



West Virginia Purchasing Division

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Header 2

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

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Procurement Type: Central Purchase Order

Vendor ID: 000000218570

Legal Name: GRW ENGINEERS INC

Alias/DBA:

Total Bid: \$0.00

Response Date: 10/27/2021

Response Time: 8:35

Responded By User ID: ksandino

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Phone: 859-223-3999

SO Doc Code: CEOI

SO Dept: 0603

SO Doc ID: ADJ2200000006

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Solicitation Description: JFHQ TAG Wing Renovation Design

Total of Header Attachments: 2

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Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	JFHQ TAG Wing Renovation Design				

Comm Code	Manufacturer	Specification	Model #
81101508			

Commodity Line Comments: Attached is GRW's Expression of Interest for Solicitation CEOI 0603 ADJ2200000006 - JFHQ TAG Wing Renovation, Charleston, WV, for the West Virginia Department of Administration / West Virginia Army National Guard. We appreciation the opportunity to response to your request. Thank you, Karri

Extended Description:

Provide professional architectural and engineering design services per the attached documentation.



EXPRESSION OF INTEREST

**JGHQ TAG Wing
Renovation**
**Solicitation No. CEOI
0603 ADJ2200000006**

West Virginia Department of
Administration | West Virginia
Army National Guard
October 27, 2021



engineering | architecture | geospatial



engineering | architecture | geospatial

Expression of Interest

Architecture & Engineering Services JFHQ TAG Wing Renovation, Charleston, WV CEOI 0603 ADJ2200000006

WV Department of Administration WV Army National Guard

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COVER LETTER

SECTION 1.0 | GRW Introduction

1.0 GRW Introduction

About GRW

Founded more than 57 years ago, GRW is an employee-owned architectural, engineering, and geospatial services firm with approximately 200 employees.

At GRW, we can address your projects from nearly every angle. Because of our in-house capabilities, we can more easily tailor our approach allowing our teams to deliver more quickly, with greater potential for more accurate cost estimates, and fewer change orders.

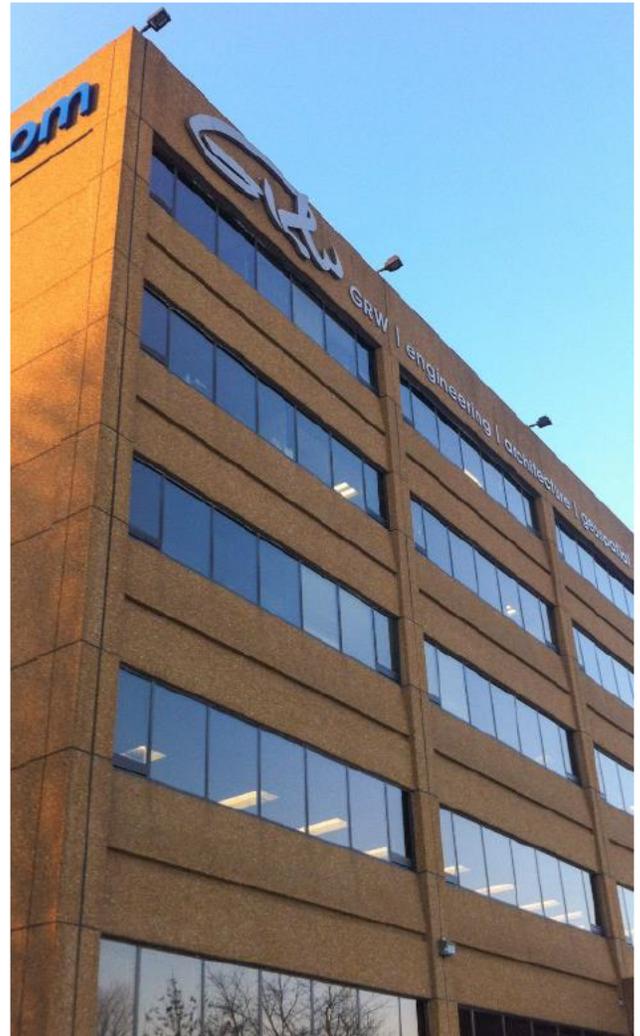
Among our achievements, GRW is listed in *Building Design and Construction's Giants 300* report as one of the nation's top Architecture-Engineering firms. Also, since 1972, GRW also has been recognized nationally as a top producing firm by *Engineering News-Record*.



Our Corporate Culture

Our corporate culture is one of close collaboration with an approach that gives our project managers and their project teams the ability to work with clients more easily, as needed, from planning through construction phases.

At GRW, we know that business relationships are built on trust – the ability to trust your business partner to deliver on their promises. By choosing GRW for your professional services, you are choosing a company that delivers on our promises. You can expect our full attention starting on day one and extending to the day of project completion and beyond. **Listening diligently to your needs, and those of your stakeholders, is the hallmark of our approach.** Delivering projects that meet our clients' goals – honestly, reliably, and efficiently, time after time – is the reason why GRW has achieved a 90% rate of repeat business.



Specialized Experience: Building Design & Renovation

Your GRW team includes a full-service building design studio, with architectural professionals supported by an in-house team of civil/site, electrical, mechanical, and structural engineers, and technicians – as well as surveyors and geospatial professionals offering LiDAR, GIS, and aerial mapping/imagery. Our teams have led numerous facility renovations and expansions, as well as new facility construction for a variety of clients.

We can complete all project phases, from concept design through construction administration.

Our In-House Services

Here's quick glance at a **few** of our relevant services:

Architecture

- Space Utilization Studies
- Master Plans
- Interior Design
- Life Safety
- ADA Compliance Studies
- Green Building Design
- Resident Project Representation
- Cost Estimating

Mechanical

- Fire Protection Systems
- Plumbing Systems

- HVAC Systems
- Building Energy Simulations
- Geoexchange Design
- Energy Auditing

Civil

- Site Development
- Parking
- Landscape Architecture
- Storm Drainage
- Water/Wastewater Systems

Electrical

- Communications and CATV
- Fire Alarm Systems

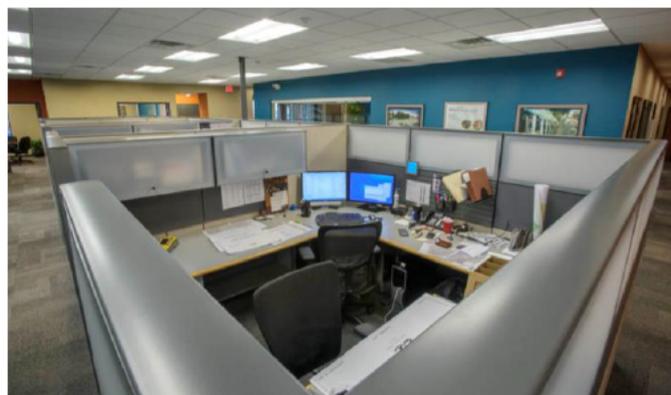
- Low & Medium Voltage Power Distribution
- Access Control Systems
- Lightning Protection Systems
- Lighting (Exterior, Interior)
- Lighting Control Systems
- Solar Photovoltaics

Structural

- Building Structures
- Foundations
- Equipment Isolation Pads
- Special Inspections



GRW's similar experience includes the renovation of 8,424 SF of space for our Louisville office.



Department of Defense Experience

GRW brings to the table a wide-ranging body of military experience that includes work for the National Guard, U.S. Army, U.S. Air Force, the U.S. Army Corps of Engineers, and the Naval Facilities Engineering Command (NAVFAC). These projects include renovation and new construction work, as well as military master plans, and a broad range of geospatial services.

The map below provides a general geographic overview of where we have provided services to the military.



* U.S. Army Corps of Engineers work encompasses multiple IDIQs and task orders in 18 Districts
OCONUS Locations: Kadena Air Base, Okinawa, Japan, and Camp Lemonnier, Djibouti

GRW's Experience with WV Army & Air National Guard | Partial List

GRW has a long history of experience with the West Virginia Army and Air National Guard. Examples of many of these projects are shown on these pages.

West Virginia ANG 130th Airlift Wing Building 107

Consolidation Study, Charleston, WV – Consolidation Study for historic hangar which will be renovated in phases to house Aero-Medical Evacuation Squadron, new Aerial Port Facility and Deployment Processing Center, and mobility storage for Security Forces Squadron. Work included floor plans for each phase as well as final floor plan and construction cost estimate. Major challenge involved consolidation of organizations with a total authorized area of over 50,000 SF into facility with 40,000 SF footprint - no additions were allowed. AT/FP, energy and ADA accessibility measures were incorporated, as well as current ANG guidelines. **Client Contact:** Capt Harry Netzer, Deputy BCE, (304) 341-6649, harry.g.netzer.mil@mail.mil

West Virginia ARNG Martinsburg Secure Facility, Martinsburg, WV – Renovations to 2-story area (6,200 SF per level) to provide new secure office space and related support spaces for specific using agency. Includes HVAC replacement; new interior finishes (including raised access flooring), structural roof deck and roofing system, elevator and fire stairs, building security and cameras, and site security fencing, sliding vehicular security gates, exterior parking; and site utility and storm drainage improvements. **Client Contact:**

Matthew Reynolds, Deputy Branch Chief - Design & Construction, (304) 561-6568, matthew.t.reynolds18nfg@mail.mil

West Virginia ANG 130th Airlift Wing Security Forces Squadron Facility Renovation and Expansion, Charleston, WV

– Complete architectural and engineering Type A, B and C services for \$2 million renovation of 5,395 SF SFS facility (B142) including addition of 2,500 SF administrative and training space to better serve unit. Project (MILCON/SRM split funded) increases space and improves mission performance and operational efficiency for command and administrative functions in ways that are energy efficient, code compliant and in accordance with current ANG policies. Project meets LEED Silver design criteria, and all AT/FP and ADAAG requirements. **Client Contact:** Capt Harry Netzer, Deputy BCE, (304) 341-6649, harry.g.netzer.mil@mail.mil

West Virginia ANG 130th Airlift Wing Squadron Operations Facility Repair, Charleston, WV

– Design services for \$3 million renovation and energy-efficient improvements to 25,765 SF facility with history of remodeling activities resulting in a building that inadequately serves its users (Administration and Operations, Base Operations, Command Post, and Life Support and Fitness Center). Work included Charrette

to develop alternative floor plans. Selected design allows for efficient use of space; HVAC, electrical and fire protection systems upgrade; and roof repairs. Designed to achieve USGBC LEED Certified rating, meet all ANG Sustainable Design criteria and utilize MILCON/SRM split funding. **Client Contact:** Capt Harry Netzer, Deputy BCE, (304) 341-6649, harry.g.netzer.mil@mail.mil

West Virginia ANG 130th Airlift Wing Communications Facility Code / Criteria Review, Charleston, WV

– Code/Criteria Review and LEED Update Report for facility designed to 65% three years prior under separate GRW/ANG contract then put on hold pending funding. Twofold project goal included: 1) identify and delineate known codes/criteria that are either new or updated since 65% Design Submittal; and 2) describe revised LEED 3.0 criteria now in effect for project and outline points for LEED Silver certification, compared to LEED Silver 2.2 criteria in effect at the 65% design stage. **Client Contact:** LtCol Rick Thomas, Base Civil Engineer

West Virginia ANG 130th Airlift Wing Building 107 Renovation, Charleston, WV

– Scope of work included design services (LEED Silver design criteria) for two separately funded (MILCON/SRM) sub-projects to repurpose existing unoccupied hangar into space for the Aeromedical Evacuation

