

**EXPRESSION OF INTEREST**

**GLEN JEAN ARMED FORCES READINESS  
CENTER POWER GENERATION**

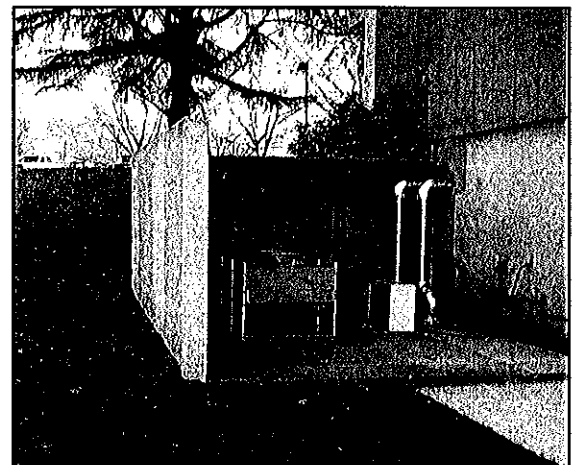
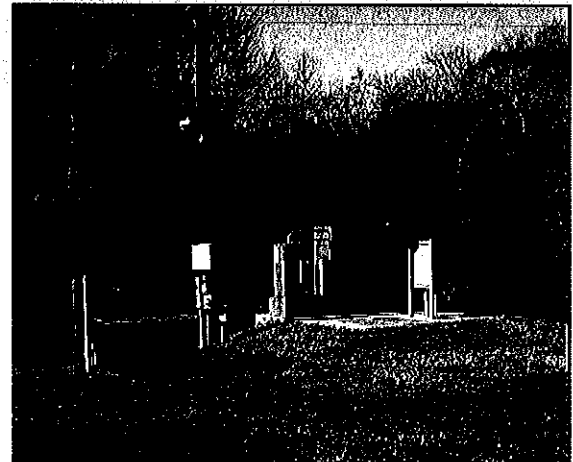
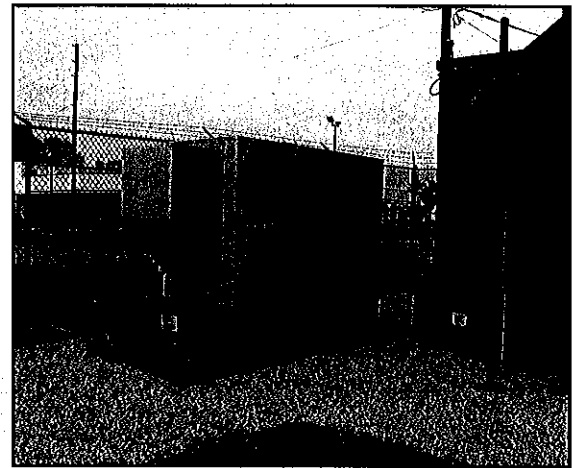
**REQ NO. DEFK11007**

*Prepared for*  
West Virginia Army National Guard,  
Construction and Facilities Management  
Office

*Prepared by*  
KCI Technologies, Inc.

August 19, 2010

**RECEIVED**  
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PURCHASING DIVISION  
STATE OF WV





ISO 9001:2000 CERTIFIED

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

48 Donley Street, Suite 502 • Morgantown, WV 26501 • Phone 304-296-3611 • Fax 304-296-8046

August 19, 2010

Mr. Chuck Bowman  
Purchasing Division  
P.O. Box 50130  
2019 Washington Street East  
Charleston, WV 25305-0130

Re: Glen Jean Armed Forces Readiness Center Power Generation  
DEFK11007

Mr. Bowman,

KCI Technologies, Inc. (KCI) is pleased to submit this proposal to provide the West Virginia Army National Guard, Construction and Facilities Management Office, professional engineering / architectural and related services for the installation of an emergency power generator and associated supporting facilities to the Glen Jean Armed Forces Readiness Center.

KCI has been providing professional engineering services since 1955. Our goal is clear – a commitment to provide an experience and knowledgeable staff with the corporate resources that can cost-effectively and capably deliver the services necessary to support your objectives under this contract. KCI has excellent management expertise, trained and experienced technical personnel, and unique corporate resources. KCI has completed numerous similar projects in the past, and we are confident in our ability to complete this project.

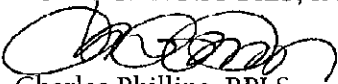
By selecting KCI for this contract, the West Virginia Army National Guard, Construction and Facilities Management Office will gain the advantages of a multidiscipline full-service engineering firm. Our single point-of-contact concept from project inception to project completion provides our clients with efficient and cost effective services. Our professional staff operates under a strong quality assurance plan that is a direct result of proven performance on all of our projects. KCI has also won more than 50 awards for engineering excellence.

The team can provide all required disciplines using in-house resources, ensuring close coordination and proper continuity to complete the tasks on time and under budget. The project will be managed from KCI's Morgantown, West Virginia, office, ensuring a rapid response to any of the town's requests.

We appreciate your consideration of the KCI team, and we look forward to working with the West Virginia Army National Guard, Construction and Facilities Management Office on this important project.

Sincerely,

KCI TECHNOLOGIES, INC.

