



RECEIVED
2019 NOV -4 AM 11:03
WV PURCHASING
DIVISION

**Expression of Interest
A/E Services for White Horse WMA HQ Office, Shop &
Garage**

CEOI 0310 DNR200000004

November 4, 2019



**Department of Administration
Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130**

Montum Architecture, LLC

37 ER Path, Keyser, WV 26726 • 304-276-7151 • tom@montumarch.com
montumarch.com



Table of Contents

Letter of Interest

TAB 1:	Firm Profiles Montum Architecture LLC Miller Engineering, Inc. RK&K LLP Project Organization Chart
TAB 2:	Qualifications Tom Pritts, AIA (Montum Architecture) Craig Miller, PE (Miller Engineering) Travis Taylor, PE (Miller Engineering) Jack Jamison (Miller Engineering) Joseph Machnik (Miller Engineering) Eyad Alhalabi (Miller Engineering) Noah Accord, PE (EarthRes) John Cole, PE (RK&K) Anthony Fish, Jr., PE (RK&K) Daniel Tichinel, PE (RK&K) Matthew Youngblood, PE (RK&K)
TAB 3:	Experience Montum Architecture Miller Engineering Projects RK&K Projects
TAB 4:	RFP Forms WV-PRC-CEOI-001 Form Terms and Conditions Signature Page Addendum Acknowledgement Form



November 4, 2019

Guy Nisbet
State of West Virginia
Department of Administration, Purchasing Division
2019 Washington St. E.
Charleston, WV 25305

**Subject: A/E Services for White Horse WMA HQ Office, Shop & Garage, CEOI
0310 DNR200000004**

Dear Sirs and Madams,

Montum Architecture, LLC is pleased to submit this Statement of Qualifications to provide architectural and engineering services. Montum is headed by Tom Pritts, an architect with 15 years of experience designing a multitude of project types. He will be the primary contact for the duration including construction administration services, provide all architectural design efforts, and lead the design team.

RK&K will provide land survey and civil engineering services to the project, although they have a wide range of abilities if required by the project.

Noah Accord of EarthRes will be the structural engineer for the project. Tom and Noah have a common employment history, completing dozens of designs together.

Montum has teamed with Miller Engineering, Inc. to provide mechanical, electrical, and plumbing design services. Tom and Craig Miller have worked on numerous projects together including many for WV DNR.

The design team has reviewed the three goals listed in the Goals/Objectives section of the EOI solicitation and the proposed approach is summarized below. Further documentation is presented in the firm profiles, qualifications, and experience sections of the EOI response.

Goal One – Montum and Miller Engineering pride themselves in working in renovation projects. Our project sheets clearly reflect the extent of previous experience in working in that medium. Thorough assessment of existing facilities is the first key component to developing the project needs.

Montum Architecture, LLC

37 ER Path, Keyser, WV 26726 • 304-276-7151 • tom@montumarch.com
montumarch.com

Goal Two – The design team's modus operandi is to work from a master planning perspective on everything we do in order to holistically understand the needs of the project and to integrate new work into overall operation of systems or facilities. In addition to existing building evaluations, functional and stylistic needs are identified with the Owner's stakeholders. This information is then boiled down into design plans, phasing approach if necessary, and budgetary impacts.

Goal Three – Each primary designer remains as the primary point person as the project progresses into construction. The continuity of the design-decision knowledgebase positively impacts the administration of construction activities.

The primary goal for any project is to provide exemplary designs that function to the greatest extent possible for the given budget constraints. We feel that by striving to spend every project dollar to our best ability will inherently serve our client's best interest.

Thank you for taking the time to review the attached information about the design team and we are grateful for your consideration.

Respectfully submitted,
Montum Architecture LLC



Thomas Pritts, AIA, CSI-CCS, LEED-AP

Montum Architecture, LLC

37 ER Path, Keyser, WV 26726 • 304-276-7151 • tom@montumarch.com
montumarch.com



Montum Architecture

Montum Architecture, LLC was founded in 2017 to provide architectural design services to clients in West Virginia and western Maryland. Staff includes one licensed architect performing all tasks and duties. This ensures the utmost coordination of building plans and specifications with minimal potential for miscommunication.

Legal Organization

Montum Architecture is a Limited Liability Corporation initially filed in the State of West Virginia. The company is also registered in the State of Maryland as a foreign LCC.

Communication

Tom Pritts will be the primary point of contact for Montum's architectural services. Montum will manage communications with sub-consultants on this project.

Project Budget

Previous work experience has shown a consistent +/-2% bid-to-budget ratio.

Project Schedule

Montum will monitor and adjust the design tasks in order to complete the design work on the established timetables. They will also work diligently during project construction to maintain the contractual constraints placed as part of the contractor's bid.

Design Software

Montum utilizes Autodesk Revit for all design projects incorporating three-dimensional modeling and parametric reporting.

Miller Engineering, Inc. 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, Inc. (MEI) has engineered solutions for over \$20.1M in mechanical system upgrades, repairs and renovations for projects of all scopes and sizes, with clients ranging from private owners to local and state governments.

*With a strict attention to detail and commitment to delivering a job done well and done right the first time, every time, **MEI has accumulated a change order percentage of less than 0.1% over the past 8 years.***

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

*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

FIRM HISTORY

Founded in 1923, RK&K is a multi-discipline consulting firm providing a wide range of planning and design engineering, such as; site design and site plan reviews; streetscapes, and sidewalk/ trails; structures, as well as construction management services for new infrastructure and rehabilitation projects, including water/sewer design; natural gas utility design; energy and corrosion; stormwater infrastructure; design of roadways; transit; environmental services; and construction management and inspection services. RK&K serves an array of municipal, state, and federal clients from multiple branch offices including two West Virginia offices – Keyser and Charleston. The firm employs a well-diversified staff of engineers, designers, construction managers, inspectors, planners, environmental specialists, surveyors, draftsmen/CAD technicians, GIS specialists, and support staff.



SITE PLAN DEVELOPMENT AND REQUIREMENTS

RK&K recognizes every site has unique characteristics and infrastructure needs. Our clients rely on RK&K's creative solutions to expedite their land and site development projects. We provide our clients with the full range of planning, engineering, and environmental services needed to take a site from survey and right-of-way acquisition to construction oversight. We have a complete staff of engineers, landscape architects, surveyors and technicians who specialize in site and land development services.



Our project team will develop plans and designs in accordance with applicable local, state and federal regulations, laws, ordinances and requirements. These plans may include documents and drawings detailing the preliminary design, a traffic signal warrant analysis, environmental requirements and permit information, drainage calculations, noise study, construction and bid documents. Permit information will be clear and concise, and will be in pursuit of final approval if federal funding is required.

WATER & WASTEWATER

RK&K provides complete drinking water, wastewater, and water resource engineering services, improving water in communities across the mid-Atlantic and Southeastern Regions. Meeting the demands of today's communities, our engineers have developed innovative solutions to provide clean water to communities, address wastewater treatment needs, and preserve our natural waterways. Experienced providing environmental design, construction management, and operational assistance services, our experts provide well informed and executable water solutions.



RK&K'S IN-HOUSE SERVICES

Water Distribution & Wastewater Collection

- Pump Station Design
- Electrical & Control Systems
- Startup & Commissioning
- Corrosion Protection System Evaluation & Design
- Utility Infrastructure Planning
- Water & Sewer Pipeline Design
- Pipeline Rehabilitation
- Trenchless Technologies

Water Supply & Storage

- Water Storage Tanks
- Raw Intake Design
- Groundwater Well Development

Private Utilities

- Power, Gas & Communications
- Corrosion Protection System Evaluation & Design

Water & Wastewater Treatment

- Electrical & Control Systems
- Water Treatment
- Wastewater Treatment
- Sludge/Residuals Management
- Operation and Maintenance Support
- Startup & Commissioning

Stormwater Resources

- Stormwater Management/BMPs
- Stormwater Drainage Systems
- Stormwater Quality

Civil/Site Development

- Master Plans
- Site Grading
- Utility Connection/Location
- Access Roadway Design
- Parking Lot Layout
- Stormwater Management
- Feasibility Studies

Transportation Engineering

- Interstate/Interchanges
- Streetscapes
- Multi-Modal Studies
- HOV Studies
- Pedestrian/Bicycle Facilities
- Toll Facilities/Express Toll Lanes
- ADA Design

Transportation Planning

- Corridor Study Alternatives
- Multi-Modal Studies
- HOV/HOT/TOLL Studies
- Geometric & Traffic
- NEPA Documents
- Public Involvement

Traffic Engineering

- Capacity/Operations Analysis
- Simulation Modeling
- ITS Design
- Traffic Signal System
- Travel Demand Forecasting

