



**Chapman
Technical
Group**
a division of
GRW

August 16, 2019

RECEIVED

2019 AUG 16 AM 9:52

WV PURCHASING
DIVISION

Department of Administration
Purchasing Division
2019 Washington Street, East
Charleston, West Virginia 25305-0130

**Re: A/E Services for
Twin Falls Resort
Outdoor Pool and Structures**

Dear Selection Committee:

Chapman Technical Group is most interested in providing the architectural and engineering services for the design of the Twin Falls Resort Outdoor Pool and Structures. Our project team recently completed the design of the Pipestem Resort State Park Spray Park, which included the demolition of the old Recreation Center. We also were involved in the development of the Master Plan for the new facilities at Twin Falls and are very familiar with the park and the requirements of the project. Additionally, our project team and a wealth of experience in designing swimming pools and aquatic facilities. In response to the specific information requested regarding the execution of the project, we offer the following:

3.1.a. Communication: In Chapman Technical Group's project management system, the Project Manager will be the point of contact for the DNR for all communications related to the project. It will be the Project Manager's responsibility to ensure that all project team members receive design directives and are involved in resolving project issues. Having a single point of contact helps minimize confusion and is the most efficient communications method. The Project Manager will also coordinate all progress meetings and site visits during construction and will ensure that all communications are forwarded to the appropriate DNR personnel. For this project, Joseph Bird will serve as the Project Manager.

3.1.b. Budget Control: Most of our WVDNR projects have been completed within budget, including the Spray Park and Recreation Center demolition project at Pipestem Resort State Park. We are currently completing a \$5 million flood repair project in Clay County within budget.

Our method of cost control includes developing accurate opinions of cost in the early stages of design, so that decisions regarding the scope of the project can be addressed early when adjustments to the design are easier to achieve. As the project progresses, we will consider alternate systems that can provide the required result in a way that is cost-effective, both short-term and long-term. We will also develop alternate bid items to ensure that the project stays within the budget. During

200 Sixth Avenue
Saint Albans, WV 25177

304.727.5501
304.727.5580 Fax

Buckhannon, WV
Lexington, KY

www.chaptech.com



Selection Committee
August 16, 2019
Page 2

construction, we will work with the contractors to establish a team relationship so that as issues arise, we can work together to find the most cost-effective solution. We are often able to find alternative means of construction that help to costs associated with unforeseen conditions.

3.1.c. Schedule Control: We have completed many projects for the WV State Parks within the allotted schedule. The Pipestem project had a very aggressive design and construction schedule and was completed on time to open this summer.

During construction, we will strive to maintain a true team relationship so that issues are resolved quickly with input from all parties, including your field representative. As you know, work in West Virginia State Parks can be subject to extreme weather conditions, which must be taken into consideration when scheduling construction activities. As always, it takes a coordinated effort from the Architect and the Owner apply the appropriate pressure to keep the project moving expeditiously, while maintaining a positive relationship with the Contractor. I think we have demonstrated that balance in past projects.

3.1.d. Experience: The Chapman Technical Group team will include Joseph Bird, who will serve as Project Manager. Tom Cloer, AIA, has designed several projects for WV State Parks including the Pipestem Spray Park project, cabins at Chief Logan State Park, and cabins Watoga State Park. He will be the lead architect for the project. Miller Engineering will provide mechanical/electrical and plumbing engineering and has extensive experience in the design of swimming pools and spray parks. CAS Structural Engineering will provide structural engineering, both of whom have demonstrated experience with WV State Parks, including pool and spray park experience.

You will find all of the requested information regarding our firm and our ability to execute the requirements of this project within this submittal. We would very much appreciate the opportunity to present our project team and further discuss your project. Meanwhile, if you have any questions or need additional information, please contact me.

Sincerely,

CHAPMAN TECHNICAL GROUP

Joseph E. Bird, ASLA
Vice President

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)
 Joseph E. Bird, VP

 (Printed Name and Title)
 200 Sixth Avenue, St. Albans, WV 25177

 (Address)
 (304) 727-5501 (304) 727-5580

 (Phone Number) / (Fax Number)
 jbird@chaptech.com

 (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.

Chapman Technical Group

 (Company)

 V.P.

 (Authorized Signature) (Representative Name, Title)

Joseph E. Bird, VP

 (Printed Name and Title of Authorized Representative)

8-15-2019

 (Date)

(304) 727-5580 (304) 727-5580

 (Phone Number) (Fax Number)

**ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.:**

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

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

Addendum Numbers Received:
(Check the box next to each addendum received)

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

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that 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.

Chapman Technical Group

Company

Authorized Signature

Date

8-15-2019

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

West Virginia Ethics Commission
Disclosure of Interested Parties to Contracts

(Required by W. Va. Code § 6D-1-2)

Name of Contracting Business Entity: Chapman Technical Group Address: 200 Sixth Avenue
Saint Albans, WV 25177

Name of Authorized Agent: Joseph E. Bird Address: 200 Sixth Avenue, St. Albans, WV 25177

Contract Number: CEOI 0310 DNR2000000002 Contract Description: Twin Falls Resort Outdoor Pool

Governmental agency awarding contract: WV Division of Natural Resources

Check here if this is a Supplemental Disclosure

List the Names of Interested Parties to the contract which are known or reasonably anticipated by the contracting business entity for each category below (attach additional pages if necessary):

1. Subcontractors or other entities performing work or service under the Contract

Check here if none, otherwise list entity/individual names below.

CAS Structural Engineering, Inc.
Miller Engineering, Inc.

2. Any person or entity who owns 25% or more of contracting entity (not applicable to publicly traded entities)

Check here if none, otherwise list entity/individual names below.

3. Any person or entity that facilitated, or negotiated the terms of, the applicable contract (excluding legal services related to the negotiation or drafting of the applicable contract)

Check here if none, otherwise list entity/individual names below.

Joseph E. Bird

Signature: [Handwritten Signature]

Date Signed: 8-15-2019

Notary Verification

State of West Virginia, County of Kanawha

I, Amanda Sutphin, the authorized agent of the contracting business entity listed above, being duly sworn, acknowledge that the Disclosure herein is being made under oath and under the penalty of perjury.

Taken, viewed, and subscribed before me this 15th day of August, 2019



Official Seal
Notary Public, State of West Virginia
Amanda M. Sutphin
Chapman Technical Group
200 Sixth Ave.
St. Albans, WV 25177
My Commission Expires April 17, 2022

[Handwritten Signature]
Notary Public's Signature

To be completed by State Agency:

Date Received by State Agency: _____

Date submitted to Ethics Commission: _____

Governmental agency submitting Disclosure: _____

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

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

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

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

DEFINITIONS:

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

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

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §51-5-3) 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: Chapman Technical Group

Authorized Signature: [Signature] Date: 8-15-2019

State of West Virginia

County of Kanawha to-wit:

Taken, subscribed, and sworn to before me this 15th day of August, 2019.

My Commission expires April 17, 2022.