Squadron (AES). Repairs and building repurposing includes: new interior spaces within existing facility to accommodate new functions; building exterior repairs, new interior finishes; mechanical and electrical systems upgrade; fire alarm and fire protection systems repair; and site/building revisions to meet AFTP standards. New functional areas include spaces for medical simulation training, maintenance, operations, administration, storage, and other mission-related activities. **Client Contact:** Capt Harry Netzer, Deputy BCE, (304) 341-6649, harry.g.netzer.mil@mail.mil

West Virginia ANG 130th Airlift Wing Communications Duct, Charleston, WV – Concept Development Report to select a preferred concept for a new duct system for routing the base's communications network to a new Communications Facility. New fiber optic cable for base network will consist of two ITNs (Information Transfer Nodes); ITN-1 in the new Communications Facility and ITN-2 in new hangar, Building 407. Duct bank will carry fiber optic lines, television and coaxial cabling; allows looping of current system; and provides redundancy of assets. A 4-duct and a 12-duct PVC conduit system with inter-duct is proposed. **Client Contact:** LtCol Rick Thomas, Base Civil Engineer

West Virginia ANG 130th Airlift Wing Aboveground Fuel Storage Dispensing Facility, Charleston, WV – Design for a new aboveground fuel station for the installation's government-

owned vehicles, comprising two new aboveground tanks (1 diesel, 1 unleaded gasoline) and a new dispensing system, replacing an older fuel station that included underground fuel storage tanks. **Client Contact:** LtCol Rick Thomas, Base Civil Engineer

West Virginia ARNG Readiness Center Commissioning Projects, WV – LEED Fundamental Commissioning for four building construction projects: Buckhannon AFRC - Phase I, 38,000 SF and \$13,150,000 construction cost; Morgantown Readiness Center, 58,520 SF and \$20,500,888 construction cost; Moorefield Readiness Center, 57,256 SF and \$17,725,351 construction cost; and Logan Readiness Center, 58,520 SF and \$14,296,326 estimated construction cost. Scope included all commissioning, coordination and documentation required for LEED certification on the HVAC systems and networked controls, the lighting control systems and the domestic hot water distribution systems. **Client Contact:** MAJ Daniel Clevenger, CFMO, (304) 561-6446, daniel.w.clevenger.mil@mail.mil

West Virginia ARNG Joint Armed Forces Reserve Center and Area Maintenance Support Activity, Ripley, WV – Preparation of a Program Planning Document Charrette (PPDC) for replacement of two local armories and a USAR center with aging facilities and site limitations, with a new, \$17 million Joint Armed Forces Reserve Center and support facilities on a 94-acre site.

Resulting plans include an Armed Forces Reserve Center (60,927 SF), unheated storage (6,000 SF), area maintenance support (4,500 SF) and helipad. **Client Contact:** MG Melvin Burch, (304) 561-6458, melvin.burch@us.army.mil

West Virginia ANG 130th Airlift Wing LOX Storage Relocation, Charleston, WV – Type A and B design and construction administration services to relocate LOX function to south end of flight line to meet operational and installation development plan requirements. Facility includes covered storage facility with adjacent tank storage canopy; elevated pads and spill containment structure for storage tanks; paved entry road; protective fencing; and utilities (electric and communications). **Client Contact:** Capt Harry Netzer, Deputy BCE, (304) 341-6649, harry.g.netzer.mil@mail.mil

West Virginia ANG 167th Airlift Wing C-17 Maintenance Hangar Modifications, Martinsburg, WV – Fast-track design of maintenance hangar modifications required to meet 167AW's change in mission from C-5 to C-17 aircraft. **Client Contact:** Major Emerson Slack, (304) 616-5233, emerson.c.slack.mil@mail.mil

West Virginia ANG 167th Airlift Wing C-17 Fuel Cell Hangar Modifications, Martinsburg, WV – Fast-track design of fuel cell hangar modifications required to meet 167AW's change in mission from C-5 to C-17 aircraft. **Client Contact:** Major Emerson Slack, (304) 616-5233, emerson.c.slack.mil@mail.mil

West Virginia ANG 167th Airlift Wing C-17 Corrosion Control Hangar Modifications,

Martinsburg, WV – Fast-track design of corrosion control hangar modifications required to meet 167AW's change in mission from C-5 to C-17 aircraft. **Client Contact:** Major Emerson Slack, Deputy Base Civil Engineer, (304) 616-5233, emerson.c.slack.mil@mail.mil

West Virginia ANG 130th Airlift Wing Master Plan Update and CIP, Charleston, WV –

Engineering consulting for preparation of a Web-Enabled Master Plan Update and GeoBase Common Installation Picture (CIP) for the 130th Airlift Wing in Charleston to evaluate benefits and impacts associated with acquiring additional airfield property for aircraft parking, operations, and maintenance facilities to meet current and future proposed missions. Identified constraints and opportunities that apply to the 130th AW aircraft parking, operations and maintenance areas, including Anti-Terrorism/Force Protection (AT/FP) measures; quantified existing and required airfield facilities; developed new alternatives for long- and short-range plans; and created plan tabs that depict constraints and opportunities, long- and short-range development plans, land use and circulation plan, real estate plan, and facility utilization plan. **Client Contact:** Capt Harry Netzer, Deputy BCE, (304) 341-6649, harry.g.netzer.mil@mail.mil

West Virginia ARNG Camp Dawson Live Fire Exercise Shoot House, Kingwood, WV – Design

for innovative re-use of a recently-acquired former industrial complex adjacent to Camp Dawson to provide a \$2 million Live Fire Exercise Shoot House, including shoot house to be housed in a metal warehouse, operations / storage, after action review (AAR) facility, ammunition breakdown facility, warehouse restroom renovation, access road and parking area, and utility services. Completed conceptual design for LFSH facility with final design and construction of LFSH completed by selected vendor (design / build); balance of facilities delivered with traditional design / bid / build approach.

Client Contact: MAJ Robert Kincaid, Jr., Range Operations Manager, (304) 791-4459, robert.j.kincaid.mil@mail.mil

West Virginia ARNG Camp Dawson Ranges at Briery Mountain, Kingwood, WV –

Project includes design and construction of new Hand Grenade Familiarization Range and Live Fire Exercise Breach (LFEB) Training Range at Briery Mountain Training area to conform site to government standard Breach Range Design Requirements. Included design of access road to the remote site, electrical connections, breaching structures, open covered range operations and control shelter, storage building, dry latrine, covered viewing stands, and parking area. **Client Contact:** MAJ Robert Kincaid, Jr., Range Operations Manager, (304) 791-4459, robert.j.kincaid.mil@mail.mil

West Virginia ARNG Relocation of Camp Dawson Electrical Power and Communications Lines, Kingwood, WV – Study

and design for 4-phase construction program to relocate overhead electrical power lines and communications lines (telephone, data, etc) to underground duct banks in order to eliminate historic problems associated with overhead services. Phase 1: 3000 LF of power line relocation to new underground duct banks, with the associated replacement of pole-mounted transformers with pad-mounted transformers (1000 KVA to 50 KVA). Phase 2: Relocation of communications service to new underground duct banks along Phase 1 route. Phases 3 & 4: Relocation of approximately 2000 LF of overhead power lines and overhead communications lines to new duct banks, respectively.

Client Contact: MAJ Robert Kincaid, Jr., Range Operations Manager, (304) 791-4459, robert.j.kincaid.mil@mail.mil

West Virginia ARNG Camp Dawson Volkstone Training Area Utility Upgrade,

Kingwood, WV – Expansion of sewer (1,996 LF), water (1,996 LF) and electric (1,797 LF) to all existing and future buildings, unit training equipment site (UTES) and wash rack locations. Also includes design of Forward Operating Base (FOB) including 20 14' x 16' wooden buildings, new bath house for approximately 200 people and pavilion. **Client Contact:** MAJ Robert Kincaid, Jr., Range Operations Manager, (304) 791-4459, robert.j.kincaid.mil@mail.mil

West Virginia ANG 167th Airlift Wing Basewide Sewer Line Repair, Martinsburg, WV –

Planning, design and construction administration services for replacement of sanitary sewer system, circa 1954. Pipe included combination of various construction materials including vitrified clay pipe (VCP) with dilapidated sections allowing high rates of inflow and infiltration during storm events. **Client Contact:** Col Rodney Neely, MSG Commander, (304) 616-5198

West Virginia ANG 167th Airlift Wing Maintenance Mall (Building 307) Repair, Martinsburg, WV –

Concept Development Report for C-5 aircraft complex which requires electrical modifications to meet needs of current occupants' activities, and investigation/resolution of temperature control in numerous locations. Report included detailed discussion of current electrical, architectural and HVAC system problems; recommendations to resolve

large-system problems, as well as particular solutions for small areas; conceptual level drawings; conceptual level outline specification; and construction cost estimate. **Client Contact:** Col Rodney Neely, MSG Commander, (304) 616-5198

West Virginia ANG 167th Airlift Wing C-5 Apron Repair, Martinsburg, WV –

Evaluation and design services to repair fractured/heaved C-5 apron caused by poorly draining base and sub base. Pavement repair of approximately 1,755 SY included demolition and removal of fractured and heaved pavement down to below original base and sub base, compaction of new material, placing of sub base and base and concrete pavement parking apron, asphalt shoulder stabilization, all constructed to support C-5 aircraft. Utility and site improvements were also included. **Client Contact:** LtCol John Poland, Base Civil Engineer, (304) 616-5198, john.r.poland4.mil@mail.mil

West Virginia ANG 167th Airlift Wing C-17 Composite Material Shop, Martinsburg, WV –

Fast-track design of composite material shop to the existing corrosion control hangar required to meet 167AW's change in mission from C-5 to C-17 aircraft. **Client Contact:** Major Emerson Slack, Deputy Base Civil Engineer, (304) 616-5233, emerson.c.slack.mil@mail.mil

West Virginia ANG 167th Airlift Wing Munitions Storage, Martinsburg, WV –

New munitions inspection building, five magazines (all pre-manufactured modular units), new concrete pads (2,865 SF), all-weather pavement (5,566 SF) for vehicular access, gate/fencing, utilities, exterior lot lighting, communications, and security for the munitions area. **Client Contact:** Major Emerson Slack, Deputy Base Civil Engineer, (304) 616-5233, emerson.c.slack.mil@mail.mil

SECTION 2.0 | Project Experience

2.0 Project Experience

Frankfort Administration Building

Frankfort Plant Board | Frankfort, KY



The Frankfort Plant Board, a municipal utility company that provides cable, broadband, telephone, security, electric and water for the city of Frankfort, KY, and surrounding areas, hired GRW to provide programming, planning and design services for its new consolidated administration building and associated 30-acre site.

The new three-level, 46,000 SF administration building project consolidates the Frankfort Plant Board's **administrative offices** for accounting, human resources, management, IT, and dispatch. In addition, facilities were provided for the Plant Board's public customer service functions including cashier/payment service stations, exterior drive through tellers, product service representation, and a **board/community/training room**.

At least one multipurpose room is available for use by the community. The facility includes a **fully integrated audio-visual systems are used in conference rooms**, the network operating center, and the board/community and training rooms. Conference rooms have media presentation systems with multiple types of user input connections, audio systems, touchscreen controllers and LED televisions.

Wireless access points were provided for total wireless coverage of the building.

Energy efficient LED luminaires were used throughout the building interior and exterior as well as the site. Lighting controls consist of standalone dual-technology occupancy sensing devices and dimmers for the private functional spaces of the building and a fully networked lighting control system for the common areas of the building and exterior.

The building facade is primarily constructed of architectural precast concrete panels with design elements such as structural silicone glazing systems, sunshade awnings and aluminum panels, relating to the customer and staff needs.

The Facility was designed with security and public safety factors including access control systems, CCTV, bullet-resistant assemblies / glazing.

Site work included utilities, storm drainage, access road, parking, and landscaping.