Structures

- Bridge Structure Design
- Bridge Rehabilitation
- Bridge System Preservation

Construction Management

- Program Management
- Construction Inspection
- Contract Administration
- Materials Testing
- Contract Closeout

Construction Engineering

- CPM Scheduling
- Claims Analysis
- Issue Resolution
- Cost Estimates
- Computerized Project Controls

Hazardous Waste

- Environmental Site Assessments
- Remediation Planning & Design
- Underground Storage Tanks
- Spill Plans
- Regulatory Compliance Audits

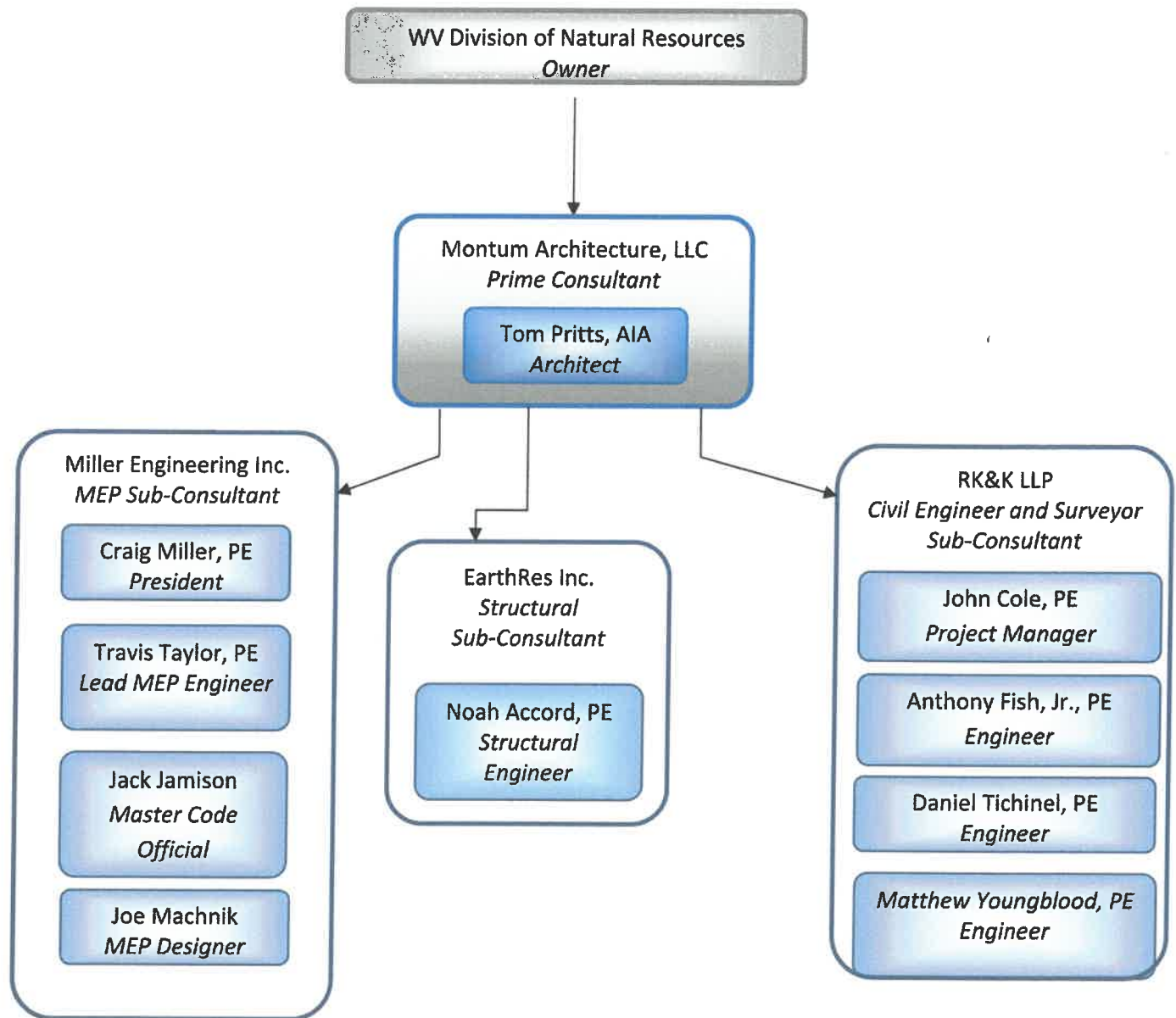
Environmental

- Stream Restorations
- Natural Environmental Analysis
- Wetland Mitigation
- Environmental Permitting

Geotechnical Engineering

- Geological Reconnaissance
- Soil Surveys & Foundation Investigations
- Geotechnical Reports
- Instrumentation
- Ground Modifications

Project Organization Chart





Thomas Pritts, AIA, LEED-AP, CSI-CCS

Tom founded Montum Architecture in 2017. He has more than 15 years experience in design, specification, and project management. During his former employment, Tom has designed and managed dozens of built projects. His experience encompasses a wide range of projects including K-12 and higher education facilities, financial Institutions, emergency services buildings, and automotive dealerships. A native of Mineral County, Tom is member of the West Virginia Chapter of American Institute of Architects and was involved in the establishment of the US Green Building Council's West Virginia chapter. He is highly skilled in the design of complex building systems, technical construction detailing and specifying, and construction contract administration. These skills were critical in the development and maintaining of many multi-year, multi-project relationships with Clients in his previous employment.

Project Role: Relationship Manager – Primary Point of Contact

- Principal in Charge
- Design and Project Management
- Concept and Construction Design
- Quality Assurance and Control

Professional History

2017- Present	Montum Architecture	Architect
2004-2017	Alpha Associates	Associate and Architect
2003	Marshall Craft Associates	Architectural Intern

Education

2004	Virginia Tech	Bachelors of Architecture
------	---------------	---------------------------

Licenses and Certifications

- Licensed Architect (West Virginia, Maryland)
- NCARB Certificate
- Construction Specifier Institute – Certified Construction Specifier
- LEED-AP Certified
- Part 107 Remote Pilot
- 30-hour OSHA Card

Associations and Memberships

- American Institute of Architects
- Mineral County Chamber of Commerce – 1st Vice President

Professional Project Highlights

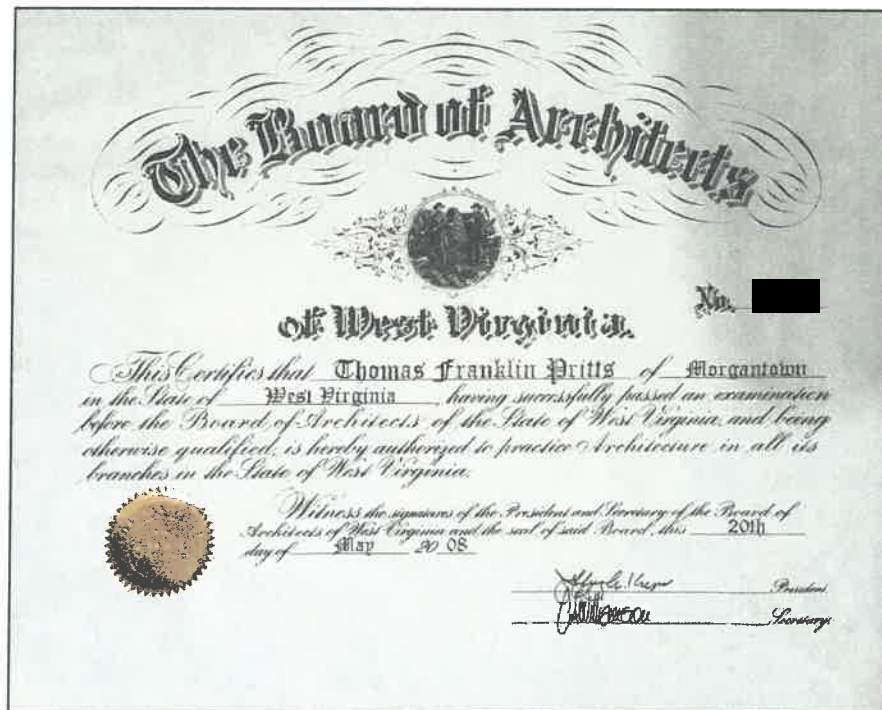
- Potomac State College – Bachelor of Nursing Renovation
- Wyoming East High School HVAC Renovation – Wyoming County Schools, WV
- Mountainview and MTEC HVAC Renovation – Monongalia County Schools, WV
- Berkeley Springs State Park – Pool Bathhouse Roof Replacement
- Berkeley Springs State Park – Old Roman Bath Renovation
- Blackwater Falls State Park – Boiler Room Renovation
- Our Lady of the Mountains Parish – Bathroom Renovation
- Mountain View Assembly of God – Rec Hall Ceiling Design

