



**Children's Crisis Center**  
**CEOI 0511 BSS23\*01**

09/29/22 09:46:57  
Purchasing Division



Sealed Bid: Children's Crisis Center  
Buyer: Crystal G. Husted, Buyer  
Solicitation No.: CEOI 0511 BSS23\*01  
Bid Opening Date: September 29, 2022  
Bid Opening Time: 1:30 PM

**PARADIGM ARCHITECTURE**

28 September 2022

Department of Administration, Purchasing Division  
Attention: Ms. Crystal G. Husted  
2019 Washington Street, East  
Charleston, WV 25305

Re: Expression of Interest – CEOI BSS23\*01  
Children's Crisis Center

Dear Ms. Husted:

**Paradigm Architecture Inc.** is pleased to submit this Expression of Interest for the Children's Crisis Center in Elkins, West Virginia. We have assembled a team of highly qualified professionals that would welcome the opportunity to provide you with the best possible solution for this facility.

Paradigm Architecture has been actively working on projects providing services for behavioral health clients. This includes the WVU Medicine Center for Health and Healing and two studies for the relocation of the Adult & Adolescent Behavioral Health Department. In association with our engineering associate, ZDS Design, we completed a major renovation to Sharp Hospital in Weston, WV. We are currently working with the Milan Puskar Healthright organization in Morgantown to provide a new facility providing mental health along with medical and dental services for low-income residents.

In addition to behavioral health, we have extensive and varied healthcare experience with clients such as WVU Medicine, Monongalia General Hospital, Lanier Hospital, and Russell Medical Center. Each of the projects in West Virginia have included involvement with the West Virginia State Fire Marshal and OHFLAC for review and compliance with all related codes. Our relationship with these organizations is very strong.

Included on our team to provide Mechanical, Electrical & Plumbing design is **ZDS Design** of St. Albans. ZDS has provided millions of dollars of engineering design services on a variety of projects, particularly healthcare. We have had the opportunity to work together on West Virginia Department of Health & Human Resources projects, specifically the Jackie Withrow Hospital and the Lakin Hospital Capital Improvements in Beckley, John Manchin Sr. Health Care Center in Fairmont, Hopemont Hospital in Terra Alta, Welch Community Hospital in Welch, William R. Sharpe Jr. Hospital, and the Mildred Mitchell-Batemann Hospital in Huntington. The remainder of our design team includes **Ascent Engineering** of Bridgeport to provide Site and Civil Engineering, **Allegheny Design** of Morgantown providing Structural Engineering Services and **Food Facilities Concepts** who will assist with all Food Services Design.

Our approach to project solutions is client specific. We believe that developing a strong working relationship is fundamental. We believe that service is the basis of success.

We look forward to the opportunity to work with you on this project.

Best regards,



Paul Walker, AIA, NCARB, President

2223 Cheat Road | Suite 300  
Morgantown, WV 26508  
T 304.284.5015 | F 304.284.5014

5184 Caldwell Mill Road | Suite 204351  
Birmingham, AL 35244  
T 205.403.2742

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## Paradigm Corporate Information



Tab 1



Morgantown Marriott at Waterfront Place

## Team History

**Paradigm Architecture** was formed in October of 2000 by a group of likeminded individuals who believe that architecture provides the opportunity to practice the career that we love. We as individuals and as team members of a firm have a responsibility to exhibit that passion in the manner in which we live our lives.

We chose the name Paradigm because it means a model that serves as an example.

This represents our highest ideals...

**that our architecture would serve as an example**

**that our client service would serve as an example**

**that our service to our God would serve as an example.**

Originally established in Birmingham, Alabama, Paradigm Architecture expanded in 2002 by opening an office in Morgantown, West Virginia. Our staff of ten includes five registered architects, three CAD designers, and two administrative assistants.

It is our belief that we should assemble consultants that are uniquely skilled to satisfy the particular requirements of a project. We have close professional relationships with many engineers and specialized consultants and choose those that we feel will best serve the technical specialization, location of the work and sometimes even personality of the client. We choose not to work with firms who do not share our commitment to service and quality.

From the early days of our company, we have sought to provide the highest level of service to our clients with the desire to generate long lasting relationships. We have more than 150 projects from these relationships. We are pleased to share some of this history.