  
Charles Phillips, RPLS  
Senior Vice President  
Site / Facilities Management

Direct Line: (410) 316-7855  
Direct Fax: (410) 316-7853  
Email: [charles.phillips@kci.com](mailto:charles.phillips@kci.com)

STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

**West Virginia Code §5A-3-10a states:** No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

**DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.


"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

**EXCEPTION:** The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (*West Virginia Code* §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

**WITNESS THE FOLLOWING SIGNATURE**

Vendor's Name: KCI Technologies, Inc.

Authorized Signature:  Date: August 16, 2010

State of Maryland

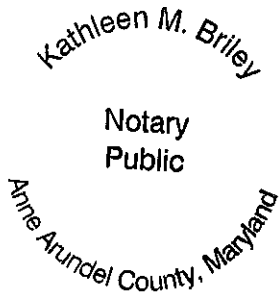
County of Anne Arundel, to-wit:

Taken, subscribed, and sworn to before me this 16 day of August, 2010.

My Commission expires 7-6, 2014.

**AFFIX SEAL HERE**

NOTARY PUBLIC 





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## **FIRM OVERVIEW**

As one of the nation's leading multidiscipline, full-service engineering firms, KCI Technologies, Inc. (KCI) is consistently ranked among the Top 100 consulting engineering firms in the country by *Engineering News Record*.

With a professional staff of engineers, planners, scientists, surveyors, and construction managers, we offer a broad range of engineering services including civil, structural, transportation, environmental, hazardous waste, mechanical, electrical, telecommunications, and soils. We also provide cultural and environmental resource management services, land planning and landscape architecture, geology, hydrology, ecology, surveying, and construction management and inspection.

The professional staff is supported by CADD (Computer-Aided Drafting and Design) designers; BIM (Building Information Modeling) designers; GIS (Geographic Information Systems) experts; database analysts, programmers, and technicians; as well as state-of-the-art computer, field, and lab equipment. KCI's computer network supports the firm's core production systems including BIM, CADD, GIS, three-dimensional visualization / animation tools, document processing and desktop publishing, and project management. The firm's integrated approach to automating design, drafting, documentation, and presentation minimizes costs, facilitates coordination among engineering disciplines, and expedites the production of high-quality products.

At KCI, we believe that our broad technical expertise, combined with our unique commitment as employee owners, has enabled us to emerge as industry leaders whose customers can count on excellent service time and again.

### **Location**

KCI has been working throughout the state of West Virginia for more than 10 years and is familiar with conditions and infrastructure of West Virginia. Our local office has a wide range of experience working with various state agencies, as well as private developers and contractors. Our backgrounds range from WV DOH to USDA Rural Development. We have engineers who understand and advocate for the needs of rural communities and public service districts. KCI has the knowledge to aid our clients in all aspects of this project including but not limited to preliminary study, preliminary design, funding assistance, final design, bidding services, construction administration, construction inspection, or any other service needed to complete these types of projects.

### **Quality Assurance**

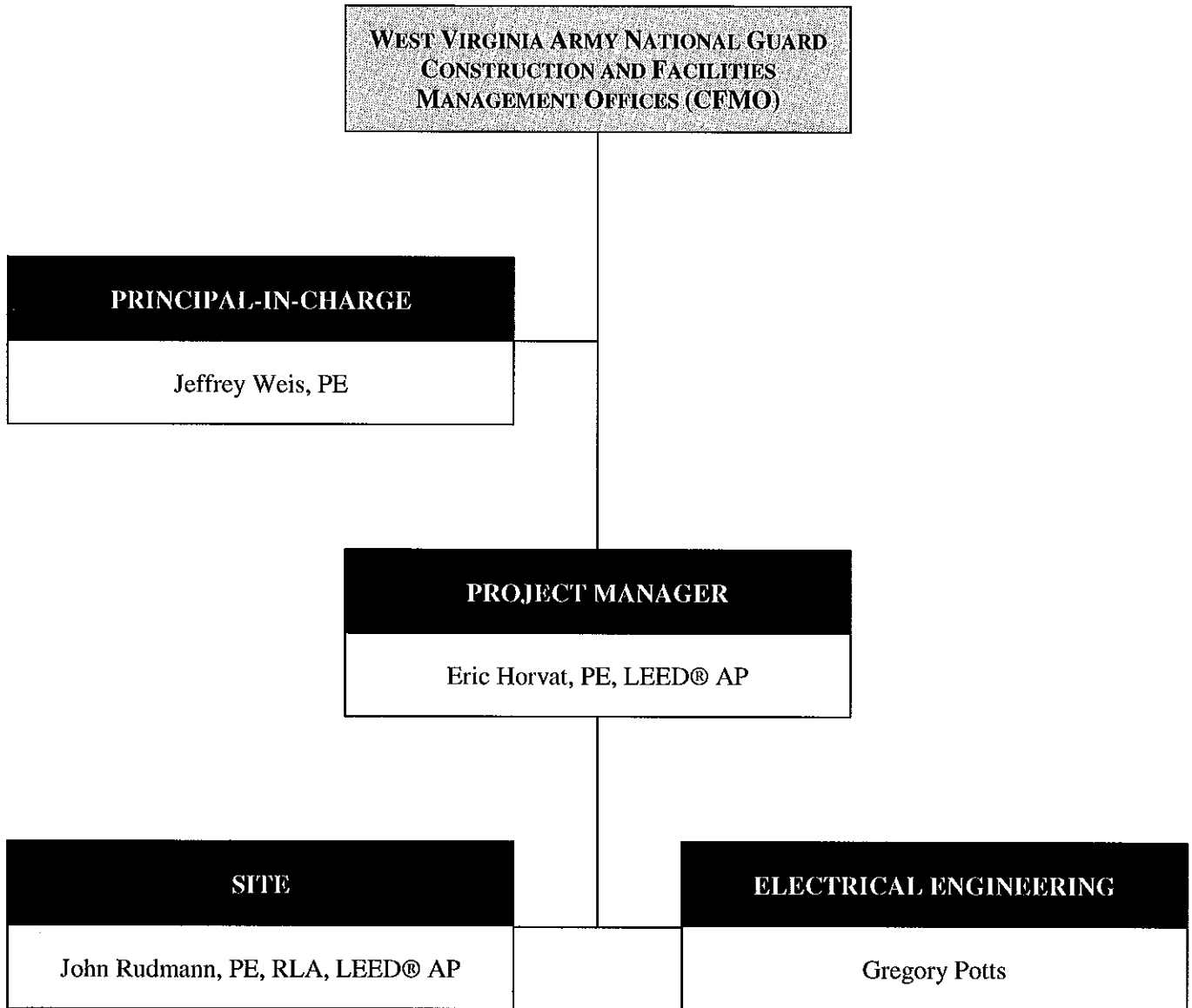
As part of our strategic plan, KCI is committed to achieving corporate wide ISO 9001:2000 certification. Our primary quality objectives are to:

- Satisfy client expectations through designs and professional services that conform to client specifications;
- Continually review company performance by analyzing objective data regarding our processes and deliverables; and
- Use this objective data to identify and drive opportunities to continuously improve the quality management system.

ISO is a quality management system (QMS) standard requiring that company activities be modeled as a system of inter-related processes and that these processes be continually audited in order to objectively measure performance and improve outcomes. A key component of the ISO standard that differentiates it from others systems is the mandatory continual auditing and improvement requirement. Quality control procedures for the work performed in each of KCI's technical disciplines are defined in each discipline's quality control manual. Conformance to these procedures is ensured through KCI's internal auditing process.



**ORGANIZATIONAL CHART**





**JEFFREY WEIS, PE**  
**Principal-in-Charge**

**Education:** BS / 1992 / Civil & Environmental Engineering / Clarkson University

**Registration:** PE / WV / 18520  
PE / PA / PE062013  
PE / NY / 074271-1  
PE / OH / 73788

**Experience:**

Mr. Weis is regional practice leader for the Mechanical and Electrical Practice, where he is responsible for the management and senior project oversight of all projects from conceptual phase through construction execution and commissioning. He is a registered professional with more than 15 years of experience in project management, construction management, and facility design. As MILCON / BRAC federal program manager, he was responsible for more than 10 projects at Fort Drum in Watertown, New York. His experience includes the management of projects ranging from federal and municipal, industrial, educational, corporate, recreational, specialty storage, commercial, and research / clean room facilities. As a former construction manager, Mr. Weis is well-versed in the areas of conceptual and final budget estimating, project scheduling, leadership and facilitation of project teams, and constructability reviews.

**91<sup>st</sup> Military Police Battalion Operations Facility. Fort Drum, NY. Principal-in-Charge.** This project includes the design and construction of a 16,000 SF headquarters building (BNHQ), 82,000 SF company operations facility (COF), and 35,000 SF tactical equipment maintenance facility (TEMF). Oversaw the civil / site design of the 30-acre development project, which totals more than 120,000 SF and includes hardstand vehicle storage areas, storage buildings, roadway construction, and parking areas. All site amenities had to meet AT / FP standards.

**Fort Drum Program Support. Fort Drum, NY. Project Manager.** As part of a five-year multidiscipline contract for architectural and engineering services, Mr. Weis is managing program management services in support of the BRAC program at Fort Drum. Services include RFP development, LEED® compliance documentation, life safety code path requirements, International Building Code Compliance Review, and addressing project specific items with Dr. Checks.

**PADGS National Guard Combined Readiness Center. York, PA. Project Manager.** Project involved due diligence and 1391 programming support for the Combined Readiness Center. The Commonwealth of Pennsylvania was interested in purchasing a parcel of land that is located both in Jackson and West Manchester Townships. The proposed facility includes a new National Guard Readiness Center. Site improvements include extending required utilities to the new building, providing fencing, and pedestrian walkways. Building setbacks for Anti-Terrorism / Force Protection (AT / FP) were incorporated in proposed facility and site layouts. Services included preliminary programming, estimating, site permitting, utility verification, survey, DD 1391 cost estimates, and environmental Phase I and II services in support of the NGB and DGS due diligence activities under the purchase agreement with the previous owner.