Montum



Professional Project Highlights (former employment built projects)

- Potomac State College – ADA Connector Building, Church-McKee Plaza, Shipper Library Façade
- WVU Engineering Sciences Building – East Wing Addition, 10th Floor Fit-Out, Basement Renovation
- WVU Engineering Research Building – G07 & G08 Renovation
- WVU Equine Education Center
- WVU College of Physical Activities and Sports Sciences/ Student Health Center
- WVU Center for Alternative Fuel Engines and Emissions
- WVU Colson Hall Water Infiltration Repairs
- WVU Mountainlair Water Infiltration Repairs
- WVU Chemistry Research Laboratories Fit-Out
- WVU Creative Arts Center Wheelchair Lift
- Alderson Broaddus University – Pyles Arena Deck Replacement
- Glenville State College – Morris Stadium Skybox
- Washington High School, Jefferson County Schools, WV
- Pineville Elementary School, Wyoming County Schools, WV
- Huff Consolidated School, Wyoming County Schools, WV
- Aurora School Addition, Preston County Schools, WV
- Riverview High Field House Design-Build, McDowell County Schools, WV
- Safe School Entries, Monongalia County Schools, WV
- Morgantown High Elevator, Monongalia County Schools, WV
- 2010 Comprehensive Education Facilities Plan- Monongalia County Schools, Wyoming County Schools
- Clear Mountain Bank Branches, Oakland, MD - Reedsville, WV - Kroger-Sabraton, WV
- Grant County Bank, Petersburg, WV
- Fairmont Federal Credit Union, Bridgeport, WV
- Freedom Ford, Kia, and Volkswagen Automotive Dealerships, Morgantown and Clarksburg, WV
- Jenkins Subaru Addition, Bridgeport, WV
- Elkins Fordland Renovation - Elkins Chrysler Dealership, Elkins, WV
- Harry Green Nissan Design-Build, Clarksburg, WV
- Cool Green Automotive Addition and Renovation, Shepherdstown, WV
- Veteran's Affairs – OI&T Office Fit-Out, Shepherdstown, WV
- OPM, Eastern Management Development Center Addition, Shepherdstown, WV
- National Energy Technology Laboratory – Building B-8 Roof Replacement, Morgantown, WV
- US Coast Guard – Conference Room Renovation, Martinsburg, WV
- Eastern Panhandle Transit Authority Addition, Martinsburg, WV
- Cacapon State Park – Old Inn HVAC and Interior Renovation
- WV National Guard - Armory Office Fit-out, Parkersburg, WV
- South Berkeley Fire Station, Inwood, WV
- Jefferson County Emergency Services Agency – New Headquarters
- Berkeley County Ambulance Authority – South Station Renovation and Addition
- Poolhouse Renovation, McMechen, WV
- Community Center, Ridgeley, WV
- Wastewater Treatment Plant Renovations, Martinsburg, WV
- Public Works Building, Fairmont, WV
- Oatesdale Park Little League Fields, Martinsburg, WV
- St. Luke Canopy Replacement, Morgantown, WV
- Freshwater Institute – Aquaculture Building, Shepherdstown, WV
- Clarion Hotel Renovation, Shepherdstown, WV
- Shenandoah Village Apartments – Façade and Deck Replacement, Martinsburg, WV
- Regional Eye Associates/ Surgical Eye Center, Morgantown, WV
- Bavarian Inn – Infinity Pool/ Pool Bar, Shepherdstown, WV



The West Virginia Board of Architects

certifies that

THOMAS F. PRITTS

is registered and authorized to practice
Architecture in the State of West Virginia.

In testimony whereof this certificate has been issued
by the authority of this board.

Certificate Number [REDACTED]

The registration is in good standing until June 30, 2020.



Grady Replogle

Board Administrator



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 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

- Bobtown Elementary HVAC
- WVU Life Sciences Building and Student Recreation Center – Owner's Engineer
- Hawks Nest/Twin Falls HVAC
- Mapletown High School HVAC Replacement Phase I & II
- Advanced Surgical Hospital
- WV State Building 25 HVAC Piping Replacement
- WV State Building 36 HVAC Upgrades
- Cheat Lake Elementary & Middle School Renovations

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



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*
- *Building Information Modeling - Revit*
- *Constructible Materials Evaluation*
- *Site Evaluation and Mechanical System Review*
- *Submittal and RFP Review*
- *RFI Coordination, Review, and Response*
- *Construction Observation*

Professional Project Highlights

- Suncrest Middle Gym HVAC
- MTEC Welding Shop
- North Elementary Gym HVAC
- WV State Building 36 HVAC Upgrades
- WV State Building 25 HVAC Piping Replacement
- Bobtown Elementary School HVAC Upgrades
- Holly River State Park Primary Electric Service Replacements Phase I & II
- Pipestem Lodge McKeever Lodge HVAC Piping Replacement

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

Staff – Qualifications and Experience



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: Master Code Official

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

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, IAEL 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*
- *Building Information Modeling*

Professional Project Highlights

- Bobtown Elementary HVAC
- WV State Building 25 HVAC Piping Replacement
- Suncrest Middle Gym HVAC
- North Elementary Gym HVAC
- WV State Building 36 HVAC Upgrades
- Westwood Middle Cooling Tower
- Pipestem Lodge HVAC Piping Replacement

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*

Eyad Alhalabi

Eyad joined Miller Engineering in June 2019. A recent graduate of West Virginia University, he has been eager to learn the means and methods of MEP consulting. Eyad assists the MEP design team with design calculations and is rapidly learning design software such as Autodesk REVIT. He is also learning construction administrations along with building codes and standards. Eyad is currently preparing to take the Fundamentals of Engineering exam.

Project Role: Junior Engineer

- *Design Calculations*
- *Drafting of MEP Systems*
- *Assist with Construction Administration*

Professional Project Highlights

- Morgantown ALC

Professional History

2019- Present Miller Engineering, Inc. Junior Engineer

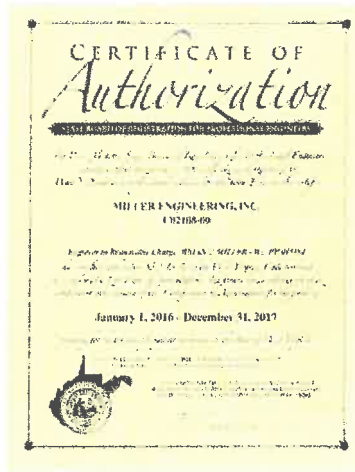
Education

2019 West Virginia University, BS - Mechanical Engineering

Licenses and Certifications

- ASHRAE Student Member

Miller Engineering Licenses and Certifications



Noah Accord, PE

Noah has more than 12 years experience in structural engineering, design, specification, and project management. During his employment with Alpha Associates and EarthRes Engineering, Noah provided structural design and managed multiple built projects. His experience encompasses a wide range of projects including K-12 and higher education facilities, financial Institutions, emergency services buildings, natural gas facilities, and automotive dealerships. A native of Braxton County, Noah is a Licensed Professional Engineer in Pennsylvania and West Virginia.

Project Role: Structural Engineer

- Structural Engineering and Design
- Concept and Construction Design
- Quality Assurance and Control

Professional History

2015- Present	EarthRes Engineering	Project Manager
2005-2015	Alpha Associates	Associate and Structural Engineer

Education

2004	University of Pittsburgh	B.S Civil Engineering
2005	University of Pittsburgh	M.S Civil Engineering

Licenses and Certifications

- Licensed Professional Engineer (West Virginia, Pennsylvania)

Professional Project Highlights

- Potomac State College – ADA Connector Building
- Potomac State College – Church-McKee Plaza
- Potomac State College – Shipper Library Façade
- WVU Engineering Sciences Building – East Wing Addition, 10th Floor Fit-Out, Basement Renovation
- WVU Engineering Research Building – G07 & G08 Renovation
- WVU College of Physical Activities and Sports Sciences/ Student Health Center
- WVU Center for Alternative Fuel Engines and Emissions
- Alderson Broaddus University – Pyles Arena Deck Replacement
- Glenville State College – Morris Stadium Skybox
- Washington High School, Jefferson County Schools, WV
- Pineville Elementary School, Wyoming County Schools, WV
- Huff Consolidated School, Wyoming County Schools, WV
- Aurora School Addition, Preston County Schools, WV
- Riverview High Field House Design-Build, McDowell County Schools, WV
- Safe School Entries, Monongalia County Schools, WV
- Morgantown High Elevator, Monongalia County Schools, WV
- Clear Mountain Bank, Oakland, MD
- Clear Mountain Bank, Reedsville, WV
- Clear Mountain Bank-Kroger, Sabraton, WV
- Fairmont Federal Credit Union, Bridgeport, WV
- Freedom Ford, Kia, and Volkswagen Automotive Dealerships, Morgantown, WV
- Jenkins Subaru Addition, Bridgeport, WV
- Elkins Fordland Renovation, Elkins, WV
- Elkins Chrysler Dealership, Elkins, WV
- Harry Green Nissan Design-Build, Clarksburg, WV
- Cool Green Automotive Addition and Renovation, Shepherdstown, WV