**Platinum Properties** (7+ projects including Two Waterfront Place Hotel & Conference Center, Morgantown Event Center & Parking Garage, Marina Tower, Jackson Kelly)

**West Virginia University** (40+ projects including Honors Hall Student Housing, Ag Sciences Greenhouse & Labs, Mountaineer Station Intermodal Garage)

**Mon General Hospital** (6+ projects including Birthing Center, Compound Pharmacy, Phased Cath Labs, Complete Hospital Lab Renovation)

**WVU Medicine** (9+ projects including Behavioral Medicine Outpatient Clinic, 2nd/3rd/4th Floors POC Renovation, Ruby Office IT Center)

**Glenmark Holdings** (10+ projects including WVU Medicine Center for Hope & Healing, USDA Office Building, University Park Mixed-Use Student Housing Complex)

**Mylan Park** (5+ projects including Aquatic Center & Track Complex, Master Plan, County Extension Building)

**West Virginia Department of Natural Resources** (Canaan Valley Resort State Park, Cacapon Resort State Park, Blackwater Falls State Park)

**American Campus Communities** (WVU College Park Student Housing, U Club Sunnyside Student Housing, Evansdale Campus Towers Renovation)

We have also sought to use those relationships to provide service opportunities in the communities that we live.

**Our team will work in conjunction with you to produce a Veterans Nursing Facility that will not only represent our highest ideals, but yours as well, and will set an example for your community.**



West Virginia University Behavioral Medicine

## Firm Profile

*Excellence in Construction by the  
Associated Builders & Contractors, Inc.*

*2020 - The Aquatic & Track Center@ Mylan Park  
Morgantown, WV*

*2019 - WVU Center for Hope and Healing  
Morgantown, WV*

*2016 - UClub Sunnyside  
Morgantown, WV*

*2015 - University Park  
Morgantown, WV*

*2014 - WVU College Park  
Morgantown, WV*

*2010 - Morgantown Event Center  
Morgantown, WV*

*2010 - GSA USDA Office Building  
Morgantown, WV*

*2010 - WVU Transportation Center and Garage  
2007 - Waterfront Marina  
Morgantown, WV*

*2007 - Chestnut Ridge Church  
Morgantown, WV*

*2004 - Madden Student Center  
Davis & Elkins College  
Elkins, WV*

*2004 - Two Waterfront Place Hotel  
& Conference Center  
Morgantown, WV*

*2003 - The Jackson Kelly Building  
Morgantown, WV*

*2001 - Russell Cancer Center  
Alexander City, AL*

Paradigm by definition means an example that serves as pattern or model. The goal of Paradigm Architecture is to be an example in client service, design quality, and technical proficiency. We practice architecture. For every project, Paradigm works closely with the unique requirements of the particular client to design a structure that reflects both the appropriate image and proper function to optimize the working or living environment.

### EXPERIENCE

Paradigm Architecture has experience in a broad range of project types. This work includes private individual, corporate, governmental, educational, and institutional clients.

### Healthcare | Institutional

Medical and retirement life care projects dominate our staff's institutional portfolio. Medical projects include outpatient surgery centers, patient care rooms, emergency medicine, surgery suites, labor & delivery suites, Magnetic Resonance Imaging, X-ray diagnostic services, heart catheterization spaces for hospital clients, radiation and chemotherapy treatment areas in cancer centers, and professional office space for private physicians. Retirement life care facilities range from independent elderly housing and assisted living facilities to full nursing care centers.

### Master Planning

Paradigm Architecture has successfully completed master planning for projects in West Virginia including the Waterfront Development, Cheat Lake Commons, and Trinity Christian School in Morgantown, Avery Court in Parkersburg, and Glade Springs Resort in Daniels. In addition, we have performed master planning for Asian Plaza in Birmingham, AL, and have recently updated the master plan for Russell Medical Center in Alexander City, AL, as well as the West Virginia School of Osteopathic Medicine in Lewisburg, WV.