**Fort Drum Design Charrette in Support of DD 1391 Child Development Center and Central Issue Facility. Fort Drum, NY. Principal-in-Charge.** Project involved site design for the Army Corps of Engineers New York District at Fort Drum for mechanical, electrical, structural, fire protection, and civil / site design for the development of the DD 1391 documents for a six-week to five-year child development center and a central issue facility.



**Intercollegiate Soccer Stadium Improvements. Akron, OH. Task Manager.** Project involves design of a new intercollegiate competition soccer field for approximately 3,400 spectators with field lighting, drainage and sub-drainage, scoreboard, berm and metal grandstand seating, and perimeter enclosure. Mr. Weis had overall responsibility for the design and staffing for the electrical elements of the project. Phase 1 includes the utilities, field relocation, bleacher relocation, players' area, and upgrade of the field lights and irrigation system.

**Pinnacle Road Pump Station Improvements. Monroe County, NY. Quality Assurance / Quality Control.** Project involves upgrading the existing Pinnacle Road pump station to meet flows ranging from today's low flows to the 20-year full build-out peak wet weather flow. The improvements bring the pump station into the county's Category No. 2 pump station standards compliance and minimize future maintenance expense. Mr. Weis will be providing quality control for M / E / P and structural design for the facility.

**Pond Lab Chilled Water Study. State College, PA. Principal-in-Charge.** Project involves a chilled water study for pond lab on their University Park Campus. The facility, built in 1917, houses classroom, shop space, and offices for the University's Department of Political Sciences. The intent of the study is to investigate the existing chilled water system in preparation for converting the building from local chilled water production to the campus wide distribution system. Mr. Weis is responsible for overall QA / QC and project oversight.

**RTO Abatement System Design. North Kingsville, OH. Principal-in-Charge.** This project involves the design, fabrication, and installation of a vapor capture and control system to abate VOC chemicals in the exhaust vapor stream. KCI is designing the HVAC, electrical, chemical, fire protection, site, and structural systems for this project. The project includes design of a process exhaust system, Regenerative Thermal Oxidizer (RTO), fire protection, utilities, and process controls. Mr. Weis was the principal-in-charge and oversaw all design aspects and construction administration services the project. The project scope included the design, fabrication, installation, start-up, and debugging of a vapor capture and control system for a coating process, as well as an external RTO unit and exhaust stack.

**Saint Vincent's Guard Shack. Latrobe, PA. Principal-in-Charge.** Project involved engineering and landscape architecture services for a new guardhouse facility and entrance road to the historic Saint Vincent College. Oversight of the construction phase support services.

**Wilkes-Barre Veterans Affairs Medical Center Facility Shell Space Renovation. Wilkes-Barre, PA. Principal-in-Charge.** KCI, as a subconsultant, was selected to provide HVAC plumbing and fire protection design for the design of a 9,000 SF office renovation. The project entailed work on three different floors of the facility. New HVAC systems were designed, restrooms updated and made code-compliant, and sprinkler systems modified for the new layout. The HVAC systems included four pipe (hot water and chilled water) fan coil units with ducted supply and return. HVAC controls tie into the existing building automation system. Sprinkler systems were also modified for the new layouts.





**ERIC HORVAT, PE, LEED® AP**  
**Project Manager**

**Education:** BS / 1998 / Architectural Engineering / Pennsylvania State University

**Registration:** PE / WV / 18489  
PE / PA / PE077388  
PE / MD / 34722  
PE / OH / 74444

**Experience:**

Mr. Horvat has more than 13 years of experience in the construction, design, and commissioning of mechanical, plumbing, and electrical systems for higher education, K-12, manufacturing, skilled nursing, multi-family, hospital, and clean room projects. Much of this project experience, both from the engineering and construction disciplines, has been gained on the performance of LEED® certified projects. Mr. Horvat brings experience in commissioning, budget and schedule management, construction estimating, negotiations, project administration for systems such as: chilled water, hot water heating, steam, cold and hot potable water, drainage waste and vent, medical gas, heat pump loop, condenser water, and compressed air piping; ductwork; ATC; mechanical equipment repair and installation; telecommunications; fire alarm; emergency power generation; nurse call; lighting; power distribution; and control wiring. He also has experience in service engineering solution providing for heating, cooling, plumbing, and electrical problems and is experienced with investigation of commercial, industrial, and institutional facilities for mechanical preventative maintenance programs.

**West Virginia University Architectural and Engineering Open End. Morgantown, WV. M / E / P Engineer.** Contract involved site / civil, structural, mechanical, electrical, plumbing, fire protection, geotechnical, and environmental engineering, as well as landscape architecture and surveying. KCI's engineering staff has provided the university with a high level of expertise and prompt service on the tasks assigned. Mr. Horvat led the electrical and mechanical design teams for the steam tunnel rehabilitation project, which identified dysfunctional equipment during the survey effort including failed and missing high-voltage cable tray supports, failed high-pressure steam line supports, broken lighting fixtures, and missing pipe conduit supports. Once identified, solutions were design and construction drawings and specifications were prepared.