Professional Project Highlights (continued)

- OPM, **Eastern Management Development** Center Addition, Shepherdstown, WV
- US Coast Guard – Conference Room Renovation, Martinsburg, WV
- Eastern Panhandle Transit Authority Addition, Martinsburg, WV
- WV National Guard - Armory Office Fit-out, Parkersburg, WV
- South Berkeley Fire Station, Inwood, WV
- Jefferson County Emergency Services Agency – New Headquarters
- Berkeley County Ambulance Authority – South Station Renovation and Addition
- Community Center, Ridgeley, WV
- Wastewater Treatment Plant Renovations, Martinsburg, WV
- Public Works Building, Fairmont, WV
- Clarion Hotel Renovation, Shepherdstown, WV
- FBOP Hazelton Prison Medium Security Complex, Hazelton, WV
- Regional Eye Associates/ Surgical Eye Center, Morgantown, WV
- Bavarian Inn – **Infinity** Pool/ Pool Bar, Shepherdstown, WV

JOHN W. COLE, PE

PROJECT MANAGER



Education: BS, Civil Engineering Technology, Fairmont State College, 2001

Professional Registration: Professional Engineer, WV, 2008 [REDACTED] also registered in MD

Experience: 18 years

Mr. Cole has been actively involved in the planning, design, and construction of West Virginia's infrastructure projects for more than 18 years, providing industry leadership through addressing the region's infrastructure needs. He has diverse experience in the design of water and wastewater treatment plants, pumping stations, distribution and collection systems, subdivision development, and construction management. His responsibilities include full project delivery including feasibility studies, design, construction plans and specifications, cost estimating, construction administration inspection and engineering.

Charles Town Utility Board On-Call Water & Sewer Projects, Charles Town, WV: Project Manager. Responsible for overseeing design and construction phase services for various water and sewer on-call projects. Projects included design and construction of new sewage lift stations; modifications to existing sewage lift stations; over 10 miles of water mains and sewage force mains; improvements to two of the Utility's three WWTP's; improvements to the single WTP including a 1 MG water storage tank; preparation of numerous reports, evaluations, and studies; construction of three emergency back-up generators; painting of several elevated water storage tanks.

Thayerville Water System, Thayerville, MD: Project Engineer responsible for the design of a 600 gpm water treatment facility, 165,000 gallon water storage tank; 1,000,000 gallon water storage tank, 110 gpm and 50 gpm remote booster stations, and distribution system consisting over 44,000 LF of 2" through 12" dia. pipe.

Wiley Ford Water Line Replacement, Mineral County, WV: Project Engineer. Developed the hydraulic model on the replacement of the approximately 55,400 LF of water mains to improve the service and quality of water. Assisted in the permitting applications and construction funding. The project also included a new 300,000 water tank, booster station, and source water well to supplement the existing water system.

Town of Oakland Sewer Improvements, Oakland, MD: Manager for the design of various sewer line replacements, I&I flow monitoring and smoke testing, and the installation of a bar screen at the Town's main pump station, upstream of the wastewater treatment plant. Project also included the preparation of both a Preliminary Engineering Report (PER) and Environmental Report (ER) for submission to USDA Rural Utility Service (RUS) for funding.

Northern Mineral County Regional Sewer System Wastewater System, Mineral County Commission, WV: Project Engineer responsible for assisting in the development of the facilities plan recommending a regional sewer project consisting of a new 1.2 mgd WWTP, 40 miles of sewer collection, 2.5 miles of sewer rehabilitation, 3 miles of sewer force mains, and 10 sewage pump stations; coordinated efforts involved in the funding and permitting process. Phase 1- Design: responsible for coordinating and overseeing the design of the WWTP including the following major components, influent pump station, mechanical fine screen, vortex grit unit, Aqua SBR's, post-equalization, automatic backwashing filters, aerobic digesters, and a belt filter press.

ANTHONY D. FISH, JR., PE

SITE DEVELOPMENT



Education: BS, Civil Engineering, West Virginia Institute of Technology, 1992

AS, Drafting & Design Engineering Technology, WV Institute of Technology, 1987

Professional Registration: Professional Engineer, WV, 2004 [REDACTED] also registered in MD

Experience: 25 years

Mr. Fish recently joined RK&K as Senior Project Engineer in RK&K's Charleston, WV office. He brings 25 years of experience as a civil engineer with strong design and project management skills. Qualified in all phases of project development, his experience includes problem identification, conceptual solutions, cost estimating, preliminary and final design, plan production, contract development, work selection, contract administration, construction inspection and field engineering.

Assistant City Engineer, City of Charleston, WV: Served in a variety of disciplines including structural, architectural, transportation and geotechnical engineering design and mapping and GIS development. Oversight for management of small, medium and large design and construction projects. Key member of the development teams for such projects as the Haddad Riverfront and Schoenbaum Amphitheater, South Side Bridge rehabilitation, Farnsworth Bridge rehabilitation, bicycle and pedestrian trails and numerous retaining structures.

WVDOH Materials, Control, Soils and Testing Division, Central Office, City of Charleston WV: Highway Engineer. Worked in various facets of MCS&T operations including the Geotechnical Section, performing subsurface investigations, slip correction, earthwork design and plan production. Worked in coating materials inspection and acceptance, performing manufacturer site inspection, construction site materials acceptance, application procedure review and quality assurance, in-place thickness testing, coating adhesion testing, field lead content assessment, laboratory test data tracking. Performed District level Materials QA Procedure audits, statewide.

Sunrise Carriage Trail Comprehensive Rehabilitation, City of Charleston, WV: Performed a comprehensive review of existing trail conditions and developed, prioritized, planned and implemented several staged discrete projects to transform the trail from a neglected, crime susceptible area to a highly valued recreational pedestrian connection from the South Hills area to downtown Charleston. Designs emphasized the use of local, natural materials and native vegetation to replace plastic pipes, manufactured wall systems and invasive plant species.

Kanawha Boulevard Bridge over Elk River, Charleston, WV: Project Manager and Design Engineer on major rehabilitation of the Kanawha Boulevard Bridge over the Elk River Bridge rehabilitation project. Project included substructure rehabilitation, concrete deck overlay, approach reconstruction, grade and drainage improvements and structure painting.

Louden Heights Road Concrete Arch Bridge, City of Charleston, WV: Project Manager and Design Engineer on substructure and parapet rehabilitation of Loudon Heights Bridge. Deteriorated concrete was removed manually from the substructure and most repairs were affected using pneumatically applied shotcrete. The deck was spot-rehabilitated and diamond ground for surface profile and the historic timber parapet was replaced with material similar in character.

South Side Bridge Rehabilitation, City of Charleston, WV: Project Manager of the last major rehabilitation of the South Side Bridge. Designed and produced plans for a major substructure rehabilitation of the subject bridge. High performance concrete deck overlay, spot painting and some lighting repair were elements of the project.

DANIEL W. TICHINEL, PE

WATER DISTRIBUTION, TRANSMISSION & STORAGE



Education: BS, Civil Engineering, Bucknell University, 2010

Professional Registration: Professional Engineer, WV, 2015 [REDACTED]; also registered in MD

Experience: 8 years

Mr. Tichinel has eight years of civil engineering experience with an emphasis on water and wastewater infrastructure. His experience includes preparation of preliminary engineering reports (PER) and environmental reports (ER), the design of water distribution systems and sanitary sewer systems, including pump stations and collection and conveyance system evaluation, pump station rehabilitation design, new pump station design, pressure reducing stations, water treatment plant design, storage tank design, and pipeline replacement/realignment projects.

Town of Luke – Preliminary Engineering Report, Luke, MD: Project engineer responsible for preparing a PER to examine the feasibility and probable costs for various water distribution and water supply alternatives to improve the Town's water supply and service. Preparation of the report involved evaluating three different water distribution alternatives and six different water source options for the Town.

Department of Public Works – Deep Creek WWTP Preliminary Engineering Report / Environmental Reports, Garrett County, MD: Project engineer responsible for preparation of a PER & ER for the 2.2 MGD Deep Creek Lake WWTP Enhanced Nutrient Removal upgrade.

Department of Public Works – Trout Run WWTP Preliminary Engineering Report / Environmental Reports, Garrett County, MD: Project engineer responsible for preparation of a PER & ER for the 0.9 MGD Trout Run WWTP Enhanced Nutrient Removal upgrade.

