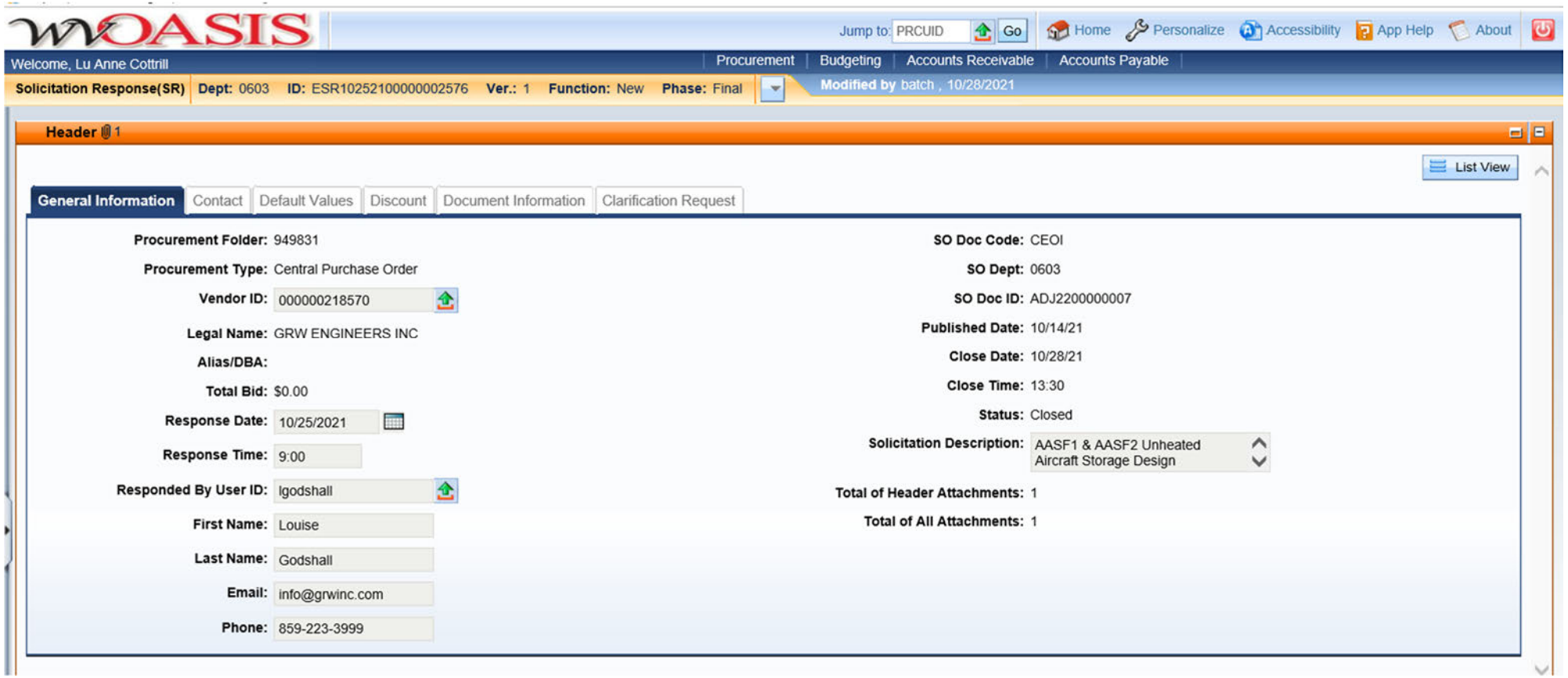
The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.


WVOASIS
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About
Welcome, Lu Anne Cottrill
Procurement
Budgeting
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Solicitation Response(SR) Dept: 0603 ID: ESR10252100000002576 Ver.: 1 Function: New Phase: Final
Modified by batch , 10/28/2021
Header 1
List View
General Information
Contact
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Document Information
Clarification Request
Procurement Folder: 949831
Procurement Type: Central Purchase Order
Vendor ID: 000000218570
Legal Name: GRW ENGINEERS INC
Alias/DBA:
Total Bid: $0.00
Response Date: 10/25/2021
Response Time: 9:00
Responded By User ID: lgodshall
First Name: Louise
Last Name: Godshall
Email: info@grwinc.com
Phone: 859-223-3999
SO Doc Code: CEOI
SO Dept: 0603
SO Doc ID: ADJ2200000007
Published Date: 10/14/21
Close Date: 10/28/21
Close Time: 13:30
Status: Closed
Solicitation Description: AASF1 & AASF2 Unheated Aircraft Storage Design
Total of Header Attachments: 1
Total of All Attachments: 1

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

State of West Virginia
Solicitation Response

Proc Folder:	949831
Solicitation Description:	AASF1 & AASF2 Unheated Aircraft Storage Design
Proc Type:	Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2021-10-28 13:30	SR 0603 ESR10252100000002576	1

VENDOR

000000218570
GRW ENGINEERS INC

Solicitation Number: CEOI 0603 ADJ2200000007

Total Bid: 0 **Response Date:** 2021-10-25 **Response Time:** 09:00:50

Comments:

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

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	AASF1 & AASF2 Unheated Aircraft Storage Design				0.00

Comm Code	Manufacturer	Specification	Model #
81101508			

Commodity Line Comments:

Extended Description:

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

EXPRESSION OF INTEREST

AASF1 and AASF2 Unheated Aircraft Storage Design

West Virginia Department of Administration | West Virginia Army National Guard

October 28, 2021

Solicitation No.
CEOI 0603 ADJ2200000007

engineering | architecture | geospatial

GRW | 801 Corporate Drive | Lexington, KY 40503 | 859.223.3999

engineering | architecture | geospatial

Expression of Interest

Architecture & Engineering Services
AASF1 & AASF2 Unheated Aircraft Storage

CEOI 0603 ADJ2200000007

WV Department of Administration
WV Army National Guard

Table of Contents

COVER LETTER

GRW | engineering | architecture | geospatial
801 Corporate Drive | Lexington, KY 40503
859.223.3999 | www.grwinc.com

October 25, 2021

Mr. David Pauline, Senior Buyer
Department of Administration, Purchasing Division
State of West Virginia
2019 Washington Street East
Charleston, WV 25305-0130

RE: AASF1 & AASF2 Unheated Aircraft Storage Design
Solicitation No.: CEOI 0603 ADJ2200000007

Dear Mr. Pauline and Selection Committee Members:

Achieving the goals you've established for improving the AASF facilities in Williamstown and Wheeling is important for the West Virginia Army National Guard's mission. GRW would like to work with you on this project – and we believe we offer you the right experience and expertise to successfully delivery the results you require.

