Chapman Technical Group
a division of GRW

200 Sixth Avenue
Saint Albans, WV 25177

304.727.5501

Buckhannon, WV
Lexington, KY

www.chaptech.com

August 7, 2024

Ms. Melissa Pettrey
Department of Administration
Purchasing Division
2019 Washington Street, East
Charleston, West Virginia 25305

Re: A/E Services for Building 74 Design Renovations Projects

Dear Ms. Pettrey:

Chapman Technical Group is most interested in providing the required A/E services for the Building 74 Renovations Project. We can meet the Goals and Objectives of the project as follows:

Goal/Objective 1: In 2019 the General Services Division engaged Chapman Technical Group to assess the building and design renovations for the building's current occupant. We performed a thorough analysis of the building, including its electrical, mechanical systems and structural systems. We evaluated the building for general code compliance, as well as general effectiveness and efficiency of the building systems. Our assessment and knowledge of Building 74 will enable us to provide an updated assessment expeditiously.

Goal/Objective 2: In 2019 we designed a renovation project to meet the needs of the current tenant. The design included upgrades to the HVAC systems, new energy-efficient lighting, replacement of all windows, upgrade finishes, reconfiguration of some of the spaces in the building, and provided for site improvements such as parking lot upgrades and lighting upgrades. Our construction documents can form the basis of the new design and can be modified expeditiously to meet the project schedule.

Our project approach is straightforward. We will use our knowledge of the building to develop an updated assessment and design modifications to meet the needs of the tenant. We will work closely with the GSD and the tenant to develop a realistic and practical design program, and then use our previous construction documents as the foundation for the new design. This will enable us to meet the project schedule.

Our project team has offered similar services for projects throughout West Virginia and Kentucky, including the design of the historic State Road Commission (SRC) Building for the West Virginia Division of Highways, and numerous other buildings. Construction is also near completion on West Virginia State Capitol East Campus project. We have an excellent track record of meeting project budgets and aggressive project schedules.

40 ANNIVERSARY

Our in-house personnel include LEED accredited architects and mechanical, electrical and structural engineers, as well as civil engineers and landscape architect for any site work that may be required. We can begin work immediately and have the project ready to bid with an accelerated schedule.

We would appreciate the opportunity to present our project team and further discuss your project. Please feel free to contact me at (304) 727-5501 or by email at jbird@chaptech.com if you have any questions or need more information.

Sincerely,

CHAPMAN TECHNICAL GROUP

Joseph E. Bird, ASLA
Senior Vice President

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
Architect/Engr

Proc Folder:	1464651
Doc Description:	Building 74 Design Renovations Project
Proc Type:	Central Contract - Fixed Amt
Reason for Modification:	

Date Issued	Solicitation Closes	Solicitation No	Version
2024-07-15	2024-08-07 13:30	CEOI 0211 GSD2500000001	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
Melissa Pettrey
(304) 558-0094
melissa.k.pettrey@wv.gov

Vendor Signature X **FEIN#** 550704766 **DATE** 8-6-2024

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

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.

(Printed Name and Title) Joseph E. Bird

(Address) 200 Sixth Avenue, St. Albans, WV 25177

(Phone Number) / (Fax Number) 304-727-5501 / NA

(email address) jbird@chaptech.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through *wv*OASIS, I certify that: I have reviewed this Solicitation/Contract 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/Contract 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 this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; 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; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

Chapman Technical Group
(Company)

(Signature of Authorized Representative)

Joseph E. Bird, Senior Vice President, 8-6-2024
(Printed Name and Title of Authorized Representative) (Date)

304-727-5501 / NA
(Phone Number) (Fax Number)

jbird@chaptech.com
(Email Address)

TABLE OF CONTENTS

COMPANY OVERVIEW & AWARDS

Established in 1984, Chapman Technical Group has steadily grown into a diverse firm of professionals, many of whom were educated in West Virginia colleges and universities. We have achieved an outstanding reputation for developing high-quality projects, while meeting schedules and budgets.

In 2013, Chapman Technical Group was acquired by the Lexington, Kentucky based A/E firm of GRW, allowing us to provide a wider range of services while expanding our resources. Now, in addition to our offices in St. Albans, and Buckhannon, West Virginia, as part of the GRW family, we also work in Kentucky, Ohio, Tennessee, and Indiana.

Our architectural group not only designs new buildings from the ground up, but also specializes in renovations and historic restoration projects. Our award-winning landscape architects provide master planning, as well as detailed site design for parks and public spaces projects.

In addition to our building studio, our engineering support staff gives us the ability to meet almost any challenge a project may present. All of our mechanical, electrical, plumbing engineering is provided in-house, and our civil engineers work with our landscape architects to provide site designs that are functional while achieving a high level of aesthetics.

Water and sewer system design is accomplished by our environmental engineers, and when on-site wastewater treatment is required, we can do it.

Working with our airport group, we can provide full airport design services, from runway and lighting design, to hangars and terminal buildings.