Client Contact: Sharmista Dutta, PE, Project Manager, Frankfort Plant Board, (502) 352-4407, sdutta@fewpb.com

Warriors in Transition Headquarters Building

U.S. Army Corps of Engineers, Louisville District | Louisville, KY



GRW provided architectural, and site/civil, mechanical, electrical, and structural engineering services (including BIM model) for the design-build of a new Warriors in Transition Headquarters Building at Fort Knox, KY. The Warriors in Transition Program was intended to help soldiers transitioning from the military to civilian life, veterans, and their families.

Construction is single-story load bearing masonry with truss roof framing and shingle roofing. The approximately 7,000 SF building provides a **reception area**, space for **private offices** (including nurses stations and offices for social workers/case management), **open office space** with workstations, **conference room**, restrooms/showers, and kitchenette. Complete site/civil design services include space for 30 additional parking spaces.

The building is **designed to meet LEED Silver** design criteria. The building goes beyond EPA Act requirements by achieving a 50% improvement over energy code. Sustainable features include a geothermal heat pump system, including five wells, and **100 percent LED lighting**. The HVAC system features a geo-exchange heat pump configuration utilizing variable volume air-handling coupled to a water-to-water heat pump for hydronic VAV reheat. Ventilation is handled through desiccant wheel

energy recovery. A server room is conditioned via dedicated precision cooling. Lighting controls were provided to manage lighting per the latest ASHRAE 189.1 standards (manual on, automatic vacancy off), and automatic daylight harvesting was installed for rooms with south facing windows.

Increased roof structure supports the future installation of solar panels, making the building zero energy ready. Wall space was also reserved in the main electrical room for an inverter, as well as accommodations in the circuit breaker.

GRW provided full BIM implementation, including completion of a BIM Project Execution Plan meeting the standards of the National Institute of Building Design.

The building's conference room includes the following key audio/visual items:

- Fixed multimedia projector with motorized project screen.
- A/V source from owner-provided CPU (or laptop).
- Network and CATV outlets are available.

Client Contact: Nick Bibelhauser, PE, U.S. Army Corps of Engineers, Louisville District, (502) 315-6119, nicholas.j.bibelhasuer@usace.army.mil

Joint ARFC and FMS Complex, Bluegrass Army Depot Kentucky Army National Guard | Richmond, KY



GRW served as the "Design Criteria Consultant" to the KY ARNG for the design-build of a new \$19.2 million Armed Forces Reserve Center (AFRC) and Field Maintenance Shop (FMS) in Richmond, KY. This complex is **designed to meet the LEED Silver sustainable design rating**. The services provided by GRW included RFQ and RFP development, assistance in short-listing and final selection of the design-build team, construction administration and commissioning of the new facilities. These facilities serve units from the KY ARNG and US Army Reserves. Two unheated storage facilities (4800 SF and 2600 SF) are also included.

The AFRC is a 63,250 SF facility. It includes the following functional spaces:

- **Administrative areas: Private offices, restroom/shower**, administrative common spaces, recruiting office, family support office
- Education spaces: Classrooms, COMSEC training, library and training center, distance learning, weapons simulator, training aid storage area, audio/visual area
- Assembly hall with fully functional kitchen and chair and table storage
- Storage areas: Heated unit storage rooms, facility maintenance, arms vault, unheated storage building
- Building operating spaces and support spaces

The FMS is a 31,725 SF facility. It includes:

- Administration area: Private shop offices

- Educational spaces: Classrooms and a library
- Storage spaces: Tools and parts storage, battery room, bulk POL storage, and lubrication system storage
- Building operating spaces and support spaces, unheated storage building
- Workbays: 12 vehicle workbays

The AFRC/FMS complex includes the following features:

- Military and POV parking, wash platform, loading dock, access roads and ramps
- Flammable material storage and controlled waste facilities
- Site AT/FP measures, security lighting, utilities and landscaping
- Energy management and control system, intrusion detection system, mass notification system

"... you have provided us with outstanding service whenever we have called on you to respond to our needs. Your architects, engineers and other staff members are to be commended for their high level of expertise and professionalism. I will be pleased to recommend your firm to other states that are in the need of a design team for ARNG facilities."

-- LTC Brian S. Demers, AIA, USP&FO for Kentucky

Client Contact: Col. Steve King, CFMO for KY, Kentucky Army National Guard, (502) 607-1874, steven.t.king@us.army.mil

West Virginia Army National Guard Martinsburg Secure Facility

GRW is designing renovations for a secure facility located adjacent to the Eastern WV Regional Airport in Martinsburg, WV. The purpose of the renovation is to provide new secure office space, and related support spaces, for a specific using agency. The main renovated area is on two upper levels, containing approximately 6,200 SF per level. The scope includes:

- **Demolition of existing interior finishes and other improvements within the renovation area**
- Complete replacement of the existing non-operational HVAC system with a new energy-efficient system
- New structural roof deck and roofing system

- **New interior finishes throughout the areas,** including raised access flooring throughout the renovated areas
- New elevator and fire stairs
- New building security and cameras
- New site security fencing, sliding vehicular security gates, exterior parking, walkways, site utility improvements, and storm drainage improvements

Client Contact: Matthew Reynolds, Deputy Branch Chief - Design & Construction, West Virginia Army National Guard, (304) 561-6568, matthew.t.reynolds18nfg@mail.mil

NKADD Office Addition

Northern Kentucky Area Development District | Florence, KY

GRW provided complete A/E services for the Northern Kentucky Area Development District office addition. The existing 13,524 SF facility, located in Florence, was designed to accommodate approximately 52 people; however, the occupant load was 75 employees.

The programming/schematic design phase of this project included an overall evaluation of the existing spaces and reorganization to allow for an improved workflow. The final design plans provided an approximate 4,500 SF addition at the rear of the existing facility, and increased the overall facility capacity to accommodate 85 persons.

The addition consists of new **private offices, office cubicle area, support spaces, and break room**. The new addition also accommodates the District's workforce development staff, previously located in leased off-site space. Accommodations for this staff required a separate exterior entrance, private work spaces for six employees, a computer/printer area for client use, a private one-on-one consultation room, restrooms, and an electronic-controlled access for employees to the main facility.



The addition's interior **finishes are similar to those in the existing facility** to create a fluid transition between the two areas. New doors and hardware match the existing key-fob security access system.

High efficiency heat pumps were utilized to minimize energy consumption and low-flow plumbing fixtures to minimize water use. The domestic hot water system was modified for the entire building to better control water temperatures throughout. The existing wet pipe sprinkler system was also expanded into the addition.

Client Contact: Bryan Cobb, IT/Facilities Director, Northern Kentucky Area Development District, (859) 283-8194, bryan.cobb@nkadd.org

Design & Renovation of 8 Facilities at Ft. Custer, Camp Grayling, Grayling Army Airfield and Midland

GRW provided complete A/E design services for 8 “fast track” projects in scattered parts of Michigan.

These projects include new Bachelor Officer Quarters at Fort Custer, Camp Grayling and Grayling AAF; an addition to the Range Control Building at Fort Custer; a new Logistics Facility at Fort Custer; **a new General Officers BOQ at Camp Grayling;** a new Company Operations Facility at Grayling AAF; and **kitchen and other renovations** to an existing armory in Midland.

The Midland Armory project included lead abatement from and renovation of an indoor firing range so this space could be converted into a kitchen. Full A/E services were required for the renovation including replacement of HVAC, plumbing and electrical systems. The floors and ceiling tiles in the Midland Armory contained asbestos, and GRW developed abatement plans to mitigate and/or remove the ACM in the rooms that were renovated.

In addition, GRW developed small area Master Plans for several of these projects in order to provide a basis for future addition of Phase 2 facilities on the sites selected by the MI ARNG. These Master Plans addressed utility requirements, grading/paving and site requirements for the future facilities.

The plans, specifications and bidding documents were prepared for these projects concurrently by a



team from GRW that was dedicated to this “fast track” project from its start. The complete design, including all required permit applications and state agency reviews, was completed in 10 weeks, in time to meet funding deadlines for bid advertisements.

West Virginia Air National Guard 130th Airlift Wing Building 107 Renovation

This project included two separately funded (MILCON/SRM) sub-projects. These two companion projects were designed to re-purpose an existing unoccupied hangar into administrative, simulation training, and storage spaces for the Aeromedical Evacuation Squadron (AES). The project was designed to meet LEED Silver design criteria.

The project scope included:

- **Upgrade of mechanical and electrical systems to meet current building codes and standards**
- **Replacement of inadequate restrooms** and locker rooms
- Replacement of fire alarm and fire protection systems
- Hardening of the front façade, **replacement of windows**, and elimination of on-street parking to achieve ATRP compliance
- **Construction of new interior spaces** and renovation of existing shop areas to create necessary **office, training, and support spaces**

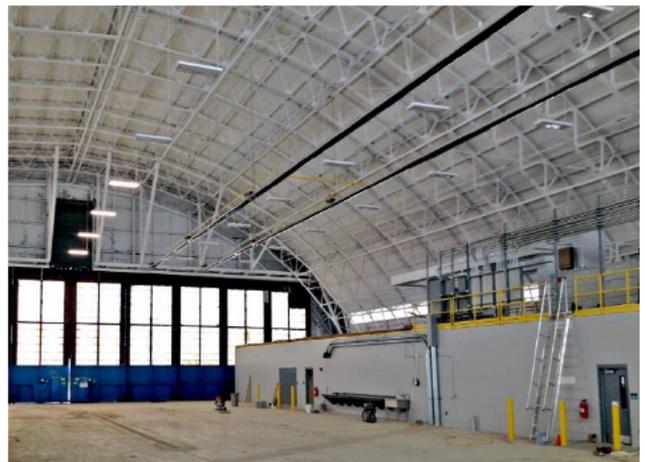
The completed building includes the following programmed spaces:

- **Conference rooms, classrooms, and breakrooms**
- **Restrooms and locker rooms**
- Command and administration
- Flight crew support spaces
- Medical simulation areas for flight crew training
- Mobile storage and staging
- Medical equipment maintenance
- HVAC, electrical, and communications support

Client Contact: Capt. Harry Netzer, Deputy BCE, WV ANG, (304) 341-6649, harry.g.netzer.mil@mail.mil

Contractor Performance Assessment Report (CPAR) from Contracting Officer Robert Barker:

- **QUALITY:** Contractor meet requirements for design on this project. Firm worked a difficult task order with 2 project task order numbers, utilizing 2 designs for one project. Quality of work for project benefited the government by providing a thorough final design for the project.
- **SCHEDULE:** Contractor kept to scheduled deadlines for project requirement. Worked well with Base Contracting and Civil Engineering to discuss any issues that would delay deadlines.
- **COST CONTROL:** Contractor kept costs controlled during project and worked very well with Base Contracting and Civil Engineering, keeping pace in utilization of 2 sources of funding, both MILCON and SRM.
- **MANAGEMENT:** Contractor met contractual requirements and worked well with the 130th Airlift Wing Base Contracting Office and Civil Engineering office. No major management issues were noted during the performance of the contract and GRW engineers and team continued to communicate regularly to ensure all aspects of the project were on track.
- **REGULATORY COMPLIANCE:** Performed all necessary environmental testing and occupational health requirements for project; kept base personnel informed of any findings or issues that would significantly delay project completion.
- **ADDITIONAL/OTHER:** Good team to work with; continues to maintain very professional standards and conduct.





West Virginia Air National Guard 130th Airlift Wing Security Forces Squadron Facility Renovation and Expansion

GRW was retained to provide complete architectural and engineering Type A, B and C services for renovating the existing 5,395 SF Security Forces Squadron facility and adding 2,500 SF of administrative and training space to the facility. This project uses MILCON/SRM split funding to deliver a renovated and expanded SFS facility, which provides increased space for command and administrative functions.

