the context of applicable rules, regulations and procedures, as it relates to the healthcare environment.

CUSTOMER SERVICE REQUIREMENT

The position meets the needs of customers while supporting VA missions. Consistently communicates and treats customers (Veterans, their representatives, visitors, and all VA staff) in a courteous, tactful, and respectful manner and responds to their needs as expediently as possible while appropriately prioritizing workload. Provides the customer with consistent information according to established policies and procedures. Handles conflict and problems in dealing with the customer constructively and appropriately. The position performs as a team player and provides positive recommendations for solutions to problems while ensuring patient care above all else.

COMPUTER SECURITY REQUIREMENT

In the performance of official duties, the position has regular access to reports and electronic files containing sensitive data which must be protected in accordance with the provisions of the Privacy Act of 1974, 38 U.S.C. 5705, and other applicable laws, federal regulations, VA directives and policies. Protects the data from unauthorized release or from loss, alteration, or unauthorized deletion; and follows applicable regulations and instructions regarding access to computerized files, release of access codes, etc., as set out in the computer access agreement that the incumbent signs.

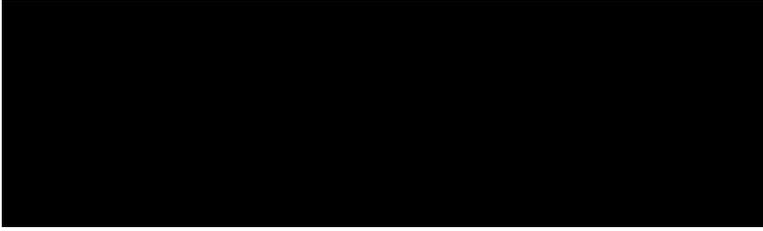
Medical imaging equipment systems are commonly networked and there are significant considerations regarding HIPAA and a variety of networking methods that are utilized to restrict access to medical systems in order to minimize the likelihood of virus or other data threat. The position must ensure that an active program is in place for all such equipment in the hospital.

OTHER REQUIREMENTS

Occasional travel is required of the incumbent. Travel will be for a variety of reasons, including but not limited to: national and regional conferences, site visits to other facilities in the VISN (or the VISN offices), face-to-face meetings regarding national and regional projects/assignments, specialized training for certain medical equipment and/or systems, other training opportunities that may improve the incumbents ability to better serve the needs of the VA.

Green Environment Management Systems (GEMS) program. Incumbent familiarizes self with how their activities impact VA's goal to implement sound stewardship practices that are protective of the air, water, land, and other natural and cultural resources. In accordance with the goals of the VA GEMS program, seeks to cost-effectively meet or exceed compliance with applicable Federal, State, and local environmental; public health; and resource protection laws, regulations, and VA requirements. Incumbent seeks to incorporate practices necessary to implement the requirements

of Executive Order 13423, "Strengthening Federal Environmental, Energy and Transportation Management."



Current Employee