NOTARY PUBLIC [Signature]

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, Buckhannon, and Martinsburg, 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



Upshur County Courthouse Renovations
WV AIA Honor Award, 2008
Historic Preservation



COMPANY OVERVIEW & AWARDS



Upper Big Branch Miners Memorial
WV ASLA Honor Award, 2012



Nuttallburg Historic Mining Complex
WV ASLA Merit Award, 2012

Twin Falls Resort State Park Outdoor Pool and Structures

**West Virginia Division of Natural Resources
Solicitation Number CEOI 0310 DNR2000000002**



**Chapman
Technical
Group**
a division of
C



**Expression of Interest to Provide Professional
Architectural/Engineering Design Services**

200 Sixth Av
St. Albans, WV 2

304.727.
304.727.558

Buckhannon
Lexington

www.chaptech



Pipestem Sprayground **Pipestem Resort State Park** 3405 Pipestem Drive Pipestem, West Virginia 25979

As part of the design team of CAS Structural Engineering, Chapman Technical Group helped plan and design a new sprayground for Pipestem Resort State Park for the West Virginia Division of Natural Resources. Chapman Technical Group was responsible for the overall planning and layout of the facility which includes a new sprayground, bathhouse, parking, and a pedestrian bridge linking the site to the McKeever Lodge across the street.

As part of the project, the old swimming pool and recreation center will be demolished and transformed into additional outdoor recreation space for the park.



Beech Fork State Park
Swimming Pool and Bathhouse
West Virginia Division of Natural Resources
324 4th Avenue
South Charleston, West Virginia 25303

Chapman Technical Group designed \$4.5 million worth of improvements at the state park near Barboursville including a 50-meter swimming pool, bathhouse, six modern cabins, and campground upgrades. The pool and bathhouse were constructed on 12 feet of fill, carefully designed by our landscape architects to blend naturally with the surrounding terrain. The project also included a one-half mile access road to the cabins, as well as storm water management for the entire project.

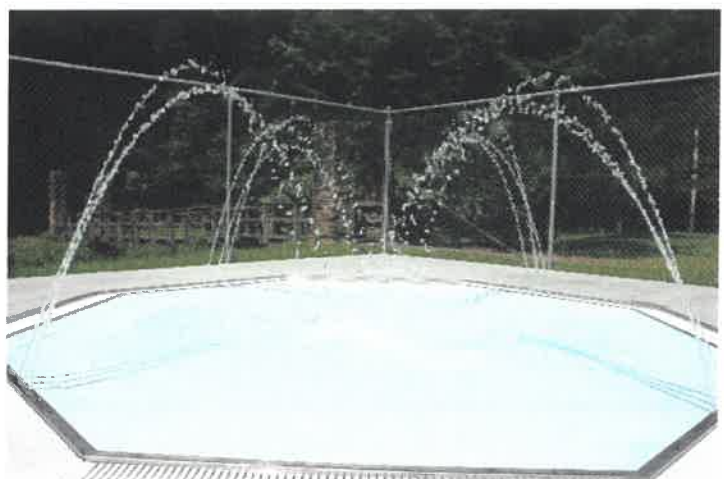




The West Virginia Division of Natural Resources swimming pool at the Laurel Lake Wildlife Management Area near Lenore, West Virginia had fallen into serious disrepair and had actually closed down. Chapman Technical Group designed a rehabilitation of the pool that included a new stainless steel gutter recirculation

system, a membrane liner, a new interactive wading pool, and new concrete decks. After the demolition of the old bathhouse, a new bathhouse was built which also houses the filtration equipment for the wading pool. The project was completed in 2010 at a cost of \$714,000.

WV Division of Natural Resources Laurel Lake Wildlife Management Swimming Pool Mingo County, West Virginia





Moncove Lake State Park Swimming Pool and Bathhouse

West Virginia Division of Natural Resources
324 4th Avenue
South Charleston, West Virginia 25303

The Moncove Lake State Park swimming pool features a stainless steel gutter recirculation system and a wading pool surrounded by spraying jets of water. The 25-meter pool is a long-needed addition to the state park located south of Lewisburg.

In order to provide adequate water for the pool, not only was the construction of a pool filter room required, but the entire water system for the park had to be renovated. The water system design included a larger well pump, a larger green sand filter to remove iron, and upgraded water storage and filter backwash capabilities.

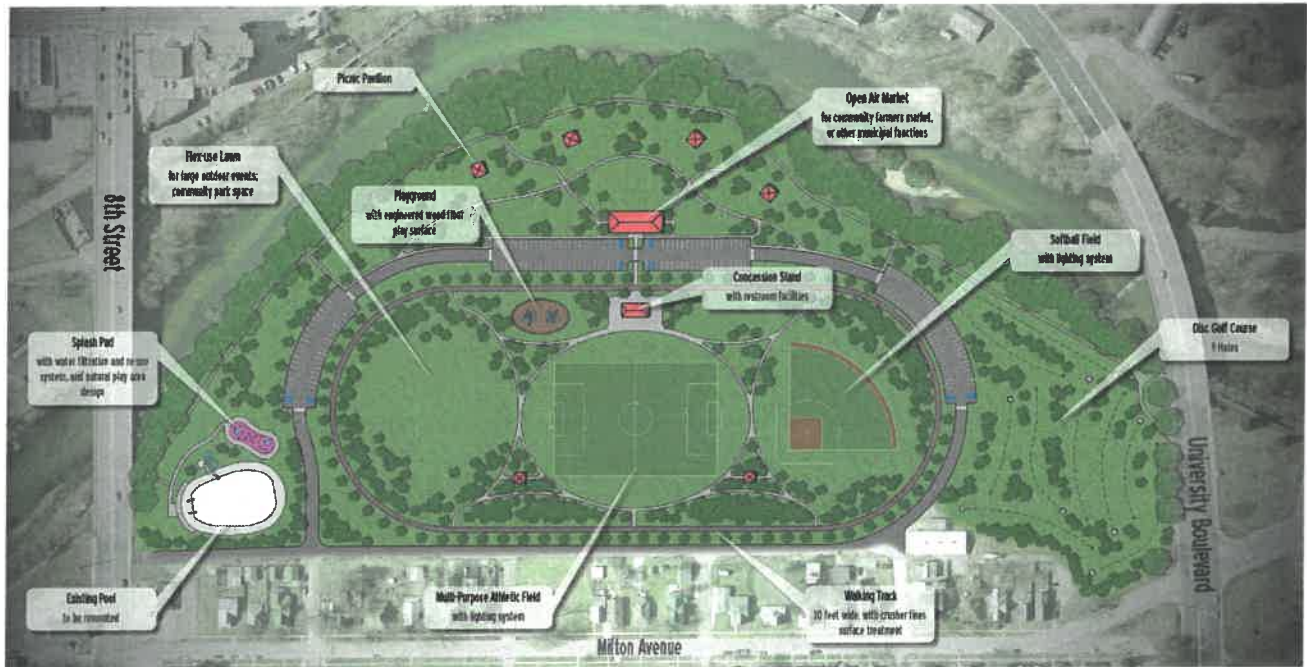
LANDSCAPE ARCHITECTURE



Valley Park Waterslide Complex Putnam County Parks 1 Valley Way Hurricane, West Virginia 25526

Design and construction inspection services for a triple waterslide complex at the Valley Park Wave-pool. The slides include a 279-foot, 44-inch diameter body flume, a 267-foot, 84-inch diameter innertube slide, and a 174-foot, 32-inch diameter fully-enclosed translucent tubular speed slide. A three-story structural tower supports the access stairways and entry platforms.