Russell Medical Center Physician's Office Building #4

*West Virginia American Institute of Architects*

*2021 – Honor Award*

*WVU College of B&E Startup Engine*

*Morgantown, WV*

*2021 – Merit Award*

*The Aquatic Center at Mylan Park, Morgantown, WV*

*2010 – Honor Award*

*Upper Monongahela River Center, Morgantown,*

*WV*

*2010 – Merit Award*

*WVU Transportation Center & Garage*

*Morgantown, WV*

*Morgantown Area Chamber of Commerce*

*2019 – Small Business of the Year Award*

*Morgantown, WV*

*Mylan Park Foundation*

*2018 – George R. Farmer, Jr. Award*

*Morgantown, WV*

*Alabama Masonry Institute*

*2004 – Top Block Award*

*Russell Professional Office Building III*

*Alexander City, AL*

*Main Street Morgantown*

*2008 – Best New Construction Award*

*Marina Tower, Morgantown, WV*

*2008 – Best New Office Award*

*Spilman Thomas Battle, Morgantown, WV*

*Pittsburgh Coming Glass Block*

*2004 – Circle of Design Excellence Award*

*Lightning Strikes Family Fun Center*

*Trussville, AL*

*International Parking Institute Awards of Excellence*

*2011 – Honorable Mention*

*Mountaineer Station (WVU Transportation Center)*

*Morgantown, WV*

## Educational

Higher Educational experience includes administrative office space, parking facilities, student housing, libraries, student centers, athletic facilities, classrooms, and research laboratory facilities. We have worked on campuses that include: West Virginia University, Fairmont State University, Davis and Elkins College, The College of West Virginia, Hampden Sydney College, Wake Forest University, Ayers State Technical College, The University of North Carolina at Greensboro, and The University of Alabama at Birmingham. Paradigm's staff has also been involved in educational facilities at the elementary and high school level including new and renovated buildings.

## Corporate

Paradigm has designed entire office buildings as well as tenant fit-up spaces for clients such as Jackson Kelly PLLC, A.G. Edwards, Acordia, Petroplus & Associates Inc., National Biometric Security Project, Simpson & Osborne, DMJM Harris, and the West Virginia University Foundation. Projects also include banking regional and branch offices.

## Governmental

Members of Paradigm have been involved in projects for the Federal Government in Charleston and Clarksburg, West Virginia. These commissions were awarded through design competitions and involved office space for Social Security, the Federal Bureau of Investigation, the Drug Enforcement Agency, the Small Business Administration, and hearing rooms for SSA Hearings and Appeals. Paradigm is also currently involved in several projects for the GSA in the Morgantown area.

## Food Service

We have been privileged to design many food service facilities. These include private restaurants as well as large, full service commercial catering kitchens and banquet facilities. Examples include Two Waterfront Place Hotel and Conference Center, Morgantown Event Center, Regatta Bar and Grille, Boathouse Bistro, Sargasso Restaurant, Trussville Family Center, and Shono's Restaurant.