Experience and Familiarity. GRW is a full-service A/E design consulting firm that has been working with clients like you on similar projects throughout the region for more than 57 years. Our project team's experience with the National Guard in West Virginia is substantial and ranges from projects at West Virginia ARNG Martinsburg to the West Virginia ANG's 130th Airlift Wing and the 167th Airlift Wing. **See Sections 2.0 and 3.0.**

GRW and its subsidiary Chapman Technical Group (offices in St. Albans and Buckhannon, WV) also have extensive experience in developing projects through the WV Purchasing Division. For example, we have designed, bid, and constructed numerous, major Division of Natural Resources projects throughout the state, as well as projects for the Department of Highways. Although every agency has its own particulars with regard to bidding projects, our experience with the WVARNG and the State's Purchasing Division will help ensure effective and efficient project delivery.

We Are Committed to Your Success. Taking care to meet your goals for your budget and schedule is a priority, as it is on every GRW project. The ultimate measure of success is how well the completed projects meet your needs and aspirations. To this end, our project team is committed to establishing an inclusive, methodical and logical approach to the design process. **See Sections 4.0 and 5.0.**

Thank you for your consideration and for the opportunity to work with you. We look forward to the next step in your selection process where we can present our additional ideas toward the successful completion of your project.

If you have questions about our qualifications or any other items, please feel free to call or email.

Respectfully submitted,

Shane Lyle, AIA, LEED AP BD+C
GRW Architect / Vice President

859-223-3999, ext. 251
slyle@grwinc.com

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.

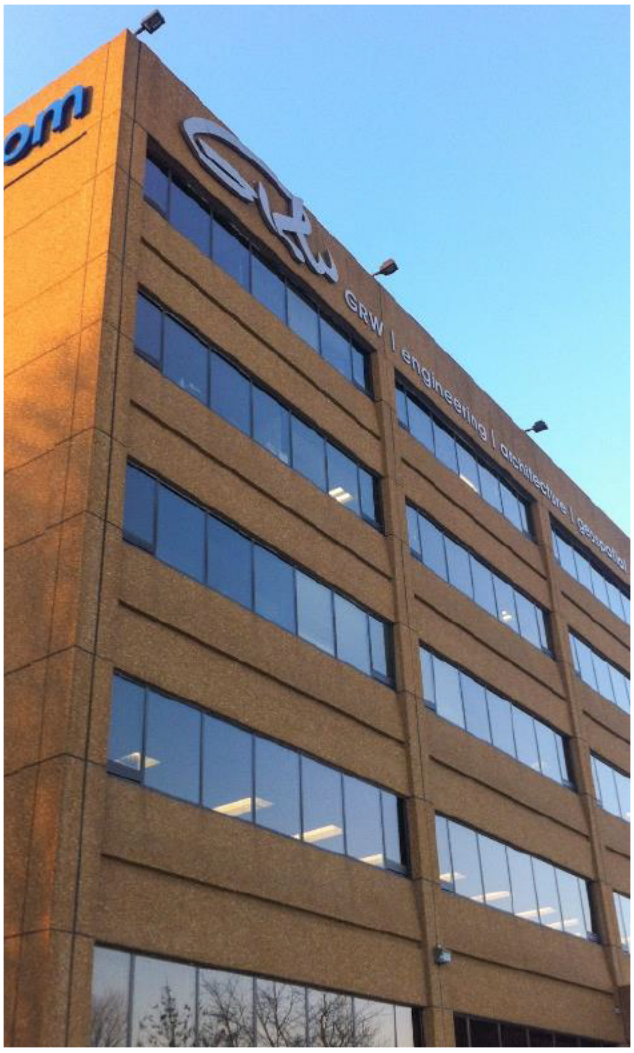
At GRW, we have the ability to address your projects from nearly every angle. Because of our in-house capabilities, we can more easily tailor our approach allowing our teams to deliver more quickly, with greater potential for more accurate cost estimates, and fewer change orders.

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 a hands-on approach, as needed, from planning through construction phases.