A few relevant spaces and features include:

- **Expanded command/administrative space**
- Training rooms
- Arms vault
- SIPRNet
- ATFP building/site security
- ADA compliance

- Geothermal
- Extensive communications infrastructure
- Split MILCON/SRM funding

This project meets LEED Silver measures for sustainable design.

Contractor Performance Assessment Report (CPAR) from Contracting Officer Matthew Corcoran:

- **Quality:** Exceptional/Outstanding Overall Job
- **Schedule:** Exceptional/Outstanding Overall Job
- **Cost Control:** Exceptional/Outstanding Overall Job
- **Management:** Exceptional/Outstanding Overall Job
- **Regulatory Compliance:** Exceptional/Outstanding Overall Job

Client Contact: Capt. Harry Netzer, Deputy BCE, WV ANG, (304) 341-6649, harry.g.netzer.mil@mail.mil

Ohio National Guard Joint Armed Forces Readiness Center Complex



GRW provided full-discipline A/E services for planning, design and construction of a new **LEED Silver Certified** 85,865 SF Joint Armed Forces Readiness Center (AFRC) and Field Maintenance Shop (FMS) for the OH Army National Guard (ARNG) and the US Army Reserves in Springfield, Ohio. The new complex was **designed to match the architecture** of the nearby Ohio ANG structures; both facilities are located within the secure perimeter of the Springfield-Beckley Municipal Airport.

The entry into the site forms a strong axis and visual connection to the existing airbase across the road. The lobby interior finishes reinforce the axis by using high windows for a view of the sky and to maximize natural light in the lobby.

A few features in the 60,902 SF administrative/training complex:

- **Private offices / administrative common spaces**
- Communications tower
- Classrooms and library
- Gymnasium-type multipurpose assembly hall with fully functional kitchen
- Heated and unheated storage areas

A few features in the 24,963 SF FMS:

- **Private shop offices**
- Concrete floor with trench drains
- Tools and parts storage, battery room, bulk POL storage, and lubrication system storage
- Flammable material storage and controlled waste facilities
- Oil/water separator
- 10 drive-through bays (6 for ARNG, 4 for USAR)
- Motorized overhead doors

The HVAC system includes a geothermal heat pump, utilizing variable volume air handling heat pump units totaling 20,000 CFM and 18 VAV terminal unit zones in occupied finished spaces, with a reheat coil system supplied by reverse-cycle water-to-water heat pumps from the geothermal loop.

Client Contact: George McCann, Project Manager, Ohio Army National Guard, (614) 336-7413, george.c.mccann@us.army.mil

Indiana Army National Guard Readiness Center, Lawrence, IN

GRW provided A/E design and construction administration services for a new 109,555 SF two-story Army National Guard Readiness Center in Lawrence, a suburb of Indianapolis, IN. This facility is located on a site that was formerly part of Fort Benjamin Harrison. An 8,300 SF unheated storage facility is also included.

Among other functional items, this Readiness Center includes the following spaces and features:

- **Private offices** and administrative common spaces, fully networked
- **Rest rooms**, locker rooms, medical section room
- **Energy management and control system, lighting controls**
- Classrooms, library and training center, training aid storage area, audio/visual area
- Assembly hall with fully functional kitchen and chair and table storage
- Mechanical and electrical system rooms, communications equipment rooms

"I want to take this opportunity to express my appreciation and gratitude to you and your team for what we feel will be a highly successful design of our Lawrence Readiness Center. The design process that your team led us through has been extremely productive and efficient. Their effectiveness was due in large part to the highly professional team you assembled for this project, and their willingness to meet the owner's requirements and timeline. Again thank you and the team at GRW for the hard work and professional approach to this design."

*Steven Hines, Facilities Management Officer,
Indiana ARNG*

Client Contact: Major Chris Purtell, Contracting Officer, Indiana Army National Guard, (317) 247-3514; chris.purtell@us.army.mil



SECTION 3.0 | **Staff Qualifications**

3.0 Staff Qualifications

By choosing GRW, you have access to some of the most qualified and knowledgeable military design consultants in the region. From operations and facility renovation or design - to high-efficiency mechanical and electrical systems, our team members are experts in their fields.

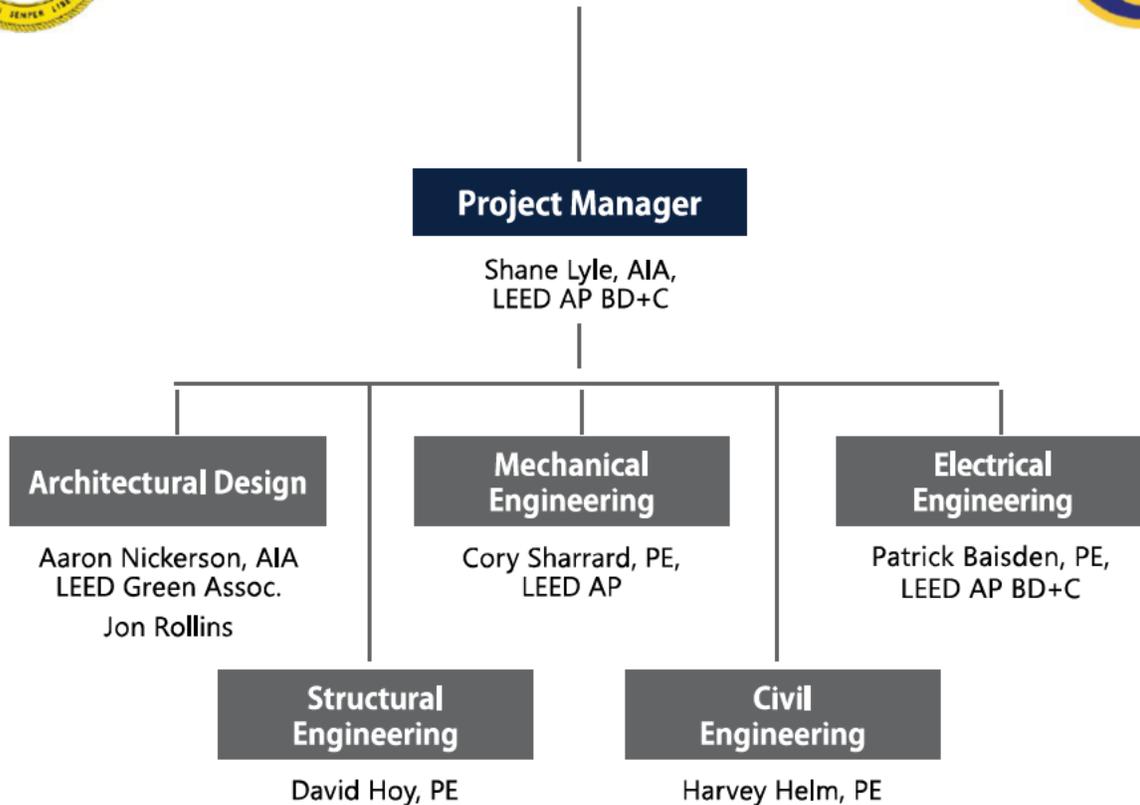
Shane Lyle, AIA, LEED AP BD+C, will be the overall leader of the design team and directly involved with you through every stage of the project. Shane regularly provides architectural leadership for complex building projects; he has managed teams on projects ranging in scope from small renovations to as high as \$182 million construction cost.

Our team’s **discipline leaders** – and their backup team members – are equally experienced and will work closely with Shane. More information about their roles is provided in **Section 4.0**, Approach & Methodology.

Our team’s local knowledge and capacity is strengthened by GRW’s subsidiary, Chapman Technical Group, a 25-person firm based in St. Albans, WV. Structural engineer David Hoy works in that office.



West Virginia Department of Administration and West Virginia Army National Guard



Shane Lyle, AIA, LEED AP BD+C | GRW Project Manager



YEARS OF EXPERIENCE:

With GRW: 32

Total: 38

EDUCATION

Bachelor of Architecture (with honors), 1983, University of Kentucky

REGISTRATION

Registered Architect: KY, WV (), TN, AL, GA, IN, TX, MS, SC, FL, MO, AZ, NM, CA, WA

National Council of Architectural Registration Boards (NCARB) Certification

LEED Accredited Professional, Building Design + Construction

Certified Interior Designer: Kentucky

PROFESSIONAL AFFILIATIONS AND TRAINING

American Institute of Architects

Past President - AIA East Kentucky Chapter Board of Directors

American Correctional Association (ACA)

Member / Past Officer - UK College of Architecture Alumni Association

Life Member - UK Alumni Association

RELEVANT PROJECT EXPERIENCE

Michigan ARNG Design & Renovation of 8 Facilities at Ft. Custer, Camp Grayling, Grayling Army Airfield and Midland – Architect. Design for 8 “fast track” projects for Michigan Army National Guard scattered throughout the state, including: new Bachelor Officer Quarters at Fort Custer, Camp Grayling and Grayling AAF; an addition to the Range Control Building and a new Logistics Facility at Fort Custer; a new General Officers BOQ at Camp Grayling; a new Company Operations Facility at Grayling AAF; and kitchen and other renovations to an existing armory in Midland that required lead and asbestos abatement.

West Virginia ARNG Martinsburg Secure Facility, Martinsburg, WV – Project Manager. Renovations to 2-story area (6,200 SF per level) to provide new secure office space and related support spaces for specific using agency. Includes HVAC replacement; new interior finishes (including raised access flooring), structural roof deck and roofing system, elevator and fire stairs, building security and cameras, and site security fencing, sliding vehicular security gates, exterior parking; site utility/drainage improvements.

West Virginia ANG 130th Airlift Wing Building 107 Renovation, Charleston, WV – Principal. Scope of work included design services (LEED Silver design criteria) for two separately funded (MILCON/SRM) sub-projects to repurpose existing unoccupied hangar into space for the Aeromedical Evacuation Squadron (AES). Repairs and building repurposing includes: new interior spaces within existing facility to accommodate new functions; building exterior repairs, new interior finishes; mechanical and electrical systems upgrade; fire alarm and fire protection systems repair; and site/building revisions to meet ATFP standards. New functional areas include spaces for medical simulation training, maintenance, operations, administration, storage, and other mission-related activities.

West Virginia ANG 130th Airlift Wing Security Forces Squadron Facility Renovation and Expansion, Charleston, WV – Principal. Complete architectural and engineering Type A, B and C services for \$2 million renovation of 5,395 SF SFS facility (B142) including addition of 2,500 SF administrative and training space to better serve unit. Project (MILCON/SRM split funded) increases space and improves mission performance and operational efficiency for command and administrative functions in ways that are energy efficient, code compliant and meet current ANG policies. Meets LEED Silver design criteria, and all AT/FP and ADAAG requirements.

West Virginia ANG 130th Airlift Wing Squadron Operations Facility Repair, Charleston, WV – Principal. Design services for \$3 million renovation and energy-efficient improvements to 25,765 SF facility; users (Administration and Operations, Base Operations, Command Post, and Life Support and Fitness Center). Work included Charrette to develop alternative floor plans. Selected design allows for efficient use of space; HVAC, electrical and fire protection systems upgrade; and roof repairs. Designed to achieve USGBC LEED Certified rating, meet all ANG Sustainable Design criteria and utilize MILCON/SRM split funding.

Northern Kentucky Area Development District Office Addition, Florence, KY – Project Manager. Approximate 4,500 SF addition at rear of existing 13,524 SF facility. Includes new private offices, office cubicle area, support spaces, and break room, as well as separate exterior entrance, private workspaces for six employees, computer/printer area for client use, private one-on-one consultation room, restrooms, and electronic-controlled access for employees to main facility for workforce development staff relocating to building. Existing parking lot was reconstructed to correct drainage issues.