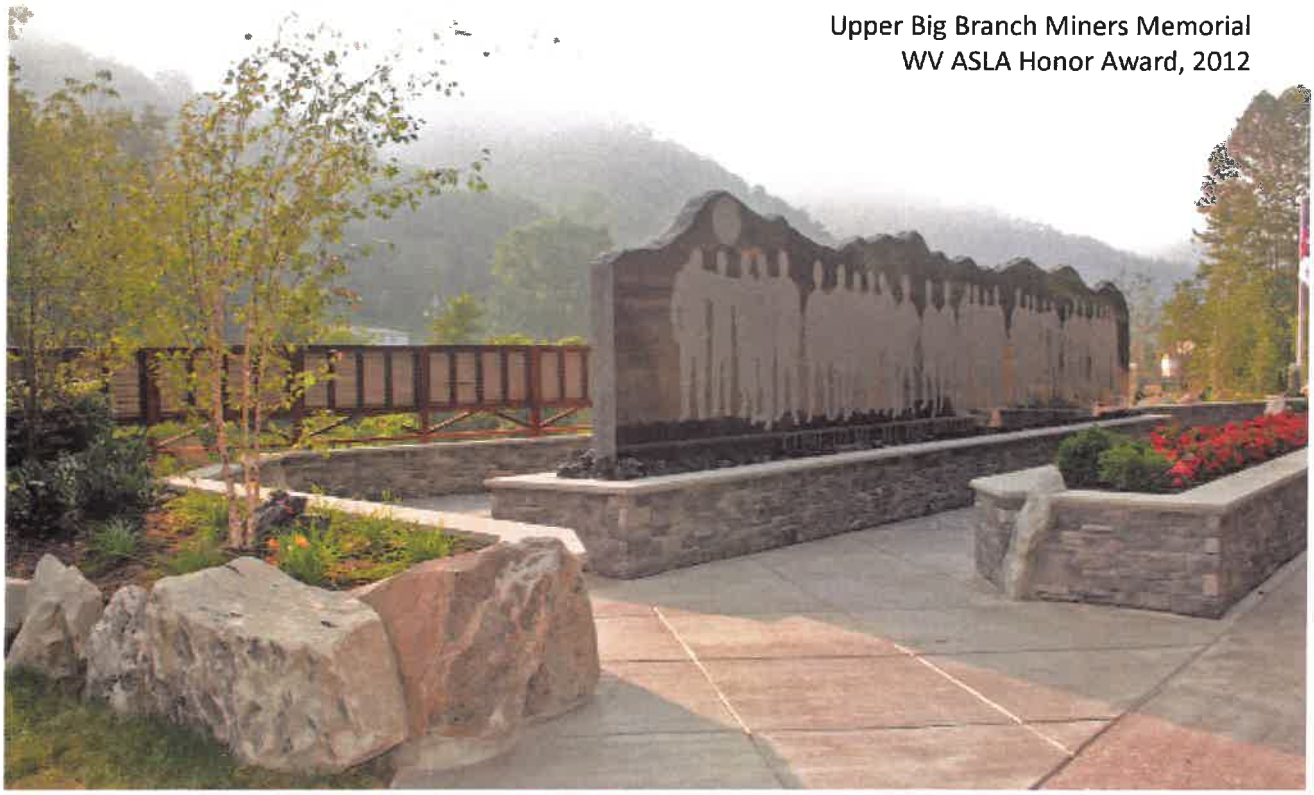
COMPANY OVERVIEW & AWARDS

SRC Building Renovation
WV AIA Merit Award, 2016
Historic Preservation

I-79 Rest Area
AIA Merit Award, 2010

COMPANY OVERVIEW & AWARDS

COMPANY OVERVIEW & AWARDS



Upper Big Branch Miners Memorial
WV ASLA Honor Award, 2012

Nuttallburg Historic Mining Complex
WV ASLA Merit Award, 2012

ARCHITECTURE

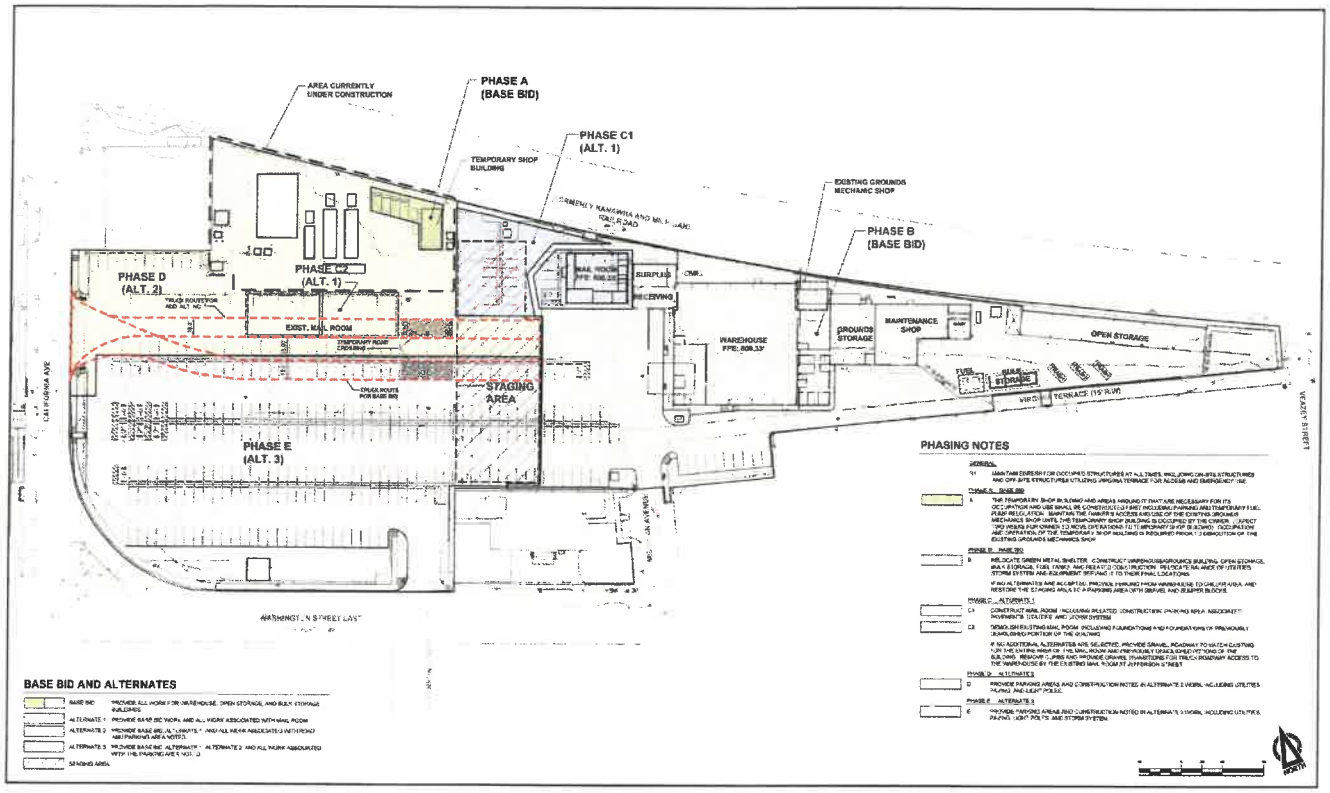
WV Department of Natural Resources

Building 74 Renovations

324 4th Avenue
South Charleston, West Virginia

Chapman Technical Group was selected to provide a multiphase project for the Renovations of Building 74 for the General Services Division (GSD). In Phase 1, Chapman Technical Group provided a thorough evaluation of the interior and exterior of the existing 37,000 square-foot building, including functional analysis, Code review, and evaluations of the building enclosure, roof, electrical, and mechanical systems. Phase 2 will provide design services as directed by the GSD to resolve issues identified in Phase 1. Phase 3 will develop construction documents and provide construction phase services for phased construction projects to enable continuous tenant occupancy of the building.

ARCHITECTURE



WV Department of Administration

Warehouse and Grounds Buildings
Charleston, WV

The State of West Virginia needed to upgrade and consolidate its warehouse facilities, as well as its building and grounds maintenance facilities. A new 28,000 square-foot warehouse building,a 5,000 square-foot buildings and grounds facility, and a 3,000 square-foot mail room building were included in the project. Parking and vehicle access were major components and low-impact stormwater facilities were designed to minimize impact on the City of Charleston's combined sewer system. Chapman Technical Group provided architectural design; civil and structural engineering; mechanical, electrical and plumbing engineering; and landscape archtecture services. Project completion is scheduled for 2024.