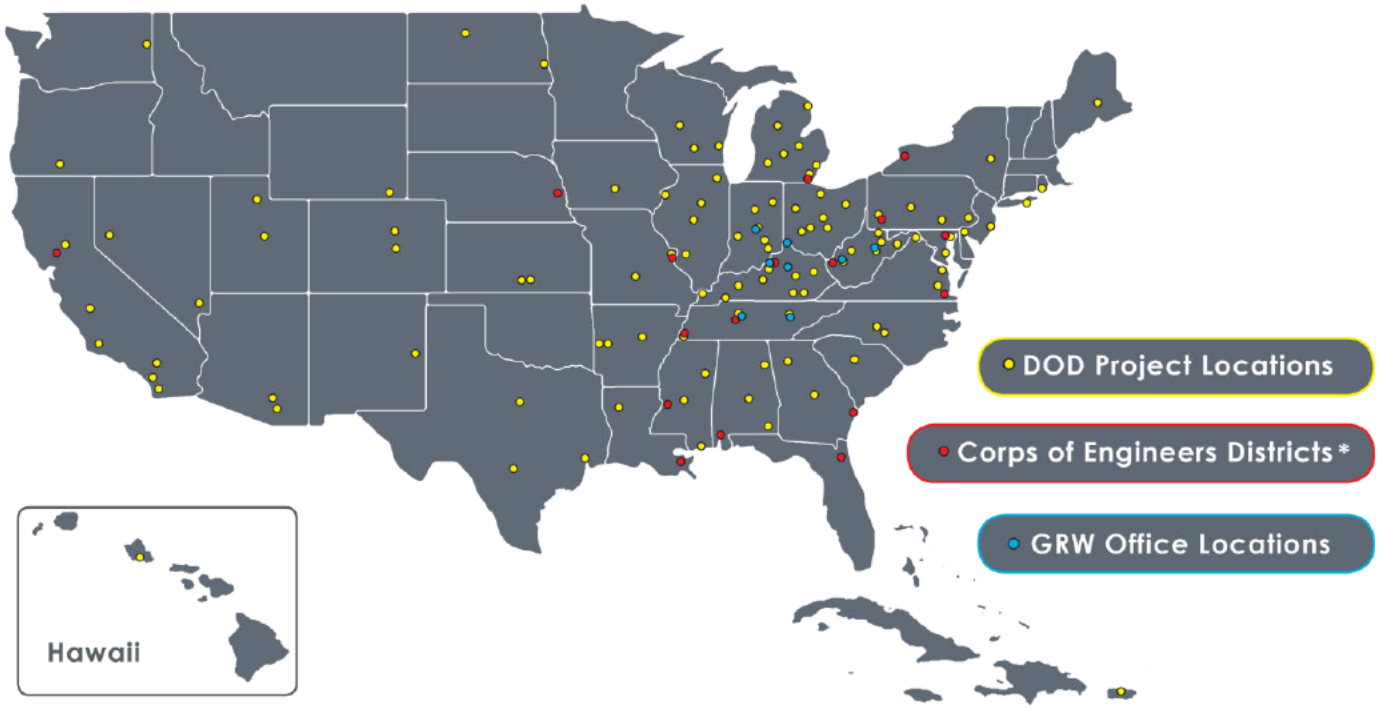
At GRW, we know that business relationships are built on trust – the ability to trust your business partner to deliver on their promises. By choosing GRW for your professional services, you are choosing a company that delivers on our promises. You can expect our full attention starting on day one, and 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.



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 the West Virginia Army and 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 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 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 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 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 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 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 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 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 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 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 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/NGB 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 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 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 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 ATFP 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 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 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, Deputy Base Civil Engineer, (304) 616-5233, emerson.c.slack.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, Deputy Base Civil Engineer, (304) 616-5233, emerson.c.slack.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 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 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

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

SECTION 2.0 | Project Experience

2.0 Project Experience

167th Airlift Wing C-17 Hangars and Maintenance Shop Modifications

West Virginia Air National Guard | Martinsburg, WV

The West Virginia Air National Guard selected GRW to design modifications to the 167 Air Wing's 79,421 SF Corrosion Control Hangar; 80,700 SF Fuel Cell Hangar; 80,751 SF Maintenance Hangar; and 2,744 SF Composite Material Shop to support its mission change from C-5 to C-17 aircraft.

- **Corrosion Control Hangar** To adequately perform aircraft wash activities, facility components such as the fall protection, air systems, drop lights, drop electrical outlets, fire protection foam generators, water, aircraft jacking points, and other maintenance support systems require adjustment to accommodate the new aircraft. The foam generators and sprinkler piping will be reconfigured, and the system updated to meet current Air Force (AF) and ANG fire suppression criteria.
- **Fuel Cell Hangar** To adequately perform maintenance activities, facility components such as the fall protection, air systems, drop lights, drop electrical outlets, fire protection foam generators, water, aircraft jacking points, exhaust, and other maintenance support systems require adjustment to accommodate the new aircraft. The foam generators and sprinkler piping will be reconfigured, and the system updated to meet current Air Force (AF) and ANG fire suppression criteria.
- **Maintenance Hangar** To adequately perform general purpose maintenance activities, facility components such as the fall protection, air systems, drop lights, drop electrical outlets, fire protection foam generators, water, aircraft jacking points, and other maintenance support systems require adjustment to accommodate the new aircraft. The foam generators and sprinkler piping will be reconfigured, and the system updated to meet current Air Force (AF) and ANG fire suppression criteria.
- **Composite Material Shop** The existing facility was designed to repair fiberglass and aluminum parts. The new C-17 is composed of carbon fiber materials, and the shop requires new technologies and environmental controls to meet the sensitive temperature requirements and reduce microscopic airborne fibers associated with carbon fiber. The following systems will also be modified or upgraded: HVAC, electrical, lighting, communications, security, and sprinklers.

Client Contact: Major Emerson Slack, Deputy Base Civil Engineer, West Virginia Air National Guard, (304) 616-5233, emerson.c.slack.mil@mail.mil

Police Department Helicopter Hangar and Maintenance Facility

City of Fort Worth | Fort Worth, TX

GRW designed a new 17,753 SF, semi-hardened facility, located at Meacham International Airport, for the Fort Worth Police Department Air Support Division Headquarters and for the Fort Worth Police Department Intelligence Division.

The facility is a single level structure with design specifications incorporating an insulated concrete form technology which results in a concrete wall and roof structure, and is intended to be survivable under high wind and other adverse conditions. During emergency operations situations, the facility provides a setting for the police air support division to provide emergency services.

The building includes a **4,775 SF office area; 2,998 SF maintenance shop; and 11,980 SF helicopter hangar**. The facility accommodates police intelligence division activities including housing emergency and intelligence/surveillance equipment, and serves as a marshalling/staging area for joint operations task forces formed from various law enforcement agencies.

The helicopter maintenance area includes a component overhaul room large enough for main rotor hub and blades balancing, a room for cleaning and painting, and a room for special tools. The space also contains an office and technical library.

The project required a significant amount of site evaluation and site planning before a final building location was determined. Because of the proposed sites proximity to the south end of runway 16-34 and the possible consequences of helicopter over flight of surrounding neighborhood, possible alternative alignments for the helicopter approach and departure tracks were studied.