Public Service Water District – Phase B Distribution System Improvements, Berkeley County, WV: Project Engineer responsible for design of 1,830 LF of 12" CL 51 DIP water line and 2,390 LF of 16" CL 51 DIP water line within residential areas of the County to improve the overall hydraulics of the water system.

Puzzley Run Water Treatment Plant, Grantsville, MD: Project Engineer responsible for design of a 100,000 gpd water treatment plant. The design included the treatment facilities, site layout and associated mechanical equipment. The project achieved the client's desired treatment capacity while minimizing the site's disturbance area.

Frankfort Public Service District, Water System Upgrade, Water Treatment Plant Improvements, Fort Ashby, WV: Project Engineer responsible for design of numerous improvements including water filter and valve upgrades; sediment basin upgrades and maintenance; raw water and grinder pump upgrades maintenance; dewatering pump station upgrades; 1500 sf storage facility, intake maintenance, plant painting.

Town of Oakland, Water Distribution & Sewer Collection System Improvements, Vertical Bar Screen, Oakland, MD: Project Engineer responsible for an upgrade to the existing waste water pump station basket strainer and grit chamber. The design included removing the existing basket strainer and installing a vertical bar screen. Installation of the vertical bar screen has reduced the amount of debris being pumped to the Oakland WWTP.

Frankfort Public Service District, Water System Improvements, Contract 4- Waterline Construction & Pump Station: Project Engineer responsible for the design of a new 150-gpm pump station along Painter Hollow Road.

MATTHEW J. YOUNGBLOOD, PE

WASTEWATER COLLECTION & PUMPING



Education: BS, Civil Engineering, West Virginia University, 2006

Professional Registration: Professional Engineer, WV, 2016 [REDACTED]

Experience: 12 years

Mr. Youngblood has 12 years of experience with a background in municipal wastewater/water treatment design and collection system infrastructure. His skills include facilities planning, preliminary study and design of water and wastewater facilities, water distribution network and sewer network, and construction management services.

Water Distribution System Study, Town of Oakland, MD: Engineer for design of waterline replacements on numerous streets in Oakland, which included the design of booster stations to provide adequate pressure to water customers within the system.

Water Line Extension, Town of Lonaconing, Allegany County, MD: Designer on four water improvement projects including new lines and line replacement in the Towns of Midland, Barton and Lonaconing. Assisted with construction management of all four projects.

Water System Improvements, Town of Lonaconing, Allegany County, MD: Construction Engineer, for the replacement of Koontz Run Dam. Existing earth dam was replaced with 3 million gallon pre-fabricated concrete tank.

Carolina and Idamay Sewer System Replacement Project, Greater Marion Public Service District, Marion County, WV: Assisted with Inflow and Infiltration study with sewer camera inspections. Designer on vacuum sewer line relocation to improve the efficiency of the sewer collection system in the Town of Idamay. Assisted with design to replace the vacuum system with gravity and force main sewer system. Construction Engineer on replacement of the vacuum system.

Northern Mineral County Regional Sewer System Phase 1 Collection System, WWTP (CM/CI), Mineral County, WV: Construction Engineer for this new regional sewer collection system which includes over 20 miles of sewer collection lines. Provided engineering oversight of 0.6 mgd Wastewater Treatment Plant to serve Northern Mineral County.

Northern Mineral County Regional Sewer System Phase 2 Collection System, Mineral County, WV: Construction Engineer on construction of new gravity collection and force main sewage system to replace individual septic systems and old collection system which was in non-compliance with state regulations. The project included a river crossing and installation of three duplex pump stations with auto-dial alarm systems. Both portable and permanent generators were provided as part of the project.

Romney Collection System Replacement, Phase 1, Hampshire County, WV: Assisted in the construction management of the sewer collection system replacement project.

Tuscan Ridge Subdivision Site Development, Atlantic Land Corporation, Davis, WV: Assisted with design of roadway layout, which included sizing culverts for drainage in the subdivision. Also assisted with the design and layout of the water and sewer utilities.

Deep Creek Lake State Park, Garrett County MD: Designer on the replacement of water line and two chlorination feed stations. Designed an RV dump station to expand the traffic volume for the camp ground.

BERKELEY SPRINGS STATE PARK

OLD ROMAN BATHHOUSE

RENOVATIONS



Before



Before

West Virginia Division of Natural Resources contracted Montum Architecture to design repairs and improvements to the Old Roman Bathhouse at Berkeley Springs State Park. The structure was built in 1815 with various changes and updates since then. Work includes repairs to the tub structure and plumbing, replacement of the boiler, floor tile replacement, and other updates to fit and finish.



COMPLETION: SPRING 2019

COST: \$782,800

SIZE: 2,500 SF RENOVATED

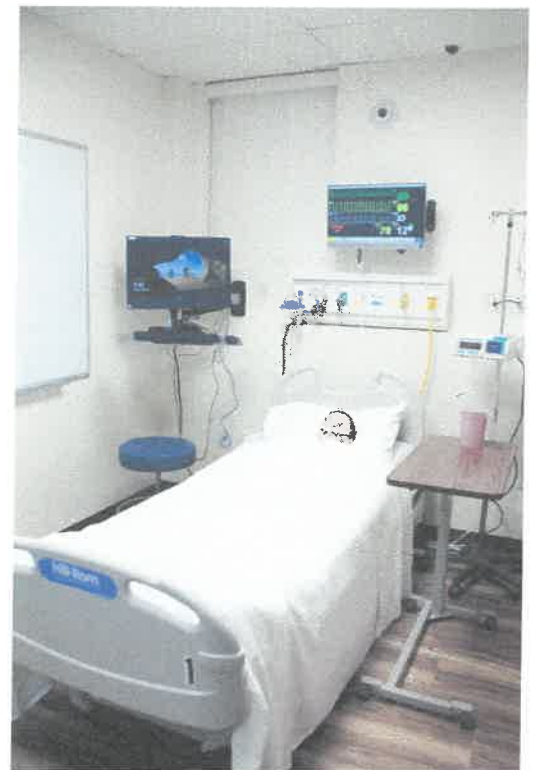
LOCATION: BERKELEY SPRINGS, WV

CONTACT:
Carolyn Mansberger
DNR Project Manager
304-558-2764

Montum Architecture, LLC

37 ER Path, Keyser, WV 26726 • 304-276-7151 • tom@montumarch.com • montumarch.com

POTOMAC STATE COLLEGE BACHELORS IN SCIENCE OF NURSING RENOVATION



West Virginia University - Potomac State College received the former National Guard Armory in 2016. In addition to recreational facilities, the newly named J. Edward Kelley Center will house the 4-year WVU School of Nursing BSN program. The project converted former meeting spaces into demonstration nursing laboratories and lecture spaces. Office spaces were renovated. Electrical and HVAC systems were updated to meet the new needs.



COMPLETED: 2018

BUDGET: NOT DISCLOSED

SIZE: 3,900 SF RENOVATED

LOCATION: KEYSER, WV

CONTACT:
Mike Simpson
Director of Facilities
304-788-6886

Montum Architecture, LLC

37 ER Path, Keyser, WV 26726 • 304-276-7151 • tom@montumarch.com • montumarch.com

BERKELEY SPRINGS STATE PARK

POOL BATHHOUSE ROOFING REPLACEMENT



West Virginia Division of Natural Resources contracted Montum Architecture to specify and administer roofing replacement of the Pool Bathhouse at Berkeley Springs State Park. The existing roofing was a combination of EPDM and built-up roofing. Failing wood framing was replaced and ACM abatement was incorporated in the demolition.

COMPLETED: 2018

COST: \$155,400

SIZE: 2,800 SF RENOVATED

LOCATION: BERKELEY SPRINGS, WV

CONTACT:
Carolyn Mansberger
DNR Project Manager
304-558-2764



Before

Montum Architecture, LLC

37 ER Path, Keyser, WV 26726 • 304-276-7151 • tom@montumarch.com • montumarch.com

WYOMING COUNTY SCHOOLS WYOMING EAST HIGH SCHOOL HVAC AND ROOF REPLACEMENT



The West Virginia School Building Authority funded replacement of the HVAC systems and roofing at the existing Wyoming East High School in 2017. Montum Architecture is the architect-of-record for the HVAC project and integrated the roofing design consultant's information into bid package scenarios. Work is being performed within an occupied building with close coordination of school daily schedules and calendar of events. Many of the units are being replaced one-for-one with some zones being split into multiple units to allow flexibility of new curriculum within the spaces or needs for additional comfort control. Ceilings are being replaced to meet updated guidelines for educational facility acoustics.