ARCHITECTURE

WV Division of Highways

State Road Commission Building Renovation

Charleston, WV

As part of the West Virginia Division of Highways District One Campus Renovation, the former State Road Commission Building was renovated to serve as an office building for various DOH personnel. The historical 40,000 square-foot facility retained many historical features, including orginal doors and transoms, while providing energy-efficient and cost effective systems throughout. In addition to a complete interior makeover that included a historic information center and radio studio, the building also received new exterior doors, windows, roofing and a new elevator. A skywalk connects the building to a new Headquarters Building being constructed beside the SRC Building. A courtyard was also constructed for employee use.

ARCHITECTURE

Clay County Board of Education

Clay County High School Renovations

1 Panther Drive
Clay, West Virginia

Clay County High School serves 550 students in grades 9 through 12 and is the only high school in the county. The school was constructed in 1970 and needed renovations to make it a more modern learning facility. Because Clay is a small rural county, the high school serves as a place of learning and acts as a community center and gathering place for the county.

Renovations to the school were quite extensive and included new HVAC systems, fire alarm and security systems, a secure office entrance, new toilet rooms, new windows, new secure classroom door hardware, reworking the locker rooms and gym and the addition of a new commons area.

The renovations and addition have significantly improved the health, safety and welfare of the students and staff at this school and have had a direct impact on improving the learning environment.

Through improved Indoor Air Quality and comfort, improved safety and the improved overall functionality of the school, this facility will continue to serve the residents of Clay County for many years.