Due to the unique functional relations between helipad landing location and other nearby facilities (including a Texas Commission on Environmental Quality air quality monitoring station), numerous studies and adjustments were made to the physical location of the building before the final location was achieved. Airport security, line-of-sight vision issues and proximity to nearby residential areas all presented special challenges; the project was designed to utilize as much of an existing concrete parking lot as possible in order to reduce construction costs.

Upshur County Regional Airport Improvements

Buckhannon Upshur Airport Authority | Buckhannon, WV

Chapman Technical Group, a division of GRW, designed improvements at the Upshur County Regional Airport include:

- Two apron extensions on either side of the original aircraft parking apron, tying each end of the combined apron to the runway with two exit taxiways
- Development of an 11-acre plateau upon which another apron was constructed along with a taxiway to join the main apron
- **Six T-hangars**
- **Two 10,000 SF hangars**

One of the 10,000 SF hangars has an 18-foot door height to accommodate the airport's growing local fixed-based operator; the other hangar has a 28-foot door height for an avionics and interior refurbishing business. A specially-designed reinforced floor slab accommodates a variety of aircraft. Innovative construction details were developed to meet the specific fire safety and building codes while remaining within client's budget.

Appalachian Regional Airport Hangars and Aviation Fuel Farm

Mingo County Airport Authority | Williamson, WV

This multi-phase project included the design of the new Appalachian Regional Airport, which was constructed on a reclaimed surface mine site. This general aviation facility replaced the Mingo County Airport located in Williamson, WV. The initial design included a 5,000-foot long runway, designated Runway 8-26. Subsequent projects involved a partial parallel taxiway, a 175,000 SF main aircraft parking apron, complete airfield lighting system and a perimeter security fence.

A later phase of the airport development included an aircraft storage hangar and a fuel storage and dispensing system.

This phase included:

- **A 10-unit nested T-hangar with 8-42′ wide door units and 2-44′ wide door units**
- Aviation fuel storage and dispensing unit for Jet-A turbine fuel, including 10,000-gallon, above-ground double-wall storage tank, and 200 gpm pumping and filtration system
- Aviation fuel storage and dispensing unit for aviation gasoline, including 6,000-gallon, above-ground double-wall storage tank, and 150 gpm pumping and filtration system
- Aviation self-service fueling terminal with credit card reader, user interface, and dispenser control functions

Philippi/Barbour County Regional Airport Box Hangar and Airport Improvements

Philippi/Barbour County Regional Airport Authority | Philippi, WV

Selected by the Philippi/Barbour County Regional Airport Authority, GRW, through its subsidiary Chapman Technical Group, has provided engineering services for improvements at the Philippi/Barbour County Regional Airport in Philippi, WV. The airport has a single, paved, lighted 3,275-foot long by 60-foot wide runway. The facilities at the airport consist of a multi-tenant building, individual and community storage hangars, and 100 LL Avgas.

Services under this contract included preparation of construction plans/specifications and contract documents for runway and apron rehabilitation, RSA improvements, hangar construction, and perimeter fencing installation projects. The services also include environmental assessments, construction administration and resident construction observation.

Projects under this contract have involved the following:

- **Hangar construction**
- Runway safety area improvements
- Apron lighting
- Main apron construction
- Access road construction
- Obstruction removal
- Equipment acquisition
- Runway rehabilitation
- Master plan preparation

Client Contact: Reggie Trefethen, Secretary-Treasurer, Philippi/Barbour County Regional Airport Authority, (304) 457-1225, reggieeda@yahoo.com

General Aviation Hangar Area Development

Blue Grass Airport | Lexington, KY

Blue Grass Airport has had an increasing demand for private sector hangar space. The purpose of this project was to **provide approximately 16 new hangar sites with water, sanitary sewer, gas and electric main lines** that would allow for service connections as needed. Two new taxiways (880 linear feet total) were required to access the new hangar sites along with a new vehicular access road and security gate.GRW provided final construction plans and specifications for the site improvements under a time constraint to ensure the use of available grant money.

GRW provided the following services for this project:

- Review of airport design parameters and alternatives
- Field surveys
- Taxiway and roadway design
- Drainage improvements
- Pavement design
- Geotechnical investigation
- Utility layout and design
- Construction cost estimates
- Airport layout plan update
- Resident inspection

This project required GRW design engineers to evaluate all site aspects. A new retention basin was designed to handle the anticipated increase in run off due to the increase of impervious area. The biggest challenge was the changes that were required during construction due to unforeseen circumstances such as an 8-inch waterline found at a depth of 16 foot where a tie-in was planned. Our staff coordinated with the owner and contractor to find the most economical and time efficient solutions for these problems.

The project also involved relocating the main electrical service and communications outside plant for the entire airport.

Client Contact: Mark Day, PE, Director of Engineering and Maintenance, Blue Grass Airport, (859) 425-3152, mday@bluegrassairport.com

136th Airlift Wing Electronic Countermeasures (ECM) Shop

Texas Air National Guard | Fort Worth, TX

This aviation maintenance complex for the 136th Airlift Wing consists of two large aircraft maintenance hangars with a complex of maintenance shops, administration and training areas, storage space and other functional areas in between. Due to budget limitations, the initial project included the design and construction of one of the hangars and the majority of the aviation system maintenance shop and administration spaces. Funds later became available for the addition of the second hangar and the balance of the shops, including an addition to the engine shop. This complex, totaling an area of 106,647 SF, includes shops for maintenance and repair of engines, electronics, avionics systems, wheels and tires, exterior metals, and virtually every component system of a C-130 aircraft. Administrative spaces (offices, conference room, secure rooms and vaults, break areas, pilot lounge/training room, rest rooms and locker rooms), support spaces (mechanical and electrical rooms, IT/communications rooms) and storage spaces are included in this complex.

