



West Virginia Purchasing Division

2019 Washington Street, East
Charleston, WV 25305
Telephone: 304-558-2306
General Fax: 304-558-6026
Bid Fax: 304-558-3970

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

Header @ 1

List View

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

Procurement Folder: 1492496	SO Doc Code: CEOI
Procurement Type: Central Purchase Order	SO Dept: 0603
Vendor ID: 000000201753	SO Doc ID: ADJ250000009
Legal Name: ALPHA ASSOCIATES INC	Published Date: 8/15/24
Alias/DBA:	Close Date: 8/29/24
Total Bid: \$0.00	Close Time: 13:30
Response Date: 08/27/2024	Status: Closed
Response Time: 13:56	Solicitation Description: Building(s) 227 & 231 Renovations Design-Camp Dawson
Responded By User ID: Diann.Clark	Total of Header Attachments: 1
First Name: Heather	Total of All Attachments: 1
Last Name: Fox	
Email: heather.fox@thinkalphafirst.c	
Phone: 304-296-8216	



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

**State of West Virginia
 Solicitation Response**

Proc Folder: 1492496
Solicitation Description: Building(s) 227 & 231 Renovations Design-Camp Dawson
Proc Type: Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2024-08-29 13:30	SR 0603 ESR08272400000001504	1

VENDOR
 000000201753
 ALPHA ASSOCIATES INC

Solicitation Number: CEOI 0603 ADJ2500000009
Total Bid: 0
Response Date: 2024-08-27
Response Time: 13:56:25
Comments:

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

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

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

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Building(s) 227 & 231 Renovations Design-Camp Dawson				0.00

Comm Code	Manufacturer	Specification	Model #
81101508			

Commodity Line Comments:

Extended Description:

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



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

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

Proc Folder: 1492496			Reason for Modification:
Doc Description: Building(s) 227 & 231 Renovations Design-Camp Dawson			
Proc Type: Central Purchase Order			
Date Issued	Solicitation Closes	Solicitation No	Version
2024-08-15	2024-08-29 13:30	CEOI 0603 ADJ2500000009	1

BID RECEIVING LOCATION

VENDOR

Vendor Customer Code:

Vendor Name : Alpha Associates, Incorporated

Address : 209 Prairie Avenue

Street : 209 Prairie Avenue

City : Morgantown

State : WV **Country :** US **Zip :** 26501

Principal Contact : Richard A. Colebank, PE, PS; President & COO

Vendor Contact Phone: (304) 296-8216 **Extension:** 102

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

Vendor Signature  **FEIN#** 550516286 **DATE** August 29 2024

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



West Virginia Army National Guard

Architectural & Engineering Services

CEOI ADJ25_09 - Buildings 227 & 231 Renovations Design at Camp Dawson

August 29, 2024



Alpha Associates, Inc.

Morgantown, WV 26501 | Martinsburg, WV 25401



Richard Colebank, PE, PS
President & COO

304.296.8216 ext. 102

rick.colebank@thinkalphafirst.com

<http://thinkalphafirst.com>

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SECTION A
GENERAL FIRM INFORMATION



29 August 2024

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

Attn: David Pauline, Senior Buyer

**RE: CEOI ADJ2509 – Building(s) 227 & 231 Renovations Design
 Camp Dawson, Kingwood, WV**

Dear Mr. Pauline,

Alpha Associates, Incorporated is pleased to submit our Expression of Interest to provide our professional architectural and engineering services to design renovations for Buildings 227 and 231, located at Camp Dawson near Kingwood, WV, to facilitate building use, meet all current building codes, and fully support the mission of the West Virginia Army National Guard. These buildings provide laundry and shower facilities to soldiers and other using tenant and organizations utilizing Camp Dawson.

As your partner, Alpha will provide services including, but not limited to, preliminary engineering; design and construction-related services, preparation of bidding and contract document, participation in the evaluation of bids received, and monitoring & inspection of construction activities, as well as to provide any additional services required by the WVARNG in the implementation of this project. Our design team has provided services to WVARNG across the State of West Virginia since our inception, and we have recently completed the following relevant projects for the WVARNG:

- α **The Memorial Tunnel** – Limited Structural Assessment, *Standard, WV*
- α **Volkstone Fencing Project** – Camp Dawson, *Kingwood, WV*
- α **Camp Dawson Paving**, *Kingwood, WV*
- α **Billeting Facility Design** – Camp Dawson, *Kingwood, WV*
- α **Parkersburg Armory Renovation/Addition**, *Parkersburg, WV*

Throughout our 55+ years, Alpha has provided engineering/architectural services throughout the State of West Virginia from our two locations in Morgantown and Martinsburg, WV. We have worked with many local, state and federal government entities on numerous renovation/addition projects of varying sizes and types, including laundry and shower facility designs on projects such as the recently completed Norwood Fire Station Renovation/Addition, the WVARNG's Parkersburg Armory, and the Billeting Facility Design completed for the WVARNG in 2002. From humble beginnings in 1969 to

becoming a leader in the industry, our dedication to the client first has been unwavering. Our design team has the experience to successfully complete your project and, more importantly, provide an efficient design that meets the project's scope and budget. Throughout the rest of the project, we will ensure the most cost-effective design is completed and the necessary approvals are obtained promptly.

Alpha Associates is a West Virginia owned and operated A/E design firm with office locations in Morgantown and Martinsburg, WV. Our professional staff includes architects, civil and structural engineers, surveyors, cost estimators, field service representatives, landscape designers, interior designers, and technicians. We are well equipped to effectively and efficiently manage and produce your proposed project. Alpha's in-house combination of architectural design, civil and structural engineering will prove to be beneficial to your project.

Alpha will be partnering with **ZDS**, a qualified engineering firm as our consulting mechanical, electrical and plumbing engineers. ZDS's personnel have worked with the West Virginia Army National Guard on projects including renovations completed at the Brushfork Armory in Bluefield, WV, MEP design projects completed within budget and ahead of schedule at the WVARNG Headquarters & Annex Building in Charleston, WV, and the comprehensive MEP engineering support provided at the Dunbar Armory in Dunbar, WV. Together, our design team possesses the experience, ability, and capacity necessary to provide the services outlined in the EOI released by West Virginia State Purchasing Division for the West Virginia Army National Guard. This project will be conveniently managed out of Alpha's Corporate Office, located just 45 minutes away from Camp Dawson, in Morgantown, WV.

Alpha Associates, Incorporated, is excited for the opportunity to work with the West Virginia Army National Guard on the design renovations needed for Buildings 227 and 231, located at Camp Dawson near Kingwood, WV. We appreciate your time and consideration for these upgrades, and we look forward to strengthening our relationship with WVARNG. Our dedicated team of professionals will make **YOUR PROJECTS OUR PRIORITY**. If you would like to further discuss this upcoming project, please contact us at (304) 296-8216 ext. 102.

Sincerely,

Alpha Associates, Incorporated



Richard A. Colebank, PE, PS

President and COO

rick.colebank@thinkalphafirst.com

(304) 296.8216 ext. 102



Two West Virginia Owned and Operated offices in Morgantown and Martinsburg which offer multiple in-house services. Everyone at Alpha Associates, Inc. shares the same goal of exceeding expectations and successfully accomplishing projects.

Architecture

Commercial

Public

Private

Residential

Civil/Structural Engineering

Enhance

Conservational

Leadership

Surveying

Accurate

Clearly Communicated

State-of-the-Art

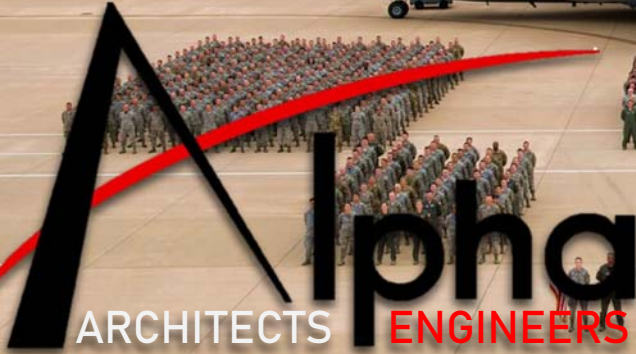
Alpha's clients are served by a local, unique combination of professionals who provide top-notch architectural design, civil engineering and structural engineering. The Alpha design experience begins with the design staff listening, interpreting, reviewing and designing what you, the client, wants. The conclusion of the design process is not the end of Alpha's involvement in your project. Alpha's staff will stay involved until your project is constructed.

"The engineer always has been, and is, a maker of history."

- James Kip Fitch

Throughout Alpha's decades of practice, our architects and engineers work closely, making history every day. With support from the Alpha Team, one can truly create a sense of place and a proper environment for the built atmosphere.

The firm mantra has always been to "*do good work*" and that philosophy is carried on today.



West Virginia Army National Guard 167th Airlift Wing Base
Martinsburg, WV

*“Creating client-focused,
innovation designs with
quality and value that
are sustainable and
cost-effective”*

LOCATIONS:

209 Prairie Avenue
Morgantown, WV 26501
304.296.8216

535 West King Street
Martinsburg, WV 25401
304.264.0051

WEBSITE:

<https://thinkalphafirst.com/>

EMPLOYEES:

21

Webster’s dictionary defines Alpha as “the first, the beginning”. In the case of Alpha, the beginning was 1969 and the location was Morgantown, West Virginia. Since 1969, Alpha has earned a reputation for producing exceptional architectural and engineering designs for high profile organizations. By 1995, Alpha’s client base had grown, demanding the need for a second location. The Eastern Panhandle of West Virginia was selected, and the planning began.

The Eastern Regional Office is located in Historic Downtown Martinsburg and is conveniently located to serve clients in West Virginia, Maryland, Virginia and Pennsylvania. We continue to raise the bar with a design studio of cross-disciplined professionals that embrace technology and innovation while treating you, the client, with respect and dignity.

As you travel through the region, you will find Alpha’s influence on the built environment, especially in West Virginia. Alpha’s local project success reflects an architectural studio which encourages creativity and flexibility. Continuing the focus of success, Alpha’s architectural and engineering teams are experts with the planning of solutions for complex issues even before facing them head-on. Alpha’s team consists of industry leaders, consistently being called upon for advice and guidance for the future. Alpha Associates, Inc. will surpass all expectations while maximizing the client’s, your, vision.

With our client-first mission, we design spaces for now and the future.

Think Alpha First!

STATEMENT OF QUALIFICATIONS.



Alpha Associates, Incorporated is a local, West Virginia based Architectural/Engineering design firm that provides services in the areas of architectural design, interior design, construction administration, civil engineering, structural engineering, landscape design, project management and surveying. Our clients benefit from our unique combination of extensive design and construction experience, advanced technological tools, dedicated principals and highly skilled staff members. Alpha's work is diverse and includes clients in commercial, educational and government facilities, developers and private organizations.

Since 1969, Alpha's team provided architectural/engineering design services throughout the State and surrounding areas. For over 55+ years, we have worked with numerous local, state, and federal government entities on multiple projects of varying sizes and types. No project is too big or too small for us. Our team of licensed architects and engineers have recent, relevant experience with land assessment, civil/site planning, schematic and design layout, document preparation, and construction/bid administration to complete projects seamlessly.

Alpha's philosophy has always been to provide exemplary services for fair fees. We have always believed that the best way to succeed as a business is to go above and beyond the basic requirements of our contracts and take every step necessary to successfully complete and surpass a given project. We act in the client's best interest.

Everyone at Alpha, no matter the given role, all work towards the same goal of achieving success for not the project but the client too. Our principals are involved with all projects from the earliest stages through to the final completion and even beyond. They will consistently update you on your projects by using effective communication tools to manage the projects and all involved parties. Our skilled staff of architects, engineers, surveyors and administrative personnel at Alpha are professionals dedicated to providing superior services to the State of West Virginia and surrounding areas. While our staff is large enough to handle any size project, our firm is also capable of being small enough to give each and every one of our projects the individual attention to details it deserves. Alpha's local and unique approach to projects ensures success for all our clientele.

ABOUT **ZDS** DESIGN/CONSULTING SERVICES

In 1983, Todd A. Zachwieja founded ZECO Consultants. In 1994 **ZDS** Limited Liability Company was incorporated in West Virginia using dba **ZDS** Design/Consulting Services, and was founded to provide design and consulting services.

Each new project is assigned to a principal in charge who will follow the project from inception through commissioning. **ZDS** assigns the production staff according to the nature of the project and the work force necessary to meet the schedule. The principal in charge of that project determines if consultants are needed and coordinates all areas. After bidding, a principal of **ZDS** coordinates visits to the job site regularly, all the way through the post-warranty inspection. **ZDS** believes in the team approach when providing engineering design and consulting services. We start with our client as the number one member on our team. We listen to the needs and concerns of our client and that becomes the basis for our design.