ARCHITECTURE

American Institute of Architects, Honor Award, 2008

Upshur County Commission

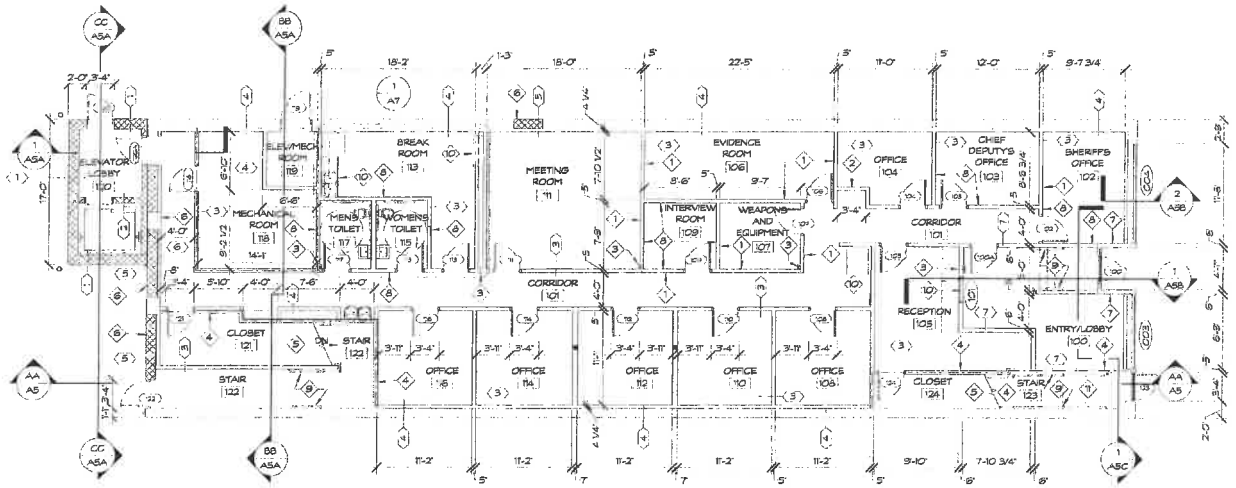
Upshur County Courthouse Renovations

38 West Main Street
Buckhannon, West Virginia

Since the design and construction of the courthouse annex in 1995, Chapman Technical Group has been involved in several improvement and restoration projects at the Courthouse in Buckhannon. In 2005, a lift was installed and plaza renovated in make the original Courthouse accessible. In 2006, the Courthouse dome and clock tower were completely restored. In 2007, the Courthouse portico stonework was restored, and in 2008 the work was honored by the AIA, WV for Excellence in Architecture.

Dome Restoration Detail

ARCHITECTURE



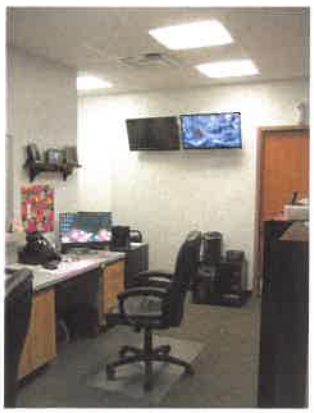
FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

Mason County Sheriff's Office

Point Pleasant, WV

The Mason County Commission selected this existing building adjacent to the County Courthouse to be headquarters for the Mason County Sheriff's Department. The three story 11,500 square-foot facility remained basically unchanged on the exterior with the exception of minor facade repairs, new doors and windows. The first floor interior of the building was completely demolished and rebuilt to house the new Sheriff's Office while the second and third floor were renovated for Sheriff's office storage, voting machine storage and programming, and other County needs. Other additions and renovations included a new elevator at the rear of the building, a new sprinkler system throughout the building,



ARCHITECTURE

Frankfort Plant Board

New Administration Building

Frankfort, KY

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

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

The building facade is primarily constructed of architectural precast concrete panels with design elements such as structural silicone glazing systems and aluminum panels.

ARCHITECTURE

Cumberland County Justice Center

Burkesville, KY

Designed to accommodate both Circuit and District Courts, this 24,270 SF facility is adjacent to the public square in Burkesville, KY. The first level includes a hearing room, sallyport, holding cells, witness areas, pre-trial area, clerk's offices, and other support functions. The second level includes the jury courtroom, judges' offices, holding cells, witness and attorney/client areas, conference rooms, law library, substantial public lobby spaces, and other supporting spaces. The building is segregated as required for judges' circulation, public circulation, and secure areas.

ARCHITECTURE

Murray State University

Waterfield Library Renovations and Additions, Phase II & III

Murray, Kentucky

For the second phase, GRW provided design and construction administration services for renovation of approximately 14,500 SF. The project, completed while the library was in use, provided a new reading/study area. In addition, the project was bid in three packages which were completed simultaneously to keep the work on schedule.

The third phase included A/E construction documents for a proposed $10.5 million major renovation to the 100,400 SF main campus library. The drawings included the following work items:

- Existing building renovations
- New semi-circular, grand reading room
- Front façade renovations, including cupola
- Mechanical and electrical systems upgrade
- Interior finishes and furnishings

ARCHITECTURE

U.S. Federal Courthouse Renovation

Atlanta, GA

GRW was part of the design-build team selected by the U.S. General Services Administration (GSA) to design and construct improvements for the federal courthouse located on Barr Street in Lexington, KY. The project team's design enhanced security at the building through the renovation of existing space, as well as new construction. Improvements included upgraded security electronics, site blast protection, and circulation / control enhancements.