Anderson Athletic Park Anderson, Indiana

At one time, the Anderson Athletic Park in Anderson, Indiana hosted harness races. Though the park is now only used for special events, the City would like to redevelop the property to offer its citizens better recreation opportunities. Chapman Technical Group's landscape architects and engineers (as GRW) worked together to plan and design the new park.



The old harness racing track will be repurposed into a walking track, and softball and soccer fields will be constructed in the infield, as well as an open lawn for unstructured play. The park will also feature a disk-golf course, walking trails, picnic pavilions and a spray park. The historic above-ground swimming pool will also be renovated.

As part of community development, a new pavilion will be used as a farmers market, as well as other functions.



Pocahontas County Wellness Center Marlinton, West Virginia

The Wellness Center was constructed adjacent to, but separate from, the existing Marlinton Elementary School. The Pocahontas County Board of Education provided the property in exchange for daytime use of the gymnasium, which the school did not have. The new construction is approximately 13,000 square feet and includes a middle-school size gym and basketball court; a wellness center; two multi-purpose rooms, one of which can be divided into two classroom size rooms with a folding, sound attenuating partition; a racquetball court; and a warming kitchen/concession stand.

The facility is configured with separate entries to allow use by the school and the public at all times of the day while limiting or prohibiting interaction of the various groups.





West Virginia Division of Natural Resources Canaan Valley Resort State Park - Ski Area Improvements Canaan Valley, West Virginia

Chapman Technical Group led a team of specialists in the development of a wide range of improvements at the ski area of Canaan Valley Resort State Park.

A new tube park features a 10-lane tube run in excess of 800 feet long with a vertical drop of 90 feet. A new boardwalk conveyor carries riders back up the hill and at the base, a new lodge includes a wood-burning fireplace, rest rooms, a concession stand for hot drinks, and an outdoor patio. In the same area, a wobble clay shooting range will be used as a seasonal activity.

Another major improvement is the new beginners slope and ski school area. This new slope will be easily accessible and includes snow guns and lighting for night skiing. A boardwalk conveyor carries skiers back to the head of the slope.



The original ski lodge buildings received a much-needed face lift, including new wall and floor finishes, new furnishings, new lighting and upgrades to the heating and ventilation systems. Outside, a new plaza with a fire pit provides more options for outdoor seating. Important infrastructure improvements include upgrades and major maintenance to the existing ski lifts; snow-making waterline repairs and upgrades; new snow guns; and major storm drainage improvements. A new waterline from the Canaan Valley golf course ponds provides expanded snow-making capabilities.

ARCHITECTURE



WV Division of Natural Resources
Canaan Valley Resort State Park - Tube Park Lodge
Canaan Valley, West Virginia



Chapman Technical Group is leading a team of specialists in developing a wide range of improvements at the ski area of Canaan Valley Resort State Park. The upgrades include new facilities that will have a major impact on the resort's operations; others will be little-noticed but important improvements to the resort's infrastructure. A new tubing park will be developed and will feature a 12-lane tube run in excess of 800 feet long with a vertical drop of 90 feet. A new boardwalk conveyor will carry tubers back up the hill. A tubing lodge will feature a wood-burning fireplace, restrooms, and a concession stand for hot drinks, and an outdoor patio will include a wood-burning fire pit. A storage building will house tubes and snow grooming equipment. In the same area, a wobble clay shooting range will be developed as a seasonal activity. Another major improvement will be a new beginners slope and ski school area. This new slope will be easily accessible by beginning skiers and will include new snow guns

and lighting for night skiing. A boardwalk conveyor will carry skiers back to the head of the slope, enabling them to ski at their skill level as long as they want. The main ski lodge, the Bear Paw Lodge, is relatively new, but the older buildings at the base of the ski slopes will get a much-needed face lift. New wall and floor finishes, new furnishings, new lighting and upgrades to the heating and ventilation systems, will make the lodge buildings much more comfortable. The pub will likewise be upgraded with an expanded bar area. Outside, a new plaza with a fire pit will provide more options for outdoor seating. Important infrastructure improvements will include upgrades and major maintenance to the existing ski lifts; snow-making waterline repairs and upgrades; new snow guns; and major storm drainage improvements. A new waterline from the Canaan Valley golf course ponds will provide expanded snow-making capabilities.

ARCHITECTURE



American Institute of Architects, Merit Award, 2010



WV DOT Division of Highways

Burnsville Rest Area
Burnsville, West Virginia

The Burnsville Rest Areas are the first of the new standard rest areas to be built around the state for the West Virginia Department of Transportation. A dual-facility layout ensures that demand will be met for many years. Native materials, including smooth cut and rough stone, were used inside and out. Low maintenance but highly durable materials, such as the tern-coated stainless steel roof and the epoxy terrazzo floor, were used throughout. The design plays off of West Virginia imagery and

creates safe, warm, and welcoming spaces. Separate maintenance and vending buildings complement the main structures.



Lewis County Board of Education
Jane Lew Elementary Addition
6536 Main Street
Jane Lew, West Virginia

The project includes five new classrooms, an updated officer suite, and a new building entrance and bus loop. Toilet rooms will also be renovated and new floor finishes will be installed throughout the building. A new HVAC system will serve the addition, and a new sprinkler system and fire alarm will be installed for the entire school. New ceilings and lighting will also be provided throughout. The renovations will allow the students to be housed in a single building that provides the safety, security and educational spaces that are required in a modern school.



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 original 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.





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



After Reconstruction

Marlinton Depot Project Marlinton, West Virginia

The project scope was originally an interior and exterior renovation, but a fire consumed the entire depot and the owner then engaged Chapman Technical Group to design a "new" depot. The new depot replicates the original structure very closely. The project also includes renovations to the original restrooms in a separate building, which serves the Greenbrier River Trail. Chapman Technical Group worked with the Marlinton Depot Owners for nearly five years to help procure grants and funding for the construction.



Original Depot



WV Division of Natural Resources

Chief Logan Cabins

1000 Conference Center Drive
Logan, West Virginia

Chapman Technical Group was selected to provide the architectural, civil engineering, and landscape architectural design to construct 3 new cabins at Chief Logan State Park. In addition to the design of the 4-bedroom cabins, the project also included site development and utility system upgrades on a very challenging former surface mine site.

A new access road was required to the cabins and water, sewer, electric, gas, and communications were all extended to the site.





Joseph E. Bird, ASLA

Vice President
Project Officer

Experience

Joe has been involved in a wide range of projects in his 30+ years of experience. In addition to his landscape architectural design experience, he has served as Project Manager for many major multi-discipline projects ranging from campus development projects to ski area renovations. His experience includes coordinating the efforts of various local, state, and federal agencies.

Years of Experience: 40
Years with Chapman: 33

Education

B.S., Landscape
Architecture, 1978
West Virginia University

Registration

Architect: WV, KY

Affiliations

Council
of Landscape
Architectural
Registration Boards

WV Chapter,
American Society of
Landscape Architects

WV DOH District One Master Plan; Charleston, WV

Project Manager and Designer for the development of a master plan for the West Virginia Division of Highways District One campus to plan for future building sites, pedestrian and vehicular circulation, and the relocation of overhead utilities underground. The project also included the implementation of sustainable stormwater principles including bioswales, pavement infiltration where possible, and underground stormwater detention, to help alleviate chronic flooding which has plagued the project area.