Frankfort Plant Board Administration Building, Frankfort, KY – Principal. New three-level, 46,000 SF administration building on 30-acre site providing consolidated facility for administrative offices (accounting, human resources, management, IT, dispatch, customer service), as well as exterior drive through tellers, board/community room and designated shelter area.

West Virginia ANG 167th Airlift Wing C-17 Composite Material Shop, Martinsburg, WV – Project Manager. Fast-track design of composite material shop to the existing corrosion control hangar required to meet 167AW's change in mission from C-5 to C-17 aircraft.

West Virginia ANG 167th Airlift Wing C-17 Corrosion Control Hangar Modifications, Martinsburg, WV – Project Manager. Fast-track design of corrosion control hangar modifications required to meet 167AW's change in mission from C-5 to C-17 aircraft.

West Virginia ANG 167th Airlift Wing C-17 Fuel Cell Hangar Modifications, Martinsburg, WV – Project Manager. Fast-track design of fuel cell hangar modifications required to meet 167AW's change in mission from C-5 to C-17 aircraft.

West Virginia ANG 167th Airlift Wing C-17 Maintenance Hangar Modifications, Martinsburg, WV – Project Manager. Fast-track design of maintenance hangar modifications required to meet 167AW's change in mission from C-5 to C-17 aircraft.

West Virginia ARNG Camp Dawson Volkstone Training Area Utility Upgrade, Kingwood, WV – Principal. Expansion of sewer (1,996 LF), water (1,996 LF) and electric (1,797 LF) to all existing and future buildings, unit training equipment site (UTES) and wash rack locations. Also includes design of Forward Operating Base (FOB) including 20 14' x 16' wooden buildings, new bath house for approximately 200 people and pavilion.

West Virginia ARNG Camp Dawson Ranges at Briery Mountain, Kingwood, WV – Principal. Project includes design and construction of new Hand Grenade Familiarization Range and Live Fire Exercise Breach (LFEB) Training Range at Briery Mountain Training area to conform site to government standard Breach Range Design Requirements. Included design of access road to the remote site, electrical connections, breaching structures, open covered range operations and control shelter, storage building, dry latrine, covered viewing stands, and parking area.

Murray State University College Court Housing Complex Fire Protection Improvements, Murray, KY – Principal. Design of fire protection improvements at the College Courts, a housing complex for university students, especially students with families, married students, and graduate students.

Aaron Nickerson, AIA, LEED Green Asc. | GRW Architect



YEARS OF EXPERIENCE:

With GRW: 15

Total: 16

EDUCATION

Bachelor of Architecture (with honors), 2006, University of Kentucky

Master of Architecture, 2007, University of Kentucky

REGISTRATION

Registered Architect: KY, TN, IN, WV (██████), FL, NY, WA

National Council of Architectural Registration Boards (NCARB) Certification

LEED Green Associate

Certified Interior Designer: Kentucky

PROFESSIONAL AFFILIATIONS AND TRAINING

American Institute of Architects (AIA)

U.S. Green Building Council (USGBC)

Society of American Military Engineers (SAME)

RELEVANT PROJECT EXPERIENCE

West Virginia ANG 130th Airlift Wing Communications Facility, Charleston, WV

– Architectural Designer. Design (Type A and B, 65%) for a new \$3.6 million, 13,100 SF Communications Facility at Yeager Airport in Charleston for West Virginia Air National Guard, designed for LEED Silver rating, to provide a centrally located common user communications system for both intra-base and off-base communications, with ground control of all ground point-to-point contact and air to ground point-to-point contact.

Frankfort Plant Board Administration Building, Frankfort, KY

– Project Manager. New three-level, 46,000 SF administration building on 30-acre site providing consolidated facility for administrative offices (accounting, human resources, management, IT, dispatch, customer service), as well as exterior drive through tellers, board/community room and designated shelter area.

Wright-Patterson AFB Consolidate / Renovate Building 614, Wright-Patterson AFB, OH

– Architect. Demolition of Building 745 CE Grounds Maintenance; consolidation and renovation of existing Building 614 CE Grounds Maintenance Shop; and addition to Building 614 in Area B. Design-build delivery.

Ohio ARNG Joint Armed Forces Reserve Center and Field Maintenance Shop Complex, Springfield, OH

– Architectural Designer. Project Planning Document Charrette and design for new LEED Silver Certified 85,865 SF complex serving both Ohio Army National Guard and U.S. Army Reserves. Provided Joint Armed Forces Reserve Center (AFRC) totaling 60,902 SF, and Field Maintenance Shop (FMS) totaling 24,963 SF, with a construction bid of \$14 million (\$9 million under the MCC of \$23 million) due in large part to innovative design and alternative construction materials. Functional spaces include administrative, educational (classrooms, weapons simulator, distance learning, training-specific libraries, COMSEC), assembly hall and kitchen, general storage, flammable materials storage and controlled waste facilities, and 10 drive-through work bays (6 for ARNG, 4 for USAR).

Blue Grass Army Depot Personnel Support Facility, Richmond, KY

– Project Manager. Design-build project of approximately 7,500 SF, pre-engineered metal building including space for field office activities, conference rooms, locker and changing areas, and laundry and storage.

Nicholasville Municipal Utilities Building Renovation, Nicholasville, KY

– Project Manager. Renovation of 5,600 SF building including reorganization of building's lobby and customer service functions, four new customer service stations, accessibility upgrades material finishes upgrades, new exterior building access, and new lobby lighting, power and data/communications.

Marshall University Weisberg Family Engineering Laboratory, Huntington, WV

– Architectural Designer. A/E design for a new, 16,000 SF Engineering Laboratory Building on the main campus providing laboratories for materials, soils, hydraulics, structural, and environmental studies, classrooms and faculty offices. Building security systems included access control and CCTV. HVAC systems feature rooftop VAV systems with variable electric reheat.

Frankfort Plant Board Headend Telecommunications Facility, Frankfort, KY – Project Manager. New 6,725 SF telecommunications "headend" facility containing owners cable, internet and telephone communications systems servicing city. Designed to accommodate forces from natural disasters, facility is hardened structure, including reinforced walls and roof assemblies. Mechanical and electrical system redundancy included backup generator, UPS and DC plant to maintain facilities operations.

Crane NSA Building 2781 New Lunchroom/Breakroom, Crane NSWC, IN – Project Manager. For 1,000-SF design-build project, provided architectural design, and mechanical/plumbing, electrical, and structural engineering services, as well as construction administration. Project involved demolition of existing building 2781 and replacement with a new pre-engineered metal building to be used as a lunchroom/breakroom.

Crane NSA Building 69 Renovation, Crane NSWC, IN – Project Manager. Renovation of an existing building into an office with lunchrooms and break out offices. The facility was upgraded to meet energy and life safety code, new finishes, and mechanical and electrical systems.

Crane NSA Building 174 Complex Boiler Renovations, Crane NSWC, IN – Architect. Mechanical and electrical design, and construction administration services for design/build replacement of heating systems at Building 174 and two other buildings.

Crane NSA Depot Operations Field Office (Building 3530), Crane NSWC, IN – Project Manager. Design and construction administration services for design-build of new Depot Operations Field Office which included 2,800 SF pre-engineered metal building. Functional areas include private and shared offices, common multi-use area, break room, computer kiosk bank of seven computers with field scanner docking stations, storage and equipment room, restroom/locker rooms, and mechanical/utility space. Also included ABA compliant parking and sidewalks, designated ATRP standoffs from new building.

Crane NSA Building 3234 Interior Mezzanine Addition, Crane NSWC, IN – Project Manager. Design services for design-build renovation providing a modular office space on the mezzanine, including stairway access and a lift for life safety access features. Also included architectural design, as well as new HVAC, electrical and lighting systems, and construction administration services.

Jon Rollins | GRW Architectural Designer



YEARS OF EXPERIENCE:

With GRW: 14

Total: 22

EDUCATION

Bachelor of Architecture, 1999,
University of Kentucky

REGISTRATION

PROFESSIONAL AFFILIATIONS AND TRAINING

LEED (Leadership in Energy and
Environmental Design) qualified
pre- and post-construction
credit documentation for
building certification

Adaptive reuse for Universal
Design in residential projects

RELEVANT PROJECT EXPERIENCE

West Virginia ARNG Martinsburg Secure Facility, Martinsburg, WV – Architectural Designer. Renovations to 2-story area (6,200 SF per level). Includes HVAC replacement; new interior finishes (including raised access flooring), structural roof deck and roofing system, and many other items.

West Virginia ANG 130th Airlift Wing Building 107 Renovation, Charleston, WV – Architectural Designer. Major challenge involved consolidation of organizations with total authorized area of over 50,000 SF into facility with 40,000 SF footprint - no additions allowed. AT/FP, energy and ADA accessibility measures incorporated, as well as current ANG guidelines.

Frankfort Plant Board Administration Building, Frankfort, KY – Architectural Designer. New three-level, 46,000 SF administration building on 30-acre site. Facility has fully integrated audio-visual **systems** in conference, operating center, board / community / training rooms.

West Virginia ANG 130th Airlift Wing Communications Facility, Charleston, WV – Architectural Designer. Design (Type A and B, 65%) for a new \$3.6 million, 13,100 SF Communications Facility at Yeager Airport, designed for LEED Silver rating, to provide common user communications system for both intra-base and off-base communications, with ground control of all ground point-to-point and air to ground point-to-point contact.

Ohio ARNG Joint Armed Forces Reserve Center and Field Maintenance Shop Complex, Springfield, OH – Architectural Designer. Planning and design for LEED Silver certified 85,865 SF complex with administrative, educational, assembly hall and kitchen, storage, & many other spaces.

Northern Kentucky Area Development District Office Addition, Florence, KY – Architectural Designer. Approximate 4,500 SF addition at rear of existing 13,524 SF facility. Includes new private offices, office cubicle area, support spaces, and break room, as well as separate exterior entrance, private workspaces for six employees, computer/printer area for client use, private one-on-one consultation room, restrooms, and electronic-controlled access.

Frankfort Plant Board Headend Telecommunications Facility, Frankfort, KY – Architectural Designer. 6,725 SF telecommunications facility containing Capitol city's cable, internet, telephone communications systems.

Berea College Forestry Outreach Center, Berea, KY – Architectural Designer. Approximate 5,000 SF facility includes classroom, forest history display area, offices, conference room, restrooms, caretaker apartment.

Kentucky ANG 123rd Airlift Wing Renovation Projects, Louisville ANG Base, KY – Architectural Designer. Fast-track design for various upgrade and renovation projects including remodeling the Operations Center, etc.

LG&E and KU Services Company E.W. Brown Generating Station Office Building, Harrodsburg, KY – Architectural Designer. Programming and design services for new, 2,781 SF office building with private offices, break room, file library, and turbine/generator control room with access flooring.

Northpoint Training Center Replacement, Burgin, KY – Architectural Designer. Design and construction oversight for fast-track project.

Cory Sharrard, PE, LEED AP | GRW Mechanical Engineer



YEARS OF EXPERIENCE:

With GRW: 2

Total: 21

EDUCATION

B.S., Industrial Technology, 1996,
Murray State University

B.S., Mechanical Engineering,
1998, University of Kentucky

REGISTRATION

Professional Engineer: KY, IN,
OH, WV (REDACTED), NY, FL

NCEES Member allows
reciprocity with other states

LEED AP

PROFESSIONAL AFFILIATIONS AND TRAINING

Kentucky Local Correctional
Facilities Construction Authority
Board (through 2023)

American Society of Heating,
Refrigerating and Air-
Conditioning Engineers
(ASHRAE) - Board of Governors,
Bluegrass Chapter

Kentucky Society of Professional
Engineers (KSPE) - Professional
Development Committee (Vice
Chair), Bylaws & Operational
Procedures Committee, Ethical
Practices Committee

Society of American Military
Engineers (SAME)

Society of Marketing
Professional Services (SMPS) -
Past President

Cory has more than 20 years' experience with mechanical engineering including design of traditional water source heat pump (WSHP), geothermal WSHP, hybrid geothermal WSHP, variable refrigerant flow (VRV), split system, rooftop units, unit ventilators, variable air volume (VAV), and ice storage systems. Her experience includes numerous K-12, higher education, vocation school, detention center, church, and library projects.