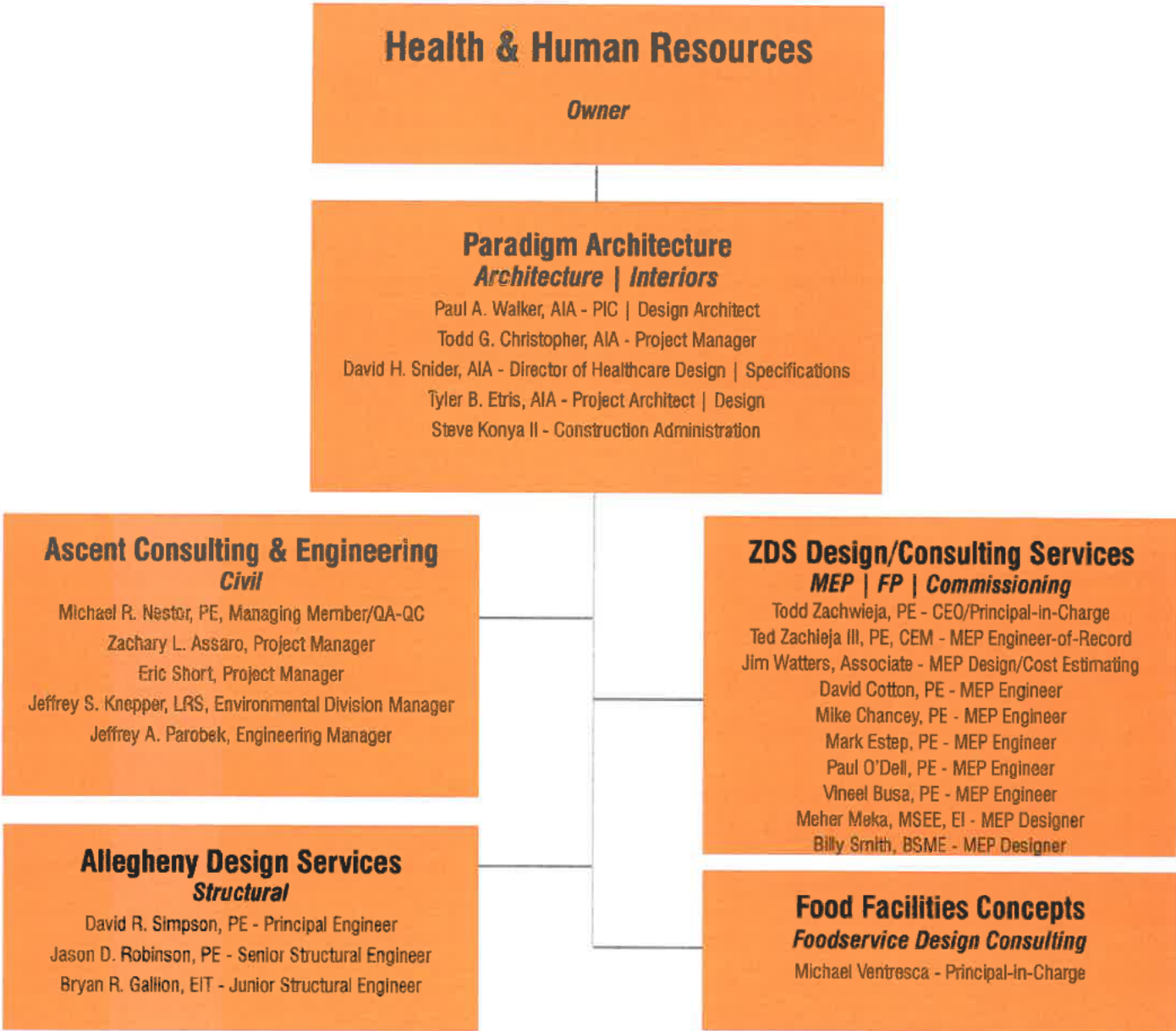


## Project Team Qualifications | Experience



Tab 2

# Team Organization Chart





# Paul A. Walker, AIA

## Principal-in-Charge | Design Architect

Paul has 39 years of experience as an architect and received his registration in 1986. He became a business owner in October 2000 when he created Paradigm Architecture. Paul's design responsibilities include programming, development of construction documents, project management, and construction administration. Among the variety of projects he has designed and supervised are: medical, commercial, corporate, educational, governmental, industrial, institutional, recreational, religious, and residential. The scope of projects ranges from a few thousand dollars to over 70 million dollars. Paul also has extensive experience with commercial and corporate facilities as well as medical facilities while working at other firms in WV, NC, and AL.

## Experience

West Virginia University Medicine  
Center for Hope & Healing  
Morgantown, West Virginia

West Virginia University Medicine  
Behavioral Medicine Build-Out at POC Level 6  
Morgantown, West Virginia

Mon Health Medical Center  
Pharmacy USP Renovation  
Morgantown, West Virginia

University of Alabama at Birmingham  
Russell Medical Center Cancer Center\*  
Alexander City, Alabama

Russell Medical Center Alterations & Additions\*  
Alexander City, Alabama

Mon Health Medical Center - Multiple Renovations  
Cardiology Office Renovation  
Cardiothoracic Suite Renovation  
Cath Lab Fit-Out  
Family Birth Center  
Microlab Renovations  
Major Lab Renovation (Complete Hospital)  
Retail Pharmacy Renovation  
Echocardiogram Renovation  
Morgantown, West Virginia

William R. Sharpe Jr. Hospital  
Weston, West Virginia

Acuity Specialty Hospital of Morgantown Renovations  
Morgantown, West Virginia

CVS Health Institutional Pharmacy  
Morgantown, West Virginia

\*Key involvement in project with firm(s) other than Paradigm Architecture, Inc.