**PADGS National Guard Combined Readiness Center. York, PA. Electrical Engineer.** Project involved due diligence and 1391 programming support for the Combined Readiness Center. The Commonwealth of Pennsylvania was interested in purchasing a parcel of land that is located both in Jackson and West Manchester Townships. The proposed facility includes a new National Guard Readiness Center. Site improvements include extending required utilities to the new building, providing fencing, and pedestrian walkways. Building setbacks for Anti-Terrorism / Force Protection (AT / FP) were incorporated in proposed facility and site layouts. Services included preliminary programming, estimating, site permitting, utility verification, survey, DD 1391 cost estimates, and environmental Phase I and II services in support of the NGB and DGS due diligence activities under the purchase agreement with the previous owner. Mr. Horvat provided preliminary programming and estimating of the building electrical requirements and subsequent electrical utility requirements in support of the National Guard and PADGS due diligence activities. In addition, based on separate guidelines for two different National Guard company requirements, Mr. Horvat developed a programming narrative of the required power, emergency, fire alarm, lighting, and telecommunications systems. The narrative served as a basis for the electrical conceptual construction estimates.



**AMG - Conde Nast Publications Data Center Projects. Wilmington, DE. Mechanical Designer.** Condé Nast Publications (CNP) retained KCI to perform engineering, bidding support, and construction administration services to renovate an existing 67,000 SF office building into a new data center including 15,000 SF data center, 10,000 SF business recovery, 10,000 SF office, 4,000 SF receiving / storage, and 28,000 SF undesignated / future use. This fast-track project will be completed in three phases.

**MPO Architect / Engineer Services in Fort Meade and Surrounding Areas. Ft. Meade, MD. Engineer and Commissioning Agent.** Providing multidiscipline architectural and engineering services to the government under this open-end task order contract with total original capacity amount of \$4 million that was recently increased to \$15 million. Completed more than 120 tasks to date. Scope of services includes mechanical engineering, electrical engineering, plumbing services, fire protection engineering, site / civil engineering, surveying, commissioning, structural analysis and engineering, geotechnical engineering, and construction administration.

**I-70 Welcome Center. Frederick, MD. Mechanical Engineer.** Design / build reconstruction of the welcome centers in Frederick County, serving both eastbound and westbound traffic on I-70. The centers are located in a natural setting on South Mountain and were designed to achieve LEED® Silver certification. Project involved the design and construction of two retaining walls; above-grade water storage tank structure; welcome center and restroom buildings; two stormwater management facilities; truck, cars, and RV parking lots; and other miscellaneous structures. Services also included design of site and water supply / treatment improvements.

**Bluegrass Army Depot. Richmond, KY. Task Manager.** KCI was a subconsultant to Atlantic Design Group for a design / build Medical Facilities Renewal Contract with the U.S. Army Corps of Engineers to provide site infrastructure design and construction services for the Bluegrass Army Depot. The objective of the design / build contract was to prepare two Access Control Points (ACP) at the Depot for installation of the US Army's Automated Installation Entry (AIE) System. The design / build team provided construction documents for the infrastructure required to accept the AIE equipment that will be installed under a separate future contract. Responsible for the electrical and system upgrades and preparatory infrastructure for future access control equipment. He performed calculations and, using the USACE Definitive Design and National Electric Codes, increased the electrical service to allow for the additional infrastructure, designed standby emergency power generation with automatic transfer switches, and configured the power infrastructure to allow for a future UPS system. Mr. Horvat was responsible for lighting calculations performed using computerized modeling software to allow for CCTV operation at night. Mr. Horvat also designed building security systems, which provided remote intrusion detection and CCTV surveillance abilities and power, communications, lighting, and CCTV support for specialized vehicle barriers. Other support tasks included lightning protection systems for the canopies, distribution of underground power and communication conduits throughout the site, and specialized barrier controls.

**Design and QA / QC Services for Landfill Leachate Lines. Marion County, WV. Electrical Engineer.** Project involved engineering services to include surveying and mapping; design engineering; preparation of construction contract drawings and specifications suitable for letting construction bids; quality control / quality assurance following design approval, bid processing, and during installation; assistance with all applicable permits, rights-of-way, and easements; and approvals for the Marion County Landfill connection to the Town of Farmington wastewater treatment plant. Mr. Horvat was responsible to survey and review the existing electrical utility system at the landfill and WWTF; design new electrical services required for the pumping stations; integrate new pump motors into the WWTF existing electrical system; and size all electrical equipment and components. In order to keep from replacing and / or upgrading the existing WWTF electrical service and standby emergency generator, KCI designed a motor control system to minimize the impacts of the high starting requirements of the motors.



**JOHN RUDMANN, PE, RLA, LEED® AP**  
**Site**

**Education:** BS / 1995 / Civil Engineering / West Virginia University  
BS / 1992 / Landscape Architecture / West Virginia University

**Registration:** PE / WV / 14779  
PE / PA / PE062150  
PE / MD / 200442  
PLA / WV / 341  
RLA / PA / LA001741  
RLA / MD / 1177  
LA / OH / 0101226  
LEED® Accredited Professional

**Experience:**

John Rudmann is a licensed civil engineer, a licensed landscape architect, and a LEED® Accredited Professional. Mr. Rudmann's responsibilities have included being a project manager, a senior civil engineer, and a senior landscape architect for many design projects. As a designer, his tasks have included completing WV / NPDES general stormwater construction permitting, completing local stormwater and erosion and sediment control permits and plans, stormwater design, utility design, grading, site master planning, and completing project specifications. He has designed several different methods of bio-filtration and has completed all the necessary credit paper work to achieve LEED® certification.