RELEVANT PROJECT EXPERIENCE

West Virginia ARNG Martinsburg Secure Facility, Martinsburg, WV – Mechanical Engineer. Renovations to 2-story area (6,200 SF per level) to provide new secure office space and related support spaces for specific using agency. Includes HVAC replacement; new interior finishes (including raised access flooring), structural roof deck and roofing system, elevator and fire stairs, building security and cameras, and site security fencing, sliding vehicular security gates, exterior parking; and site utility and storm drainage improvements.

West Virginia Division of Natural Resources Building 74 Renovation, South Charleston, WV – Mechanical Engineer. Evaluation and recommendations for possible improvements and upgrades to building systems in three-story, 37,000 SF, masonry-construction facility that houses approximately 100 employees. Among improvements selected for design are replacement of heating and cooling systems, windows, T5 lighting with LED fixtures, and replacement of ceilings and floor finishes, as well as new DDC controls throughout building.

Petersburg Federal Correction Institution Food Service Building, Hopewell, VA – Mechanical Engineer. Replacement of 22,000 SF dining and food service building with new 23,500 SF medium-security facility completed in two phases to accommodate Owner's funding allocation.

Clay County BOE Clay County High School Renovations, Clay, WV – Mechanical Engineer. Design and construction administration phase services for gymnasium and locker rooms, commons area, and HVAC system renovations; door/window replacement; and security/communications system improvements. Portion of construction will occur during summer months, but much will be completed while school is occupied.

West Virginia Department of Highways District 1 Vehicle Maintenance and Equipment Shops Building, Charleston, WV – Mechanical Engineer. Approximate 35,000 SF facility includes: 8 heavy vehicle repair bays; 6 light vehicle repair bays; 2 welding bays; wash bay; small engine shop; parts and tire storage areas; offices; 2 cranes serving repair bays; 1 crane serving entire weld shop area; freight elevator; perimeter fencing; keycard entry system; and generator. Structure features cavity walls with concrete panel backup, petroleum resistant concrete floors, and metal roofing over rigid insulation, metal decking, and bar joists.

Georgetown College Cooke Building Renovation, Georgetown, KY – Mechanical Engineer. Design-build renovation project of first floor of Cooke Building. Renovation of approximately 3,847 SF encompasses addition of walls and doors, flooring replacement, and replacing and/or adding a suspended ceiling, new HVAC system, as well as new lighting, and the addition of power, data, and communication outlets.

Patrick Baisden, PE, LEED AP BD+C | GRW Electrical Engineer



YEARS OF EXPERIENCE:

With GRW: 11

Total: 23

EDUCATION

B.S., Electrical Engineering, 1997,
University of Kentucky

REGISTRATION

Professional Engineer, Electrical:
KY, IN, WV (REDACTED), OR, NM

LEED Accredited Professional,
Building Design + Construction

NCEES Member allows
reciprocity with other states

Patrick's experience with electrical systems design has encompassed industrial, educational, and commercial projects, as well as numerous projects for GRW's water resources, and local, state, federal clients. His areas of expertise include electrical power distribution, communication systems, interior/site lighting, lighting control systems (network, dimming, and theatrical), and code compliance.

RELEVANT PROJECT EXPERIENCE

West Virginia ARNG Martinsburg Secure Facility, Martinsburg, WV –

Electrical Engineer. Renovations to 2-story area (6,200 SF per level) to provide new secure office space and related support spaces for specific using agency. Includes HVAC replacement; new interior finishes (including raised access flooring), structural roof deck and roofing system, elevator and fire stairs, building security and cameras, and site security fencing, sliding vehicular security gates, exterior parking; and site utility and storm drainage improvements.

West Virginia ARNG Camp Dawson Ranges at Briery Mountain, Kingwood, WV –

Electrical Engineer. Project includes design and construction of new Hand Grenade Familiarization Range and Live Fire Exercise Breach (LFEB) Training Range at Briery Mountain Training area to conform site to government standard Breach Range Design Requirements. Included design of access road to the remote site, electrical connections, breaching structures, open covered range operations and control shelter, storage building, dry latrine, covered viewing stands, and parking area.

West Virginia ANG 130th Airlift Wing Security Forces Squadron Facility Renovation and Expansion, Charleston, WV –

Electrical Engineer. Renovation of 5,395 SF SFS facility including addition of 2,500 SF administrative and training space to better serve unit.

West Virginia ANG 130th Airlift Wing Squadron Operations Facility Repair, Charleston, WV –

Electrical Engineer. Renovation and energy-efficient improvements to 25,765 SF facility. Selected design allows for efficient use of space; HVAC, electrical and fire protection systems upgrade; and roof repairs.

West Virginia Department of Highways District 1 Vehicle Maintenance and Equipment Shops Building, Charleston, WV –

Electrical Engineer. Approximate 35,000 SF facility includes: 8 heavy vehicle repair bays; 6 light vehicle repair bays; 2 welding bays; wash bay; small engine shop; parts and tire storage areas; offices; 2 cranes serving repair bays; 1 crane serving entire weld shop area; freight elevator; perimeter fencing; keycard entry system; and generator. Structure features cavity walls with concrete panel backup, petroleum resistant concrete floors, and metal roofing over rigid insulation, metal decking, and bar joists.

UK Nursing Building Renovation, Lexington, KY –

Electrical Engineer. Design services for Phase II renovation of approximately 8,117 SF on sixth-floor of University's Nursing Building. Fit-up project includes 144-seat computer classroom used for computerized exams and lectures, IT office and reading room with seating for 42. Also included processor room for computer and CCTV surveillance equipment, as well as corridor system to secure floor after hours.

Dave Hoy, PE | GRW Structural Engineer



YEARS OF EXPERIENCE:

With GRW: 14

Total: 14

EDUCATION

B.S., Civil Engineering, 2006,
West Virginia University

REGISTRATION

Professional Engineer: WV
(██████████), KY, IN, TN, NC, OH,
VA

PROFESSIONAL AFFILIATIONS AND TRAINING

American Society of Civil
Engineers

RELEVANT PROJECT EXPERIENCE

West Virginia Department of Highways District 1 State Road Commission Building, Charleston, WV – Structural Engineer. Renovation of historic 40,000 SF State Road Commission Building to house offices and support facilities for local highway district.

West Virginia Department of Highways District 1 Vehicle Maintenance and Equipment Shops Building, Charleston, WV – Structural Engineer. Approximate 35,000 SF facility includes: 8 heavy vehicle repair bays; 6 light vehicle repair bays; 2 welding bays; wash bay; small engine shop; parts and tire storage areas; offices; 2 cranes serving repair bays; 1 crane serving entire weld shop area; freight elevator; perimeter fencing; keycard entry system; and generator.

West Virginia ANG 167th Airlift Wing C-17 Maintenance Hangar Modifications, Martinsburg, WV – Structural Engineer. Fast-track design of maintenance hangar modifications required to meet 167AW's change in mission from C-5 to C-17 aircraft.

West Virginia ANG 167th Airlift Wing C-17 Fuel Cell Hangar Modifications, Martinsburg, WV – Structural Engineer. Fast-track design of fuel cell hangar modifications required to meet 167AW's change in mission from C-5 to C-17 aircraft.

West Virginia ANG 167th Airlift Wing C-17 Corrosion Control Hangar Modifications, Martinsburg, WV – Structural Engineer. Fast-track design of corrosion control hangar modifications required to meet 167AW's change in mission from C-5 to C-17 aircraft.

West Virginia ANG 167th Airlift Wing C-17 Composite Material Shop, Martinsburg, WV – Structural Engineer. Fast-track design of composite material shop to the existing corrosion control hangar required to meet 167AW's change in mission from C-5 to C-17 aircraft.

Ritchie County School District Smithville Elementary School Renovation/Addition, Smithville, WV – Structural Engineer. Demolition of two buildings in existing four-building complex and design of new classroom wing and kitchen addition adjacent to remaining buildings to create single facility under one roof. Also included access control and improved security, new HVAC systems, compliance with ADA/ABA requirements throughout, and renovated restrooms.

Lewis County Schools Jane Lew Elementary School Addition, Jane Lew, WV – Structural Engineer. Addition includes five new classrooms, updated officer suite, and new building entrance and bus loop, along with new HVAC system for addition. Also includes new sprinkler and fire alarm system, ceilings, floor finishes, and lighting for entire school, as well as renovated toilet rooms.

Clay County BOE Clay County High School Renovations, Clay, WV – Structural Engineer. Design and construction administration phase services for gymnasium and locker rooms, commons area, and HVAC system renovations; door/window replacement; and security/communications system improvements.

Harvey Helm, PE, LEED AP, PLS | GRW Civil Engineer



YEARS OF EXPERIENCE:

With GRW: 47

Total: 47

EDUCATION

B.S., Civil Engineering, 1977,
University of Kentucky

REGISTRATION

Professional Engineer:

WV [REDACTED], KY, TN, IN, OH,
MD, MS, GA, NC, AL, AR, NY, VA,
NM, AZ, TX

LEED Accredited Professional

Professional Land Surveyor: KY

PROFESSIONAL AFFILIATIONS AND TRAINING

National Society of Professional
Engineers

Kentucky Society of Professional
Engineers

Soil and Water Conservation
Society

RELEVANT PROJECT EXPERIENCE

West Virginia ANG 130th Airlift Wing Communications Facility,

Charleston, WV – Civil Engineer. Design (Type A and B, 65%) for a new \$3.6 million, 13,100 SF Communications Facility at Yeager Airport in Charleston for West Virginia Air National Guard, designed for LEED Silver rating, to provide a centrally located common user communications system for both intra-base and off-base communications, with ground control of all ground point-to-point contact and air to ground point-to-point contact (such as radio, telephone, DISNET, etc.). Design paused at 65% to enable base's master plan and re-prioritize new capital improvements.

Kentucky ARNG Joint Armed Forces Reserve Center and Field

Maintenance Shop Complex, Bluegrass Army Depot, Richmond, KY –

Civil Engineer. Design Criteria Consultant for design-build delivery of a new \$19.2 million complex encompassing a 63,250 SF Armed Forces Reserve Center (AFRC) and a 31,725 SF Field Maintenance Shop (FMS), both designed to meet LEED Silver sustainable design rating. Provided RFQ and RFP development, assistance in short-listing and final selection of the design/build team, construction administration and commissioning of the new facilities that included administrative, training, assembly, storage, and vehicle workbays.

Michigan ARNG Design & Renovation of 8 Facilities at Ft. Custer, Camp

Grayling, Grayling Army Airfield and Midland, MI – Civil Engineer.

Architectural and engineering design for 8 "fast track" projects for Michigan Army National Guard scattered throughout the state, including: new Bachelor Officer Quarters at Fort Custer, Camp Grayling and Grayling AAF; an addition to the Range Control Building and a new Logistics Facility at Fort Custer; a new General Officers BOQ at Camp Grayling; a new Company Operations Facility at Grayling AAF; and kitchen and other renovations to an existing armory in Midland that required lead and asbestos abatement.