### Education

Bachelor of Architecture  
University of Tennessee  
Knoxville, 1982

### Affiliations

American Institute of Architects  
NCARB # [REDACTED]

### Registrations

West Virginia # [REDACTED]  
Alabama # [REDACTED]  
Arizona # [REDACTED]  
Florida # [REDACTED]  
Georgia # [REDACTED]  
Maryland # [REDACTED]  
Massachusetts # [REDACTED]  
North Carolina # [REDACTED]  
Ohio # [REDACTED]  
Oregon # [REDACTED]  
Pennsylvania # [REDACTED]  
South Carolina # [REDACTED]  
Tennessee # [REDACTED]  
Texas # [REDACTED]  
Virginia # [REDACTED]

Attached is your wallet card, evidence of your current registration to practice architecture in West Virginia. You will receive a renewal notice prior to the expiration date indicated.

Certificate No: [REDACTED]

STATE OF WEST VIRGINIA  
BOARD OF ARCHITECTS

This Certifies that:

PAUL WALKER

Is duly Registered and entitled to  
practice as a  
REGISTERED ARCHITECT  
until and including 06/30/2023



Attest

*[Handwritten Signature]*

President

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## Todd G. Christopher, AIA

### Project Manager

Todd's responsibilities have included development of construction documents and drawings, project management, marketing presentations, bidding procedures, and construction administration. He has a combined 19 years of experience in commercial, corporate, hospitality, educational, performing arts, healthcare, continuing care retirement communities, laboratories, industrial, institutional, sports facilities, and multi-family residential.

### Experience

West Virginia University Medicine  
Communication & Health Disorders Program Renovation  
Morgantown, West Virginia

West Virginia University Medicine  
Center for Hope & Healing  
Morgantown, West Virginia

Mon Health Medical Center  
Pharmacy USP Renovation  
Morgantown, West Virginia

Mon Health Medical Center - Multiple Renovations  
Cardiology Office Renovation  
Cardiothoracic Suite Renovation  
Cath Lab Fit-Out  
Family Birth Center  
Microlab Renovations  
Major Lab Renovation (Complete Hospital)  
Retail Pharmacy Renovation  
Echocardiogram Renovation  
Morgantown, West Virginia

Acuity Specialty Hospital of Morgantown Renovations  
Morgantown, West Virginia

West Virginia University Greenhouse & Labs  
Morgantown, West Virginia

Canaan Valley Resort State Park Renovations & Additions  
Morgantown, West Virginia

West Virginia University – Parkersburg  
New Science Wing Fit-Up & Lab Classrooms  
Parkersburg, West Virginia

University of South Carolina Discovery  
Biomedical Research Facility\*  
Columbia, South Carolina

Catawba Valley Medical Center  
Women's Oncology Expansion & Renovations\*  
Hickory, North Carolina

National Institute of Aerospace Research Facility\*  
Hampton, Virginia

\*Key involvement in project with firm(s) other than Paradigm Architecture, Inc.

#### Education

Master of Architecture  
Virginia Polytechnic Institute &  
State University  
Blacksburg, 2002

Bachelor of Science  
in Engineering Technology  
Fairmont State College  
Fairmont, WV, 1999

#### Affiliations

American Institute of Architects  
NCARB # [REDACTED]

#### Registrations

West Virginia # [REDACTED]

Attached is your wallet card, evidence of your current registration to practice architecture in West Virginia. You will receive a renewal notice prior to the expiration date indicated.

Certificate No: [REDACTED]

STATE OF WEST VIRGINIA  
BOARD OF ARCHITECTS

This Certifies that:

TODD CHRISTOPHER

Is duly Registered and entitled to  
practice as a  
REGISTERED ARCHITECT  
until and including 06/30/2023

*Edward W. Feltner*

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President



## David H. Snider, AIA

### Director of Healthcare Design | Specifications

Mr. Snider graduated from Auburn University with a degree in architecture and practiced in North Carolina before returning to his hometown of Birmingham, Alabama. As one of the founding members he has spent the last 21 years of his 38-year career with Paradigm Architecture. His responsibilities with Paradigm Architecture have included project management, construction documents, contract administration, and writing specifications. Project experience includes renovations, hospitality, educational, healthcare, churches, libraries, schools, historic office buildings, airports, and commercial facilities. David has extensive experience with healthcare facilities throughout the duration of his entire career and currently manages the open-end contract with Russell Medical Center. These project types include cancer centers, medical office buildings, physical therapy, assisted living facilities, and major hospital renovations.