COMPANY LEGAL NAME

ZDS Limited Liability; Company dba **ZDS** Design/Consulting Services

LOCATION OF INCORPORATION West Virginia

FOUNDERS

Todd A. Zachwieja, P.E., C.E.O.

Lori L. Zachwieja, C.P.A., C.F.O.

Daniel H. Kim, Ph.D.

FIRM LOCATION

135 Corporate Center Drive, Suite 532
Scott Depot, WV 25560

EMPLOYEES

ZDS currently employs design professionals covering all aspects of our services.

CLIENTS & EXPERIENCE

- ◆ Charleston Area Medical Center
- ◆ Charleston National Bank/Chase Towers
- ◆ Concord University Nick J. Rahall II Technology Ctr.
- ◆ District 2 Headquarters' Building HVAC Renovations
- ◆ Tyler County 911 Center - *Net Zero*
- ◆ General Motors North America Operations
- ◆ Harvard University Arboretum Lab
- ◆ Hopemont Hospital, WVDHHR
- ◆ IMC Data Center
- ◆ Jackie Withrow Hospital, WVDHHR
- ◆ Kanawha County Commission Courthouse & Judicial Annex
- ◆ Kanawha County Metro 911
- ◆ Laidley Towers
- ◆ Marshall University Harris Hall, Smith Hall, Dorms
- ◆ Meadowbrook & Burnsville Rest Areas, WVDOT
- ◆ Mercer County Courthouse
- ◆ Ohio University Athens & Chillicothe Campuses
- ◆ Pendleton County Courthouse & Annex
- ◆ Pocahontas County Community Center
- ◆ Pocahontas County EMS 911 Center
- ◆ Robinson Grand Performing Arts Theatre
- ◆ St. Patrick Church Renovations
- ◆ Tyler County Commission Courthouse

- ◆ Tucker County Courthouse
- ◆ University of Charleston Innovation Center, Lab
- ◆ Veterans Administration—many locations
- ◆ Washington & Lee University
- ◆ Webster County Development Authority
- ◆ White Sulphur Springs Welcome Center
- ◆ William R. Sharpe, Jr. Hospital, WVDHHR
- ◆ World Trade Center, MD
- ◆ WV Air National Guard
- ◆ WV Army National Guard
- ◆ WV Chief Medical Examiners Office Renovations
- ◆ WV Dept. of Education - State wide PreK-12 Schools
- ◆ WV Division of Energy
- ◆ WV Dept. of Transportation
- ◆ WV Dept. of Health & Human Resources
- ◆ WV Division of Culture and History Renovations
- ◆ WV Division of Protective Services
- ◆ WV General Services Division
- ◆ WV Higher Education Policy Commission
- ◆ WV Parkways Authority HVAC Renovations
- ◆ WVU Health
- ◆ WVU Morgantown Campus
- ◆ WVU Tech (Montgomery Campus) Engineer Bldg.
- ◆ WVDOT Lab

ZDS provides comprehensive design services. We have experience and specialties in indoor air quality, energy management and commissioning, along with traditional mechanical and electrical design experience dating back as far as 1958. We offer a complete package. **ZDS** works with all levels of the client's staff: the building owner, budget supervisor, operating and maintenance staff and others impacted by the project. We recognize that the maintenance and operating staff live with the design long after the project's completion. We listen to and work with those who will continue to operate and maintain the equipment. We find that proper communication benefits the client throughout the design process and beyond.

The **ZDS** design team provides a total system evaluation for cost-effective selection, installation, and ease of maintenance for both new systems and retrofit of in-place systems. Design begins with our client. Our staff meets with our client to review their concerns, budgets and schedules. The **ZDS** design team reviews the entire picture, and ends with "A Total Design."

The **ZDS** staff has the expertise with codes and standards. We have extensive experience in conducting engineering code surveys of existing facilities. Our staff has excellent working relationships with the West Virginia Fire Marshal's Office, West Virginia Department of Education and the West Virginia School Building Authority. In addition to comprehensive Engineering services from an experienced design team, another major consideration in the selection of your engineer and design staff should be their track record.

ZDS' organization has an unbeatable, long running, and well-known track record for meeting our clients' needs, on time and within budget, with outstanding quality. **ZDS** views these characteristics as the foundation of Quality. We look forward to the opportunity to discuss our ideas with you and assist you by providing solutions for your needs with a full range of services from Planning to Commissioning.

INDOOR AIR QUALITY SERVICES

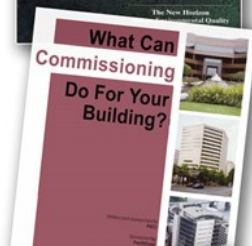
ZDS provides consulting engineering services for the indoor air quality (IAQ) environment. These services include: strategic planning for renovation and new construction projects; technical research and writing; specialized applications software development; corporate and professional training programs; publications support and fulfillment; and site-specific engineering and scientific consultation. Todd Zachwieja, **ZDS** Principal, is contributing editor for the following IAQ publications:

- Technical Review Panel for the publication of the *INvironment™ Handbook of Building Management and Indoor Air Quality*, by Chelsea Group and published for Powers Educational Services
- Technical Review Panel for the quarterly publication of the *INvironment™ Newsletter*, by Chelsea Group for Powers Educational Services
- *Ventilation for a Quality Dining Experience: A Technical Bulletin for Restaurant Owners and Managers*, released in January 1993
- *The New Horizon: Indoor Environmental Quality*, published as a supplement to an issue of *Consulting-Specifying Engineer* magazine, a trade magazine distributed to roughly 50,000 engineers
- Editorial Advisory Board member reviewing the articles of the monthly publication *INvironment™ Professional*
- Editorial Advisory Board member of *POWER PRESCRIPTIONS™ Indoor Air Quality Publication* by Electric Power Research Institute

ZDS provides Indoor Air Quality (IAQ) services for major corporations, government organizations and property owners to resolve their specific facility problems:

- Resolve “sick building syndrome”
- Identify solutions to building-related illnesses due to extensive biological contamination
- Develop solutions for HVAC systems, temperature controls, equipment, operating and maintenance practices for indoor air quality
- Commission new and renovated facilities to minimize or eliminate IAQ issues before problems arise
- Develop and establish master plans as well as conduct training seminars for IAQ of schools and commercial buildings

As one of the nation’s leaders in Indoor Air Quality (IAQ), **ZDS** provides sophisticated technical expertise that enables our client to be proactive in solving and preventing indoor environmental problems.



SECTION B
TECHNICAL EXPERTISE

ALPHA'S SCHEDULING EXPERTISE

Project Track Record

Alpha Associates, Incorporated has an excellent track record of producing projects on time and within the Owner's budget. Many A/E firms can claim the same successes; however, the determining factor is the tools a firm utilizes to achieve the budgets, in regards to funds at that time. Alpha utilizes a number of both traditional & modern tools to exceed our client's expectations.

A project schedule is a dynamic, ever-changing entity. Your project schedule depends on many factors including:

- α Preferred construction method
- α Changes to project scope
- α Unique construction elements

Successful Project Management/Schedule

Successful project management depends on consensus regarding work efforts, milestones and goals. Our team has found the development of detailed work plans, which delineate tasks and deliverables for each project phase, in consort with the client and full project team, is the most effective approach with establishing expectations of efforts required by the respective disciplines. In addition to guiding the efforts of the design team, the work plan sets forth specific time frames and decision points for the Owner and user reviews, comments and/or approvals.

Developing an overall project schedule is a critical task that must take account of many factors: building type, owner's desired occupancy, scope of work & level of documentation, whether contract(s) is bid or negotiable, available fee, and experiences on similar projects. Once the design process begins, a comprehensive, realistic project schedule can be developed and communicated to all involved.

In a world where "time is money", the schedule of a project is as important as controlling the cost. Alpha works diligently to control the budget of a project and avoid the "scope creep" which can occur.

Alpha's Unique In-House Features

Alpha's in-house cost estimators combined with our excellent relationships with contractors throughout the State provides the client with the most accurate estimates early in the design process. The Alpha estimators begin at the schematic design phase of the project and develop a line-item estimate of probable construction costs which can be carried through each of the project phases. At each phase, the estimate is updated to include a more detailed evaluation for enhanced accuracy. When updating estimates, specific increases or decreases can be identified allowing the owner to make informed decisions on important budget issues for the project.

Many projects use alternatives to control the budget through obtaining actual contractor pricing during the bid process. This allows flexibility in the owner's determining costs of portions for the project which may be optional and/or critical for budget control.



CAPACITY & SOFTWARE.

OUR CAPABILITIES

Alpha Associates, Incorporated is prepared to commit staff and resources to your project. Alpha has the qualified and experienced personnel, administrative support, along with the production equipment and resources, to ensure the successful completion of this project. We are confident in our ability to provide you with a committed and dependable design team. Our multidisciplinary design team is prepared to meet and exceed the expectations for your project by committing any resources necessary to meet the project schedule.

USING THE LATEST SOFTWARE

The project team incorporates the latest computer and software capabilities required to complete the working drawings and specifications of this project. Our cost accounting system is top-of-the-line and we have the ability to differentiate fees according to task. We have secure e-mail and internet capability to allow efficient transfer of information between Alpha and the client. We currently have the latest editions of the following software:

- α AutoCAD22
- α REVIT (Editions up to 2022)
- α Civil 3D
- α RISA 3D
- α RISA Foundation
- α MathCAD Prime
- α DJI Phantom 4 RTK Drone
- α Office 365
- α Autodesk Civil 3D
- α Autodesk Suite
- α Autodesk Revit
- α Bentley Open Bridge Modeler & Designer
- α Enercalc
- α AutoTURN
- α TopCON GR5 GPS System
- α TopCON Total Station with Reflector-less Capabilities
- α Carlson Surveyor & Data Collector



FUNDING EXPERIENCE

Throughout our 55 years of business, Alpha Associates, Incorporated has worked with multiple funding agencies on projects, including State and Federal dollars.

Our funding experience includes:

- State and Federal ARRA Funds
- West Virginia Infrastructure Loan Program
- HUD Grants and Loans
- West Virginia Economic Development Grants and Loans
- Transportation Enhancement Grants
- West Virginia State Historic Preservation Office Funds
- Small Cities Block Grants
- Tax Increment Financing
- BIG Grant (Boating Infrastructure Grant)
- USDA Rural Development/Rural Utility Service- Grants and Loans
- ARC
- School Building Authority of West Virginia
- WV DEP Revolving Loan Fund
- WV Bureau of Health Clean Water Loan Fund
- Private Bond Sales

COMMISSIONING



The Prince Jonah Kūhiō Kalanianaʻole (PJKK)
Federal Building and
United States Courthouse
Honolulu, Hawaii



130th Airlift Wing at Yeager Airport, Phase I
and Phase II: Aircraft Maintenance Fuel
Systems Hangars and Shops
Awarded a **LEED Silver Certification** for
each of the two phases

“ZDS’s commissioning services were invaluable in helping us understand our facility and ensure the systems were installed as intended and optimized for long-term operating benefits. We would recommend them again!” - **Captain Harry Netzer, WVANG Project Manager**



Harvard University
Arnold Arboretum Weld Hill
Research and Administration Building
LEED Gold Certified

- Kanawha County Commission
- WV DHHR healthcare facilities
- Many PK-12 Schools
- General Motors (GM) of North America
- Maryland – Calvert County Indoor Aquatic Center
- Montgomery County Dept of Correction and Police
- Ohio University – Chillicothe Campus
- Santa Ana Federal Building Renovations
- University of California, Davis School of Veterinary Medicine Instructional Facility
- Tyler County Courthouse
- Washington & Lee University
- WV Air National Guard
- WV Museum of Culture and Natural History
- WV State Capitol Complex, Bldg. #3, #4
- WVU—Downtown Campus
- CAMC General, Memorial Division
- CAMC Women & Children’s Hospital
- United Hospital Center