Fort Knox Warriors in Transition Headquarters Building, Fort Knox, KY –

QA/QC. Design services (including BIM model) for design-build of new 7,000 SF Warriors in Transition Headquarters Building to meet LEED Silver design criteria. Construction is single-story load bearing masonry with truss roof framing and shingle roofing. Sustainable design features included geothermal heat pump system, 100% LED lighting, manual on/automatic vacancy off lighting controls, and automatic daylight harvesting in rooms with south facing windows. Increased roof structure supports future installation of solar panels, making building zero energy ready.

West Virginia ANG Yeager Airport Pavement Design, Charleston, WV –

Project Manager. Pavement investigation/analysis, subsurface investigation, and design for grade, drain and surfacing construction plans for all air base pavements. Included replacement of approximately 9,000 SY of taxiway and 33,000 SY of apron pavement; 27,000 SY of new perimeter taxiway for future expansion as an aircraft apron; and 10,600 SY of new apron/holding pad capable of providing two C-130 H aircraft for preflight check operations.

Blue Grass Army Depot Personnel Support Facility, Richmond, KY – Civil Engineer. Design-build project of approximately 7,500 SF, pre-engineered metal building including space for field office activities, conference rooms, locker and changing areas, and laundry and storage.

West Virginia ANG 167th Airlift Wing C-5 Apron Repair, Martinsburg, WV – Project Manager. Evaluation and design services to repair fractured/heaved C-5 apron caused by poorly draining base and sub base. Pavement repair of approximately 1,755 SY included demolition and removal of fractured and heaved pavement down to below original base and sub base, compaction of new material, placing of sub base and base and concrete pavement parking apron, asphalt shoulder stabilization, all constructed to support C-5 aircraft. Utility and site improvements were also included.

West Virginia ANG 167th Airlift Wing Munitions Storage, Martinsburg, WV – Project Manager. New munitions inspection building, five magazines (all pre-manufactured modular units), new concrete pads (2,865 SF), all-weather pavement (5,566 SF) for vehicular access, gate/fencing, utilities, exterior lot lighting, communications, and security for the munitions area.

West Virginia ARNG Camp Dawson Ranges at Briery Mountain, Kingwood, WV – Civil Engineer. Project includes design and construction of new Hand Grenade Familiarization Range and Live Fire Exercise Breach (LFEB) Training Range at Briery Mountain Training area to conform site to government standard Breach Range Design Requirements. Included design of access road to the remote site, electrical connections, breaching structures, open covered range operations and control shelter, storage building, dry latrine, covered viewing stands, and parking area.

Frankfort Plant Board Administration Building, Frankfort, KY – Civil Engineer. New three-level, 46,000 SF administration building on 30-acre site providing consolidated facility for administrative offices (accounting, human resources, management, IT, dispatch, customer service), as well as exterior drive through tellers, board/community room and designated shelter area. Building construction includes primarily architectural precast concrete panels with design elements such as structural silicone glazing systems and aluminum panels.

SECTION 4.0

Approach & Methodology for Meeting Goals & Objectives

4.0 Approach & Methodology for Meeting Goals & Objectives

The West Virginia Department of Administration along with the West Virginia Army National Guard are embarking on an important renovation project at the Joint Forces Headquarters (JFHQ) building in Charleston, WV.

With a focus on the TAG Wing area, this renovation project is important because the space is needed to support elements of the WVARNG command.

You've stated the area has sustainment issues that need to be addressed both aesthetically and mechanically.

We understand your primary goals and objectives for this project include:

- Complete design for full renovation – architecture and engineering – to prepare construction bid documents for West Virginia State Purchasing

Of particular interest are the following:

- Renovation of office areas
- Complete restroom renovations
- New LED lighting for the areas

We also understand we will be responsible for:

- Submitting drawings at 35%, 65%, 95% and 100%, as well as revising and submitting costs estimates at each phase
- Breakdown of costs will address sustainment, restoration, modernization, and energy
- Researching and investigating the location of existing utilities and providing drawings and specifications of any and all utility changes
- Providing construction bid services and administrative services



An Approach Based on Respect & Clarity

Our approach to accomplishing these goals and objectives for your project is straightforward:

- 1) assemble the best and brightest design talent with **knowledge of the national guard/military projects**;
- 2) bring an **open mind** and **fresh perspectives**; and
- 3) **remain accountable** to you throughout the process for cost control/budget.

The relationship between you and your chosen design consultant is critically important. The cornerstone of the GRW design approach is collaboration, which we believe is key this relationship. Communicating in an open dialog, where ideas can be freely expressed and considered, helps to vest everyone in the project's success, and is a vital prerequisite to ensuring buy-in from all project stakeholders.

A Project Team You Can Count On



Leading our team will be GRW's Vice President in charge of architecture, **Shane Lyle**. He'll provide overall supervision for the design team and be directly involved with you through every stage of the project.

Shane regularly manages teams on projects ranging in scope from \$2.3 million to as high as \$182 million. We believe you will find him a knowledgeable architect and a valuable partner. Shane's logical and methodical approach will provide a steady hand guiding the team and the WVARNG through the design process to a successful conclusion. He'll work to balance vision with a realistic and practical assessment of cost and schedule.

In addition to Shane, our architectural services are augmented by **Aaron Nickerson, AIA, LEED Green Associate** and **Jon Rollins** who bring a balance of WVARNG familiarity and the latest architectural design skills.

Closely supporting Aaron to ensure efficiency, effectiveness, and code compliance of mechanical systems will be **Cory Sharrard**. Our electrical engineer **Patrick Baisden** will apply his experience with power, lighting, and communications systems. Both will ensure code compliance and well-coordinated system upgrades.



Our in-house structural engineer, **David Hoy**, is based in West Virginia. **Mike Aslaon** will address any site utilities issue for your project. All four have the experience you need and are accustomed to working on complex, systems-oriented, code-oriented projects. They all also have experience with WV National Guard projects.

Kickoff/Charrette

As part of the first phase of the project, we'll hold an initial meeting with you and the primary project stakeholders to discuss in detail your project goals,

options for accomplishing those goals, and budget and schedule requirements for the work. Following this meeting, we issue a written record of our discussions.



Existing Conditions

After we gain a full understanding of your desires and goals through the kickoff, we also will complete an examination of the existing conditions. We will take stock of the existing equipment, through an examination of existing documentation and field observations.

At the conclusions of this step we will create a report that outlines the condition of the existing building components and systems that will be affected by the

work of this project. This information will include the identification of existing hazardous materials.

Again, we will meet with you to determine likes, dislikes, what's working, and what's not.

This will give us a foundation as we move forward.

We'll use all information we collect to begin an outline for recommendations – including initial cost estimates

SECTION 5.0 | **Project Management &
Quality/Cost Control**

5.0 Project Management & Quality/Cost Control

Project Management

Our straightforward approach continues throughout the management of the entire project.

Schematic Design | 35%

Using the information from the Kickoff/Charrette and analysis of existing conditions, we continue through the A1/10% phase – and move into the A2/35% design phase. At this time we present the **schematic design** concept to you through the use of drawings, product information sheets, written narratives and an initial cost estimate. After your review of the material, we will meet together to go over the design review comments, review the budget, and document any

desired revisions. We will repeat this process as needed to reach an acceptable solution that meets your goals and budget.

We will also discuss with you potential construction phasing opportunities, if/as needed. We will document each step of the process with thorough meeting minutes.

Design Development, Pre-final & Final Construction Documents | 65%, 95% & 100%

Using the approved **schematic design** documents, the design team will proceed with **design development** docs which likewise, are issued for Owner/User review and approval before proceeding to **pre-final construction documents** and completion of final construction documents for bidding.

remains within budget. We will also reconfirm final decisions on materials, equipment, and finishes.

If needed, we will incorporate a phasing plan into the final documents to minimize the impact of construction on the facility's day-to-day operations.

The **estimate of probable cost** is updated at each design review submittal to check the estimate against the drawings and specs, to make sure the work

The **final construction documents** will consist of drawings, specifications, and instructions to bidders. The completed documents are then ready for bidding.

Construction Bid Services | Construction Phase

The same Project Manager you worked with throughout design continues as your point of contact through the entire construction process. Also, the original designers are the team we use to review shop drawings, attend meetings and observe the work in progress. This provides a continuity that benefits the project, and is an integral part of our quality control process.



GRW manages and tracks our construction administration and resident inspection responsibilities using **Newforma®** Project Center (project information management software); this

GRW and its subsidiary Chapman Technical Group (offices in St. Albans and Buckhannon, WV) have extensive experience in developing projects through the WV Purchasing Division. For many years, we have designed, bid, and constructed numerous, major Division of Natural Resources projects throughout the state. The West Virginia Division of Highways (DOH) recently began working with the State's Purchasing Division for building projects, and our \$10 million equipment shop building for District One was the first project that the DOH bid through the WV Purchasing Division. Our knowledge and experience of the State's purchasing procedures made this an easy transition for all stakeholders. Although every agency has its own particulars with regard to bidding projects, our experience with the West Virginia Purchasing Division will help ensure effective and efficient project delivery.

ensures that the process is transparent to all parties. Newforma has built-in modules specifically developed for the A/E industry. **Using this system, Owners, Design Team, and Contractor/GC all have access to real-time logs showing the current status of all construction-related activities.**

During project construction, GRW provides consultation and advice on construction matters including visits to the site to check work progress and quality and to evaluate general conformance with the contract documents.

In addition, we review equipment and materials related to the submittals. Once reviewed, copies of submittals, with comments, are distributed to the team members (Owner, Contractor, etc.) for appropriate action. A comprehensive submittal file is maintained in the Newforma software.

Our team members review and recommend progress payments to the construction contractor based on observation of the work in-place. Project costs automatically update for tracking of project budgets.

Our team performs semifinal inspections of the project and creates a list of work yet to complete prior to the final technical inspection. Upon completion, we will



provide a set of record drawings based on mark-ups from the contractor, to show field changes made during construction. These drawings are reviewed by the Project Manager and serve as the record drawings for the project and are suitable for facility management.

Changes

The GRW project team will not approve any change that affects project cost, time or quality without your approval, and then only after a thorough discussion and vetting of the reasons for the change. Contractor cost proposals are carefully reviewed to ensure the proposed costs are fair and reasonable. When needed, GRW will negotiate on your behalf to reach an equitable solution.

Flexibility

These procedures are not cast in concrete, as GRW prides itself on being an organization which seeks to simplify and expedite procedures that can impede the work and stifle creative people. Sometimes these procedures are streamlined for smaller projects, and sometimes they are more formalized for larger projects but at all times they remain flexible to accommodate the needs of our client's organizations. We want you to be satisfied with the quality of your facility: the bottom line is that GRW cares a great deal about securing repeat business with our clients.

Quality & Cost Control

At GRW, cost control, scheduling and value engineering are daily components of design rigor. Project planning decisions are assessed in weekly project meetings with all A/E disciplines to confirm budgets and schedules will be met. During these sessions, project status is discussed to direct adequate resources to meet the project schedule. The issues tracking list we create is reviewed to ensure problems are resolved before they impact the schedule or budget. Our vision as your full-service architectural and engineering design firm is to partner with you to simplify the design and construction process for the results you intend.

Quality Control

Shane Lyle, Project Manager, has primary responsibility for the daily management and coordination of the project team. With over 35 years of experience, he has a clear understanding of the most effective methods for maintaining the programming, planning, and design schedule.

COMMUNICATION: At GRW, our highest project-management priority is focused on maintaining clear and effective communication throughout the entire project. This focus includes our communication with you and your stakeholders, with the Contractor, and with our internal design team members. Key to this effort is our use of Newforma project information management software, which allows the storage, sharing, and retrieval of project information both internally and externally.

PROJECT MANAGER: Our process begins initially with the assignment of an experienced Project Manager who is responsible for organizing the design effort and who manages the Quality Control process. While a project design team may involve many different departments or groups, the Project Manager has the ultimate authority over the project at all times.