COMPLETION: SUMMER 2019

BUDGET: \$3.2M

SIZE: 130,000 SF EXISTING

LOCATION: NEW RICHMOND, WV

CONTACT:
Donald Clay
Director of Facilities
304-732-6262

Montum Architecture, LLC

37 ER Path, Keyser, WV 26726 • 304-276-7151 • tom@montumarch.com • montumarch.com



Montum Architecture - Experience

Montum Architecture, LLC was founded in 2017 by Tom Pritts. Prior to that, Tom worked with Miller Engineering as a consultant on the following built projects (projects underlined were designed with Noah Accord as the structural engineer):

- WVU Creative Arts Center Wheelchair Lift
- Glenville State College – Morris Stadium Skybox
- Riverview High Field House Design-Build, McDowell County Schools, WV
- Clear Mountain Bank, Oakland, MD
- Clear Mountain Bank, Reedsville, WV
- Clear Mountain Bank-Kroger, Sabraton, WV
- Grant County Bank, Petersburg, WV
- Freedom Ford, Kia, and Volkswagen Automotive Dealerships, Morgantown and Clarksburg, WV
- Jenkins Subaru Addition, Bridgeport, WV
- Eastern Panhandle Transit Authority Addition, Martinsburg, WV
- Cacapon State Park – Old Inn HVAC and Interior Renovation
- WV National Guard - Armory Office Fit-out, Parkersburg, WV
- Jefferson County Emergency Services Agency – New Headquarters
- Berkeley County Ambulance Authority – South Station Renovation and Addition
- Poolhouse Renovation, McMechen, WV
- Community Center, Ridgeley, WV
- Public Works Building, Fairmont, WV
- Oatesdale Park Little League Fields, Martinsburg, WV

In order to protect his former employer's instruments of service, further documentation will not be included as part of the Montum submission. Additionally, references for Tom Pritts personal performance can be provided upon request.

Descriptions of Past Projects Completed – MEP

Cacapon Old Inn

Berkeley Springs, WV

Services Provided:

- HVAC
- Plumbing
- Electrical

MEP Budget: \$98k

Facility Area: 5,500 ft²

Owner: West Virginia Division of Natural Resources



The Old Inn at Cacapon State Park is a popular lodging choice for large gatherings at the park. The Old Inn only had window AC and heating only through fire places. MEI designed a complete HVAC renovation which includes propane fired furnaces with DX air conditioning to serve the first floor common areas. The guest rooms on the second floor utilize mini-split system units, allowing for individual room control. The kitchen area was completely renovated including new appliances making it more useful for large gatherings.

The HVAC renovation required architectural and structural modifications to the facility. The guest rooms were updated with new furniture and bathrooms were undated as well. Great detail was taken to keep any modifications in-line with the historical component of the Old Inn.

Project Contact:
 Debbie Demyan, Project Engineer
 State Parks Section
 (304) 550-4892

Project Experience – Beach and Bathhouse

Tygart Lake State Park

Grafton, WV

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
WVDNR State Parks Section
Phone: (304) 558-2764*

Descriptions of Past Projects Completed – Electrical

Elkins DNR Operations Center Standby Generator

Elkins, WV

Services Provided:

- Backup Power
- Electrical Distribution
- Emergency Lighting

Electrical Budget: \$92K

Facility Area: Approx 30,000 sq ft

Owner: WV DNR



The WV DNR Operations Center in Elkins, WV requested to have an emergency generator installed due to losses incurred from a long power outage caused by Hurricane Sandy. MEI coordinated which systems the DNR wanted on standby power. This required the installation of new panels which are fed through a transfer switch. Critical operation loads were installed in these panels. The owner requested a natural gas fueled generator, requiring modifications to the building's gas service. Some of the buildings light fixtures were retrofitted to LED with battery backup to provide some emergency lighting in common areas.

Project Contact:

Brad Leslie, PE

WV DNR

(304) 558-2764

Descriptions of Past Projects Completed – Construction Admin

Canaan Valley Resort

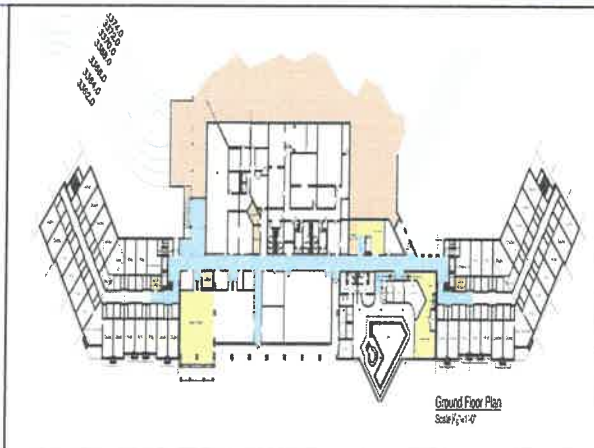
Services Provided:

- Electrical
- Plumbing
- HVAC
- Hydronic Pipe

Estimated Budget: \$30M

Facility Area: 68,000 ft²

Owner: West Virginia Division of Natural Resources



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

Part of keeping a large project on schedule is the ability of Miller Engineering Inc.'s staff to provide rapid and complete response to any contractor questions. MEI was brought in by the owner to provide MEP construction administration for quality assurance and 3rd party MEP design review. MEI's staff was very involved in keeping the project on schedule and in accordance with the construction documents. Detailed construction observation helps to minimize downtime and change orders. MEI's construction administration provided technical support for problem resolution throughout the project, warranty and issue support and quality of work evaluation during construction.

Project Experience: MEP

Cacapon Lodge Addition & Renovation

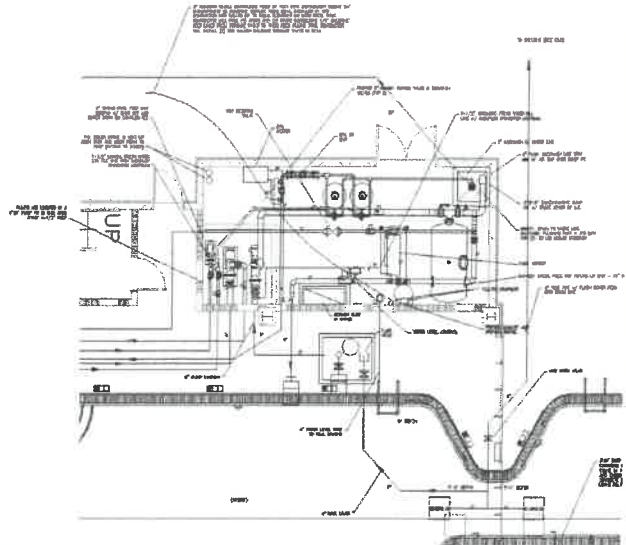
Services Provided:

- Electrical
- Plumbing
- HVAC
- Fire Alarm
- Fire Protection
- Pool

Estimated Budget: \$26M

Facility Area: 113,000 sq ft

Owner: WV Department of Natural Resources



Miller Engineering teamed with Paradigm Architecture to design the addition to the lodge at Cacapon State Park. The addition includes approximately 80 guest rooms, new kitchen and dining areas, a spa, indoor/outdoor pool, and support spaces. All of the utilities were upgraded. A new boiler / chiller plant will be installed with distribution to local air handling units. The electrical service includes an upgrade to 480V while using the existing distribution panels where possible as local branch panels. The project is currently under construction.

Project Contact:

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

Project Experience: HVAC Upgrade

West Virginia State Building 36 (1 Davis Sq.)

Charleston, WV

Services Provided:

- HVAC System Replacement
- Mechanical Piping
- Electric
- Construction Administration

Estimated Budget: \$2.1M

Facility Area: 58,400 ft²

**Owner: State of West Virginia –
General Services Division**



The 30-plus year old chiller serving Building 36 failed in the spring of 2016. MEI was retained to design the installation of a temporary rental chiller, which remains in service at this time. MEI was then retained to design a full HVAC retrofit to the building due to the condition of the air handlers, ductwork, VAV boxes, and associated systems. The building presented unique challenges as it was originally two buildings in which the common space was later in filled to create one building. The deck to deck heights in some areas are very limited, resulting in the need for accurate evaluation, design, and detailing in the construction documents. MEI designed a phased approach to accomplish the project. The phasing was developed directly with the owner to minimize the impact on the building occupants; who had to relocate to swing space phase by phase. Instead of just replacing the existing system in-kind, MEI designed a system utilizing three rooftop units ducted vertically through the building, which eliminates the sole source failures that have plagued the system for several years. The project is ready for bid at this time.