Smith Street Streetscape; Charleston, WV

Project Manager and Landscape Architect for the design of a streetscape project as a part of the overall development of the District One Campus project. The plan includes placing overhead utilities underground, new street lights, new sidewalks and curb ramps, and new street trees.

Covington Streetscape Project; Covington, KY

Project Manager and Landscape Architect for the design of seven blocks of streetscape in Covington, Kentucky. The plan includes placing overhead utilities underground, new street lights, new sidewalks and curb ramps, and new street trees. The project also included the design of new traffic signs and pedestrian crossing signals.

Scottsville Streetscape Project; Scottsville, KY

Landscape Architect for the design of two blocks of streetscape in Scottsville, Kentucky. The plan includes placing overhead utilities underground, new street lights, new sidewalks and curb ramps, and new street trees.

WV DOH Alternative Transportation Projects

Project Manager and Designer for the Alternative Transportation and Trail projects throughout West Virginia, including sidewalk projects, streetscape projects, and recreational trail projects. Managed and designed several phases of the ongoing streetscape projects for the City of St. Albans.



W. Thomas Cloer, III, NCARB, AIA Project Architect

Experience

Tommy has extensive architectural 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 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.

Years of Experience: 18
Years with Chapman: 12

Education

B.S., Architecture, 2001
University of Tennessee

Registration

Architect: WV, VA, KY

Affiliations

National Council
of Architectural
Registration Boards

WV Chapter
American Institute
of Architects

St. Albans Property and
Maintenance Board

St. Albans Historic District
Committee Member

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.

Smithville Elementary School Addition; Smithville, WV

Project Architect for the addition and renovation of the Smithville Elementary School project which included the demolition of two buildings in the existing complex and the design of a new classroom wing and a new kitchen addition adjacent to the remaining buildings. The new additions were designed to join with the existing classroom wing and multipurpose building to create a single facility under one roof.

Man K-8 Addition; Man, WV

Project Architect for the Man K-8 Addition which included the design and space planning for a 9,360 square-foot addition to the existing school. The addition included four new classrooms, a 2,400 square-foot gymnasium/multipurpose room, ADA compliant restroom facilities, and a small landscaped courtyard. The design and construction was accomplished in 10 months and nearly 15% below budget.

Tube Park Lodge; Canaan Valley, WV

Project Architect for the New Tube Park Lodge and other existing facilities upgrades that were part of a wide range of improvements to the ski area at Canaan Valley Resort State Park. The new tubing lodge features a wood burning fire place, restrooms, a concession stand for hot drinks and an outdoor patio with wood-burning fire pit.

Blackwater Falls State Park Cabins; Davis, WV

Project Architect for thirteen new cabins in the environmentally-sensitive Blackwater Falls State Park. One of the Goals in Developing the project was to have as little environmental site impact as possible. Each cabin has four bed rooms and a central-living, dining, kitchen area. Wood floors and trim as well as a large stone fireplace give these modern cabins a more rustic feel.



Phillip A. Warnock, NCARB, AIA Project Architect

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.

Years of Experience: 26
Years with Chapman: 15

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

WV DOH District One Historic Architect; Charleston, WV

Responsible for documenting historic structures for submission to the West Virginia State Historic Preservation Office in conjunction with the redevelopment of the District One campus.

WV DOT Rest Areas and Welcome Centers

Project Architect for the design of the prototype rest areas and welcome centers for various locations throughout West Virginia.

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 Building.

District One Equipment Shop Building; Charleston, WV

Project Architect for the design of the new \$10 million vehicle equipment shop building for District One which includes multiple service bays, parts storage, welding shop, and offices.

Coal Heritage Discover Center; Mt. Hope, WV

Project Architect for the Coal Heritage Discovery Center, which is a rehabilitation of the historic Patteson Building in downtown Mt. Hope. The Coal Heritage Discovery Center will consist of offices, meeting rooms, an historic information center, a small theater space, a public lobby area, a gift shop, and a small café area. There will also be an outdoor patio which can be used as exterior café seating.



Roger Kennedy, ASLA

Landscape Architect

Experience

Roger has a very diverse professional background, having been involved in parks and recreation projects, highway design, stormwater management, and trail and streetscape design. Other experience includes the use of various civil design software packages for use in site development and road design, digital terrain modeling, hydraulic analysis and related computer aided design tools, as well as the development and management of the computing resources of the company.

Years of Experience: 29
Years with Chapman: 28

Education

B.S., Landscape
Architecture, 1990
West Virginia University

Registration

Landscape Architect: WV,
KY

Affiliations

President, WV Chapter,
American Society of
Landscape Architects

Member, St. Albans Rotary
Club

Cubmaster, Cub Scout
Pack 146

Member, Sigma Lambda
Alpha Honor Society of
Landscape Architects

Awards

WV Division of Highways
Engineering Excellence:
WV Route 10
2011, 2000
Corridor H
2013

WV DOH Alternative Transportation Projects

Project Manager and Designer for the Alternative Transportation and Trail projects throughout West Virginia, including sidewalk projects, streetscape projects, and recreational trail projects. Current projects include Shepherdstown Multi-use Trail Project, Poca Sidewalk Project, Lewisburg Route 219 Sidewalk Project, Lewisburg L&R Trail Project, Lewisburg Civil War Trail Project.

Chief Logan State Park Cabin Access Road; Logan, WV
Project Landscape Architect for a new 1700-foot access road serving three new cabins for the West Virginia Division of Natural Resources. The project included utility design, stormwater management, and extensive erosion and sediment control.

Meadow River Trail; Greenbrier and Fayette Counties, WV
Project Landscape Architect for a multi-use rail trail being developed by the Greenbrier and Fayette County Commissions in West Virginia as a Recreation Trail Project administered by the West Virginia Division of Highways. The project includes the rehabilitation of 17 miles of compacted aggregate trail and six railroad trestles, which will be rebuilt to accommodate pedestrian, bicycle and equestrian traffic. After the initial design was complete, seasonal floods damaged the existing trail. Working with FEMA and the County Commissions, the project scope was expanded to include flood damage repair.

WV DOT Highway Projects

Responsibilities include the design of horizontal and vertical road alignments, superelevation design, intersection layout, slope design and quality control review. Projects include several multi-lane highways and bridges throughout West Virginia.



Sharon L. Chapman

Interior Design

Experience

Sharon has extensive experience in space planning and interior design and has worked on a variety of projects ranging from industrial facilities to 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.

Years of Experience: 25
Years with Chapman: 24

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

Thomas Memorial Hospital
Foundation

Gabriel Project of WV

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.

WV DOT Rest Areas and Welcome Centers

Interior Designer for the design of the prototype rest areas and welcome centers for various locations throughout West Virginia.

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.

Man K-8 Addition; Man, WV

Interior Designer for the Man K-8 Addition which included the design and space planning for a 9,360 square-foot addition to the existing school. The addition included four new classrooms, a 2,400 square-foot gymnasium/multipurpose room, ADA compliant restroom facilities.

Pocahontas Wellness Center; Marlinton, WV

Interior Designer for a community wellness center which included a middle-school size gym and basketball court; a wellness center; two multi-purpose rooms; a racquetball court; and a warming kitchen/concession stand.

Coal Heritage Discover Center; Mt. Hope, WV

Interior Designer for the Coal Heritage Discovery Center which will consist of offices, meeting rooms, an historic information center, a small theater space, a public lobby area, a gift shop, and a small café area.