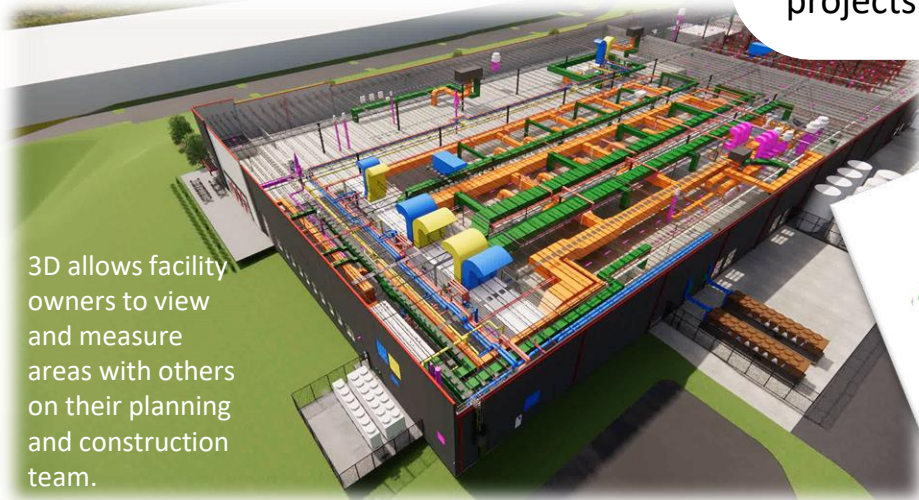
3D Scan to BIM Services BIM Collaboration



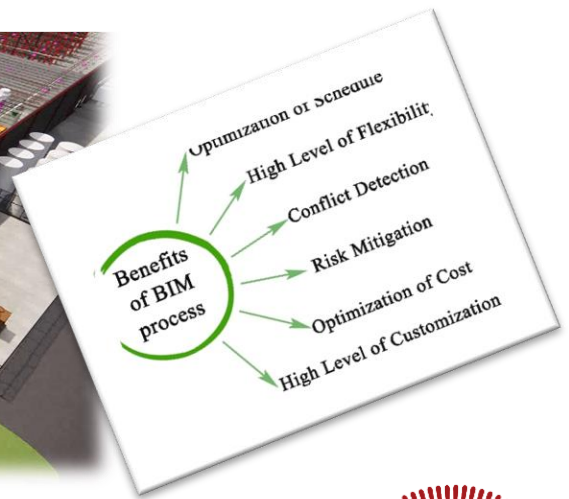
Why 3D Laser Scanning is Better

3D laser scans can be beneficial with NEW construction projects by capturing concealed elements during construction before they're concealed. 3D laser scans also provide superior details with data that is more comprehensive.

“With the 3D laser scanning service, ZDS saved me countless hours communicating with all project team members, even those who work or live far away. Also, we now have an accurate record of the existing conditions that we can rely on for future projects.” - Retired COO of WV DHHR



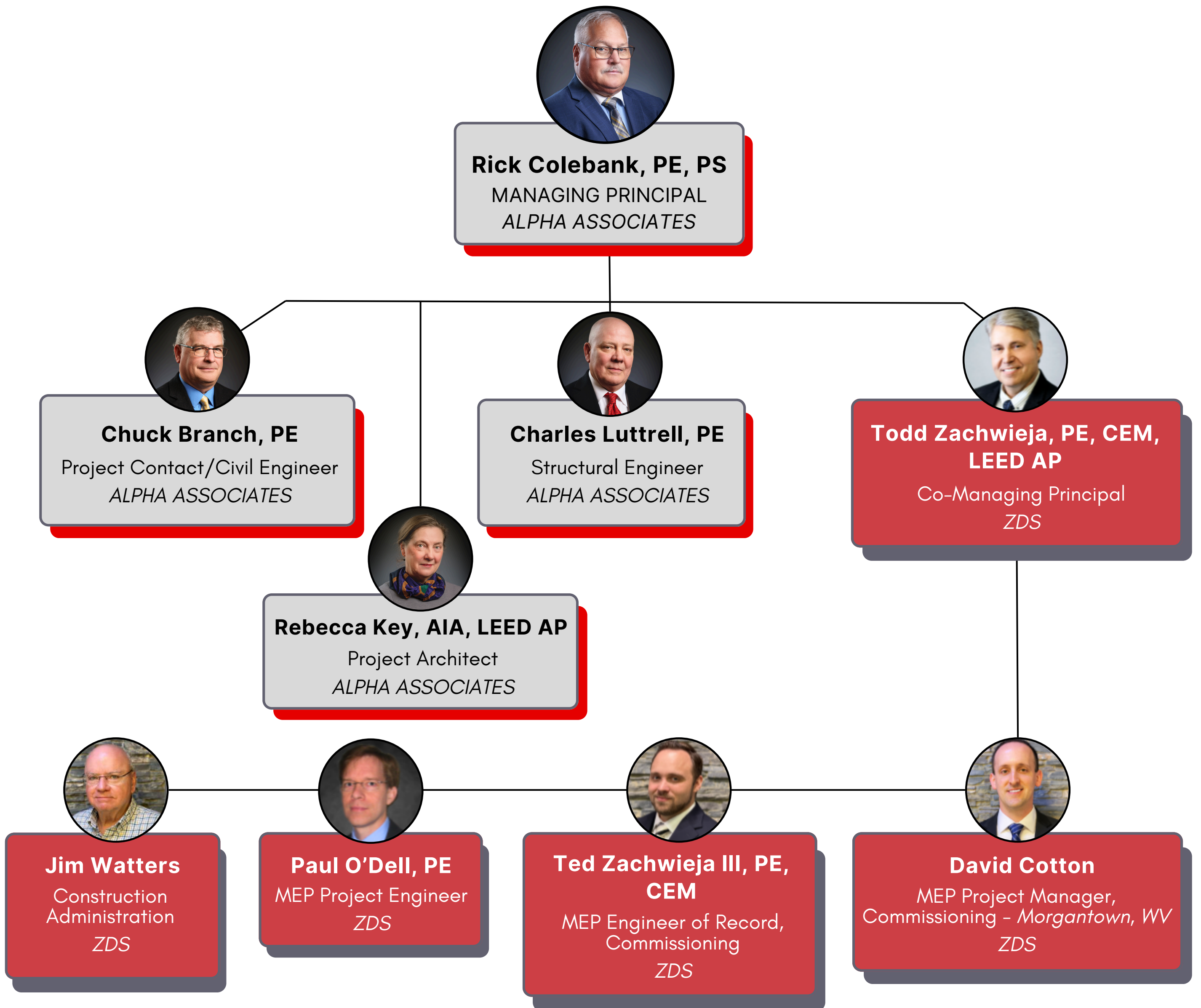
3D allows facility owners to view and measure areas with others on their planning and construction team.



Real-time, anytime, anywhere access with co-authoring ability!
Brings teams together for the highest level of collaboration.



CORE TEAM ORG CHART



CONSULTANT TEAM

ALPHA ASSOCIATES
ARCHITECTURAL &
ENGINEERING DESIGN

ZDS DESIGN/CONSULTING
SERVICES
MEP DESIGN SERVICES

We have thoughtfully put together a team of individuals who will bring both local **knowledge** and **expertise** to this important project. Teamed together, Alpha Associates and ZDS are excited for this opportunity to support the elements of the West Virginia Army National Guard, once again. Our highly skilled personnel will make us the perfect design partner for your services required.

SECTION C
MANAGEMENT AND STAFFING CAPABILITIES



Richard Colebank PE, PS

PRESIDENT & COO

SUMMARY

Mr. Colebank is President and Chief Operating Officer at Alpha. He has been with Alpha Associates, Inc. since 1985. He began his career with Alpha as a staff engineer and progressed through the ranks from Project Manager to his current position. Mr. Colebank has worked with diverse clients such as WVU, City of Morgantown, WVDOH, WVU Foundation, and the Morgantown Municipal Airport, as well as numerous other public and private clients. Since 1988, Mr. Colebank has been the Principal-In-Charge of the Civil Engineering projects developed by Alpha. In his current capacity, Mr. Colebank provides financial and administrative guidance for the day-to-day operations of the company while managing projects.

PROFILE

Broad-based responsibilities in the following areas:

- Project Mangement
- Business Operations & Financial Management
- Quality Assurance/Quality Control
- Civil Engineering Project Management and Design
- New Business Development
- Expert Testimony and Investigation

PROFESSIONAL HIGHLIGHTS

Project Principal

Morgantown Municipal Airport Access Rd; Morgantown, WV
 Mon General Access Rd; Morgantown, WV
 WVU Reedsville Farm Redevelopment; Reedsville, WV
 Monongalia General Hospital Access Road; Morgantown, WV
 DOH Martinsburg Train Station Corridor Streetscape; Martinsburg, WV
 WV State Office Building; Parkersburg, WV
 College of Physical Activity & Sports Science; Morgantown, WV
 WVDOH Open End Engineering Contract; WV
 WVDOH Deckers Creek Pedestrian Bridge; Morgantown, WV
 Clarksburg State Office Building; Clarksburg, WV
 Jane Lew Truck Stop; Jane Lew, WV
 Grant County Bank Addition & Renovation; Petersburg, WV
 South Berkeley Fire Station; Inwood, WV

EMPLOYMENT HISTORY

1985-Current | Alpha Associates, Inc.
 1983-1985 | Charles Townes & Assoc. P.C.
 1983 | US Army Corps of Engineers

EDUCATION

MA Business Administration | 1999
 BA Civil Engineering | 1982

QUALIFICATIONS

- License: Professional Engineer: West Virginia, Maryland, Pennsylvania, and Virginia
- Professional Surveyor: West Virginia
- Certified Private Pilot

AFFILIATIONS

- Former NSPE/PEPP Governor of WV
- American Red Cross - State Board
- University High School Foundation; Charter Member; President
- Morgantown Area Chamber of Commerce; Past Chairman
- WVU College of Civil & Environmental Engineering Visiting Committee
- WVU College of Business & Economics MBA Advisory Committee
- WVU 2023 Academy of Civil Engineers



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come, Greeting.

Know Ye That The State Board of Registration for Professional Engineers, of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

Richard A. Colebank

DOES, IN PURSUANCE OF AUTHORITY VESTED IN IT

by law, hereby certify that he, having submitted satisfactory evidence, of his ability and experience, is a

REGISTERED PROFESSIONAL ENGINEER

Registration Number 10346

To hold and use such title, in the practice of his profession, subject to the conditions prescribed by law.



Given under the hand and the Seal of the Board at the Capitol in the City of Charleston, this 23rd day of Feb. in the year of our Lord One Thousand Nine Hundred and Eighty-Eight and of the State the One Hundred Twenty-Fourth.

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

Secretary
Frank Gaddy

By
Kenneth H. Means

President
Robert B. Scott



Charles Branch PE

SENIOR PRINCIPAL & CIVIL ENGINEER

SUMMARY

As Chief Engineer for site development and planning projects, Mr. Branch is a vital part of the design process at Alpha. His involvement spans from solely civil engineering projects to the design of large-scale educational projects and medical facilities. Mr. Branch acts as peer review for young engineers in the firm on issues ranging from storm water management to site design. Mr. Branch is also involved in commercial and residential development design, roadway and bridge design and utilities layout.

PROFILE

Broad-based responsibilities in the following areas:

- Highway Design
- Municipal Engineering
- Wastewater Collection
- Storm Sewer System Design
- Storm Water Management
- Site Engineering
- Project Management

PROFESSIONAL HIGHLIGHTS

Civil Engineer/Project Manager:

Jane Lew Truck Stop; Jane Lew, WV
 Clarksburg State Office Building; Clarksburg, WV
 WVU Reedsville Farm Redevelopment; Morgantown, WV
 Freedom Automotive Group Dealerships; Morgantown, WV
 Freedom Kia; Clarksburg, WV
 WVU Parking Lot 81 Renovations; Morgantown, WV
 WVU Doll's Run Burn Room; Morgantown, WV
 WVU Alumni Center Parking Lot; Morgantown, WV
 WVU Alumni Center Storm Water Management; Morgantown, WV
 WVU Health Sciences Center Eastern Division; Martinsburg, WV
 WVDOH Martinsburg Train Station Corridor Streetscape; Martinsburg, WV
 WVDOH I-77 Welcome Center; Williamstown, WV
 WV Medal of Honor Recipients Plaza; Hazleton, WV
 Lewis County High School Bridge; Weston, WV
 Wyoming County Route 10 Relocation; Wyoming County, WV
 Fairmont Federal Credit Union; Bridgeport, WV
 Queen St Underpass; Martinsburg, WV
 Martinsburg Little League Fields; Martinsburg, WV

EMPLOYMENT HISTORY

1992-Current | Alpha Associates, Inc.
 1988-1992 | Reimer, Muegge & Assoc., Inc.

EDUCATION

MA Civil Engineering | 2000
 BA Architectural Engineering
 Technology | 1988

QUALIFICATIONS

- License: Professional Engineer: West Virginia

AFFILIATIONS

- WV Society of Professional Engineers
- National Society of Professional Engineers



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come, Greeting

Know Ye That The State Board of Registration for Professional Engineers, of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

Charles B. Branch

DOES, IN PURSUANCE OF AUTHORITY VESTED IN IT by law, hereby certify that he, having submitted satisfactory evidence of his ability and experience, is a REGISTERED PROFESSIONAL ENGINEER

Registration Number 15056

To Hold and use such title in the practice of his profession, subject to the conditions prescribed by law.