Project Contact:
David Parsons, Operations and
Maintenance Manager
State Capitol, Room E-119
(304) 957-7122

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 – High Voltage Repair

Holly River State Park

Hacker Valley, WV

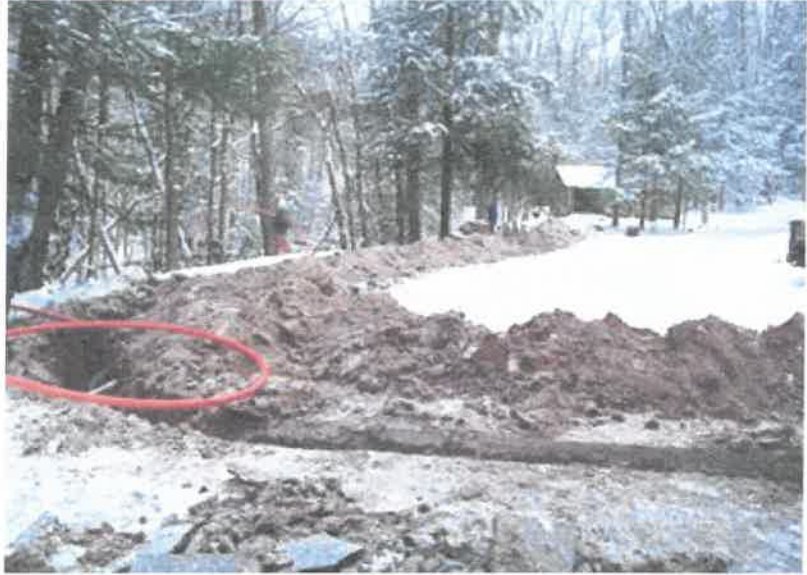
Services Provided:

- 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 State Parks Section
(304) 558-2764 ext. 51826*

TOWN OF OAKLAND WATER & SEWER IMPROVEMENTS

GARRETT COUNTY, MD

Owner: Town of Oakland

Contact: Gwen Evans | 15 South Third Street, Oakland, MD 21550 | 301.334.2691 | townofoak@gmail.com

Dates: 2014 - Ongoing

Key Team Members: John Cole and Dan Tichinel

RK&K conducted a study of the Town of Oakland's water distribution and sewer collection systems. The study consisted of evaluating low pressure areas within South Third Street, Country Club Acres, Frazee Estates, and Winter's Development/Highland Estates, including the collection system along Second Street.

The Community's water system was constructed in the early 1920s and consisted primarily of cast iron water line. The Town has since replaced most of the cast iron line. As the system expanded, several developments were experiencing low pressure and inadequate fire flows due to existing at higher elevations.

Water System Improvement: Each low-pressure area was independently evaluated to determine the most cost-effective solution to improving system pressure. For the Third Street extended area, we determined that the line size feeding the area was undersized. This line, including a river crossing was replaced. The Country Club Acres area's low pressure was due to elevations. The most economical solution to this problem was the installation of a small booster pump station for the dozen homes affected. The other low-pressure areas were subdivisions with line elevations above the maximum service area. While individual booster pump stations were considered, the accepted solution was to connect both subdivisions with over 6,700 feet of cross-country transmission line to the higher elevation zone served by the existing Lowes Pump Station, eliminating operation and maintenance costs on two pump stations. In addition, replacement projects were developed to replace several other old lines in the system. Another aspect of this project was the replacement of the US 219/Oak Street water line as part of a planned MDSHA Streetscape Project. **Funding:** RK&K's services included assistance with securing funding for the project.

NORTHERN MINERAL COUNTY REGIONAL SEWER SYSTEM MINERAL COUNTY, WV

Owner: Frankfort Public Service District

Contact: Rae Corwell | PO Box 80, Wiley Ford, WV 26753 | 304.738.9552 | rcorwellpsd@atlanticbb.net

Dates: 2006 - 2018

Key Team Members: John Cole and Matthew Youngblood

The Mineral County Commission in West Virginia requested that the Frankfort Public Service District (FPSD) investigate the feasibility of developing a sewage collection and treatment system in northern Mineral County. RK&K was hired to conduct the sewer feasibility study.

The study defined sewage treatment needs from the perspective of public health and safety while ensuring the environmental health of local waterways. The study area covered approximately 35 square miles and fourteen sewage treatment plants with affiliated infrastructure. Eleven of these sewer systems had serious systemic deficiencies, which resulted in raw sewage spills, lethal toxicity to aquatic life, sewage backups into structures, improper treatment, and violations of the facilities' respective National Pollutant Discharge Elimination System (NPDES) permits.



The project area contained 2,576 customers representing 3,058 equivalent dwelling units, both residential and commercial. Sewage service for those residents and businesses was provided at that time by the Fort Ashby wastewater treatment plant, 13 other individual treatment plants, and individual septic systems.

The project area contained 2,576 customers representing 3,058 equivalent dwelling units, both residential and commercial. Sewage service for those residents and businesses was provided at that time by the Fort Ashby wastewater treatment plant, 13 other individual treatment plants, and individual septic systems.

RK&K evaluated the collection system and treatment plant specifications necessary for comprehensive sewage collection and disposal in the project area. Development of a facility plan for the proposal ensued.

During the design of the regional project, the FPSD submitted a plan for the entire regional sewer system that envisioned the elimination of the fourteen existing wastewater treatment facilities, which would be superseded by the construction of a 1.2 million-gallon-per-day (MGD) wastewater treatment plant, 63 miles of sewer lines (of diameters ranging 6" through 21"), and fourteen sewage lift stations divided among nine sewer sheds covering 35 square miles. However, the problem of obtaining adequate funding while maintaining affordable user rates within any single fiscal year became apparent early in the design process. A recommendation was therefore made to divide the entire project into multiple phases to increase the likelihood of incrementally securing the project funding necessary for construction.

RK&K continues to serve in the capacities of planning, design, preparation, construction management, and associated duties. To date, two of three planned phases of the Northern Mineral County Regional Sewer System (NMCRSS) project have been completed.

Phase I: Phase I of the NMCRSS project allowed for the construction of approximately 13 miles of interceptor sewer lines (8" through 21" diameter), one remote sewage pump station, and the construction of a 0.6 MGD regional wastewater

treatment plant. The total population served by this phase of the project is nearly 7,500 people, representing approximately twenty-five percent of the Mineral County population.

Significant challenges in permitting, funding, design and construction were overcome to provide a cost-effective treatment method of meeting State nutrient loading limitations while minimizing the impact to the surrounding area and the financial burden on the District's customers. The Sequencing Batch Reactor (SBR) biological process was utilized as the primary means of treatment, incorporating both chemical addition to enhance the nitrification process, and filtration to enhance phosphorus removal. This design resulted in the FPSD plant becoming the first treatment facility to be specifically designed, constructed, and placed into successful operation within the State of West Virginia in accordance with the State's limitations on nutrient loadings (5 mg/L of total nitrogen and 0.5 mg/L of total phosphorus)



entering the Chesapeake Bay. The treatment plant process comprises an influent pumping station, a rotating mechanical fine screen, vortex grit removal, SBRs, continuous backwash up-flow sand filters, UV disinfection, cascade aeration, aerobic digestion, and belt-filter-press. Concurrent with construction of the plant's processing components, an operations building complete with testing laboratory was erected, as were chemical storage facilities and a maintenance garage. In recognition of this design, the FPSD project received top honors in 2017 for Engineering Excellence from the American Council of Engineering Companies of West Virginia.

Despite challenging site conditions, the wastewater treatment plant (WWTP) was operational in June of 2011 (15 months after Notice to Proceed).

Phase II: The second phase included the addition of 800 new customers, elimination of the remaining five antecedent wastewater treatment facilities, and construction of six remote sewage pump stations and an additional 30 miles of sewer collection lines. Additionally, the treatment capacity of the new WWTP was expanded from 0.6 MGD to 1.2 MGD. The WWTP expansion involved the construction of two additional SBR tanks, one digester, four more sand filters, and additional UV disinfection capacity. Phase II of the regional project was completed in April of 2018 (13 months after Notice to Proceed).

Funding: Due to the high anticipated cost (more than \$52 million), the regional project was divided into multiple phases in an effort to secure the necessary funding. Phase I of the project cost approximately \$18.22 million, while Phase II cost \$26.95 million. The planned third phase of the project has an estimated construction cost of \$16 million.

Associated Work: Phases I and II of this project necessitated the acquisition of several private sewer systems, a wastewater treatment plant site, and seven pump station sites. RK&K completed land surveys, prepared plats and legal descriptions, and supported attorney and owner during the procurement process. In addition to these acquisitions, 111 right-of-way easements were required for Phase I, and Phase II required over 800 easement agreements. RK&K coordinated the acquisition process among attorney, right-of-way agents, and the owner. In a limited number of instances where land was acquired through the mechanism of eminent domain, RK&K provided court testimony.