For this upgrade to this complex, GRW provided architectural and engineering services for conceptual design, RFP development and construction administration for modifications to the maintenance shop area of this complex. **This included expansion of the facility to accommodate a larger, separate electronic countermeasures (ECM) shop (approximately 2,740 SF), a renovated avionics shop, pavements and utility system revisions.**

This **LEED Gold certified project** includes the following unique sustainable design measures:

- Photovoltaic cells on the roof of the hangar, to offset energy costs and electrical power usage for the entire hangar complex

- Vegetated roof on the shop expansion to reduce energy usage, heat island effect, and stormwater runoff
- Geothermal-based HVAC system for the new addition to reduce energy usage in administration and training areas.
- Occupancy sensors for electric lights (with dimming capability to reduce electrical usage when sufficient natural light is available) and new light fixtures to replace old units
- Low flow and low flush restroom and shower room fixtures to reduce potable water usage
- Pervious pavements to reduce stormwater quantity and to improve stormwater runoff quality

"It is with great pleasure that I recommend GRW. Their technical experience and professionalism have provided superior design documents, exceeding my expectations." -- Major Kevin A. McKinney, Base Civil Engineer, 136th AW

Client Contact: Lt.Col. Kevin McKinney, Base Civil Engineer, Texas Air National Guard, (817) 852-3395, kevin.mckinney@ang.af.mil

116th Wing B-1B Bomber Composite Aircraft Maintenance Hangar Complex

Georgia Air National Guard | Robins AFB, GA

This $23.2 million B-1B Bomber Composite Aircraft Maintenance Hangar Complex was a fast track design, proceeding from NTP to Final Design in six-and-a-half months. The **76,000 SF hangar complex is a two-bay facility** which provides space for aircraft fuel system maintenance, corrosion control program activities, administrative functions, and the needed utilities and special systems required to safely perform fuel system maintenance, corrosion control functions and identified activities associated with the B-1B Bomber. The exterior is made of metal panels, reddish brown brick and beige stucco to complement that used on the Joint Starts development across the flightline. Roofs are a dark bronze standing seam metal roof. Exterior windows and doors are dark bronzed anodized aluminum, double glazed.

The office and shop is reinforced concrete slab-on-grade. Interior walls are constructed of painted CMU; 22-gage metal panel siding is proposed for the exterior walls. The roof composition includes 24 gage standing seam metal roof with rigid insulation over metal deck. Spaces included in this area include:

Separate hangar bays (50 feet in height) house the fuel cell and corrosion control functions, each requiring specialized humidity, vapor removal, and shop and breathing air utilities. The corrosion control hangar bay includes:

- Paint Storage Room
- Paint Mixing Room
- Sanding Area
- Prep Room
- Paint Booth
- Stencil Room

The fuel cell maintenance hangar bay includes:

- AFFF/Fire Pump Room
- Storage Workshop Area
- T.O. (Tech Order) Library
- Dispatch Office
- Office

A mezzanine joins the shops and hangar areas and includes a mechanical area, classroom, unisex lavoratory and shower and four maintenance command offices.

As this facility is on the flight line, access is controlled by fence, with an electrically-latched turnstile which is released by a card reader. Parking is set back to meet anti-terrorist force protection (ATFP) guidelines.

"The conversion of the GA ANG 116th FW to B-1B bombers and the relocation to Robins AFB was an extremely complex undertaking ... further complicated by an expedited schedule. GRW not only met the schedule, but provided an efficient master plan and design." **-- COL Grant Smith, District Engineer, Savannah COE**

Client Contact: Lt Col Jeremy Simmons, Base Civil Engineer, Georgia Air National Guard, (478) 201-1400

126th Air Refueling Wing Flightline Facilities for Relocation to Scott AFB

Illinois Air National Guard | Scott AFB, IL

GRW was one of five A/E team members chosen to design facilities for the relocation of the Illinois ANG and their KC-135E aircraft in the unit's move from Chicago O'Hare International Airport to Scott AFB. The design efforts represent over $15,000,000 worth of facilities toward the development of this new, $85,000,000 installation for the Illinois ANG. The design of this flightline complex was accomplished under tight time constraints to meet construction and relocation deadlines associated with the move from O'Hare International Airport.

This project included all architectural; civil/site, structural, mechanical and electrical engineering and environmental issues associated with the design of:

- renovations to an existing two-bay general maintenance hangar including design of the engine inspection and repair shop;
- aerospace ground equipment shops and storage; and
- general purpose maintenance shops.

The 29,400 SF **fuel cell hangar** is designed to house KC-135E aircraft in conjunction with fuel system inspection/repair and air frame corrosion control. Interior design and finishes were selected in accordance with the Base Design Guide.

Spaces of the fuel cell hangar include:

- Maintenance Hangar Bay (Explosion Proof)
- Paint Storage and Mixing Rooms, 400 Hz Equipment Room, Tool Room & Aircraft Wash Equipment Room
- Media and Paint Booths
- AFFF/Fire Pump Room (Foam contained in excavated detention area to which the hangar/apron sloped.)
- Fuel System Storage
- Hazardous Material Storage (Flammable Storage)
- T.O. (Tech Order) Library, Offices, Break Room, Laundry and Men's & Women's Lavatories/Showers/Locker Rooms, Classroom

- Mechanical, Electrical, and Communications (met Scott AFB TEMPEST Protection Requirements) Rooms

The existing two-bay **general maintenance hangar** (Building 3680) was substantially renovated to house two KC-135E aircraft. "Phase" and "Intermediate" level maintenance and inspection is the primary function of the facility. Work included design of the engine inspection and repair shop; and new, updated life safety and accessibility code features. Interior design and finishes were selected in accordance with the Base Design Guide.

The 71,300 SF general maintenance hangar included:

- Maintenance Hangar Bay
- Parts Storage and Cleaning, Compressor Room, Non-Powered AGE Shop
- Kitchen, Ready Room, Classroom, T.O. (Tech Order) Library, Quality Assurance Office and Administrative Space

- Hazardous Material Storage (Flammable Storage)
- Men's & Women's Lavatories/Showers/Locker Rooms
- Mechanical, Electrical and Communications (Met Scott AFB TEMPEST Protection Requirements)

The **AGE Shop and Storage Building** (5,241 SF) supports inspection, maintenance, repair and servicing of all authorized powered aircraft support equipment. The facility contains maintenance bays, tool crib, storage, battery shop and administrative areas as well as wash and paint areas. In addition, covered storage and parking for selected essential base vehicles and AGE equipment are provided.