Given under the hand and the Seal of the Board at the Capitol in the City of Charleston, this 18th day of February in the year of our Lord 2002 and of the State the One Hundred Thirty-Eighth

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

[Signature]

By Frank D. Goddy

[Signature]

[Signature]

[Signature]



Rebecca Key AIA, LEED AP

DIRECTOR OF ARCHITECTURE

SUMMARY

Ms. Key has worked in the architectural field for over 35 years. She serves as Project Architect/Project Manager for numerous architectural designs at Alpha Associates, Inc. Ms. Key is involved from the programmatic stages and schematic designs all the way through construction documents to construction administration. Having been with Alpha since 2000, Ms. Key has provided design services on numerous projects that have contributed to the ever-growing skyline of Morgantown, Charleston, Bridgeport, and other areas around the state.

PROFILE

Broad-based responsibilities in the following areas:

- Architectural Design
- Interior Design
- Feasibility Studies
- Water Infiltration Analysis
- Historic Renovation
- Project Management

PROFESSIONAL HIGHLIGHTS

Education:

North Elementary School Connector; Morgantown, WV
 Mountaineer Middle School; Morgantown, WV
 Pineville Elementary School; Pineville, WV
 Washington High School; Charles Town, WV

Historic Renovations:

Cass Scenic Railroad - Clubhouse Renovation; Cass, WV
 Berkeley Springs Bathhouse; Berkeley Springs, WV
 Hawks Nest State Park Picnic Pavillion; Ansted, WV
 Hawks Nest State Park CCC Museum; Ansted, WV

Recreation:

Ruby McQuain Amphitheater; Morgantown, WV
 North Fork Hughes River State Park; Ritchie County, WV

Dormitory & Multi-Family:

Fairmont State University, Prichard Hall Renovation; Fairmont, WV
 WVU Boreman Hall; Morgantown, WV
 Augusta Apartment Building; Morgantown, WV
 Grand Central Apartments

Municipal & State Government:

WV State Office Building; Clarksburg, WV
 Mon County Family Court Renovation; Morgantown, WV
 Mon County Sheriff's Department; Morgantown, WV
 Norwood Fire Station; Morgantown, WV
 WV State Office Building 25; Parkersburg, WV

EMPLOYMENT HISTORY

2000-Current | Alpha Associates, Inc.
 1983-1999 | Alexander Key & Associates
 1978-1983 | Webster Clothes; Director of Store Planning

EDUCATION

BA Architecture | 1977
 Coursework in Furniture Design | 1986-87

QUALIFICATIONS

- License: Professional Architect: Maryland, New York, Virginia, Washington DC, and West Virginia
- NCIDQ Certified (Interior Design) Leadership in Energy and Environmental Design Accredited Professional
- Meet Standards of Secretary of the Interior for Historic Architecture

AFFILIATIONS

- American Institute of Architects
- West Virginia Society of Architects
- Fairmont, WV ICC Board of Appeal; Board Member
- US Green Building Council
- AIA Liveable Communities
- Leadership Kanawha Valley Class of 2014

The Board of Architects



of West Virginia.

No. 2693

This Certifies that Rebecca Jean Key of Baltimore
in the State of Maryland, having successfully passed an examination
before the Board of Architects of the State of West Virginia, and being
otherwise qualified, is hereby authorized to practice Architecture in all its
branches in the State of West Virginia.



Witness the signatures of the President and Secretary of the Board of
Architects of West Virginia, and the seal of said Board, this 26th
day of September 1994

Will E. Johnson President.
E. Faith, Jr. Secretary.



Charles Luttrell PE

SENIOR PRINCIPAL & STRUCTURAL ENGINEER

SUMMARY

Mr. Luttrell has worked with Alpha Associates, Inc. since 1996. He is the chief structural engineer on all projects at Alpha. Before coming to Alpha, Mr. Luttrell's graduate work resulted in several contributions to the cold-formed steel deck industry. His new method of analysis for non-uniform loads on composite concrete and cold formed steel decks has been made a permanent part of the Steel Deck Institute's design manual. Mr. Luttrell also worked on projects that involved pre-stressed timber bridge research with WVU Constructed Facilities Center. Since coming to Alpha, Mr. Luttrell has had significant involvement in the effort to begin utilizing modern composite materials in practical bridge applications.

PROFILE

Broad-based responsibilities in the following areas:

- Project Mangement
- Business Operations & Financial Management
- Quality Assurance/Quality Control
- Civil Engineering Project Management and Design
- New Business Development
- Expert Testimony and Investigation

PROFESSIONAL HIGHLIGHTS

Structural Engineer:

Freedom Automotive Group 3 Dealerships; Morgantown, WV
 Hazel Ruby McQuain Equine Education & Resource Center; WVU
 WVDOT Arnettsville Replacement Bridge; Morgantown, WV
 Clarksburg State Office Building; Clarksburg, WV
 Grant County Bank Addition & Renovation; Petersburg, WV
 South Berkeley Fire Station; Inwood, WV
 Alumni Center Structural Framing and Foundation; WVU
 Engineering Science Building, East Wing Addition; WVU
 Hazel Ruby McQuain Amphitheater Roof; Morgantown, WV
 Shepherd University Pedestrian Underpass; Shepherdstown, WV
 Washington High School; Charles Town, WV
 WVU Coliseum Structural Inspection; Morgantown, WV
 Alderson Broaddus College, Rex Pyles Arena Deck; Phillipi, WV
 Monongalia County Sheriff's Building; Morgantown, WV
 South High Street Bridge; Morgantown, WV
 Ices Ferry Bridge; Morgantown, WV
 Matthews Foundry Structural Evaluation; Martinsburg, WV
 Martinsburg Little League Fields; Martinsburg, WV
 Martinsburg WWTP; Martinsburg, WV
 Queen St. Underpass; Martinsburg, WV
 Winchester & Western RR Rt. 11 Bridge; Martinsburg, WV

EMPLOYMENT HISTORY

1996-Current | Alpha Associates, Inc.
 1995-1996 | Larry D. Luttrell, PE, PhD
 1991-1994 | West Virginia University
 1990-1991 | WVU Constructed Facilities Center

EDUCATION

MA Structural Engineering | 1995
 BA Civil Engineering | 1993

QUALIFICATIONS

- License: Professional Engineer: West Virginia, Pennsylvania

AFFILIATIONS

- WV Society of Professional Engineers
- National Society of Professional Engineers
- Chi Epsilon; Member
- American Concrete Institute; Member

RESEARCH EXPERIENCE

Cold Formed Steel Deck Research:

- Fastener Failures
- Edge Conditions/Failures
- Buttoned Overlap Shear Failures

Composite Cold Formed Steel & Concrete Deck

- Line Load Behavior/Failures
- Concentrated Load Behavior/Failures
- Web Crippling
- Punch Failures



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come, Greeting

Know Ye That The State Board of Registration for Professional Engineers, of the State of West Virginia, reposing special confidence in the Intelligence, Integrity, and Discretion, of

Charles B. Luttrell

DOES, IN PURSUANCE OF AUTHORITY VESTED IN IT

by law, hereby certify that he, having submitted satisfactory evidence, of his ability and experience, is a

REGISTERED PROFESSIONAL ENGINEER

Registration Number 14172

To Hold and use such title, in the practice, of his profession, subject to the conditions prescribed by law.



Given under the hand and the Seal of the Board at the Capitol in the City of Charleston, this 28th day of July in the year of our Lord One Thousand Nine Hundred and Ninety-nine and of the State the One Hundred Thirty-sixth.

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

Handwritten signatures: G. R. Wickley, Frank H. Haddy, W. B. Faulkner, and others.

Todd has over 45 years of experience involving the analysis, design, construction management and specifications for mechanical engineering, heating, ventilating, air conditioning, plumbing, fire protection, electrical and lighting, as well as indoor environmental quality analysis, building system commissioning and forensic engineering for educational, governmental, military, commercial, industrial and healthcare clients. He is also recognized as a campus master planner for utility infrastructure providing master planning for the Technology Park in South Charleston and at many universities, hospitals and the State of WV Capitol Complex.

Prior to starting a consulting engineering firm, Todd Zachwieja coordinated comprehensive energy conservation programs resulting in annual energy savings of millions of dollars. He has managed a profitable regional office for one of the country's largest energy companies that service the southeastern United States. Todd also developed computer modeling programs for building energy analysis and monitoring. He has been invited as an industry leader to present technical papers and speak at professional conferences both regionally and nationally.

Todd selected and designed the pilot project for one of the largest geothermal heat pump applications in the Eastern US including designing custom geothermal rooftop AHU's. He has retro-commissioned HVAC systems for millions of square-feet for facilities located in 10 states. He has been involved with many commercial, healthcare and industrial structures including high-rise building renovations. Todd designed renovations to many facilities which received **Energy Star Certifications** placing them in the nation's top 25% for energy efficiency. *The College Planning and Management Magazine* featured Todd and his work with a major university for the performance contracting programs that save millions of dollars in energy and operating costs. Most projects also qualified for EPA's Act which requires buildings use over 50% less energy than buildings designed using ASHRAE 90.1.



PROFESSIONAL REGISTRATIONS

Professional Engineer:

Florida
Georgia
Kentucky
Maryland
North Carolina
Ohio
Pennsylvania
South Carolina
Virginia
West Virginia

Fire Investigation Certification under the direction of Peter Vallas, Sr.

Certified Energy Manager
(C.E.M.) National
Certification



LEED Accredited Professional,
National Certification through
USGBC

EDUCATION

Masters of Science in Engineering
Management from West Virginia University
College of Graduate Studies.
Bachelor of Science in Mechanical
Engineering from West Virginia
Institute of Technology.

GOVERNMENT/COMMERCIAL PROJECT EXPERIENCE

- Bank One/Chase Towers
- Bayer Material Science
- Calvert County Aquatic Center, MD
- Charleston Area Medical Center
- Chief Medical Examiners Office Retrofit
- Culture Center, HVAC & Fire Protection, WV State Capitol Complex
- General Motors Corp. Re-commissioning
- Harvard University Research Laboratory
- Hopemont Hospital, WVDHHR
- Jackie Withrow Hospital, WVDHHR
- Jackson County Courthouse Annex
- Kanawha County Commission: Judicial Annex additions/renovations
- Kanawha County Courthouse
- Kanawha County Schools
- Laidley Towers
- Marshall University
- Mercer County Schools
- Mercer County Courthouse Annex
- Mildred Mitchell Bateman Hospital
- Olin Corporation
- Pocahontas County 911/EMS Center
- Public Service Commission of WV
- Raleigh County Schools
- Rhone-Poulenc
- Roane General Hospital
- Robinson Grand Performing Arts Theatre
- Santa Anna Federal Building, CA
- Tyler County Courthouse
- Tyler County 911 Center - **Net Zero**
- Tyler County Schools
- Toyota Motor Manufacturer, WV Inc.
- UC Davis Veterinary Medicine, CA
- Union Carbide/DOW
- United Center
- University of Charleston Innovation Ctr.
- William R. Sharpe, Jr. Hospital, WVDHHR
- World Trade Center, MD
- WV Air National Guard including Cx Fuel Cell/Maintenance Hangars at Yeager Airport - **LEED Silver Certified**
- WV Army National Guard
- WV Capitol Complex Renovations
- WVDHHR - State-wide Hospitals
- WV DOH Testing Lab
- WV Division of Natural Resources
- WV Division of Protective Services
- WV Higher Education Authority
- WV General Services Division
- WV State Capitol Complex Renovations
- WVU Health System

PROFESSIONAL AND COMMUNITY AFFILIATIONS

Past President 2013-14, current Governor - WV ASHRAE Chapter, Served as ASHRAE's Energy and Technical Affairs Chairman for six years. Recognized by ASHRAE Region VII in 2014 with the David Levine Award of Excellence, Presidential Award of Excellence

Recognized by the International Who's Who of Professionals

Recognized nationally as West Virginia's Business Man of the Year

Recognized by AEE nationally in 2007 as a Legend in Energy

Recognized by AEE nationally in 2008 as a Charter Legend in Energy

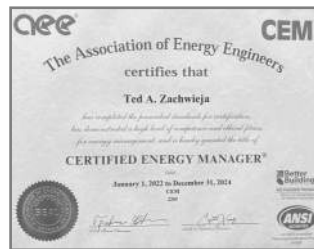
Charter Life Member of the Association of Energy Engineers

Professional Affiliate Member of the American Institute of Architecture

Associate Member West Virginia Society for Healthcare Engineering

Member of the International Code Council

Member of the National Society of Professional Engineers



OTHER RECOGNITIONS

Selected by WVU and the WV Division of Energy to train Code officials and the design community on ASHRAE 90.1 State Energy Code

Presented at regional and national conferences including the annual National System Commissioning Conference

Contributing editor and served on the Editorial Review Panel for *"The Handbook of Building Management and Indoor Air Quality"*

Contributing editor *"Ventilation for a Quality Dining Experience"*

Contributing editor and served on the Editorial Review Panel for *INvironment Professional, Power Prescriptions* and other publications and articles featuring Indoor Air Quality (IAQ) and MEP engineering systems

Energy Star Certified for facilities in the nation's top 25% of energy efficiency

1st Place 2014 ASHRAE Technology Award, Region VII

LEED Silver Certified WVANG Fuel Cell/Maintenance Hangar, Charleston, WV

LEED Gold Certified Harvard Arboretum, Boston, MA

First ASHRAE bEQ certified building in West Virginia, 2015

1st Place 2023 ASHRAE Technology Award, Region VII



David is a professional Mechanical Engineer with over 18 years of experience in the design and construction of over 500 projects having construction values up to \$35 million. His commissioning/design experience ranges from commercial, industrial, institutional, healthcare, education, restaurant, retail, government, airport, and recreational facilities.