**Morgantown Event Center and Garage, Morgantown, WV. Senior Design Engineer.** Mr. Rudmann was responsible for the overall design of all site / civil services, which included local stormwater permitting, stormwater retention, grading plans, landscaping, erosion and sedimentation control, access roads and parking lot, and utility lines. While this building is not seeking LEED® certification, Mr. Rudmann designed the site to maximize Sustainable Sites and Water Efficiency Credits. The stormwater quantity control was achieved through oversized storage collection pipes and quality through a series of filters.

**Washington Dulles International Airport Parking Bowl Repairs, Washington, DC. Design Engineer.** Responsible for reconfiguring existing parking, solving drainage problems, and designating areas in need of pavement rehabilitation. The drainage solutions involved adding new inlets and pipe to milling and overlaying areas to provide positive drainage. The pavement rehabilitation involved areas of milling and overlay, base repairs, and wedge and level.

**The Dayton, Morgantown, WV. Senior Design Engineer.** KCI was a subconsultant for The Dayton, a three-story mixed-used building located at the corners of Ridgeway Avenue, Dayton Street, and Richwood Avenue in Morgantown that provides retail space and parking on the ground level with residential housing on the upper floors. Mr. Rudmann was responsible for the overall design of all site / civil services including water lines, sanitary sewer, general utility coordination, site / civil permitting, and erosion and sediment control. Since the budget for this project was very tight, Mr. Rudmann utilized cost-efficient design principles to keep the project under budget, while still meeting strict environmental standards.

**New Northside Fire Station, Morgantown, WV. Senior Design Engineer.** Project involved overall site design, access roads, utility lines, sidewalks, drainage, stormwater quality and retention, grading plans, erosion and sedimentation control plans, and the site / civil permitting. Client is pursuing LEED® Silver certification. Mr. Rudmann was responsible for the overall design of all site / civil services, which included site design, local stormwater permitting for the Morgantown Utility Board, drainage, stormwater quality and retention, grading plans, and erosion and sedimentation control plans. Mr. Rudmann was responsible for completing the Sustainable Sites and Water Efficiency Categories. The water quantity credit was achieved through a stormwater cistern.



**Cacapon Resort State Park Lodge Expansion and Park Improvement, Berkeley Springs, WV. Civil / Site Engineer.** Project involved tasks for water and wastewater system improvements as part of state park upgrades and expansion project. For the lodge facility, Mr. Rudmann is responsible for completing the overall design of all site / civil services, which included access roads and parking lot, utility lines, sidewalks, drainage, stormwater retention, grading plans, landscaping, erosion and sedimentation control, and permitting. For the golf course pond renovations, Mr. Rudmann has completed the pond bank stabilization design and completed the site registration application form, WV / NPDES general permit construction stormwater (three acres or greater). This application has been submitted and approved. Mr. Rudmann is also responsible for updating the golf course drainage system and solving stormwater ponding problems.

**The View II at the Park, Morgantown, WV. Senior Design Engineer.** KCI was a subconsultant to Paradigm Architecture for the View II. The View II is the second phase of a three-phased development along the waterfront in Morgantown. The View II is a four-story structure that houses Morgantown Area Chamber of Commerce on the first floor with residential condominiums on the upper floors. Mr. Rudmann was responsible for the overall design of all site / civil services, which included maintenance of traffic control, utility lines, sidewalks, drainage, stormwater retention, grading plans, erosion and sedimentation control plans, all the site / civil permitting, and the project specifications.

**USDA Design / Build IDIQ 8(a), Sabraton, WV. Design Engineer.** Providing site / civil engineering services for this design / build project. Mr. Rudmann was responsible for parking lot design, access road design, landscape design, WV DEP erosion and sediment control permitting, local permitting for the Morgantown Utility Board, drainage design, stormwater quality and retention, grading plans, and erosion and sedimentation control plans. The parking lot was designed to hold 154 spaces with 24 spaces in a secured area. To maintain ADA compliance and efficiently fit the parking lot into the existing terrain, the parking lot was design at a 5% running slope with a 2% cross slope. This cross slope allowed the asphalt to be contoured into swales to direct water into a series of bio-filtration cells within the parking lot areas and swales located closer to the building. The location of the site is well known for stormwater problems and frequent flooding. The bio-retention areas have effectively alleviated the flooding condition for this site due to a significantly slower time of concentration which allows for water to slowly infiltrate on side and the excess to discharge off site. Mr. Rudmann also completed all the necessary LEED® submittal paperwork for Sustainable Site and Water Efficiency Credits. The site was also previously disturbed and certified a brownfield site.

**West Virginia University Downtown Student Housing Project, Morgantown, WV. Senior Design Engineer.** Mr. Rudmann was responsible for the overall design of all site / civil services, which included an extensive landscaping plan and courtyard pedestrian design. Due to severe space limitations, Mr. Rudmann utilized oversized piping and developed a gravel layer to be used for water detention to meet the requirements of the City of Morgantown's stormwater ordinance.