Aircraft Engine Repair Shops and Parachute Shops are attached to the **General Maintenance Shops** (46,202 SF), which contain general purpose maintenance, avionics, engine repair, para-rescue and administrative areas. The Engine Inspection and Repair and the Non-Destructive Inspection Shops include aircraft maintenance shops for aircraft engine inspection and repair functions, with non-destructive inspection operations for engine/parts inspection. The Parachute Shops include functions to receive, inspect, repair, pack and ship parachutes and life rafts in industrial type space.

Spaces of the general purpose maintenance shops included:

- Pneudraulics, Wheel & Tire, Guidance & Control, Comm/Nav, Weld, Machine, Structural Repair, Composite, Electro/Environmental/Battery, Sewing (Dinghy & Parachute), Penetrant & Magnetics, and Engine Maintenance Shops
- T. O. Libraries
- Men's & Women's Lavatories/Showers/Locker Rooms and Break Room
- Tool Storage, and Electrical Equipment and Mechanical Rooms

"GRW worked tirelessly with the members of the 126 ARW during the design phase of the Flight Line Buildings. They have stepped up to the challenge of the compressed schedule, completing each design phase in a timely manner. The acceptance of 'ownership' of this project has resulted in an extremely good working relationship with the 126 ARW, assuring that the users' requirements are identified and included in the design." **-- Lt. Col. William E. Mell, Illinois ANG regarding the relocation of the IL ANG to Scott AFB**

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. Furthermore, our team's local knowledge and capacity has been strengthened by GRW's acquisition of Chapman Technical Group, a 25-person St. Albans, WV-based firm. Structural engineer David Hoy works in that office.

West Virginia Department of Administration and West Virginia Army National Guard

Project Manager/Architect
Shane Lyle, AIA, LEED AP BD+C

Mechanical Engineering	Electrical Engineering	Electrical Engineering
Bill Brewer, PE, LEED AP BD+C	Patrick Baisden, PE, LEED AP BD+C	David Hoy, PE

Civil Engineering	Aviation Engineer	Geotechnical
Harvey Helm, PE, LEED AP, PLS	Alexis Schmidt	**Triad Engineering**

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 [redacted], 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

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 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; and site utility and storm drainage improvements.

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.

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 in accordance with current ANG policies. Project 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 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.

Air Force Special Operations Command C-130 Hangar Complex, Cannon AFB, NM – Project Manager. Concept design and Design-Build RFP to construct two of the first facilities supporting C-130 aircraft to be built at a new AFSOC base at Cannon AFB (NM), including a Corrosion Control Hangar ($22 million, 57,700 SF) and a Fuel Cell Hangar ($23 million, 31,100 SF), utility service, pavements and other site development features. Involved 3-day charrette to develop conceptual site and floor plans, narratives of functional areas, requirements for facility system design (architecture, civil/site, HVAC, electrical, security, communications, Antiterrorism/Force Protection, utilities, etc), recommended design criteria, functional area adjacency requirements, a parametric cost estimate and a detailed room requirements sheet for each space, Conceptual Design with Performance Specification and Design Analysis to support a request for proposal for design-build delivery. Project designed to meet LEED Silver criteria.

Martin Campbell Field Improvements, Copperhill, TN – Architect. Under open-end contract, services included preparation of plans, specifications and contract documents for rehabilitation of runway, taxiway, and apron, new precision approach path indicator (PAPI) lighting, and 10-unit T-hangar, as well as the update of the Airport Layout Plan. Additional services provided under contract include environmental assessments, construction management, and resident observation/construction inspection.

Bill Brewer, PE, LEED AP BD+C | GRW Mechanical Engineer

YEARS OF EXPERIENCE:

With GRW: 22
Total: 50

EDUCATION

B.S., Mechanical Engineering, 1967, Case Western Reserve University

REGISTRATION

Professional Engineer: KY, CA, OH, NC, TN, NH, WV, IN, TX, MS, GA, VA, MI, PA, KS

NCEES Member, allows reciprocity with other states

Professional Member, Society of Fire Protection Engineers

LEED Accredited Professional, Building Design + Construction

PROFESSIONAL AFFILIATIONS AND TRAINING

American Society of Mechanical Engineers

American Society of Heating, Refrigeration and Air Conditioning Engineers, Bluegrass Chapter

American Institute of Aeronautics and Astronautics

International Code Council

Society of Fire Protection Engineers

International Ground Source Heat Pump Association

U.S. Green Building Council

Simplex-Grinnell Clean Agent Training: "Clean and Green - Ansul Sapphire and Inergen Fire Suppression Agents"

Bill's vast engineering experience has involved the design, application and trouble-shooting of a wide range of environmental and process systems, particularly HVAC, plumbing and fire protection systems. His experience has encompassed mechanical engineering design for dozens of water and wastewater treatment plant systems, and pumping stations. Bill also regularly works on projects involving GRW's educational, municipal, state, and federal clients. He has also been involved in the construction administration for most of his projects.

RELEVANT PROJECT EXPERIENCE

West Virginia ANG 167th Airlift Wing C-17 Corrosion Control Hangar Modifications, Martinsburg, WV – Mechanical 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 Fuel Cell Hangar Modifications, Martinsburg, WV – Mechanical 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 Maintenance Hangar Modifications, Martinsburg, WV – Mechanical 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 Composite Material Shop, Martinsburg, WV – Mechanical Engineer. Fast-track design of 7,600 SF 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 130th Airlift Wing Aboveground Fuel Storage Dispensing Facility, Charleston, WV – Mechanical Engineer. 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.

Appalachian Regional Airport Hangars and Aviation Fuel Farm, Varney, WV – Mechanical Engineer. Project included 10-unit nested T-hangar; aviation fuel storage and dispensing unit for Jet-A turbine fuel, including 10,000-gallon, above-ground double-wall storage tank and 200 gpm pumping and filtration system; aviation fuel storage and dispensing unit for aviation gasoline, including 6,000-gallon, above-ground double-wall storage tank and 150 gpm pumping and filtration system; and aviation self-service fueling terminal with credit card reader, user interface, and dispenser control functions.