David collaborates well with fellow engineers, architects, owners, contractors, code officials and vendors to meet the goals and objectives. As a project manager he successfully manages projects from start to finish in design, bidding, and construction administration.

PROJECT EXPERIENCE

Boiler Projects

- Tyler County Courthouse Additions/Renovations
- Tyler County 911 Center - **Net Zero**
- New Clendenin Elem Commissioning
- Independence Middle HVAC/Roof Renovations and Commission
- Shady Spring Middle School HVAC Renovations & Cx
- Maxwell Hill Elementary School HVAC Renovations & Cx
- Tyler Consolidated MS/HS Renovations and Commissioning
- Dominion Office Building - **LEED Gold**
- WV Capitol Complex Bldg. #3 & #4 Renovations and Commissioning
- Belmont County Commission Coroner, Records & Health Dept. Facility
- Beckley Police Station
- Dominion Office Building, Delmont, PA
- Health Plan, Wheeling, WV

Other Project Experience

- Braxton County 911/EMS Center
- Mon General Hospital Echo Renovations
- Mon Health LTAC for Acuity
- Clarksburg Comprehensive Care Clinic Renovations
- Jerry Dove Medical Office Building
- Medbrook Building HVAC Replacement
- Doddridge County Athletic Complex
- White Hall Public Safety Building
- Webster County 911/EMS Center
- Beitzel/Pillar Innovations Office Building
- Percival Hall Absorption Chiller and Cooling Tower Replacement
- Upshur County 911/EMS Center
- WVU Creative Arts Center Rehearsal Hall
- WVU Towers Dining Hall Renovations
- WVU Athletic Performance Center
- University of Pittsburgh Softball Practice Facility
- WVU Alumni Center
- WVU Biomedical Research Facility
- WVU Milan Puskar Stadium Locker Room Renovations
- NOAA GOES-R Supercomputing Center, Fairmont, WV
- Harrison County 911/EMS Center
- Renaissance Academy, Morgantown
- Mabscott Elem Renovations/Cx Morgantown, WV
- City of Bridgeport WWTP
- VA Medical Center; Audiology Task Lab Clarksburg, WV
- Boy Scouts of America, Rex W. Tillerson Leadership Center
- Pocahontas County 911/EMS Center
- Saint Marys K-8 School Renovations
- Mylan Pharmaceuticals
- Westmoreland Community and Technical College, Indiana, PA
- HP Hood Addition/Renovations, Winchester, VA
- WVU Rehabilitation Center



PROFESSIONAL REGISTRATIONS

Professional Engineer:

West Virginia
Maryland
Virginia
Ohio
Pennsylvania

LEED AP BD+C Professional Accreditation
NCEES Record Certificate

EDUCATION

Bachelor of Science
Mechanical Engineering
WV Institute of Technology

MEMBERSHIPS

WV ASHRAE, Past President
National Fire Protection Association
WV Society of Healthcare Engineers

Ted, a third generation engineer and Principal in the firm, has over 20 years of experience in building construction design industry that includes award winning designs including the first Net Zero 911 Center in WV and technology awards for design innovation in multiple facilities. Innovation in HVAC, Plumbing, Fire Protection, lighting design/controls, technology, engineering design, communication methods and management of the design process are the areas of his expertise. As a pioneer and a believer in technological processes, Ted has championed Integrated Design Practices and Commissioning that has become the fabric of ZDS's day-to-day operations.

Ted develops ZDS's 3D Scanning and BIM services which have assisted in collecting key existing conditions for renovation projects, forensic engineering, historical preservation, and high definition reality capture. Ted has in-depth experience on collection, registration, and scan to BIM processes. He has provided training and developed materials for best practices when using 3D scan data. Ted's 3D scanning experience includes governmental, educational, healthcare, industrial, and commercial facilities. He also has experience in speaking on how 3D laser scanning impacts our industry today.

Ted is the Engineer-of-Record for design projects. As Engineer of Record he is responsible for all aspects of the project and takes a hands-on approach to the overall management, design and construction of the project. He works well with all stakeholders involved throughout the entire project lifecycle.

As Chief Technical Officer Ted develops and deploys a strategy of forward thinking and strategic development for ZDS' Integrated Design Processes, research and development into new technologies for improving quality of services for our clients.

Ted's project experience includes design and commissioning for electrical, lighting, security, IT, A/V, heating, ventilating, air conditioning, plumbing, fire protection, and acoustical systems for educational, healthcare, industrial and commercial facilities. His experience encompasses working both on new construction and renovation projects. He also is experienced in historical facilities including theatrical. He has significant experience in designing, commissioning and implementing efficient lighting and HVAC systems for various commercial, healthcare and educational facilities.

Ted maintains an active membership in the ASHRAE professional society and also has a lifetime membership in the Association of Energy Engineers. He maintains an active continuing education towards today's standards and codes as well as participates in ASHRAE at both a local and society level. He served on the Electronic Communications Standing Committee with ASHRAE. He has designed renovations to existing facilities which received **Energy Star Certifications** placing them in the **nation's top 25% of energy efficiency** facilities.



PROFESSIONAL REGISTRATIONS

Professional Engineer:

Florida

West Virginia

Certified Energy Manager (C.E.M.)

National Certificate



EDUCATION

Bachelor of Science in Mechanical Engineering from Rochester Institute of Technology, Rochester, NY

AWARDS AND RECOGNITIONS

Awarded 2012 Legend in Energy by the Association of Energy Engineers

Awarded acceptance into ASHRAE's 2015 Leadership University

ASHRAE Blue Ribbon Award of Excellence

Co-Author at Autodesk University

1st Place 2023 ASHRAE Technology Award, Region VII

Energy Star Certified for facilities in the Nation's top 25% of energy efficiency



RELEVANT PROJECT EXPERIENCE

- WV State Capitol Complex Bldgs. 1, 3, 5, 7, 8, & 9 Renovations and #3 & #4 Cx
- Kanawha County Judicial Building Renovations and Cx - **EPAct Qualified**
- Office of Chief Medical Examiners Renovations and Commissioning
- CASCI Building Electrical Renovations, Charleston WV
- WV Air National Guard Maintenance Hangar and Fuel Cell Hangar
- University of Charleston - Virtual Dissection Lab, Innovation Center, Gorman Hall/ Eddie King Gym Renovations campus natural gas, medium voltage and water upgrades.
- Marshall University, Jomie Jazz, Harris Hall, Smith Hall Renovations
- WV Higher Education Policy Commission, S. Charleston Tech Center Master Planning
- Ben Franklin Career Center Renovations - **EPAct Qualified**
- Glade Middle School - **Energy Star Certified**
- Kanawha County Schools - County-Wide includes Master Planning, Renovations
- New laeger Elementary Schools - **Energy Star Certified**
- Pendleton Co Middle/High School, North Fork Elem Renovations - **EPAct Qualified**
- Pocahontas County 911/EMS Center
- Princeton Middle and High School HVAC Renovations - **Energy Star Certified**
- Raleigh County Schools - County-Wide
- WVDHHR Master Planning, Renovations for seven healthcare facilities
- William R. Sharpe, Jr. Hospital Additions/Renovations & Cx - **EPAct Qualified**
- Riverside High School HVAC/Lighting Renovations - **Energy Star Certified**
- Tyler County 911 Center - **Net Zero**
- Tyler County Courthouse Additions, Renovations and Commissioning
- Tyler Consolidated Middle/High School HVAC Renovations - **EPAct Qualified**
- Meadowbrook, Servia, White Sulphur Springs Rest Areas for WV DOT
- World Trade Center, Renovations, MD
- West Virginia University Renovations
- WV DHHR Healthcare Facilities master planning, additions/renovations, lighting renovations - **EPAct Qualified**

Professional Affiliations

- Member of ASHRAE WV Chapter
- Prior Membership Promotions Chair WV ASHRAE Chapter
- Prior Chapter Secretary WV ASHRAE Chapter
- Lifetime member of the Association of Energy Engineers
- Associate Member WV Society for Healthcare Engineering



CEM®

OTHER RECOGNITIONS

Presented and co-authored at regional and national conferences

Energy Star Certified for facilities in the nation's top 25% of energy efficiency for many facilities

1st Place 2014 ASHRAE Technology Award, Region VII

First ASHRAE bEQ certified building in West Virginia, 2015

1st Place 2023 ASHRAE Technology Award, Region VII

ASHRAE Blue Ribbon Award of Excellence

2012 Legend in Energy by the Association of Energy Engineers

2015 ASHRAE Leadership University Recipient



Paul has 30 plus years of engineering experience involving the analysis, design, project management, specifications' writing and construction management on many projects throughout the region. This experience includes heating, ventilation, air conditioning (HVAC), plumbing, electrical systems and lighting for governmental, commercial, educational, healthcare, industrial and military facilities. He also has knowledge and experience with indoor environmental quality assessment, recommended remedial work and design of the necessary modifications in various types of buildings.

Paul assisted in the design and implementation of the pilot project for one of the largest geothermal heat pump systems in the mid-Atlantic region. He has also been involved in the design of facilities that have received the Energy Star Certification placing them in the nation's top 25% in energy savings for similar buildings and systems as well as his contribution as part of a large team effort performing mechanical systems' retro-commissioning at numerous automotive manufacturing facilities in North America.

His project experience is wide-ranging and includes the development of scope, design criteria and budget conscious designs. Working with other design professionals and through rapport with the clients he has conducted design peer reviews, construction budget and project schedule overview, Construction Administration and closeout of projects.

GOVERNMENT/COMMERCIAL PROJECT EXPERIENCE

- WVARNG Armory/Annex Bluefield
- WV Capitol Complex Central Bldg. #3 Renovations and Campus Central Boiler Plant
- Bruceton Bank
- Bank One
- Culture Center, WV State Capitol Complex
- Cuissets Residence
- Camp Dawson barrack/mess hall
- DOT Huntington District II Headquarters Renovations
- Yeager Airport Terminal Expansion/Renovation
- DOH Testing Lab
- GMC Assembly Plants in Lordstown OH, Janesville WI, Pontiac East MI, Bowling Green KY, Arlington TX
- Harrison County Bank
- IMC Office Bldg.
- Riverside High School Renovations
- Chief Medical Examiners Lodox CT Scanner Renovations
- Pocahontas County 911/EMS Center
- Kanawha County Commission, Judicial Annex Renovations
- Mercer County Courthouse
- Tyler County Courthouse Additions/Renovations
- Tyler County 911 Center - **NET ZERO**
- Appalachian Tire
- Laidley Towers
- Robinson Grand Performing Arts Theater
- USDA Forestry Building
- University of Charleston Innovation Center Additions/Renovations
- World Trade Center, MD
- William R. Sharpe, Jr. Hospital Additions/Renovations, WVDHHR
- WV Capitol Complex Bldg. #3 Central Boiler Plant Additions/Renovations
- Numerous K-12 School Renovations including Mercer, McDowell, Raleigh, Kanawha, Clay, Grant, Harrison, Marion, Pleasants, Pocahontas, Putnam, Summers, Tyler, Tucker, Upshur, Webster County Schools.