TOWN OF OAKLAND INFLOW & INFILTRATION STUDY OAKLAND, MD

Owner: Town of Oakland

Contact: Gwen Evans | 15 South Third Street, Oakland, MD 21550 | 301.334.2691 | townofoak@gmail.com

Dates: 2014 - Ongoing

Key Team Members: John Cole, Dan Tichinel and Matt Youngblood

The Town of Oakland retained RK&K as engineering consultant to perform a study of Inflow and Infiltration (I&I) entering into their sewer collection system. The Town has had high levels of water entering the sewer system during rain events, leading to overflowing manholes and overloading the treatment plant.

Oakland's sewer system dates back to 1909, and some of the original pipe and manholes are still in operation today. Excess stormwater enters the sewer system through old and vulnerable terra cotta pipes and brick-formed manholes. In addition, water enters the system through illegally connected downspouts, improper pipe seals, and loose manhole covers. The Town has not been able to keep current with upgrades and remediation, and therefore, the cost to pump the excess stormwater continues to increase. Consequently, treatment cost rose, causing an increase in sewer rates. The I&I Study will determine the causes of the excess water through three different aspects of investigation: manhole inspections, flow monitoring and smoke testing.



Manhole Inspections: This portion of the I&I study consisted of surface inspections at 436 manholes. Covers were removed and photos were taken of the surface/environment around the cover for reference and of each pipe connection entering the manhole. Photos were also taken at any damaged or leaking locations. Multiple measurements, ranging from depth of manhole, diameter of all pipes entering and exiting the manhole and drop connection heights, were recorded. Inlet locations were referenced with respect to their position to the outlet pipe, and flow levels were noted at time of inspections. Weather and time of day were also noted. After all necessary items were recorded, each manhole was given a rating from 1 to 5, classifying each manhole's condition. 1 being good and 5 being poor.

Flow Monitoring: Portable flow meters purchased from Greyline Instruments Inc. were used to monitor and record flows during significant rain events at various manhole locations. The meters recorded level, velocity and temperature, but could produce a flow chart in gal/min for practicality. Flows were compared to rain and time to narrow down possible I&I sources on specific sewer lines. Later in the study, when televising the sewer lines would be conducted, a more specific area could be chosen based on flow monitoring results rather than televising the entire collection system, which reduced costs.

Smoke Testing: This portion of the study was conducted during dry periods, typically in the summer months to ensure that smoke could be detected above ground if it escaped the sewer lines. Testing was performed with a smoke blower, sewer pipe plugs, marker flags and a video camera to document any illegal connections, broken pipes, etc. Predetermined locations to place the blower were chosen ahead of time to test specific sections of sewer line efficiently. During the test, illegal downspout connections, broken/missing cleanout caps were the most common issue. The most frequent problem was illegally connected foundation drains and/or driveway drains. With video evidence, the Town was able to notify each property owner about the issues and required remediation, as well as address any problems that were the Town's responsibility.

EMERGENCY WATER LINE REPLACEMENT NEW CREEK, WV

Owner: New Creek Water Association

Contact: Thomas Cooper, President | PO Box 194, New Creek, WV 26743 | 304.788.5886 | newcreekwater@frontier.com

Dates: Ongoing

Key Team Members: John Cole, Dan Tichinel and Matt Youngblood

The New Creek Water Association (NCWA) retained RK&K for evaluation of the existing water distribution system to determine the reason for an increase in the number of breaks and leaks being experienced on the existing water system.

The existing water system was installed in 1972 and consisted of a 6" distribution line from the Pump Station along US 220 and WV 972, to the intersection of US Route 50, and an 8" line running from storage tanks on Stony Run and Cut Off (US Rt. 220) Roads.

RK&K determined that the problems were the result of original lines constructed of SDR 21 PVC installed with little or no bedding for protection. In addition, due to the widening of the roads, pavement was placed over the water line in many locations.

RK&K submitted the project for Public Service Commission approval and provided design and preparation of contract plans and specifications for the project. Services included preparation of bidding and contract documents, participation in the evaluation of bids received, and monitoring and inspection of construction activities to insure compliance with plans and specifications.

The project included the replacement of 6,500 feet of 6" SDR 21 and SDR 26 water line along WV Route 972 / WV Route 93 from Rees Chapel Church to Potomac Highland Guild with new 8" C900 Cl. 235 PVC water line, 44 services, 6 fire hydrants, and valves. This project also provided funding for development of a Preliminary Engineering Report to improve other areas of the water system including various water line replacements, water line extensions, pump station improvements, replacement of the cut off water storage tank, water meter replacements, service line replacements, and other potential projects.

TUSCAN RIDGE SUBDIVISION

TOWN OF DAVIS, WV

Owner: North American Land Corporation

Contact: Joe Drenning, Mayor | PO Box 211, Davis, WV 26260 | 304.259.5302 |

Dates: Complete 2008

Key Team Members: John Cole and Matt Youngblood

In 2005, RK&K was contracted to conduct a boundary survey of the 486± acre parcel of land south of the Town of Davis. Following the initial survey, RK&K was retained to provide engineer and surveying services to develop the subdivision into approximately 370 lots in four separate phases.

Due to the housing market crash of 2008, only the first two phases (Phases 1 and 2) were completed and all other work has been suspended. Once the housing market turns around, the Developer intends on completing the project as a whole.



Design Services: Phase 1 - Completed in late 2007 and consisted of 117 lots and approximately 14,360± LF of roadway, drainage, stormwater management, 16,980± LF of sewer lines, manholes, cleanouts, residential lateral connections, a duplex sewage pump station, 12,600± LF of water mains, fire hydrants, residential services, and a community lodge. Also part of this design included gas, underground electric, television cable, and telephone.

Phase 2 - Completed in the Summer of 2008 and consisted of 20 lots and approximately 1,400± LF of roadway, drainage, stormwater management, 4,700± LF of sewer lines, manholes, cleanouts, residential lateral connections, a duplex sewage pump station, 2,330± LF of water mains, fire hydrants, and residential services. Also part of this design included approximately 2,100± LF of gas, 3,200± LF of underground electric, television cable, and telephone.

Phase 3 - Design completed in the Fall of 2008 and will consist of 216 lots and approximately 24,300± LF of roadway, drainage, stormwater management, 24,400± LF of sewer lines, manholes, cleanouts, residential lateral connections, a duplex sewage pump station, 25,700± LF of water mains, fire hydrants, a 150,000 gallon water storage tank, water booster station, and residential services. Also part of this design is proposed to include approximately 24,700± LF of gas, 24,200± LF of underground electric, television cable, and telephone.

Phase 4 - Design completed in the Fall of 2008 and will consist of 15 lots and approximately 3,300± LF of roadway, drainage, stormwater management, 7,200± LF of sewer lines, manholes, cleanouts, residential lateral connections, 5,650± LF of water mains, fire hydrants, and residential services. Also part of this design is proposed to include approximately 3,200± LF of gas, 3,200± LF of underground electric, television cable, and telephone.

Wastewater Treatment Plant - Due to the size of the development and the lack of availability of sewage treatment, the development intends on constructing a 0.1 MGD WWTP to treat the sewage from the Subdivision and once constructed will donate the facility to the Town of Davis to own and operate. RK&K has completed preliminary design and once the project resumes construction will conduct final design.



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

State of West Virginia
Centralized Expression of Interest
02 — Architect/Engr

Proc Folder: 639956

Doc Description: A/E Services-White Horse WMA HQ Office, Shop & Garage

Proc Type: Central Contract - Fixed Amt

Date Issued	Solicitation Closes	Solicitation No	Version
2019-10-21	2019-11-04 13:30:00	CEOI 0310 DNR2000000004	1

BID RECEIVING LOCATION:

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

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER

Guy Nisbet
(304) 558-2596
guy.l.nisbet@wv.gov

Signature X

FEIN # 82-1385831

DATE October 31, 2019

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.



, Member

(Name, Title)

Thomas Pritts, Member

(Printed Name and Title)

37 ER Path, Keyser, WV 26726

(Address)

304-276-7151

(Phone Number) / (Fax Number)

tom@montumarch.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.

Montum Architecture, LLC

(Company)



, Member

(Authorized Signature) (Representative Name, Title)

Thomas Pritts, Member

(Printed Name and Title of Authorized Representative)

October 31, 2019

(Date)

304-276-7151

(Phone Number) (Fax Number)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CEOI 0310 DNR20*4

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

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

Addendum Numbers Received:

(Check the box next to each addendum received)

- ☒ Addendum No. 1
- ☐ Addendum No. 2
- ☐ Addendum No. 3
- ☐ Addendum No. 4
- ☐ Addendum No. 5

- ☐ Addendum No. 6
- ☐ Addendum No. 7
- ☐ Addendum No. 8
- ☐ Addendum No. 9
- ☐ 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.

Montum Architecture, LLC

Company

Authorized Signature

October 31, 2019

Date

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