**Platinum Drive, Bridgeport, WV. Design Engineer.** Responsible for designing a 3,000-foot-per-unit industrial access road with office building pad sites. The earthwork management between the road and the pad sites was coordinated to achieve maximum buildable area. The drainage and erosion and sediment control were designed together to alleviate existing off-site drainage problems and to control future development. Mr. Rudmann was also responsible for developing the construction schedule and sequencing plan, preparing the cost estimates, writing the project specifications, and preparing the bid packages.

**Bowie Commuter Rail Station, Bowie, MD. Design Engineer.** Responsible for the layout of the parking lot, bus loop, and transit center. An existing bus station and a stormwater management pond were relocated on-site. Autoturn was used to design the bus loop through the parking lot to ensure no conflicts between cars and buses. Mr. Rudmann provided a detailed grading plan, completed the stormwater pipe design, and completed the cost estimate.



**GREGORY POTTS**  
**Electrical Engineering**

**Education:** BS / 1998 / Electrical Engineering Technology / Pennsylvania State University

**Registration:** NYSERDA High Performance School Design Training

**Experience:**

Mr. Potts has more than 12 years of experience in the design and commissioning of electrical systems for higher education, K-12, commercial, and DOD projects. Mr. Potts also has extensive experience performing engineering studies including load flow calculations, short circuit, harmonic analysis, voltage drop, coordination of protection studies, and grounding systems. He has provided design services for more than 20 generators, including single units under 500kW, single units greater than 500kW, and multiple parallel units.

**AMG - Conde Nast Publications Data Center Projects. Wilmington, DE. Electrical Designer.** Project involves engineering, bidding support, and construction administration services for the expansion of an existing data center. This two-phase, fast-track project was completed in a compressed schedule to meet the demands of Condé Nast's holiday customers. The project included HVAC upgrades, electrical upgrades including adding a new 225 kVA uninterruptible power supply (UPS), two new power distribution units (PDU), and five new remote distribution cabinets (RDC). Condé Nast then retained KCI to perform engineering, bidding support, and construction administration services to renovate an existing 67,000 SF office building into a new data center. The building was modified to include three 5,000 SF high-density data centers. Extensive mechanical and electrical support areas including a 10,000 SF generator area are provided. KCI met the client's very aggressive design and construction schedule while keeping the project within budget. Mr. Potts provided electrical design and construction administration services for six 900 kW generators running in parallel.

**Primary and Secondary Substation Design Standards. Fort Meade, MD. Project Manager.** Under this task order, KCI and our subconsultant were contracted by MPO to provide the standard design packages to be incorporated into future design / build projects as a basis for replacement of the primary and secondary substations. Due to aging electrical infrastructure and growth, MPO saw a need to replace many primary and secondary substations throughout the campus over the next five to seven years. KCI provided complete standard design packages for both indoor and outdoor secondary substations including all architectural, mechanical, electrical, and fire protection required. Each standard design package included, but was not be limited to, drawings, specifications, one-line diagrams, assemble layout, equipment configurations, communication diagrams, control settings, relay settings, assembly ratings, and nameplate schedule.

**MPO Architect / Engineer Services in Fort Meade and Surrounding Areas. Ft. Meade, MD. Electrical Designer.** Providing multidiscipline architectural and engineering services to the government under this open-end task order contract with total original capacity amount of \$4 million that was recently increased to \$15 million. Completed more than 120 tasks to date. Scope of services includes mechanical engineering, electrical engineering, plumbing services, fire protection engineering, site / civil engineering, surveying, commissioning, structural analysis and engineering, geotechnical engineering, and construction administration. Mr. Potts provided construction administration and commissioning services for DOD control points generators (under 500 kW) at six locations. He was also responsible for a multi-building high rise 900 kW emergency generator. He developed a comprehensive construction document package to include drawings, specifications, calculations, and construction cost estimates for additional building renovations.

**Baltimore County Public Schools Systemic Renovations. Baltimore County, MD. Electrical Designer.** KCI provided mechanical, electrical, and miscellaneous structural engineering, environmental services, architectural design, and site visits for the renovation of Bear Creek, Elmwood, and Campfield Elementary Schools. The project included engineering, architectural, and construction services to accommodate the project phases schematic design, construction documentation, bid phase, and construction administration. Mr. Potts provided electrical design and construction administration for a single unit generator greater than 500 kW.



**Prince George's County Call Center. Bowie, MD. Electrical Designer.** KCI provided interior building layout and design, mechanical and electrical system design, and structural modifications to the interior and roof structural support for the new 40,000 SF public safety communications center in Prince George's County. This 911 call center is the 24 / 7 processing hub for all emergency phone calls in the area. Electrical systems were designed to include UPS / PDU / RDC units for the call and data center, as well as associated back-up generators and related equipment. The facility was designed with dual redundant power and emergency generator systems. Mr. Potts was responsible for five generators, two 600 kW in parallel.



## **NATIONAL GUARD COMBINED READINESS CENTER Pennsylvania Department of General Services**

KCI was selected to provide due diligence and DD 1391 programming support for the York Combined Readiness Center. The Commonwealth of Pennsylvania was interested in purchasing a parcel of land that is located both in Jackson and West Manchester Townships. The proposed facility includes a new National Guard Readiness Center for two companies of soldiers numbering approximately 60 soldiers each.