Amanda M. Sutphin, P.E.

Civil/Environmental Engineer

Experience

Amanda's overall experience includes planning, design, bidding, and construction administration/management of various public and private water and wastewater systems throughout West Virginia. Her specific potable water experience includes distribution systems, river crossings, horizontal directional drills, wells, raw water intakes, treatment plants, water storage tank design, computer modeling, treatment process evaluation, and problem troubleshooting in existing systems.

Her wastewater experience includes gravity and low-pressure collection systems, pump stations and force main transmission systems, treatment plant process evaluation and design, trenchless pipeline rehabilitation, odor and corrosion control, and alternative on-site disposal systems.

WV DNR Projects; Charleston, WV

Project Engineer for wastewater treatment and septic systems for various State Park and Wildlife Management Area facilities.

WV American Water Company Projects; various locations, WV
Project Engineer for the design of water distribution systems, water storage, and wastewater systems for West Virginia American Water Company.

Town of New Haven; New Haven, WV

Project Engineer for a water distribution system replacement, well rehabilitation, and water storage tank replacement project.

Elkins Road PSD; Buckhannon, WV

Project Engineer for a water extension project to include water tank rehabilitation, new office building, and emergency generators for existing pump station.

Town of Hartford; Hartford, WV

Project Engineer for a water distribution system replacement, well rehabilitation, and water storage tank replacement project.

Years of Experience: 15
Years with Chapman: 3

Education

B.S., Civil Engineering, 2004
West Virginia University
Institute of Technology

Registration

Civil Engineer: WV, OH, PA,
KY



Jason E. Brown, P.S. Professional Surveyor

Experience

Highways

Established control, site surveying, topographic surveying, courthouse research, drawing production, Right-of-Way Questionnaires, bore hole stake out, and all surveying associated with the initial and final design of WV highways.

Site Development

Experienced in all types of surveying associated with site development, to include control, topographic boundaries, research, and drawing production. Projects include military complexes, public housing, commercial development, industrial and institutional complexes, churches, resorts and public facilities throughout the state.

Schools

Associated surveying for new schools, additions, athletic fields, and sidewalks projects.

Parks and Recreation

Associated surveying for projects including swimming pools, bathhouses, cabins and support facilities for the West Virginia Division of Natural Resources and similar facilities for county and municipal park systems.

Water/Wastewater/Stormwater Systems

Associated surveying for the design of water systems, sanitary sewer systems, and stormwater systems, including treatment facilities for both private and public systems throughout the state. Also, field experience in the inventory and collection of attribute data using GPS equipment for uploading to GIS databases.

Boundary Surveys

Experienced in full boundary surveys and ALTA surveys for military complexes, private residences, prison facilities, commercial sites, and all boundaries associated with various engineering projects throughout the state.

Years of Experience: 24
Years with Chapman: 9

Education

A.S., Land Surveying, 2002
Glennville State College, WV

Registration

Professional Surveyor: WV,
KY, VA, PA

Affiliations

WV Society of Professional
Surveyors

REFERENCES



1. **Mr. Travis Knighton, P.E.**
WV Department of Transportation
Division of Highways
1338 Smith Street
Charleston, WV 25301
(304) 356-3840
2. **Mr. Dirar Ahmad, P.E.**
West Virginia Division of Highways
1334 Smith Street
Charleston, WV 25301
(304) 558-9721
3. **Mr. Joe Paxton, Superintendent**
Clay County Schools
P.O. Box 120
Clay, WV 25043
(304) 587-4266
4. **Mayor John Manchester**
City of Lewisburg
942 Washington Street
Lewisburg, WV 24901
(304) 645-2080



Firm Profile

Our engineered solutions involve a detailed assessment process: investigation, observation, communication with stakeholders, system analysis, building modeling, and engagement from our entire team. We approach each and every project with this process and the guiding principle that buildings are designed to be livable and function in their intended purpose.

Over the past 13 years Miller Engineering has engineered solutions for over \$17.2M in mechanical system upgrades, repairs, and renovations for projects of all scopes, with clients ranging from private owners to local and state governments.



Our team has engineered repairs and stabilized systems to assist an owner to plan for required upgrades, system repair or develop a maintenance plan to extend the life of a system.

Our team has unique skill-sets regarding engineered renovation solutions. Each member of the team has hands-on mechanical system installation, construction, design, and maintenance experience.



Miller Engineering takes pride in being ***different by design***, and that difference shines through in all phases of our work and continued relationships with our clients.

Additional Benefits

- Experienced and Licensed Professional Engineers
- Quality, Value-Engineered Project Delivery
- Qualified Construction Representative on Staff
- LEED-AP Certified
- Below Industry Change Order Status
- Building Information Modeling
- Interactive Solutions Provider
- Emergency Facility Response



Engineering Design and Consultation

- Mechanical
- Electrical
- Plumbing
- HVAC Design
- Renovation
- New Construction

Aquatic Facility Design

- Public Pools & Areas
- ADA Compliance
- Indoor & Outdoor (air flow)
- Chlorination/Filtration

Construction Administration

- Maintenance/Facility Improvement Plans
- Contract Administration
- Code Observation

Communication System

- Intercomm & Public Address
- Voice/Data/CATV
- Urgent Response

Energy

- Power Supply (main & backup)
- Green & Renewable Consulting
- Systems Utilization & Upgrades
- Sustainable Solutions

Facility Utilization

- Systems Assessment & Solutions
- Adaptive Re-use
- Planning/Life-Cycle Control
- Engineered Replacement

Life Safety Inspection/Design

- Fire Protection & Alarm Systems
- Access Control
- Fire & Electrical Investigation

Industry Experience

- Education
- Local & State Government
- Commercial Development
- Healthcare
- Public Pools (indoor & outdoor)
- Department of Parks & Recreation

The Miller Engineering Difference



When people ask me what it is exactly we do here at Miller Engineering, I like to explain our craft as “the stuff that makes people’s eyes roll into the back of their heads when we go into detail”. Our work isn’t exciting or pretty – it’s the behind-the-scenes stuff that makes the pretty, exciting facilities functional – but we know we’ve done the job right if nobody knows we were ever there.

I founded Miller Engineering in 2002 when, after 6 years working for West Virginia University and 20 years spent in facilities operation and maintenance, I decided it was time to provide a solution that was different by design. We’re not your typical MEP firm; we ensure our designs meet very specific, time-tested criteria, including but not limited to being constructible, operable and maintainable. It’s an improved process that, in short, helps owners and their staffs effectively operate and maintain their systems. We want to set up our clients to be self-sufficient, but we work to be available every step of the way.

Our hands-on staff takes great pride in their construction and operations backgrounds, which help us see the project as being constructed instead of just lines on paper. We don’t sit clients down and lecture to them about what they’re going to get; we listen to them so we can strive to deliver exactly what they want and need. It costs too much time and money (for both our clients and us) to not deliver exceptional service every single time, and we work tirelessly to keep projects on time and on budget. We’re proud to say that our change order percentage over the last 7 years is less than 0.1%, and that’s not just a statistic; it’s a proclamation of our commitment and determination to make sure things are done right the first time, every time.