A key element in effective Quality Assurance/Quality Control (QA/QC) is the use of regularly scheduled progress meetings. A kickoff meeting between key members of GRW's proposed project team and your management and staff will be held to ensure a common understanding of the goals and objectives among all project partners. These issues will be

reviewed and the work plan will be discussed in detail. Regular meetings will then be scheduled throughout the project to report on project progress and to review technical issues. These meetings provide a forum for discussing concerns and ideas. The assigned Project Manager is the primary conduit for communication between you and the design team.

TEAM MANAGEMENT: QA/QC is enhanced at GRW since most design disciplines are in-house. Because of this, scheduling internal team meetings or over-the-shoulder reviews is greatly simplified. On this project, the Project Manager will conduct weekly team meetings with the design team members to facilitate coordination of design issues. Any design problems are identified along with a path for their correct resolution. A checklist managed by the Project Manager is used to track the resolution of issues from meeting-to-meeting.

SCHEDULE MANAGEMENT: No QA/QC process can succeed without allocating sufficient time for internal review. The Project Manager will develop a proposed internal design schedule at the beginning of the project for appropriate time for internal review. These internal reviews typically occur prior to normal design submittal dates for the project.

QUALITY CONTROL REVIEWS: QC reviews at GRW includes desk-to-desk, task-to-task, and person-to-person crosschecking of work that takes place on a regular basis within the company. Impromptu meetings to discuss specific issues take place as often as needed. The peer review personnel are determined by the Project Manager at the beginning of the project, and remain consistent throughout the course of the project.

QUALITY ASSURANCE: A major advantage of providing all design disciplines within the same firm is the opportunity to streamline communication and work flow resulting in a well-coordinated set of construction documents. By close collaboration throughout the design stage, ideas can be quickly discussed and evaluated to understand impacts on cost, schedule and effectiveness.

PROGRAMMATIC OVERSIGHT: The Project Manager is tasked with maintaining oversight of the project as the design develops, to insure that the design decisions are in keeping with the programmatic criteria developed with you at the project's initiation. At each interim submittal, the Project Manager takes a step back, and looks at the project in broad terms to insure that the design is progressing in accordance with the original criteria.

Cost Control

PROJECT BUDGET ACCOUNTABILITY: Government officials are accountable to the public for the expenditure of public monies. The GRW team understands this obligation and develops a project design that is cost-effective and delivers an efficient and appropriate use of funds assigned to the military. Rarely do projects have sufficient budget to accommodate everything on the programmatic *wish list*. Reconciling the program against the project budget is done early and often in order to guide the

project to a successful conclusion. GRW approaches this process in a pragmatic and open manner. This subject will be on the agenda of every project meeting we have with you for open and frank discussion so that everyone is kept abreast of any potential concerns. Prioritizing the program relative to the budget can be a difficult task, with different stakeholders sometimes at odds over how to resolve differences of opinion. GRW excels at guiding this process and helping you to resolve these differences.

GRW has a strong history of successful estimating of projects, and our design experts will draw upon this knowledge during the development of our construction cost estimates.

We can also develop a list of possible value-engineering for consideration to help manage construction costs and give you the most construction value for your dollar.



GRW provided design and construction phase services for the WV ANG's 130th Airlift Wing Building 107 Renovation.

With a construction budget of \$5M, the awarded bid was \$4,941,290, and the final construction cost was \$4,991,876 (within 1% of awarded bid).



SECTION 6.0 | References

6.0 References

GRW understands that professional consulting begins as a relationship built on trust. We fully understand the importance of gaining your respect, proving our worth, and being there long after your successful project is completed. With repeat clients providing more than 90 percent of GRW's current workload, we believe this is a testament to our business philosophy of providing close, personal, high quality service. We invite you to contact our references to verify GRW's performance.

West Virginia Army National Guard

MAJ Robert Kincaid, Jr.

(304) 791-4459

robert.j.kincaid.mil@mail.mil

Matthew T. Reynolds

(304) 561-6568c

matthew.t.reynolds18nfg@mail.mil

West Virginia Air National Guard

Capt. Harry Netzer, Deputy BCE

(304) 341-6649

harry.g.netzer.mil@mail.mil

Maj. Emerson C. Slack, Deputy BCE

(304) 616-5233

emerson.c.slack.mil@mail.mil

Federal Bureau of Prisons

Judah Organic, Design Compliance

Programs Manager

(202) 514-9566

jorganic@bop.gov

Frankfort Plant Board, Frankfort, KY

Sharmista Dutta, PE, Project Manager

(502) 352-4407

sdutta@fewpb.com

(New Administration Building Shown Right)



SECTION 7.0 | **West Virginia EOI Forms**



Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

**State of West Virginia
 Centralized Expression of Interest**

Proc Folder: 944005			Reason for Modification:
Doc Description: JFHQ TAG Wing Renovation Design			
Proc Type: Central Purchase Order			
Date Issued	Solicitation Closes	Solicitation No	Version
2021-10-05	2021-10-21 13:30	CEOI 0603 ADJ2200000006	1

BID RECEIVING LOCATION

BID CLERK
 DEPARTMENT OF ADMINISTRATION
 PURCHASING DIVISION
 2019 WASHINGTON ST E
 CHARLESTON WV 25305
 US

VENDOR

Vendor Customer Code:

Vendor Name :

Address :

Street :

City :

State : **Country :** **Zip :**

Principal Contact :

Vendor Contact Phone: **Extension:**

FOR INFORMATION CONTACT THE BUYER
 David H Pauline
 304-558-0067
 david.h.pauline@wv.gov

Vendor Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

The West Virginia Purchasing Division, for the agency, the West Virginia Army National Guard, Construction and Facilities Management Office, is soliciting Expressions of Interest from qualified firms to provide professional design services to develop construction documents to renovate the TAG Wing of the Joint Forces Headquarters (JFHQ) building in Charleston, WV, per the attached documentation.

INVOICE TO	SHIP TO
ADJUTANT GENERALS OFFICE 1707 COONSKIN DR CHARLESTON WV 25311 US	ADJUTANT GENERALS OFFICE 1703 COONSKIN DR CHARLESTON WV 25311-1085 US

Line	Comm Ln Desc	Qty	Unit Issue
1	JFHQ TAG Wing Renovation Design		

Comm Code	Manufacturer	Specification	Model #
81101508			

Extended Description:
 Provide professional architectural and engineering design services per the attached documentation.

SCHEDULE OF EVENTS

<u>Line</u>	<u>Event</u>	<u>Event Date</u>
-------------	--------------	-------------------



Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

**State of West Virginia
 Centralized Expression of Interest**

Proc Folder: 944005			Reason for Modification: Addendum No. 1
Doc Description: JFHQ TAG Wing Renovation Design			
Proc Type: Central Purchase Order			
Date Issued	Solicitation Closes	Solicitation No	Version
2021-10-06	2021-10-27 13:30	CEOI 0603 ADJ2200000006	2

BID RECEIVING LOCATION

BID CLERK
 DEPARTMENT OF ADMINISTRATION
 PURCHASING DIVISION
 2019 WASHINGTON ST E
 CHARLESTON WV 25305
 US

VENDOR

Vendor Customer Code:

Vendor Name :

Address :

Street :

City :

State : **Country :** **Zip :**

Principal Contact :

Vendor Contact Phone: **Extension:**

FOR INFORMATION CONTACT THE BUYER
 David H Pauline
 304-558-0067
 david.h.pauline@wv.gov

Vendor Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

Addendum No. 1

To correct the bid opening date on solicitation documents.

Bid opening is moved to October 27, 2021 at 1:30 pm

No other changes.

INVOICE TOADJUTANT GENERALS OFFICE
1707 COONSKIN DRCHARLESTON WV 25311
US**SHIP TO**ADJUTANT GENERALS OFFICE
1703 COONSKIN DRCHARLESTON WV 25311-1085
US

Line	Comm Ln Desc	Qty	Unit Issue
1	JFHQ TAG Wing Renovation Design		

Comm Code	Manufacturer	Specification	Model #
81101508			

Extended Description:

Provide professional architectural and engineering design services per the attached documentation.

SCHEDULE OF EVENTS

<u>Line</u>	<u>Event</u>	<u>Event Date</u>
-------------	--------------	-------------------

	Document Phase	Document Description	Page
ADJ2200000006	Draft	JFHQ TAG Wing Renovation Design	3

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

SOLICITATION NUMBER: CEOI ADJ2200000006
Addendum Number: 1

The purpose of this addendum is to modify the solicitation identified as (ADJ2200000006) to reflect the change(s) identified and described below.

Applicable Addendum Category:

- Modify bid opening date and time
- Modify specifications of product or service being sought
- Attachment of vendor questions and responses
- Attachment of pre-bid sign-in sheet
- Correction of error
- Other

Description of Modification to Solicitation:

1. To change bid opening date to October 27, 2021, at 1:30 pm
2. No other changes

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CEOI ADJ2200000006

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Company

Authorized Signature

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

**ADDITIONAL TERMS AND CONDITIONS
(Architectural and Engineering Contracts Only)**

1. PLAN AND DRAWING DISTRIBUTION: All plans and drawings must be completed and available for distribution at least five business days prior to a scheduled pre-bid meeting for the construction or other work related to the plans and drawings.

2. PROJECT ADDENDA REQUIREMENTS: The Architect/Engineer and/or Agency shall be required to abide by the following schedule in issuing construction project addenda. The Architect/Engineer shall prepare any addendum materials for which it is responsible, and a list of all vendors that have obtained drawings and specifications for the project. The Architect/Engineer shall then send a copy of the addendum materials and the list of vendors to the State Agency for which the contract is issued to allow the Agency to make any necessary modifications. The addendum and list shall then be forwarded to the Purchasing Division buyer by the Agency. The Purchasing Division buyer shall send the addendum to all interested vendors and, if necessary, extend the bid opening date. Any addendum should be received by the Purchasing Division at least fourteen (14) days prior to the bid opening date.

3. PRE-BID MEETING RESPONSIBILITIES: The Architect/Engineer shall be available to attend any pre-bid meeting for the construction or other work resulting from the plans, drawings, or specifications prepared by the Architect/Engineer.

4. AIA DOCUMENTS: All construction contracts that will be completed in conjunction with architectural services procured under Chapter 5G of the West Virginia Code will be governed by the attached AIA documents, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein. The terms and conditions of this document shall prevail over anything contained in the AIA Documents or the Supplementary Conditions.

5. GREEN BUILDINGS MINIMUM ENERGY STANDARDS: In accordance with West Virginia Code § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July 1, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Name, Title)

(Printed Name and Title)

(Address)

(Phone Number) / (Fax Number)

(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

(Company)

(Authorized Signature) (Representative Name, Title)

(Printed Name and Title of Authorized Representative)

(Date)

(Phone Number) (Fax Number)

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, 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: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. 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.

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.

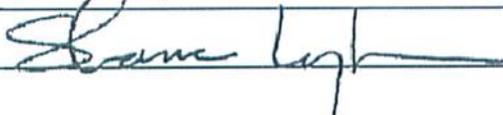
"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"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 exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: GRW Engineers, Inc. (GRW)

Authorized Signature:  Date: 10/27/2021

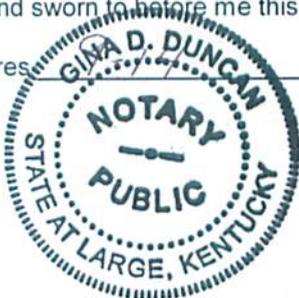
State of Kentucky

County of Fayette, to-wit:

Taken, subscribed, and sworn to before me this 27th day of October, 2021.

My Commission expires GINA D. DUNCAN, 2023

AFFIX SEAL HERE



NOTARY PUBLIC

629771
Gina D. Duncan