Built in 1934, the building is listed on the National Register of Historic Places. The Federal Courthouse was originally constructed as a Post Office and is the base for one of six U.S. District Court locations for the Eastern District of Kentucky. The four-story building, plus basement, contains 84,000 SF of rentable space and currently houses both the U.S. District Court, the U.S. Marshals Service, U.S. Attorneys, and the U.S. General Services Administration.

GRW's specific role on the design-build team was to provide civil/site engineering, and mechanical and electrical engineering. Sustainability was a key factor as the addition achieved a 33% energy efficiency improvement over code, exceeding EPAct requirements for federal buildings. The project involved a phased construction schedule; work was completed while the building was occupied.

ARCHITECTURE

Harlan County Courthouse Renovations

Harlan, KY

Completed July 7, 1922, the Harlan County Courthouse is constructed of poured-in-place concrete columns, beams, floor slabs and roof deck. The exterior is classically-styled Indiana limestone.

To address long-term roofing and ADA compliance issues, the Harlan County Fiscal Court selected GRW to design a phased renovation. GRW field measured the four-story, 31,040 SF building, identified upgrade/renovation issues, estimated construction cost, and developed phased packages based on the most urgent needs. This phased approach allowed the County to form a long-term budget to complete the renovations.

Phase 1 provided hazardous materials abatement, reroofing, and masonry and metal cornice restoration at the parapet area. Phase 2 added a four-stop elevator and ADA/code upgrades; Phase 3 provided replacement of the water main feed and all interior water lines. Phase 4 on the second floor adjacent to the existing courtroom, renovation of the existing non-ADA compliant ground floor restrooms.

The scope of work also included renovation of a courtroom to provide small meeting rooms and fit-up of the existing courtroom space for use as multi-purpose meeting room. The vacant County Judge Executive suite on the ground floor was renovated for use by the Commonwealth Attorney. A future phases will entail HVAC replacement, and renovation of the vacant fourth floor jail into a history and art museum.

ARCHITECTURE

Cardome Centre Restoration
Cardome Centre
Georgetown, KY

This circa 1896 building, which previously housed a convent and academy, is one of the oldest and most historic properties in Scott County, Kentucky. The project involved plaster repair and resoration in the main meeting hall/sanctuary. Work included plaster demolition, and replacement of the vault ceiling substructure and plaster ceiling. The work area was approximately 30 feet above the finish floor.

Phillip A. Warnock, NCARB, AIA
Project Architect

Years of Experience: 29
Years with Chapman: 20

Education
B.S., Architecture, 1995
University of Tennessee

Registration
Architect: WV, KY, IN, TN

Affiliations
National Council
of Architectural
Registration Boards

WV Chapter,
American Institute
of Architects

Awards
Honor Award, WV AIA
Upshur County Courthouse

Merit Award, WV AIA
I-79 Burnsville Rest Area

Merit Award, WV AIA
State Road Commission
Building

Publications
Structure Magazine,
February 2010
"A Gem in the Mountains"
Upshur County Courthouse
Restoration

Experience

Phill is an award-winning architect with extensive experience, having worked with clients on programming / planning, budget analysis, design, construction documents, meeting coordination, bidding / negotiation services, construction phase services, and code compliance. He is especially skilled in renovation and historic restoration projects for government and municipal facilities.

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

WV General Services Division, Capitol East Campus;
Charleston, WV
The Capitol East Campus Project transforms a 5 ½ acre site adjacent to the State Capitol into upgraded and consolidated facilities, including several buildings supporting the building and grounds maintenance needs for the entire Capitol Complex. The Warehouse/Grounds Building is a 27,000 square-foot structure providing high-bay storage, low-bay storage, maintenance shop, a grounds/mechanics shop, distribution area, and office suite. The 4,300 square-foot Open Storage Building provides covered storage for vehicles, tools, and equipment. The Bulk Storage Building provides 600 square feet of covered storage for salt, gravel, and mulch. The wedge-shaped site was designed to accommodate the buildings, parking for 369 vehicles, vehicular circulation, and greenspace with storm detention systems to reduce flooding in the area. A 6,000 square-foot Mail Room Building provides the mail service and sorting center for the entire Capitol Complex.

WV Division of Highways State Road Commission Building;
Charleston, WV
Project Architect for the renovation of the historic State Road Commission Building for the West Virginia Division of Highways. The 40,000 square-foot building houses offices and support facilities for the local highway district. In addition to a complete interior makeover that included a historic information center and radio studio, the building also received new exterior doors, windows, roofing and a new elevator. A skywalk connects the building to a new Headquarters Building that was constructed beside the State Road Commission.

W. Thomas Cloer, III

NCARB, AIA

Project Architect

Years of Experience: 23
Years with Chapman: 17

Education
B.S., Architecture, 2001
University of Tennessee

Registration
Architect: WV, VA, KY

Affiliations
National Council
of Architectural
Registration Boards

AIA National

AIA West Virginia

WV Chapter
American Institute
of Architects
Past V.P. and Secretary

St. Albans Historic District
Committee Member

Experience

Tom has extensive architectural experience, having worked with clients on programming, planning, budget analysis, design, construction documents, bidding, construction phase services, and code compliance. He regularly provides leadership in architectural design and project management for new building design and renovation projects such as K-12, parks and recreation, and government and municipal facilities.