Air Force Special Operations Command C-130 Hangar Complex, Cannon AFB, NM – Mechanical Engineer. Concept design and Design-Build RFP to construct two of the first facilities supporting C-130 aircraft to be built at a new AFSOC base at Cannon AFB (NM), including a Corrosion Control Hangar ($22 million, 57,700 SF) and a Fuel Cell Hangar ($23 million, 31,100 SF), utility service, pavements and other site development features.

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.

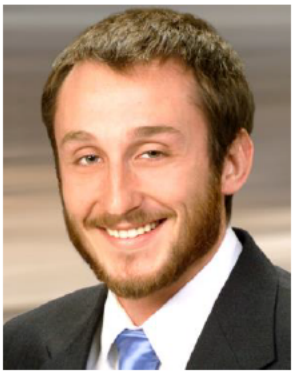
West Virginia ANG 130th Airlift Wing Security Forces Squadron Facility Renovation and Expansion, Charleston, WV – Electrical Engineer. Renovation of 5,395 SF SFS facility including addition of 2,500 SF administrative and training space to better serve unit.

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 ([redacted] KY, IN, TN, NC, OH, VA

PROFESSIONAL AFFILIATIONS AND TRAINING
American Society of Civil Engineers

RELEVANT PROJECT EXPERIENCE

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.

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.

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: KY, TN, IN, OH, MD, MS, GA, NC, AL, AR, WV, 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

Harvey's experience as a civil engineer is broad and encompasses land surveying, drainage facilities, streets and roads, site development and site utilities. He has worked on projects for client types ranging from aviation to equine, as well as federal, state and local governments. He is very proficient in the technical elements that make up civil engineering projects of all sizes and has the management skills to produce quality and efficient projects.

For aviation projects, he has managed the planning, surveying, design, and construction administration of many airfield pavement and utility projects in several states. He knows the FAA regulations and military airfield regulations having worked with most of the FAA regional offices in the country and military bases in 20 states. He has also managed several AIP-funded projects for airfield pavement and utility improvements.

RELEVANT PROJECT EXPERIENCE

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.

Georgia ANG 116th Wing B-1B Bomber Composite Aircraft Maintenance Hangar Complex, Robins AFB, GA – Civil Engineer. Fast-track design for a new 76,000 SF B-1B bomber hangar complex.

Kentucky ANG 123rd Airlift Wing Fuels System Maintenance & Corrosion Control (FSMCC) Facility, Louisville, KY – Civil Engineer. Design services for $4 million design-build acquisition of a modern C-130 Fuels System Maintenance and Corrosion Control (FSMCC) Hangar and shops for the Kentucky Air National Guard, providing 23,800 SF for Level II compliant environmentally safe repair of aircraft components on and off the aircraft. Included approximately 12,500 SY of aircraft ramp access taxiway connecting the hangar to the parking apron, and utilities for water, sanitary sewer, drainage, gas, electric and telephone.

Camp Lemonnier CLDJ Airfield Work, Camp Lemonnier, Djibouti, – Principal. Airfield Work Project consisted of four project areas: Taxiway Echo repair, new flightline access road, Lion Apron repair and repairing to Enduring ramp.

Camp Lemonnier CALA Hanger Drainage Repair, Camp Lemonnier, Djibouti, – Principal. Project required elimination of stormwater into three existing CALA hangers; activities included regrading perimeter of each hanger to provide positive drainage away from structures. CALA is required for loading/off-loading explosive ordinance onto combat aircraft departing and/or returning from weapons flights. CLDJ, he hub for U.S. expeditionary operations in the Horn of Africa, is primary gateway for air operations.

Alexis Schmidt | GRW Aviation Engineer

YEARS OF EXPERIENCE:
With GRW: 1
Total: 17

EDUCATION
B.S., Civil Engineering, 2004
Colorado School of Mines

Alexis has more than a decade of experience in the aviation industry. She has been responsible for the design of various airport improvement projects including runways, taxiways, aprons, hangar site development, lighting, and signage. In addition to design, she has also provided construction administration and observation for airport projects, as well as FAA grant application preparation.

RELEVANT PROJECT EXPERIENCE

Vero Beach Municipal Airport (Vero Beach, FL) – Assist in design of new general aviation concrete apron. Responsibilities included grading and joint layout for aircraft parking apron.

Calhoun County Airport (Blountstown, FL) – Design of new 3100' runway including horizontal alignments, grading, drainage of airfield, and runway marking. Project also required extensive mitigation and permitting with Department of Environmental Protection and Army Corps of Engineers. Also assisted project manager with bidding process and construction phase services. Assist in design with additional projects at the airport including new fuel tank, a new beacon and tower, and new hangars.

Apalachicola Regional Airport (Apalachicola, FL) – Design of new airport access road and improvements to existing road. Responsibilities included horizontal alignment, grading and drainage, and construction phase services.

Sarasota-Bradenton International Airport (Sarasota, FL) – Design of airport intermodal transit system including roads and parking. Responsibilities included horizontal and vertical alignments, grading, drainage, signage, marking, bidding, assist project manager at construction meetings, and construction phase services.

Carrabelle-Thompson Airport (Carrabelle, FL) – Site development for 3-unit hangar. Responsibilities included horizontal layout, grading and drainage, lighting, and bidding. Also assisted with runway lighting project including vault improvements, P.A.P.I. replacement, and new beacon and tower.

Tampa International Airport (Tampa, FL) – Site development for new long term remote parking garage. Responsibilities included grading of new fire lane, pond and site.

Tri-County Airport (Chipley, FL) – Design on new partial parallel taxiway and new taxiway connector. Responsibilities included horizontal alignment and geometry, grading and drainage, lighting, and signage. Also assisted with site development for new t-hangars.