PROFESSIONAL REGISTRATIONS

Professional Engineer:
West Virginia

EDUCATION

Bachelor of Science in Mechanical Engineering from WV Institute of Technology, Montgomery, WV (Graduated Cum Laude)

PROFESSIONAL AFFILIATIONS

Member American Society
of Mechanical Engineers

Member ASHRAE

AWARDS AND RECOGNITIONS

1st Place 2023 ASHRAE
Technology Award, Region VII



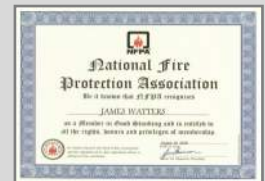
Jim has over 50 years of experience in design and implementation of lighting, HVAC, plumbing and electrical systems including nine years in the construction industry. He has a comprehensive knowledge of construction documents, contracts, and development of cost estimates, budgets and schedules. Jim's strengths reside in his ability to manage projects and people in an organized and cost-effective manner. Jim has been involved with the design and production of mechanical and electrical drawings including HVAC, plumbing, fire protection, lighting, electrical power, fire alarm and specialized systems. He has worked with and managed engineers in projects for health care, educational and commercial buildings in the states of West Virginia, Florida, Maryland, Pennsylvania, Ohio, Kentucky, Virginia, Georgia, New York, Arizona, Illinois and Massachusetts.

Jim has extensive experience in energy savings' programs for lighting, HVAC, plumbing and electrical systems in hospitals, state and government office buildings, school systems, and manufacturing facilities, as well as managing performance contracts for a large hospital campus in Georgia that included the conception, design and construction administration for the installation of a 1.5 Megawatt emergency generator to provide peak shaving/load shedding to save on the campus utility costs as well as provide emergency power to the facility. He has previously provided design and Construction Administration services for a multitude of labs of varying used for Charleston Area Medical Center (CAMC). Through the years, Jim has researched and implemented into practice International Building Codes, NFPA Codes, National Electrical Codes, Life Safety Codes, IES standards, AIA Guidelines for Design and Construction, and ADA guidelines. His involvement in construction through the years has been mainly from the design side of the industry with a 9 year stint working for a contracting firm at the turn of this century. His experience includes coordinating with Architects, Owners and Agencies including an excellent relationship with the office of State Fire Marshal.



PROFESSIONAL AFFILIATIONS

Member of the National
Fire Protection Association (NFPA)



Member of the Health
Care Section of the NFPA

Past Member of the Illuminating
Engineering Society (IES)

Past member of the American Society
of Plumbing Engineers (ASPE)

Past member of the Institute of
Electrical Engineers (IEE)

OTHER RECOGNITIONS

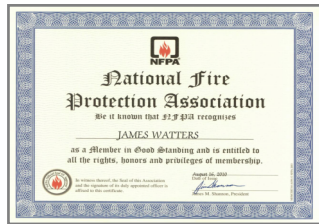
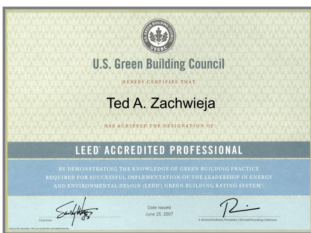
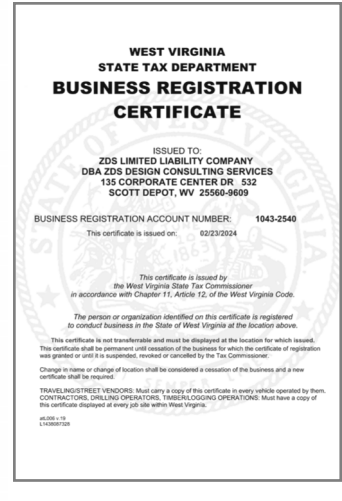
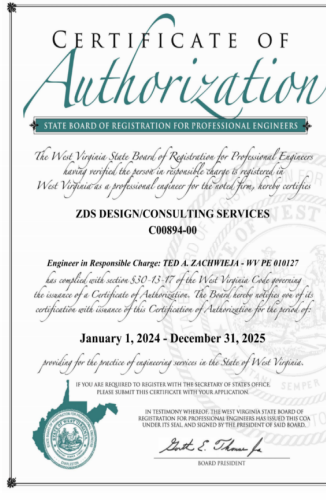
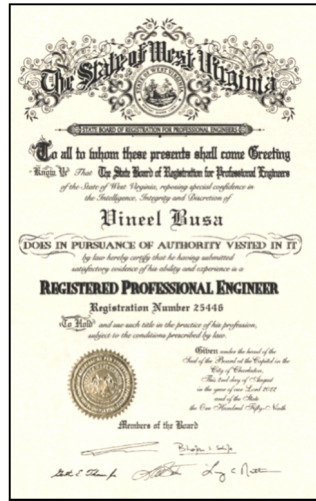
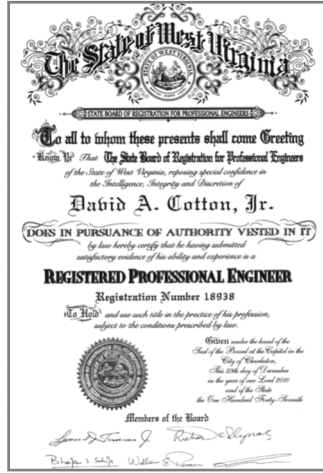
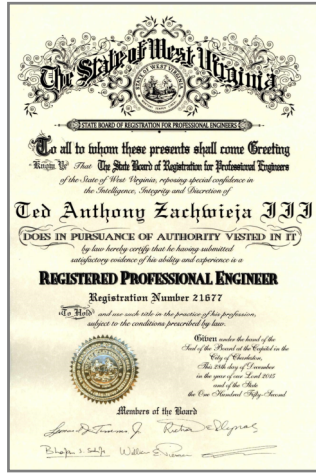
Energy Star Certified
for facilities in the Nation's top 25% of
energy efficiency



GOVERNMENT/COMMERCIAL PROJECT EXPERIENCE

- Bluefield Area Transit Authority Administration and Maintenance Facility
- Belmont County Commission Coroner, Records & Health Dept. Facility
- Kentucky Judicial Center, Boyd County
- CAMC Various Labs
- Chief Medical Examiners Office Lodox Renovations
- Coal Heritage Highway Authority
- Chase Towers (formerly Charleston National Bank)
- Culture Center Fire Alarm/Sprinklers, WV State Capitol Complex
- Department of Transportation Rest Area prototype
- Department of Transportation Welcome Center prototype
- Fenway Park Lightning Protection/ Grounding Study, Boston
- Glenville State College
- Hopemont Hospital, WVDHHR
- Jackie Withrow Hospital, WVDHHR
- Jackson County Libraries Renovations
- Kanawha County Commission Judicial Annex Renovations
- Laidley Towers
- Meadowbrook Rest Areas
- Morgantown Welcome Center
- Oglebay Wilson Lodge Renovations
- Pocahontas County 911/EMS Center
- Redmond House, WVDOT
- Rhone-Poulenc New Admin. offices
- Robinson Grand Performing Arts Theatre
- Sacred Heart Pavilion and Daycare Ctr
- St. Patrick's Church
- Shawnee Park Clubhouse
- Stonewall Jackson Marina Renovations
- Tucker County Board Office Boiler Retrofit
- Tucker County Courthouse
- Tyler County Courthouse
- Tyler County 911 Center - **Net Zero**
- University of Charleston Innovation Ctr
- William R. Sharpe, Jr. Hospital, WVDHHR
- World Trade Center, MD
- WV Air National Guard including Cx \$45M Fuel Cell/ Maintenance Hangars at Yeager Airport – **LEED Silver Certified**
- WVArNG Renovations
- WV Children's Home, WVDHHR
- WV Department of Military Affairs, Public Safety Maintenance Facility, Eleanor
- WV Department of Transportation Burnsville Rest Area and Domestic Water Pumping Station - **AIA Merit Award Recipient**
- WV State Capitol Complex Renovations to Buildings 1, 3, 4, 5 & 7
- White Sulphur Springs Welcome Center

Certifications



SECTION D
PROJECT EXPERIENCE



CAMP DAWSON

WVARNG

Camp Dawson Paving

Kingwood, WV

Alpha Associates provided surveying, civil engineering and construction administration services for Camp Dawson and the West Virginia Army National Guard in Kingwood, WV.

The MCA Road, almost 3,000 FT long, was gravel and heavily traveled by large vehicles and equipment. Maintenance had become overwhelming for the National Guard. To solve the problem, Alpha provided a unique pavement design, providing a combination of rigid concrete pavement in areas of increased equipment maneuvering and a heavy-duty asphalt section for the straight sections of the roadway. The solution should provide the National Guard with years of trouble-free service.



The second road in the project was the ASP Road, a very steep, gravel road that accessed the ammunition bunker. Due to slope and gravel surface, access was often a problem. To accommodate, Alpha designed a specific asphalt paving section which allows forklifts, trucks, and loading equipment to travel with ease.



Both roads also included storm water and storm drainage design. Providing storm water control and runoff management is critical to the long-term success of any road or paving project.



Project Contact:

Aaron Miller

West Virginia Army National Guard

1001 Army Road

Kingwood, WV 26537

304.791.4161

aaron.f.miller.mil@mail.mil



Volkstone Perimeter Fencing Project

Kingwood, WV

The Volkstone Perimeter Fence Project for the West Virginia Army National Guard in Kingwood, WV included design of an 8' high fence for perimeter control and security. The project also upgraded and improved the existing trail adjacent to the fence and provided drainage control. With the completion of this project, the WV Army National Guard will have increased security, including vehicular impact control, and a newly paved recreational trail for use by the Kingwood and WVANG communities.



Option 1



Option 2



Option 3



Project Contact:
Jonathan Neal, Deputy Branch Chief
Training Site Branch
1001 Army Road
Kingwood, WV 26537
304.791.4138

NORWOOD FIRE STATION RENOVATION

City of Morgantown



Location:

Morgantown, WV

Alpha provided a renovation and addition to an existing 1953 fire station residential quarters of a municipal fire station in the City of Morgantown. The addition of approximately 1,500-square feet provides for individual bunk rooms, new locker room and shower facilities a dedicated exercise room and expanded dayroom.

The goal of achieving defined and separate spaces for apparatus and equipment from housing and residential facilities is the hallmark of 21st century fire stations. Since 9.11 studies have confirmed the increased risk of toxic borne particles from burn and accident areas effecting the health of fire fighters, they must be kept out of the residential areas of the fire house.

Norwood Fire Station will now have an extractor for cleaning gear separated and contained within the equipment area. Separate air handling and exhaust systems along with the use of radiant underfloor heating in the locker room and bunk areas will ensure the comfort of the "house" for generations of fire fighters.



PROJECT INFORMATION:

- ★ Services Provided:
Architectural & Engineering
- ★ Size:
7,626 sq. ft.
- ★ Completion Date:
Spring of 2024
- ★ Cost:
\$ 1,770,957
- ★ Reference:
Eugene Deem, Fire Chief
Morgantown, WV
304.284.7480

VA WEST VIRGINIA TRAINING FACILITY

The Federal Group



Location:

Shepherdstown, WV

The VA WV National Training Academy project consisted of the complete renovation of existing office space in Shepherdstown, WV. The space had to be re-designed to function as a place to hold training sessions as well as develop and film training videos for the VA.

To achieve this, high STC walls and doors had to be provided for the filming studios and the large training rooms. Standard enclosed offices, conference rooms, and open office space were also provided for the facility. Renovated restrooms and a new break area completed the project, providing all the spaces needed for the VA's intended usage of the site.



PROJECT INFORMATION:

- ★ Services Provided:
Architectural, Civil & Structural
- ★ Size:
14,825 sq. ft.
- ★ Completion Date:
2019
- ★ Cost:
\$ Private
- ★ Reference:
Ken Lowe, The Federal Group
233 Lowe Drive
Shepherdstown, WV
304.870.7001

WEST VIRGINIA OFFICE OF MINERS HEALTH SAFETY & TRAINING BUILDING

WV Miners Health & Safety



Location:

Oak Hill, WV



WEST VIRGINIA OFFICE OF
MINERS' HEALTH SAFETY & TRAINING

Alpha Associates, Incorporated provided architectural design, civil and structural engineering services for renovations to the Miners Health and Safety Training Building. The building serves as a Training Building for the WV Miners Health and Safety.