Comprehensive Educational Facilities Plan
Tommy worked as part of a team to develop the 2020 Comprehensive Educational Facilities Plan (CEFP) for both Ritchie County Schools and Clay County Schools. Work on the CEFP's include facilities assessments and reports, participation in educational planning committee meetings, presenting findings to the county board of education and assisting the county in translating educational needs into facility needs.

Jane Lew Elementary School Addition; Jane Lew, WV
Project Architect for the design of an addition and renovation project that included five new classrooms, an updated office suite, and a new building entrance and bus loop. Toilet rooms were also renovated and new floor finishes were installed throughout the building. A new HVAC system serves the addition, and a new sprinkler system and fire alarm were installed for the entire school. New ceilings and lighting were also provided throughout.

Clay County High School Addition and Renovation; Clay, WV
Tommy worked closely with Clay County Schools to obtain a WV School Building Authority Needs Grant to fund the design and construction of a multi-million dollar addition and renovation to the 106,000 sf Clay County High School. The project included the design and construction of a new multipurpose Commons Area that can serve as additional cafeteria space, a lobby for the gymnasium during sporting events and graduation, and as an area for students to congregate before and after school. Major renovations to the gymnasium and locker rooms include a new gym floor, bleachers, basketball and volleyball equipment, lockers, and shower rooms, In addition to renovating all of the toilet rooms, the school also received new doors, windows, light, paint and a new HVAC system was also Installed throughout the school.

Sharon L. Chapman
Interior Design

Years of Experience: 26
Years with Chapman: 25

Education
B.A., Art and Interior Design, 1993
University of Charleston

Registration
Allied Member, American Society of Interior Designers

Affiliations
Allied Member, ASID

St. Albans Rotary

Gabriel Project of WV

Experience

Sharon has extensive experience in space planning and interior design and has worked on a variety of projects ranging from industrial facilities to schools and high-end professional offices. She offers a unique perspective, understanding the need to provide durable, low maintenance finishes, while enhancing the basic architectural design with just the right aesthetic touch.

Jane Lew Elementary School Addition; Jane Lew, WV
Interior Designer for the addition and renovation project that included five new classrooms, and an updated office suite.

Smithville Elementary School Addition; Smithville, WV
Interior Designer for the addition and renovation of the Smithville Elementary School project which included the design of a new classroom wing and a new kitchen addition adjacent to the remaining buildings.

State Road Commission Building; Charleston, WV
Interior Designer for the renovation of the historic State Road Commission Building for the West Virginia Division of Highways. The 40,000 square-foot building houses offices and support facilities for the local highway district. In addition to a complete interior makeover that included a historic information center and radio studio, the building also received new exterior doors, windows, roofing and a new elevator. A skywalk connects the building to a new Headquarters Building that was constructed beside the State Road Commission.

WV Division of Natural Resources, Building 74 Renovation;
Charleston, WV
Interior Designer for evaluation and recommendations for possible improvements and upgrades to building systems in three-story, 37,000 SF, masonry-construction facility that houses approximately 100 employees. Improvements included new ceilings, floor finishes, and wall finishes.

Various State Park Cabins
Interior Designer for three new 2,200 sf deluxe 4-bedroom cabins at Chief Logan State Park; thirteen new 1,500 sf modern 4-bedroom cabins at Blackwater Falls State Park; and the renovation of nine cabins at Watoga State Park.

Monty Maynard, PE

LEED AP BD+C

Vice President

Years of Experience: 46
Years with GRW: 27

Education

B.S., Electrical Engineering, 1978,
University of Kentucky

Registration

Professional Engineer (Electrical): KY, WV, IN, GA, TN, TX, FL

LEED Accredited Professional, Building Design + Construction

Affiliations

National Fire Protection Association

International Society of Automation

American Council of Engineering Companies

National Council of Examiners for Engineering and Surveying

Experience

Monty's experience with electrical design, process instrumentation and control design, and project management is extensive. He has been involved with the design of building systems for more than 300 projects, ranging from water resources projects to the design-build of federal prisons with total construction values as high as $984 million. His areas of technical expertise include electrical power distribution, substation design, alarm systems, communications, lighting, lightning protection, instrumentation/controls/telemetry, power quality, energy efficiency and code compliance.

Cumberland Valley Technical College Building One Renovation; Harlan, KY
Electrical Engineer. Renovation design for 31,000 SF building including updated exterior appearance, and modernized teaching spaces. Work included total replacement of building mechanical and electrical systems.

Fort Knox Macdonald Elementary School Renovation; Ft. Knox, KY
Principal-in-Charge. Renovation of a 63,000 SF Army school with year-round schedule. Involved a new standing seam roof installed over 48,000 SF to create an attic for 100% replacement of existing HVAC system equipment with geothermal-based heat pump system, new electrical service system, and fire alarm system upgrade.

Lexington Catholic High School Phase II Addition, Lexington, KY
Engineering Manager. 48,000 SF addition included 1800-seat two level gymnasium and running track, performing arts stage, art wing, and new administration area.

Marshall University Weisberg Family Engineering Laboratory, Huntington, WV
Electrical Engineer. New, 16,000 SF engineering laboratory building. Building security systems included access control and CCTV. HVAC systems feature rooftop VAV systems with variable electric reheat.