KCI and our subconsultant team provided preliminary programming, estimating, and 1391 cost estimates in support of the NGB and DGS due diligence activities under the purchase agreement with the previous owner. The 1391 charrette involved a day-long workshop with the end user, the Pennsylvania National Guard.

To support these services, KCI provided Phase I and Phase II environmental assessments. KCI also verified the field survey including hard stand areas and personnel parking. Additionally, KCI provided utility verification and site permitting, as well as structural services as necessary. M / E / P services included estimating support of the building electrical requirements and subsequent electrical utility requirements. Based on separate guidelines for two different National Guard company requirements, KCI developed a programming narrative of the required power, emergency, fire alarm, lighting, and telecommunications systems. The narrative served as a basis for the electrical conceptual construction estimates.

The proposed facility includes a new National Guard Readiness Center. Site improvements include extending required utilities to the new building, providing fencing, and pedestrian walkways. Building setbacks for Anti-Terrorism / Force Protection (AT / FP) were incorporated in proposed facility and site layouts.



## 91<sup>ST</sup> MILITARY POLICE BATTALION OPERATIONS FACILITY U.S. Army Corps of Engineers New York District

This \$32 million project includes the design and construction of a 16,000 SF headquarters building (BNHQ), 82,000 SF company operations facility (COF), and 35,000 SF tactical equipment maintenance facility (TEMF). The site is approximately 35 acres in area and includes concrete hard stand, asphalt parking, stormwater management ponds, and a 3,000-foot-long off-site stormwater outfall. The project is a design / build project with a fast-track design package execution, requiring the site design to be complete much earlier than the building designs.



KCI completed the design for the civil / site elements of the project, which includes the development of site plans for building locations, parking areas, area roadways, concrete hard stand, and stormwater management; grading plans and details; utility plans including primary electric, site lighting, natural gas, potable and fire water, storm and sanitary sewer, data / tele, and cable TV; and erosion and sediment control plans. The sewers are designed in accordance with the 10 state standards and flexible and rigid pavement in accordance with NYSDOT requirements. AT / FP requirements are met through the adherence to required stand-off distances incorporated in the design of the site.





**TITLE II INSTALLATION OF LIFE SAFETY EMERGENCY POWER GENERATOR**  
**Maryland Procurement Office**

This project includes the replacement of the existing generator located outside of 9800C Building with a new 500 kW generator. Part of the work includes installing new feeders to the main distribution panel and an ATS in 9800C, installing a new distribution panel in 9800D with six new ATS, and replacing two existing ATS that control the emergency lighting.



**DESIGN AND QA / QC SERVICES FOR LANDFILL LEACHATE LINES**  
**West Virginia Department of Environmental Protection**

KCI is providing engineering services to include surveying and mapping; design engineering; preparation of construction contract drawings and specifications suitable for letting construction bids; and quality control / quality assurance following design approval, bid processing, and during installation; assistance with all applicable permits, rights-of-way, and easements; and approvals for the Marion County Landfill connection to the Town of Farmington, WV WWTP.

The West Virginia Department of Environmental Protection (WV DEP) is in the process of providing the ultimate closure of the Marion County Landfill; it has been determined that a transmission line is necessary to send leachate to the Town of Farmington's wastewater treatment plant for treatment and disposal. Currently, the landfill has no permanent leachate management, but the current configuration does involve extraction of leachate from within the limits of waste into three lagoons. KCI will provide the engineering services necessary for establishing the connection between the landfill leachate ponds and the Town's treatment plant. This project will include the evaluation of alternative alignments and connections through a preliminary engineering report, a preliminary design, a final design and contract documents, bid support, and contract management.



## **PRIMARY AND SECONDARY SUBSTATION DESIGN STANDARDS** **Maryland Procurement Office (MPO)**

Due to aging electrical infrastructure and growth, MPO saw a need to replace many primary and secondary substations throughout the campus over the next five to seven years. The substations to be replaced are located both indoors and outdoors.

To ensure that MPO met its goal for replacing the aging primary and secondary substations in a timely, cost-effective manner and to ensure they are all constructed to meet the Agency's growing needs, a standard primary and secondary substation design needed to be developed.

KCI and our subconsultant were contracted by MPO to provide the standard design packages to be incorporated into future design / build projects as a basis for replacement of the primary and secondary substations.

KCI provided complete standard design packages for both indoor and outdoor secondary substations including all architectural, mechanical, electrical, and fire protection required. Each standard design package included, but was not limited to, drawings, specifications, one-line diagrams, assemble layout, equipment configurations, communication diagrams, control settings, relay settings, assembly ratings, and nameplate schedule.

Throughout the design process, KCI and our subconsultants coordinated with government personnel to gather all requirements for the primary and secondary substation designs and to incorporate the requirements into each of the separate standard designs.

The standard design packages used the latest editions of the National Electrical Code (NEC), the Facilities Engineering Electrical Standards (FEES), UL, NEMA, NFPA, ANSI, as well as any other applicable code or standard.

For all considerations, KCI weighted the advantages and disadvantages of using one particular option over the other and provided this comparison list to the COR.