I want to personally thank you for reviewing our proposal and giving us the opportunity to learn more about you and earn your business. Miller Engineering would be privileged to add you to our long history of satisfied customers. If you have any questions for me personally, please don’t hesitate to reach out to me at 304-291-2234, cmiller@millereng.net or stop by our new office at 240 Scott Avenue Suite 1.

Best regards,

A handwritten signature in blue ink, appearing to read 'Craig Miller', written over a light blue horizontal line.

Craig Miller
President/Owner
Miller Engineering, Inc.

Descriptions of Past Projects Completed – Misc. Upgrades

Blackwater Falls State Park Lodge Upgrades

Davis, WV

Services Provided:

- General Trades
- Plumbing
- Electrical
- Mechanical
- Pool

Estimated Budget: \$1.1 Mil

Facility Area: 46,000 ft²

**Owner: West Virginia Division of
Natural Resources**



MEI has performed several projects at the Blackwater Falls State Park Lodge that cover many trades. Miller Engineering designed new HVAC systems for the dining room and make up unit for the Kitchen. The units were installed in a manner to not interfere with views of the park. The second floor plumbing piping was upgraded and routed out of the attic for freeze protection. The bathrooms were re-connected with new GFCI receptacles to eliminate nuisance tripping. New panel boards, hallway lighting, and hallway ceilings were installed as well. A MEI project which was just completed is the replacement and re-piping of the hot tub. The existing spa was leaking and had maintenance issues. A new hot tub was installed along with tiling. A new chemical and pump room was installed as well. Miller Engineering was recently contracted to design the replacement of the existing boiler system and convert them from steam to hot water. The project is currently in design and will include the construction of a boiler room.

Project Contact:

*Bradley S. Leslie, PE, Assistant Chief
State Parks Section*

Phone: (304) 558-2764 ext. 51826

Descriptions of Past Projects Completed – Pool Replacement

Greenbrier State Park

Eastern, WV

Services Provided:

- Aquatic Design
- Plumbing
- Electrical

Estimated Budget: \$760K

Facility Area: 5,500 ft²

**Owner: West Virginia Division of
Natural Resources**



A field study and assessment determined that several plumbing and mechanical systems were inadequate and needed more efficient, code-compliant replacement. The goal of the project was to efficiently use existing piping tunnels that were in good condition and place a new basin within the existing one in order to meet budget demands. The innovative isolation method saved on excavation cost and construction time. New filtration and heating systems were designed for the wading pool and an attractive aquatic design element was also added to increase water movement. The filtration and heating systems were sized and configured not just for the existing pool but also to accommodate a larger pool renovation that was planned during our design process and implemented the following year.

High-rate fiberglass sand filters provide circulation and filtration of the pool water.

Project Contact:

*Bradley S. Leslie, PE, Assistant Chief
State Parks Section
(304) 558-2764 ext. 51826*

Descriptions of Past Projects Completed – Pool Repairs

City of Grafton

Grafton, WV

Services Provided:

- Mechanical
- Plumbing
- Pool Systems

Estimated Budget: \$70k

Facility Area: 4,500 ft²

Owner: City of Grafton



The project included a complete re-design of the filter room equipment serving the existing main pool. The wading or “baby” pool was in poor condition, disliked by the public and suffering from chemistry problems due to poor circulation. Miller Engineering worked with the owner to upgrade the filtration system and install a chemical feed system on the main swimming pool. Miller Engineering, Inc. (MEI) designed a new wading pool which is zero grade entry, incorporates a water-spray feature and increases the play area of the pool. The redesigned wading pool now includes a castle with an interactive waterfall, as well as a new filtration system and chemical feed system which are located in a pump-house addition. MEI provided plans and construction guidance to permit the city to construct the new pool and associated pump-house using city workers, allowing substantial savings to the city.

Project Contact:

*Busty Webber, Director of Public Works
Grafton, West Virginia
(304) 265-1234*

Descriptions of Past Projects Completed – Pool Replacement

Bluestone State Park

Hinton, WV

Services Provided:

- Aquatic Design
- Plumbing
- Electrical

Estimated Budget: \$1M

Facility Area: 56,000 ft²

**Owner: West Virginia
Division of Natural
Resources**



The pool at Bluestone resides within the flood plain of Bluestone Lake and special consideration was required to actually allow the pool basin, if empty at the time, to flood to prevent it from “floating” should the lake level reach the pool.

To our knowledge, the approach selected has never been utilized in the area before and was of our own design. The pool had experienced total basin failure and could not be filled completely during its last few weeks of operation in 2011.

The project replaced the entire basin, wading pool and all equipment but the main pool filters.

The beach area, which had been described as “prison like” due to concrete retaining walls, was reconfigured to increase sunbathing area. The wading pool incorporated a mountain fountain that was outside the pool with arched spray bars. An addition to the existing bathhouse gave a place for the wading pool equipment to reside.

Project Contact:

*Bradley S. Leslie, PE, Assistant Chief
State Parks Section
(304) 558-2764 ext. 51826*

Project Experience: Development and Design

Beech Fork State Park Lodge

Services Provided:

- Mechanical
- Electrical
- Plumbing
- Cost Estimation
- Phased Plan for Pools

Estimated Budget: \$20M

Facility Area: 74,000 ft²

**Owner: West Virginia Division of
Natural Resources**



Currently, the West Virginia Department of Natural Resources has engaged our team's services for design and development of a new, multi-million dollar lodge in the southern region of the state. Miller Engineering is providing all of the mechanical, electrical, plumbing and pool design for the Beech Fork State Park. This project includes coordination with ZMM Architects, EL Robinson, the West Virginia Department of Environmental Protection, the West Virginia Division of Highways and the US Army Corps of Engineers.

Development and design for guest, conference and public recreational areas, as well as commercial kitchen space, fire safety and public safety lighting are key elements of the project.

Project Contact:

*Bradley S. Leslie, PE, Assistant Chief
State Parks Section*

Phone: (304) 558-2764

Project Experience: High Voltage Repair

Holly River State Park

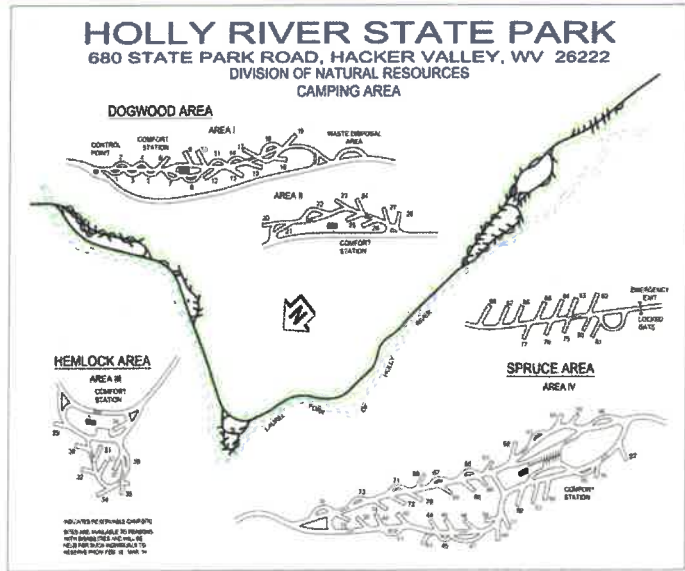
Services Provided:

- High Voltage Electrical Design
- Emergency Repair
- Installation

Estimated Budget: \$2.4M

Facility Area: 8,101 acres of recreational space

Owner: West Virginia Division of Natural Resources



Emergency electrical supply was restored to select areas of the park in phase 1 due to the timing of the storm and the onset of winter. Phase 1 was a priority for the owner (WVDNR) and went from start of design to bid in less than 4 weeks. Coordination with the DOH and the DEP were facilitated during this short turnaround in order to restore electrical supply to the administrative areas.