Cory Sharrard, PE
LEED AP
Mechanical Engineer

Years of Experience: 23
Years with GRW: 3

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

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

Registration
Professional Engineer: KY, IN, OH, WV, NY, TN

NCEES Member allows reciprocity with other states

LEED AP

Affiliations
American Society of Heating, Refrigerating and Air-Conditioning Engineers

Kentucky Society of Professional Engineers

Experience

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

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

WV Capitol East Campus - Charleston, WV
Mechanical Engineer for planning, design, and bidding services for a 26,771 SF warehouse facility with surplus and receiving, a warehouse store, office area, maintenance shop with welding, grounds mechanic shop for vehicle maintenance, and equipment storage facility serving the General Services Division on the Capitol East Campus. Included are an open storage and bulk storage building, as well as a separate building for Capitol mail room.

Clay County Schools Bus Garage; Clay, WV
Mechanical Engineer; FEMA funded project for new bus garage constructed above 100 year flood elevation. Project included 5,000 SF masonry garage (constructed on deep foundations) with two service bays, wash bay, parts storage, and drivers lounge. Separate building houses spare tires.

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

Buffalo Trace Distillery Design-Build Process Building at Wastewater Treatment Plant; Frankfort, KY
Architectural, mechanical, process, and structural design services for design-build of process building at Buffalo Trace Distillery's wastewater treatment plant in Frankfort, KY. Approximate 13,000 SF pre-engineered metal building, with height of up to 33 feet, houses equipment and processes for new wastewater treatment plant.

CAS Structural Engineering, Inc.

Carol A. Stevens, P.E.
Structural Engineer

EDUCATION
West Virginia University, BSCE, 1984
Chi Epsilon National Civil Engineering Honorary
The Pennsylvania State University, ME Eng Sci, 1989

PROFESSIONAL REGISTRATION
P.E.	1990	Pennsylvania
P.E.	1991	West Virginia
P.E.	1994	Maryland
P.E.	2008	Ohio

BACKGROUND SUMMARY
2001 – Present	President, Structural Engineer CAS Structural Engineering, Inc.
1999 – 2001	Structural Engineer Clingenpeel/McBrayer & Assoc, Inc.
1996 – 1999	Transportation Department Manager Structural Engineer Chapman Technical Group, Inc.
1995 – 1996	Structural Engineer Alpha Associates, Inc.
1988 – 1995	Structural Department Manager Structural Engineer NuTec Design Associates, Inc.
1982 – 1988	Engineer AAI Corporation, Inc.

PROFESSIONAL ASSOCIATIONS
American Society of Civil Engineers, WV Section
Past Past President
National Society of Professional Engineers
American Concrete Institute
American Institute of Steel Construction
West Virginia University Department of Civil and Environmental Engineering Advisory Committee
West Virginia University Institute of Technology Department of Civil Engineering Advisory Comm

CIVIC INVOLVEMENT
ASCE Christmas in April Project

EXPERIENCE
West Virginia, Central West Virginia Transit Authority (CENTRA): Repairs to existing facility roof and parapet wall to repair leaks.

West Virginia, Bluefield Transit Building: Design of new office, maintenance and bus storage facility for the Bluefield Transit Authority.

West Virginia, State Capitol Complex, Dome Structure: Exploratory investigation and preparation of construction documents for repairs to structural steel in Capitol Dome.

West Virginia, State Capitol Complex, Building 3: Structural design and construction administration of repairs and renovations to limestone canopy.

West Virginia, State Capitol Complex, Main Capitol Building Parapet: Exploratory investigation of limestone/brick parapet/balustrade of Main Capitol Building to determine cause of movement/cracking/leaks. Construction contract for repairs has been awarded and work is progressing. Building is on State Historic Register.

West Virginia, Huntington Parking Garage: Designed structural repairs to existing parking facility. New deck expansion joints were installed at the upper level and a new deck coating system was applied to parking level above retail space.

West Virginia, State Capitol Complex, Governor's Mansion: Structural analysis and design in addition to evaluation report for modifications and renovations to several areas of mansion. Building is on State Historic Register.

West Virginia, State Capitol Complex, Holly Grove Mansion: Structural evaluation report for preliminary condition assessment of building structure. Building is on State Historic Register.

West Virginia, State of West Virginia Building 2, California Ave Parking Garage, Charleston, WV: Performed condition survey of existing 1950's reinforced concrete parking facility and recommended repairs to Owner. Owner opted to raze structure.

West Virginia, St. Mary's Parking Structure: Performed condition survey of existing post-tensioned

P.O. Box 469 Alum Creek, WV 25003-0469 (304) 756-2564 (voice) (304) 756-2565 (fax)
A West Virginia Certified DBE Consultant
Structural Engineering Certification Board

parking structure designed in 1978. Recommended repairs to the Owner.

Pennsylvania, Sewickley Manor Parking Garage: Performed condition survey of existing parking structure constructed in the 1960's. Structure consists of precast concrete beams and joists supported by concrete columns. Recommended repairs to Owner.

Pennsylvania, Holiday Inn Parkway East: Performed condition survey of existing structure designed in 1974. Determined that there were structural deficiencies and recommended repair solutions to Owner.