This facility consisted of:

- α Renovation of Prefab Metal Building
- α Added Office Space
- α Poured Concrete
- α Parking Lot
- α New Windows & Doors
- α Interior Finishes



PROJECT INFORMATION:

- ★ Services Provided:
Architectural, Engineering & Surveying
- ★ Size:
16,584 sq. ft.
- ★ Completion Date:
2019
- ★ Cost:
\$ 690,000
- ★ Reference:
Eugene White
7 Players Clun Dr., Ste 2
Charleston, WV 25311
304.469.8100

MONONGALIA COUNTY SHERIFF'S DEPARTMENT

Monongalia County Commission



Location:

Morgantown, WV

Alpha Associates, Incorporated provided architectural design, civil and structural engineering, and surveying services for this new building that houses offices for the Monongalia County Sheriff's Department and other County agencies.

Site constraints and adjacent overhead structures made the development and construction of the project very challenging. The ground floor includes the sheriff's department, evidence room and several bailiff rooms and restrooms.



PROJECT INFORMATION:

- ★ Services Provided:
Architectural, Civil & Structural
- ★ Size:
783 sq. ft.
- ★ Completion Date:
2018
- ★ Cost:
\$ 187,000
- ★ Reference:
Al Kisner, Sheriff
116 Walnut Street
Morgantown, WV
304.291.7290

NORTH FORK HUGHES RIVER RECREATIONAL DESIGN

USDA

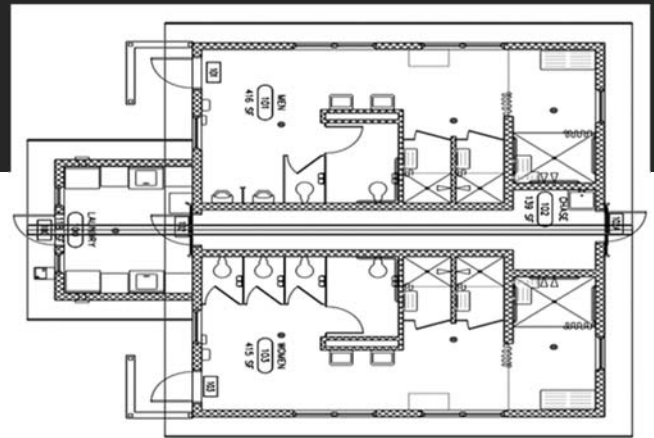


Location:

Ritchie County, WV

Alpha Associates, Incorporated provided architectural design, engineering and landscape design for the implantation of a \$12 million Master Plan for the USDA.

Included in this design was the North Fork Hughes River Deluxe Bathhouse. This build was known as deluxe because it came equipped with laundry as a feature. Alpha incorporated two of the Deluxe bath houses and two standard bath houses for about 200+ camp sites. At the North Fork Hughes River, there are four (4) washing machines and dryers for campers to use.



PROJECT INFORMATION:

- ★ Services Provided:
Architectural, Engineering & Surveying
- ★ Size:
23,089 sq. ft. (total area)
- ★ Completion Date:
2009
- ★ Cost:
\$ 12 Million (in total)
- ★ Reference:
Sam Ware
Parkersburg, WV
304.422.9072

NEW BILLETING FACILITY DESIGN

West Virginia Army National Guard



Location:

Kingwood, WV

Alpha Associates, Incorporated provided architectural and engineering design services for the new Billeting Facilities at Camp Dawson located in Preston County, WV.

The project's scope of work, for three buildings, included:

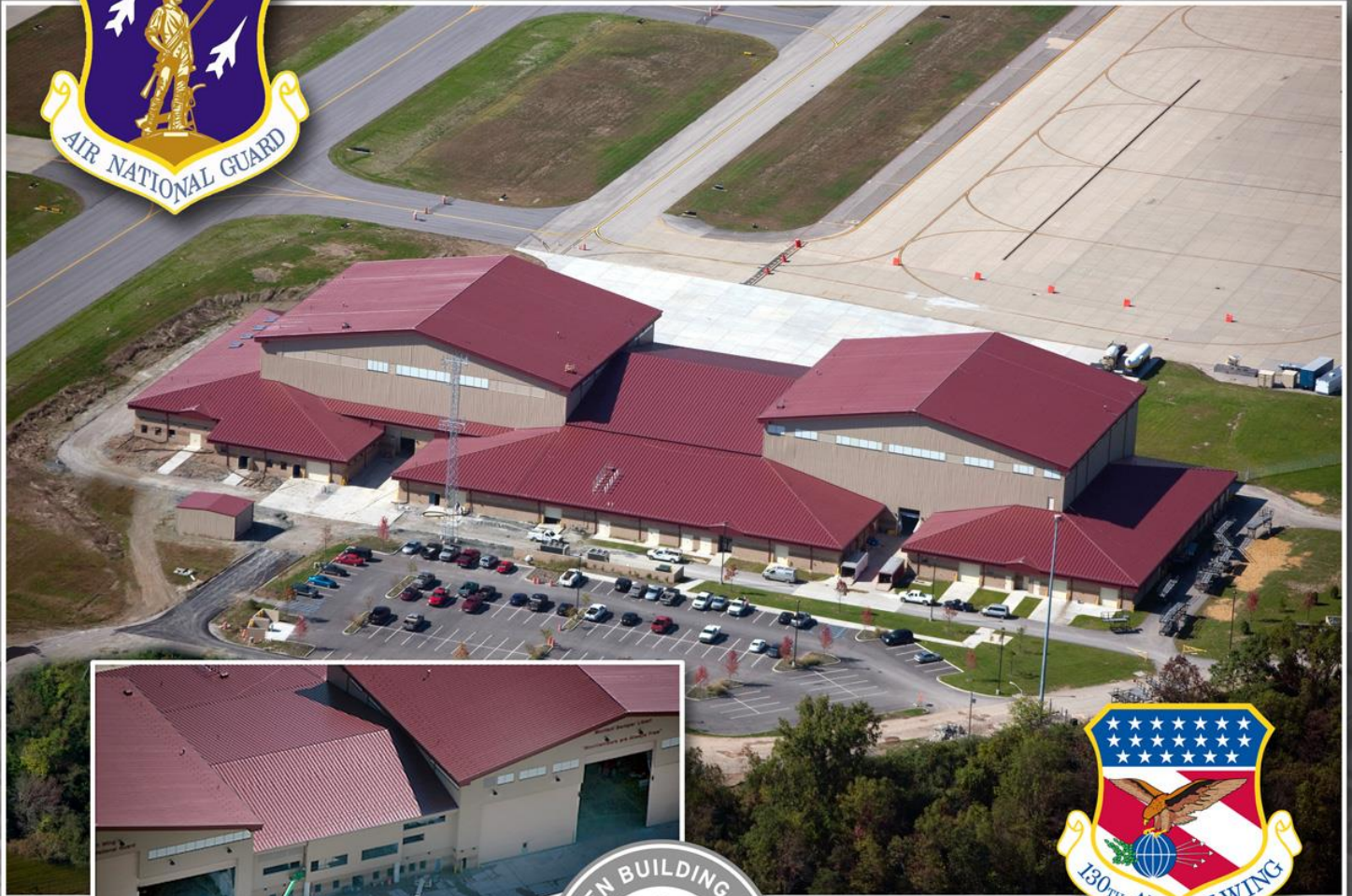
- α Site work & utilities
- α MEP services
- α New HVAC design
- α New lighting



PROJECT INFORMATION:

- ★ Services Provided:
Architectural & Engineering Design
- ★ Size:
1,300 sq. ft.
- ★ Completion Date:
2002
- ★ Cost:
\$ 1.5 Million
- ★ Reference:
Mr. Todd Tingler, AIA
WVARNG, Coonskin Base
(304) 561-6545

Engineering for State & Local Government Facilities



130th Airlift Wing at Yeager Airport,
Phase I and Phase II
Aircraft Maintenance Fuel Systems
Hangars and Shops
Awarded LEED Silver Certification

ZDS worked with the West Virginia Air National Guard on the Commissioning for their new Replacement Aircraft Maintenance Hangar and Shops plus a new Fuel Cell Hangar. This facility included a larger maintenance hangar, miscellaneous maintenance shops, central boiler plant and chiller plant. The project successfully achieved LEED Silver Certification with commissioning being an integral part of that certification.

Construction Costs: \$43,000,000
Project Size: 128,715 ft²

“ZDS’s commissioning services were invaluable in helping us understand our facility and ensure the systems were installed as intended and optimized for long-term operating benefits. We would recommend them again!” - Captain Harry Netzer, WVANG Project Manager



Engineering for State & Local Government Facilities



Governor's Mansion

Engineering planning and design for central heating plant, DDC controls, Air Handling Unit replacements and retrofits, operating and maintenance, training, heat recovery, fuel conversion, VFD's, variable water volume pumping, steam/heating hot water and chiller optimization.

Renovations included HVAC, fire safety, lighting, plumbing, indoor air quality and electrical power engineering.



Building #3



State Capitol



LEED Certified Candidate



Design/Consulting Services

Oglebay Wilson Lodge
Commercial Kitchen and Dining
Wheeling, WV



SKYLINE BUFFET



SKYLINE DINING



LOBBY & COFFEE SHOP



MANSION DINING



PORTE COCHERE



Multiple simultaneous project renovations at Oglebay Wilson Lodge included the main entrance Porte Cochere addition with a feature fountain, guest dining amenities, commercial kitchen, & lodge infrastructure including HVAC, fire safety, lighting, plumbing, indoor air quality, & electrical power engineering. ZDS assisted in a phased approach to support the lodge services during construction.

WV Army National Guard Brushfork Armory HVAC Renovations, Bluefield, WV

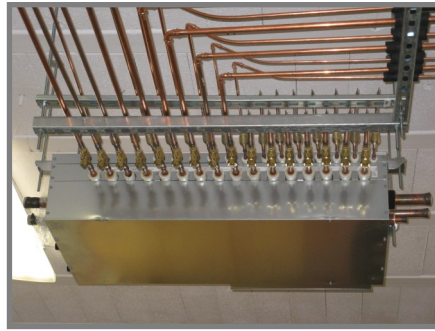
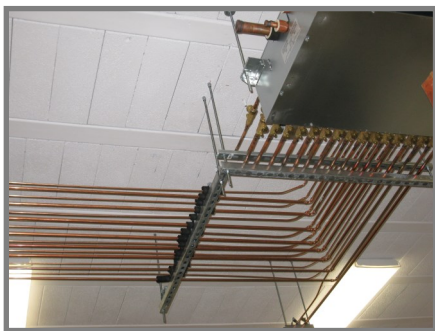


Project Cost: \$1,398,100 **Size:** 41,300 ft² **Date Complete:** 2022

Study/Evaluation, HVAC Renovations, Lighting Upgrades, Fire Protection, Electrical Renovations, 3D Scanning

Client Reference: Kenneth Goodson; (304) 561-6337

ZDS provided comprehensive professional engineering services for HVAC renovations at the Brushfork Armory located at 2915 Old Bramwell Road near Bluefield, West Virginia. Project included providing Variable Refrigerant Flow (VRF) systems for administration, offices, and other selected areas. Systems were comprised of indoor VRF cassette units, outdoor condensing units and a roof mounted DOAS unit to provide Code required ventilation air. The twinned condensing units were provided to reduce issues when in defrost cycle by allowing one side at a time to be in defrost mode. Our services included preparation of Construction Bid Documents, assistance with Bidding and Construction Administration through completion of the contract.



WV Army National Guard Headquarters & Annex Building

ZDS Design/Consulting Services and its principals Ted and Todd Zachwieja were involved in many mechanical, electrical, and plumbing design projects for the WV Army and Air National Guard. **ZDS** projects with the Army National Guard include providing electrical Design/Build engineering and project management for emergency power for the Army Headquarters Building and Annex Building in Charleston, WV. This project was completed ahead of schedule and within budget to provide emergency power needs for the Coonskin Army National Guard campus as part of their overall homeland security strategy. **ZDS** also evaluated and designed HVAC renovations to restore four indoor firing ranges to meet current compliance with Army Standards.



Total MEP Cost: Over \$4,000,000

Contact: Lt. Co. Todd Justice, Deputy Director of Joint Operations: anthony.t.justice.mil@mail.mil



WV Army National Guard Dunbar Armory

ZDS provided comprehensive MEP engineering support for HVAC/partial lighting renovations at the Dunbar Armory. Our professional services included preparation of the Construction Bid Documents and continued through bidding, negotiation and construction administration of the Contract.

Renovations resulted in a **61% reduction** in energy for lighting and **41% reduction** in energy for HVAC renovations over ASHRAE 90.1-2007 standards qualifying the project for EPA Act.