Our team designed and developed a plan to restore power to the park and reduce future outages. MEI's design solution opted for burying 2.5 miles of electrical supply cabling in conduit, demo of the existing storm damage prone overhead service, reclaiming PCB transformers and re-connecting all existing electrical loads. During Phase 1, MEI noted several concerns and safety issues which needed to be addressed long term.

MEI worked with the client to both document and estimate the cost to address code deficiencies and issues, which the client used to secure funding. Phase 2 design of the replacement of 9,000 feet of high voltage cabling and PCB transformers has been completed and is bidding.

Phase 2 addresses the long-term reliability and code deficiencies in the remainder of the park, particularly the campground areas.

Project Contact:

*Bradley S. Leslie, PE, Assistant Chief
WVDNR Parks and Recreation
(304) 558-2764 ext. 51826*

Project Experience: Beach and Bathhouse

Tygart Lake State Park

Services Provided:

- Mechanical
- Electrical
- Plumbing
- Commercial Kitchen Update
- Construction Administration

Estimated Budget: \$995k

Facility Area: 4 acres

**Owner: West Virginia Division of
Natural Resources**



Previously the beach area was nothing more than a concrete slab prone to algae infestation creating a slip hazard. Paths and recreation areas were ill-defined, lacking clear flow or direction and did not contribute to natural surroundings. After

a site review, an overall plan was developed by Miller Engineering and is now a successfully completed project.

The State Park is a popular recreation destination for Morgantown area residents. The beach area and access, volleyball, horse shoe, grilling and bath house were all renovated. The kitchen received code compliant updates and additional electric capacity to add a concession stand in the future.

Project Contact:
*Bradley S. Leslie, PE, Assistant Chief
State Parks Section
Phone: (304) 558-2764*



B. Craig Miller, PE

Craig founded Miller Engineering in 2003, and serves as President and Principal Engineer. He has more than 20 years experience in design, specification, operations and project management. During his employment with WVU, Craig was directly involved with approximately \$130 million in new capital construction. His experience with a wide range of projects including HVAC, electrical, plumbing, infrastructure upgrades, building automation, energy efficiency and maintenance/renovation, among others, allows him to serve in multiple capacities within a given project. Craig will serve as the “Relationship

Manager” for Miller Engineering as the main communication interface between the Owner, the design team, contractors and end users.

Project Role: Relationship Manager – Primary Point of Contact

- *Engineer in Responsible Charge*
- *Design and Project Management of Mechanical, Electrical, Plumbing Projects*
- *Concept and Construction Design*
- *Business Operations and Financial Management Oversight*
- *Quality Assurance and Control*

Professional Project Highlights

- WVU Recreation Center Indoor Pool – Owner’s Engineer
- WVU Life Sciences Building and Student Recreation Center – Owner’s Engineer
- Camp Virgil Tate
- Mapletown High School HVAC Replacement
- Advanced Surgical Hospital
- Holly River State Park Primary Electric Service Replacements Phase I & II
- Beech Fork State Park – MEP New Construction Design
- WVU Willowdale Walkway

Professional History

2003- Present	Miller Engineering, Inc.	President, Relationship Manager
2002-2003	Casto Technical Services	Existing Building Services Staff Engineer
2001-2002	Uniontown Hospital	Supervisor of Engineering
1995-2001	West Virginia University	Staff Engineer
1990-1995	BOPARC	Caretaker – Krepps Park
1983-1988	University of Charleston	Electrician/HVAC Mechanic

Education

1995	West Virginia University	BS- Mechanical Engineering
1988	University of Charleston	BA- Mass Communications

Licenses and Certifications

- Professional Engineer (West Virginia, Pennsylvania, Maryland, and Ohio)
- Licensed Master Plumber
- LEED-AP Certified



Jack Jamison

Jack brings 15 years as an electrical/building inspector and over 25 years of experience in the commercial electrical construction industry. His knowledge and experience are valuable resources to Miller's complete assessment process.

Project Role: Code and Construction Specialist

- Facility Review, Code Research, and Project Evaluation
- Field Observations and Issue Resolutions

Professional Project Highlights

- Board Member of the WV Code Officials
- Founder and Secretary of the West Virginia Division of the International Association of Electrical Inspectors
- IAEI Ohio Chapter – Membership Chair

Professional History

2010- Present	Miller Engineering, Inc.	Code and Construction Specialist
1999-2010	Megco Inspections	Chief Inspector
1972-1998	Jamison Electrical Construction	Master Electrician

Education

1971 Fairmont State College, BS-Engineering Technology-Electronics

Licenses and Certifications

- Master Code Professional, IAEI Master Electrical Inspector, Class C Electrical Inspector – WV, PA, MD, & OH
- ICC Commercial Building, Building Plans, Commercial Plumbing, Residential Energy, and Accessibility Inspector/Examiner
- WV Master Electricians License
- NCPCCI-2B, 2C, 4B, 4C: Electrical & Mechanical General/Plan Review
- OSHA 30 Hour Course: General Industry
- NFPA Code Making Panel 14 – NEC 2014 Edition



Joseph Machnik

Joe has experience with AutoCAD, MEP and Revit MEP. He provides design modeling, drafting and supervised design services and construction support for Miller Engineering.

Project Role: MEP Designer

Revit/CADD Coordination of New Construction and Renovation Designs

Professional History

2010 – Present Miller Engineering, Inc. MEP Designer

Education

2008 Penn State – Fayette, AS - Building Engineering Systems Technology: *Building Environmental Systems Technology*
 2007 Penn State – Fayette, AS - Building Engineering Systems Technology: *Architectural Engineering Technology*



Travis Taylor, PE

Experience in project management facilitates Travis's ability to create and design constructible projects. Prior to joining the Miller Engineering team he was directly responsible for managing \$10 million in electrical construction budgets. His experiences encompass both new construction and renovation. Travis maintains professional competencies by attending seminars and continuing education classes. As lead engineer he provides HVAC, mechanical, plumbing and electrical design solutions and services for our clients. In addition, he is part of our team's complete assessment process in both

planning and MEP design through construction administration.

Project Role: Lead MEP Engineer

- *Design of Mechanical, Electrical, and Plumbing Systems*
- *Constructible Materials Evaluation*
- *Site Evaluation and Mechanical System Review*
- *Submittal and RFP Review*
- *RFI Coordination, Review, and Response*
- *Construction Observation*

Professional Project Highlights

- Krepps Park ADA Upgrades
- Holly River State Park Primary Electric Service Replacements Phase I & II
- Beech Fork State Park Lodge Design Development
- Pipestem Lodge McKeever Lodge HVAC Piping Replacement
- WV Veterans Memorial Restoration
- Bobtown Elementary School HVAC Upgrades

Professional History

2011-Present	Miller Engineering, Inc.	Staff Engineer
2006-2011	Tri-County Electric, Co.	Project Manager
2006-2006	Schlumberger	Field Engineer Trainee - MWD

Education

2006 West Virginia University, BS – Mechanical Engineering

Licenses and Certifications

- Professional Engineer - State of West Virginia
- OSHA 10-hour Course: Construction Safety & Health



Firm Profile

CAS Structural Engineering, Inc. – CAS Structural Engineering, Inc. is a West Virginia Certified Disadvantaged Business Enterprise structural engineering firm located in the Charleston, West Virginia area.