Crystal River Airport (Crystal River, FL) – Design of new taxiway and taxiway connectors, including demolition of existing taxiway. Responsibilities included horizontal alignment and geometry, vertical alignment, grading and drainage, phasing, lighting layout, mitigation and environmental considerations, bidding, and construction phase services including construction submittals, progress meetings, change orders, quality control and testing, contractor pay requests, and inspections.

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 project to improve AASF facilities in Williamstown and Wheeling.

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

- Complete design for two sets of construction bid documents for new 15,000 SF unheated aircraft storage facilities for West Virginia State Purchasing

Of particular interest are the following:

- Aviation doors adequate for moving aircraft in and out of the storage facility
- Appropriate lighting
- Designed to remain operation during adverse weather

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

An Approach Based on Respect & Clarity

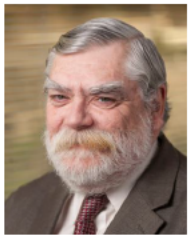
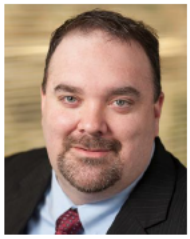
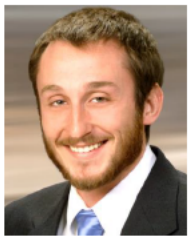
Our approach to accomplishing these goals and objectives for your project is straightforward:
1) assemble the best and brightest design talent with **knowledge of the national guard/military projects**;
2) bring an **open mind** and **fresh perspectives**; and
3) **remain accountable** to you throughout 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 the architectural design, 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.

Closely supporting Shane to ensure efficiency, effectiveness, and code compliance of mechanical systems will be **Bill Brewer**. Our electrical engineer **Patrick Baisden** will apply his experience with power, lighting, and communi-cations systems. Both will ensure code compliance and well-coordinated system upgrades.


Our in-house structural engineer, **David Hoy**, is based in West Virginia. **Harvey Helm** will address any site utilities issue for your project, as well as develop site design. 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 subsurface investigations, and research locations of existing underground and aboveground utilities. This will give us a foundation as we move forward.

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.

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 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 **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 ensure 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 ensure that the design is progressing in accordance with the original criteria.

Cost Control

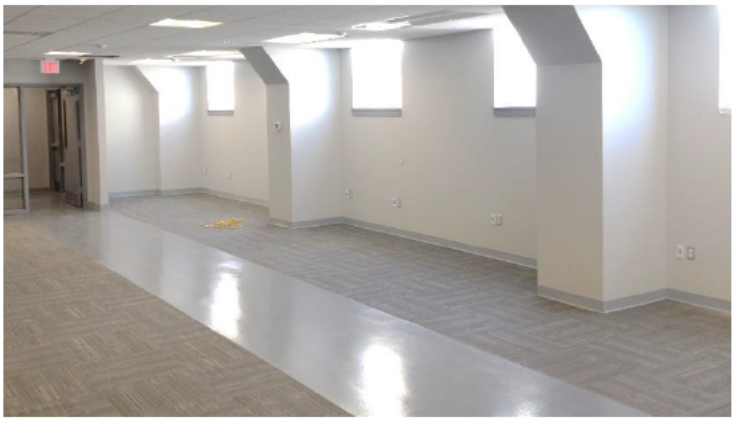
PROJECT BUDGET ACCOUNTABILITY: Government officials are accountable to the public for the expenditure of public monies. The GRW team understands this obligation and develops a project design that is cost-effective and delivers an efficient and appropriate use of funds assigned to the military. Rarely 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: 949831 **Doc Description:** AASF1 & AASF2 Unheated Aircraft Storage Design **Proc Type:** Central Purchase Order			**Reason for Modification:**
Date Issued	**Solicitation Closes**	**Solicitation No**	**Version**
2021-10-06	2021-10-21 13:30	CEOI 0603 ADJ2200000007	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 architectural and engineering design services to develop two (2) sets of construction documents to construct new 15,000 square foot unheated aircraft storage facilities at AASF#1 in Williamstown and at AASF#2 in Wheeling, WV, per the attached documentation.

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

Line	Comm Ln Desc	Qty	Unit Issue
1	AASF1 & AASF2 Unheated Aircraft Storage Design		

Comm Code	Manufacturer	Specification	Model #
81101508			

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

SCHEDULE OF EVENTS

Line	Event	Event Date

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

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:	949831		Reason for Modification:
Doc Description:	AASF1 & AASF2 Unheated Aircraft Storage Design		Addendum No. 1 Change bid opening date and time
Proc Type:	Central Purchase Order		
Date Issued	**Solicitation Closes**	**Solicitation No**	**Version**
2021-10-14	2021-10-28 13:30	CEOI 0603 ADJ2200000007	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 move bid opening date and time to 10/28/21 at 1:30 pm No other changes.

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

Line	Comm Ln Desc	Qty	Unit Issue
1	AASF1 & AASF2 Unheated Aircraft Storage Design		

Comm Code	Manufacturer	Specification	Model #
81101508			

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

SCHEDULE OF EVENTS

Line	Event	Event Date

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

SOLICITATION NUMBER: CEOI ADJ2200000007
Addendum Number: 1

The purpose of this addendum is to modify the solicitation identified as CEOI ADJ2200000007 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

☐ To respond to technical questions

☐ Attachment of pre-bid sign-in sheet

☐ Correction of error

☐ Other

Additional Documentation:

1. **To move bid opening date and time October 28, 2021, at 1:30 pm**
2. **No other changes.**

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 ADJ2200000007

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)

☒	Addendum No. 1	☐	Addendum No. 6
☐	Addendum No. 2	☐	Addendum No. 7
☐	Addendum No. 3	☐	Addendum No. 8
☐	Addendum No. 4	☐	Addendum No. 9
☐	Addendum No. 5	☐	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 July1, 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 exceed 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: _____

Authorized Signature: _____ Date: _____

State of _____

County of _____, to-wit:

Taken, subscribed, and sworn to before me this ___ day of _____, 20___.

My Commission expires _____, 20___.

AFFIX SEAL HERE

NOTARY PUBLIC _____