Pennsylvania, Fifth & Neville Apartments Parking Garage: Performed condition survey of existing parking structure constructed in the 1960's. Recommended repair solutions to Owner.

West Virginia, Upshur County Courthouse: Developed construction documents for structural repairs to main entrance and dome of 1899 structure. Work is currently under contract.

PREVIOUS EXPERIENCE

West Virginia, Huntington TTA Bus Garage: Designed repairs to existing building foundation and floor slab in office area for project including renovations of offices, driver's and mechanic's area and locker room recreations room/break room.

West Virginia, State Capitol Building: Designed structural system to replace deteriorated reinforced concrete slab at landing on north side of Capitol steps.

West Virginia, Farrell Law Building: Performed analysis of existing deteriorated structural sidewalk over parking area. Recommended repair solutions for reinforced concrete and aged terra cotta façade of 1920's building.

West Virginia, Upshur County Courthouse Annex: Performed structural evaluation and design for repairs to existing multi-story Annex addition.

West Virginia, Sissonville Library: Structural design of new 7,000 SF branch library. Structure consisted of wood framing.

West Virginia, Cabell Huntington Hospital Boiler Mezzanine: Structural analysis and testing of existing reinforced concrete mezzanine with significant degradation from brine tank leakage. Developed new structural system to replace existing concrete mezzanine utilizing steel framing and steel grating.

West Virginia, Beckley Wastewater Treatment Plant: Designed reinforced concrete tanks and masonry support structures for new wastewater treatment plant.

West Virginia, Morgantown High School Additions: Designed steel framing and foundations for science classroom, cafeteria and gymnasium additions to existing education complex.

West Virginia, Grafton High School Addition: Designed steel framing and foundations for new science classroom addition to existing high school.

Pennsylvania, Metropolitan Edison Company, Headquarters: New 80,000 SF two-story office addition to existing complex.

Pennsylvania, Defense Distribution Region East: Structural engineering and design for a 33,000 SF Hazardous Materials Storage Warehouse.

Pennsylvania, Glatfelter Insurance: Design of steel framing and foundations for new 30,200 SF building.
Maryland, U.S. Army Corps of Engineers, Baltimore District, Administration Building: Seismic design of new 10,000 SF masonry building.

Pennsylvania, Carlisle Syntec: Design of foundation supports for 800,000 lb rubber vulcanizing machine; enlargement of foreman's office including new framing to support mechanical equipment on roof; new monorail installation; extension of existing gantry rail.

Pennsylvania, Engel Worldwide: Steel framing and foundations for new 12,000 SF two-story office building; design of crane beams and columns for adjacent 60,000 SF crane building.

Pennsylvania, AMP IMF: Structural design for the renovation and conversion of a stamping facility into an integrated manufacturing facility (IMF) housing operations for stamping as well as blow molding processes.

Texas, York International: Structural survey of existing building structure for modifications to incorporate large testing and manufacturing areas for mechanical equipment.

Maryland, Columbia 100: Design of structural steel framing for new two-story 43,000 SF office building.

Pennsylvania, York Federal Savings and Loan Association/New Service Corporation: Design of steel framing, reinforced concrete retaining wall and foundations for new 14,400 SF two-story office building.

Pennsylvania, Yorktowne Parking Garage: Study of reinforced concrete/steel framed parking garage.

Robert G. Belcher, P.E.

Senior Vice President
Project Officer

Years of Experience: 40
Years with Chapman: 37

Education
B.S., Civil Engineering, 1983, West Virginia Institute of Technology

Registration
Civil Engineer: WV, OH, VA

Affiliations
WV Water Environment Association

Contractor's Association of WV

WV American Water Works Association

WV Society of Professional Engineers

WV American Council of Engineering Companies

WVUIT Civil Engineering Advisory Board

WV Qualifications Based Selection Council

Awards
George Warren Fuller Award, 2001

Experience

Water Systems
Design and project management for numerous water systems for both public and private water companies. Projects include new water treatment plants as large as 6.0 MGD, improvements to existing plants, water mains and distribution systems. Water storage projects include glass-lined steel tanks, welded high-strength steel tanks, elevated pedestal tanks, and pre-stressed concrete tanks.

Wastewater Systems
Design and project management for numerous wastewater systems throughout West Virginia. Projects include new, secondary and tertiary wastewater treatment plants as large as 4.5 MGD, improvements to existing plants, small-flow treatment plants, new and rehabilitation of wastewater collection systems, CSO compiance, SSES Reports and I/I Studies, and facility plan updates.

Miscellaneous
Design and project management for large highway and bridge projects, airport improvements projects, large stormwater management projects including assistance with MS4 compliance, as well as potable water and wastewater system design for site development projects throughout West Virginia, and Virginia.

Recent Relevant Experience
St. Albans MS4 Stormwater Management Plan Update; St. Albans, WV
St. Albans MS4 Stormwater Repairs; St Albans, WV
City of Ashland Oakview Road Culvert Replacement; Ashland, KY
City of Lewisburg Dogwood Heights Culvert Replacement; Lewisburg, WV
City of Lewisburg Comprehensive Stormwater Report; Lewisburg, WV