Providing structural engineering design and/or analysis on a variety of projects throughout the state of West Virginia, CAS Structural Engineering has experience in excess of 30 years on the following types of building and parking structures:

- Governmental Facilities (including Institutional and Educational Facilities)
- Industrial Facilities
- Commercial Facilities

Projects range from new design and construction, additions, renovation, adaptive reuse, repairs and historic preservation (including use of The Secretary of the Interior's Standards for Rehabilitation) to evaluation studies/reports and analysis.

CAS Structural Engineering utilizes AutoCAD for drawing production and Enercalc and RISA 2D and 3D engineering software programs for design and analysis. Structural systems designed and analyzed have included reinforced concrete, masonry, precast concrete, structural steel, light gauge steel and timber.

Carol A. Stevens, PE is the firm President and will be the individual responsible for, as well as reviewing, the structural engineering design work on every project. Carol has over 30 years of experience in the building structures field, working both here in West Virginia and in the York, Pennsylvania vicinity. Carol is also certified by the Structural Engineering Certification Board for experience in the field of structural engineering.

CAS Structural Engineering, Inc. maintains a professional liability insurance policy.

PO Box 469 • Alum Creek, WV 25003-0469  304-756-2564  304-756-2565  www.casstruceng.com

PROVIDING STRUCTURAL ENGINEERING SOLUTIONS FOR YESTERDAY, TODAY AND TOMORROW
COMMERCIAL, GOVERNMENTAL AND INDUSTRIAL STRUCTURAL DESIGN, ANALYSIS AND RESTORATION
A WEST VIRGINIA CERTIFIED DBE CONSULTANT • CERTIFIED IN THE PRACTICE OF STRUCTURAL ENGINEERING

Carol A. Stevens, PE, F.ASCE

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
P.E.	2010	Kentucky
P.E.	2013	Virginia

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
National Society of Professional Engineers
American Concrete Institute
American Institute of Steel Construction
West Virginia University Department of Civil and
Environmental Engineering Advisory Committee Chair
West Virginia University Institute of Technology
Department of Civil Engineering Advisory Committee

CIVIC INVOLVEMENT

Forks of Coal State Natural Area Fdn Committee Member
Engineer's Week Speaker

EXPERIENCE

West Virginia, Pipestem Resort State Park Lodge:
Structural repairs to steel and concrete structural components with severe deterioration.

West Virginia, Pipestem Resort State Park Sprayground:
Structural design of new bathhouse to support new sprayground near lodge.

West Virginia, Twin Falls Resort State Park:
Multiple phased structural repairs to existing lodge structure.

West Virginia, Hawks Nest State Park:
Multiple phased structural repairs to existing lodge structure.

West Virginia, Chief Logan State Park:
Structural design of new 4-bedroom cabins.

West Virginia, Canaan Valley Resort State Park:
Structural investigation and recommendations for repairs to the five (5) existing overnight sleeping facilities.

West Virginia, Twin Falls Resort State Park Lodge Addition: Structural design for new 28,000 SF addition to existing facility, including new entrance lobby, conference areas, sleeping rooms and indoor pool.

West Virginia, Hawks Nest State Park Lodge: Analysis of structural cracks in lodge building. Work included probes to determine condition of existing connections between structural elements.

West Virginia, Twin Falls Resort State Park: Structural evaluation of existing recreation building.

West Virginia, Pipestem Resort State Park: Structural evaluation of existing recreation building.

West Virginia, Cabwaylingo State Forest: Structural evaluation of existing dormitory buildings constructed in the 1950's.

West Virginia, Beech Fork State Park Pool, Bathhouse and Cabins: Designed structure for new bathhouse, swimming pool and cabins.

PO Box 469 • Alum Creek, WV 25003-0469 304-756-2564 304-756-2565 www.casstruceng.com

PROVIDING STRUCTURAL ENGINEERING SOLUTIONS FOR YESTERDAY, TODAY AND TOMORROW
COMMERCIAL, GOVERNMENTAL AND INDUSTRIAL STRUCTURAL DESIGN, ANALYSIS AND RESTORATION
A WEST VIRGINIA CERTIFIED DBE CONSULTANT • CERTIFIED IN THE PRACTICE OF STRUCTURAL ENGINEERING



PIPESTEM SPRAYGROUND

Pipestem, West Virginia



Project included a new sprayground and bathhouse with pedestrian bridge to provide safe access from McKeever Lodge across the street.

The old swimming pool and recreation center will be partially demolished and the existing upper level toilet rooms will be renovated to provide ADA accessibility.

Work is anticipated to be completed by end of 2019.

Project Owner: West Virginia Division
of Natural Resources

Contact Person: Brad Leslie, PE

Contact Phone: (304) 558-2764



STRUCTURAL INVESTIGATION

TWIN FALLS STATE PARK RECREATION BUILDING & LODGE

Mullens, West Virginia



Project includes investigation into causes of structural cracking in existing lodge and recreation buildings and preparation of a construction cost estimate for repairs.

Steel pipe columns have been installed in many locations due to the excessive amount of deterioration that is present at



The structural steel beam within the concrete beam has rusted due to water infiltration through the wall system. Additionally, the steel beam was not designed for current code-related deflection requirements.



JOB'S TEMPLE

Glennville Vicinity, West Virginia



This log structure was constructed in the 1860's, having begun prior to the Civil War and completed afterward. The years had taken a toll on the main logs/beams at the top of the walls supporting the roof structure.

The uphill wall was exhibiting damage due to the condition of the beam at the top of the wall, allowing the wall to push out from thrust on the deteriorated beam.



The structure was originally constructed of local poplar trees and clay chinking. A replacement log was hand hewn to the required size for the beam on the uphill side. Epoxy repairs were made to the beam on the downhill side. A team of horses brought the log to the site.



COLLETT HOUSE

Beverly, West Virginia



The original portion of this structure was constructed as a log cabin in the 1770's. This project included foundation stabilization and log wall and floor framing repairs.

The foundation had settled over the years. As a result, the rear portion of the building had to be jacked up approximately 6-inches and new foundation supports were installed.



STRUCTURAL INVESTIGATION

PIPESTEM STATE PARK RECREATION BUILDING

Pipestem, West Virginia



The pool deck is supported by this structure, thus the severe deterioration due to leaking joints in the deck. Once the decking is repaired, a new coating system must be installed to prevent chemically treated water from deteriorating the structural members.



A steel pipe column was added below the bearing end of this beam due to the severe deterioration at the end of the beam.



Project includes investigation into causes of structural cracking in existing recreation building and preparing a construction cost estimate for repairs.



STRUCTURAL INVESTIGATION HAWKS NEST STATE PARK LODGE

Ansted, West Virginia

Project includes investigation into causes of structural cracking in existing lodge facility and providing solution to the problem.



Currently completing a report for the Owner with photo documentation of conditions found and recommendations for repairs and associated construction cost estimates.



Part of the investigation included having a contractor perform probes to observe the condition of the structural elements and connections.