Total Project Cost: \$1,000,000 (completed under budget)

Contact: SGM Kenny Goodson: kenneth.c.goodson.mil@mail.mil



Design/Consulting Services

Kanawha County Courthouse & Judicial Building

Charleston, WV



The Kanawha County Commission hired ZDS to provide HVAC/Roof Replacement engineering planning, design, bidding and construction administration services for the renovation of the 95,400 ft² Judicial Building and a 23,000 ft² addition using the ground floor of the parking garage connected to the Judicial Building. The facility includes circuit courtrooms, jury deliberation, attorney conferencing, witnessing, court clerical staff, public research, adult probation, prosecuting, maintenance, voter registration, court administration, and all public areas. The addition included a new entrance, security checkpoint, and lobby to accommodate a building expansion for Juvenile Probation and Family Court. Replacing the roof of the original building is being done concurrently with HVAC renovations for a coordinated effort.

ZDS assisted in identifying a phased approach to addressing and defining Indoor Environmental Quality (IEQ) issues and modifications for the Kanawha County Courthouse.

Total Judicial Bldg. Project Costs: \$13,807,000

ZDS Team Project Cost: \$6,737,000

Annex Project Size: Renovations 95,400 ft² plus 23,000 ft² addition

“No one else could identify the MEP problems even though many had tried. Yet, ZDS provided an excellent evaluation while working well with our Judges and staff for a very successful project. We use them for all our challenging work.”

- Kanawha County Commissioner

Project Cost: \$4,090,000.00

Size: 4,260 ft²

Date Complete: 2021

HVAC, Plumbing, Fire Protection, Lighting, Electrical and LV Systems

Client Reference:

WYK Associates, James Swiger, President; (304) 624-6326, james@wykassociates.com



Tyler County 911 Center



ZDS provided professional MEP engineering services for the preparation of construction documents on the new Tyler County 911 Center. Stringent Codes and standards for 911 facilities were researched and implemented into the MEP systems for the new facility. We designed a high performance geothermal well field that will serve the HVAC systems' equipment as well as a solar power panel array with equipment and components that is intended to provide all necessary electric power to the building. The electricity generated by the PV panels will exceed the needs of the facility and with the installation of an interconnecting system coordinated with the local utility the excess power will feed back into the utility grid for the County's use at the local Courthouse. The installation of the geothermal system coupled with the solar power generated will result in a significant overall reduction in energy costs to the Owner. The facility also has a propane-fired emergency generator to provide 100% backup for electrical needs in the event of a utility failure and an Uninterruptible Power Supply (UPS) system sized for all critical loads in the Operations Center. State of the art systems incorporated in our design included fire alarm, security, door access and vehicle entry gate openers. The building has a complete fire protection wet-pipe sprinkler system with the exception of clean agent dry suppression systems for the Server room and the Operations Center where sensitive electronic/data equipment is located.

APPENDIX

REFERENCES

ALPHA ASSOCIATES, INC.

209 Prairie Ave
Morgantown, WV 26501
304.296.8216

REFERENCES

Aaron Miller, West Virginia Army National Guard:

(304) 791-4161, aaron.f.miller.mil@mail.mil



LTC Michael Beckner, USARMY USAG WVARNG-CFMO:

michael.j.beckner.mil@army.mil

Jonathan Neal, Deputy Branch Chief, West Virginia Army National Guard:

(304) 791-4138



Eugene White, Director, Miner's Health Safety & Training:

(304) 469-8100

Ken Lowe, Owner/President, Ken Lowe Management Company:

(304) 870-7001, klow@clarionshepherdstown.com



Morgantown Municipal Airport:

(304) 225-4114

ZDS has worked on hundreds of projects in West Virginia including many with Governmental agencies.

We encourage you to call the references listed below:

1. **Ron Adkins**, Construction Manager, WV Air National Guard & WV DHHR: (304) 957-0205, or (304) 634-9379; former Project Manager for WVANG and current Construction Manager for many projects with WV DHHR.
2. **Gary Boyd**, Director of Facility Services, University of Charleston & WVU: (304) 357-4871, garyboyd@ucwv.edu; worked on projects at both WVU and University of Charleston involving MEP systems since 1990's.
3. **Patrick O'Neill**, Project Manager, WV General Services Division: (304) 352-5514, Patrick.S.Oneill@wv.gov; for projects with the State of West Virginia GSD.
4. **Joe McClung**, Construction & Facilities Management Office, WV Army National Guard: (304) 758-2145, joseph.d.mcclung4.nfg@mail.mil; for projects with the WV Army National Guard.





Michael Pickens

172 Oak Street

Dunbar, WV 25064

(304) 400-9993

RE: ZDS Design/Consulting Services

I have had the privilege to work with ZDS Design/Consulting Services' principals and many of their staff since working at the School Building Authority in the 1990's in my roles at the School Building Authority to my current role as Executive Director of the Office of School Facilities at the West Virginia Department of Education.

When an emergency issue arose, they would immediately make themselves available to help. ZDS's principal, Todd Zachwieja, did not hesitate to board a helicopter during a weekend to help assess the damage to the State's school facilities when damaging floods occurred. Helicopters were the only way to reach many of the facilities because the roads had been washed away or were impassible. Anytime a challenging issue has arisen that no one knew how to resolve, ZDS has stepped up to solve the challenges. Their extensive engineering knowledge of energy efficient systems, HVAC, controls, lighting, power and plumbing systems has always been at the leading edge in the industry, providing innovative solutions that also minimize energy and operating costs. I have always considered their approach in engineering design and commissioning for buildings to be the best and would highly recommend them to anyone.

Their ability to work with the State Fire Marshal and other agencies – while guiding everyone to a practical design approach – always provided each project with the best value. They are much more than excellent design engineers; they also understand the importance of operating and maintaining equipment and have hands-on knowledge to troubleshoot and also commission to ensure our projects were a great success. Their combined engineering design and commission skills prove to be invaluable.

ZDS Design/Consulting Services was also selected to help the WV Department of Education and the School Building Authority in writing new codes and standards to raise the bar for the entire State. They were chosen because their projects were a success while we were having challenges with others. Todd Zachwieja was also asked to teach school facility staff members, and his reference books continue to be used today. I would always think of ZDS first whenever a challenge would occur, knowing I would get the best results possible.

I trust ZDS's staff in their technical expertise and their approach in solving challenging engineering issues and believe that anyone who uses them will be as satisfied as I have been. They are worth it!

Sincerely,

Michael E. Pickens



Gary Boyd MA CEFP

2300 MacCorkle Ave. SE | 304 357-4871 | garyboyd@ucwv.edu

To Whom it May Concern

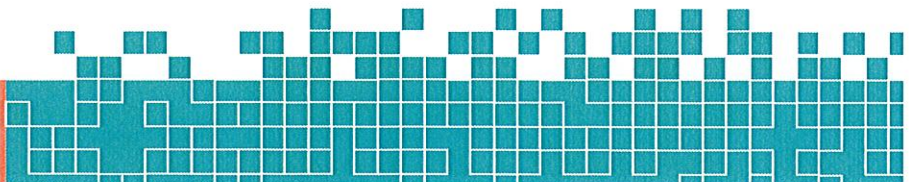
I have worked with the ZDS design team on multiple projects which include a chilled water interconnect loop, the UC Innovation Center, the UC athletic arena, and most recently, the UC Virtual Dissection Lab.

The Dissection lab project was a fast-tracked project that had many innovative components that had to be perfectly aligned to ensure the lighting was correct, the cooling for the computers mounted in the ceiling was sufficient, and headsets were accessible and properly positioned to name a few. I was extremely impressed with the speed and efficiency that ZDS provided to design and complete this project over the Summer and have this innovative space ready for our students for the 2022 Fall semester. The cooling, lighting, equipment placement and aesthetics have performed flawlessly, ZDS designed a high-quality show piece for UC in record time.

ZDS also took on the task of developing the MEP for the new athletic arena and addition of the Innovation Center and new athletic offices. This project included 3D imaging of the space prior to construction. The project also included LED lighting, a chiller and chilled water distribution with a roof mounted cooling tower and roof mounted AHUs. The Wehrle Innovation Center and Athletic Arena have served UC extremely well over the past 6 years, the arena has become the choice location for the UC graduation ceremony since completion. The plumbing, electrical, and HVAC systems have performed extremely well due to the quality of the design and specifications that ZDS provided. I highly recommend ZDS for their impressive attention to detail, skilled design team, and commitment to their projects.

Gary Boyd – University of Charleston Director of Facilities

A handwritten signature in black ink that reads 'Gary Boyd'.





To whom it may concern:

ZDS Design/Consulting Services was sub-contracted by SAIC to perform the fundamental commissioning activities on a two-phase maintenance and fuel cell hangar project for the 130th Airlift Wing on the West Virginia Air National Guard Base at Yeager Airport outside Charleston, West Virginia.

Without hesitation, I recommend Todd Zachwieja and his team for their efforts on this complex project. The first phase, the Replace Aircraft Maintenance Hangar and Shops phase, was initially scoped to meet a certifiable level for LEED® certification. ZDS Design/Consulting Services worked with my team and the West Virginia Air National Guard (WVANG) representatives through the design phase to provide the necessary activities required to meet the LEED® Energy and Atmosphere Prerequisite 1, Fundamental Commissioning of the Building Energy Systems. However, when the second phase, the Fuel System/Corrosion Control Hangar and Shops phase, came to life about the time that phase 1 construction began, the entire project was required by the National Guard Bureau to be certified by the Green Building Certification Institute (GBCI) at a LEED® Silver level. ZDS Design/Consulting Services diligently worked with the general contractor, the WVANG and SAIC to develop an approach to the phasing of the commissioning activities for both buildings that still met the fundamental commissioning prerequisite requirements as one of the hangars was to lay dormant after completion for an extended period of time until near the completion of the second phase. This required that ZDS Design/Consulting Services perform some of the commissioning activities for the first phase during the first phase construction and the remainder during commissioning of the second phase.

Through the construction process, Todd Zachwieja's group kept me well informed on their schedule and their deliverables. Todd was frequently on my LEED status calls with the contractor to stay abreast of any upcoming issues that would affect the commissioning activities and to assist in how to resolve issues that would come up. In addition, ZDS Design/Consulting Services assisted us with services beyond the commissioning activities as well. These included providing and reviewing building flush-out calculations to determine if LEED® Indoor Environmental Quality Credit 3.2, Construction IAQ Management Plan, Before Occupancy, was achievable and providing light level readings for a light pole that needed to meet certain light levels. The project achieved LEED® Silver certification and the fundamental commissioning prerequisite was approved by the GBCI after the first construction review without qualification.

ZDS Design/Consulting Services proved to be a well-qualified firm that provides timely and efficient services. SAIC was extremely pleased with their services on this challenging project.

Sincerely,

SAIC Energy, Environment & Infrastructure, LLC

Thomas Warner, LEED® AP, BD&C
LEED Administrator/Senior Architect

SAIC Energy, Environment & Infrastructure, LLC

60 East Plato Boulevard, Suite 300 | St. Paul, MN 55107 | tel: 651.771.2222 | fax: 651.778.3911 | saic.com/EEandI

CERTIFICATE OF *Authorization*

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

*The West Virginia State Board of Registration for Professional Engineers
having verified the person in responsible charge is registered in
West Virginia as a professional engineer for the noted firm, hereby certifies*

*has complied with section §30-13-17 of the West Virginia Code governing
the issuance of a Certificate of Authorization. The Board hereby notifies you of its
certification with issuance of this Certification of Authorization for the period of:*

providing for the practice of engineering services in the State of West Virginia.

IF YOU ARE REQUIRED TO REGISTER WITH THE SECRETARY OF STATE'S OFFICE,
PLEASE SUBMIT THIS CERTIFICATE WITH YOUR APPLICATION.



IN TESTIMONY WHEREOF, THE WEST VIRGINIA STATE BOARD OF
REGISTRATION FOR PROFESSIONAL ENGINEERS HAS ISSUED THIS COA
UNDER ITS SEAL, AND SIGNED BY THE PRESIDENT OF SAID BOARD.

Geoff E. Thomas Jr.

BOARD PRESIDENT

State of West Virginia



Certificate

I, Mac Warner, Secretary of State of the State of West Virginia, hereby certify that

ALPHA ASSOCIATES, INCORPORATED

was incorporated under the laws of West Virginia and a Certificate of Incorporation was issued by the West Virginia Secretary of State's Office on June 23, 1969.

I further certify that the corporation has not been revoked or administratively dissolved by the State of West Virginia nor has the West Virginia Secretary of State issued a Certificate of Dissolution to the corporation.

Accordingly, I hereby issue this Certificate of Existence

CERTIFICATE OF EXISTENCE

Validation ID:1WV25_3J5W7



*Given under my hand and the
Great Seal of the State of
West Virginia on this day of
January 26, 2024*

Mac Warner

Secretary of State