### Experience

West Virginia University Medicine  
Center for Hope & Healing  
Morgantown, West Virginia

University of Alabama at Birmingham  
Russell Medical Center Linear Accelerator Addition  
Alexander City, Alabama

University of Alabama at Birmingham  
Russell Medical Center Cancer Center\*  
Alexander City, Alabama

Russell Medical Center Professional Office Building #3  
Alexander City, Alabama

Russell Medical Center Alterations & Additions\*  
Alexander City, Alabama

Lanier Memorial Hospital Family Practice Clinic  
Valley, Alabama

Monongalia General Hospital - Multiple Renovations  
Cardiology Office Renovation  
Cardiothoracic Renovation  
Family Birth Center  
Microlab Renovations  
Major Lab Renovation  
Morgantown, West Virginia

William R. Sharpe Jr. Hospital  
Weston, West Virginia

Lanier Memorial Hospital Additions & Alterations  
Valley, Alabama

\*Key involvement in project with firm(s) other than Paradigm Architecture, Inc.

#### Education

Bachelor of Architecture  
Auburn University  
Alabama, 1984

Roofing Technology  
The Roofing Industry  
Educational Institute, 1995

#### Affiliations

American Institute of Architects



## Tyler B. Etris, AIA

### Project Architect | Design

Tyler started working at Paradigm as a summer intern starting in 2007 until graduation from the University of Tennessee in 2011 where he achieved a Bachelor in Architecture. Tyler joined Paradigm full time in 2011, and is responsible for design, project management, presentation drawings, development of construction drawings, and marketing. He believes architecture has the potential to strongly influence lives and sees design as a way to impact the community. Project types have included healthcare, commercial, corporate, educational, hospitality, institutional, and retail.

### Experience

West Virginia University Medicine  
Center for Hope & Healing  
Morgantown, West Virginia

West Virginia University Health Sciences Center  
Third Floor North Renovation  
Morgantown, West Virginia

West Virginia University Health Sciences Center  
Physical Therapy - Occupational Therapy Clinic Renovation  
Morgantown, West Virginia

West Virginia University Health Sciences Center  
School of Pharmacy Lab Renovation  
Morgantown, West Virginia

West Virginia University Health Sciences Center  
School of Dentistry Urgent Care Renovation  
Morgantown, West Virginia

West Virginia University Health Sciences Center  
Medical Museum  
Morgantown, West Virginia

West Virginia University Health Sciences Center  
Surgical Simulation Room Renovation  
Morgantown, West Virginia

West Virginia University Health Sciences Center  
Pathology RDL Lab Renovation  
Morgantown, West Virginia

West Virginia University Health Sciences Center  
Jazzman's Cavanaugh Café Renovation  
Morgantown, West Virginia

West Virginia University Health Sciences Center  
Inhalation Lab Expansion  
Morgantown, West Virginia

Russell Medical Center Office Building #4 & Urgent Care  
Alexander City, Alabama

#### *Education*

*Bachelor of Architecture  
College of Architecture  
NAAB Accredited Program  
University of Tennessee  
Knoxville, 2011*

*Krakow Polytechnic University  
Krakow, Poland  
Spring 2010*

#### *Affiliations*

*American Institute of Architects*

#### *Registrations*

*West Virginia # [REDACTED]*

Attached is your wallet card, evidence of your current registration to practice architecture in West Virginia. You will receive a renewal notice prior to the expiration date indicated.

Certificate No: [REDACTED]

**STATE OF WEST VIRGINIA  
BOARD OF ARCHITECTS**

**This Certifies that:**

TYLER ETRIS

**is duly Registered and entitled to  
practice as a  
REGISTERED ARCHITECT  
until and including 06/30/2023**



**Attest**

*[Handwritten Signature]*

**President**

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## Steve Konya

### Construction Administration

Steve's responsibilities have included development of construction drawings and documents, construction administration, project management tasks, marketing, and photography. He has a combined 26 years of experience in commercial architecture and has been with Paradigm Architecture for 16 years. Project types have included commercial, recreational, corporate, educational, hospitality, institutional, and retail.

### Experience

West Virginia University Medicine  
Center for Hope & Healing  
Morgantown, West Virginia

The General Services Administration for the  
U. S. Department of Agriculture Office Building  
Morgantown, West Virginia

West Virginia University Oglebay Hall  
Forensics Lab Facilities Renovation  
Morgantown, West Virginia

West Virginia University Aquatics Lab Renovation  
Morgantown, West Virginia

Fairmont State University Musick Library Roof Renewal  
Fairmont, West Virginia

Fairmont State University Falcon Center Fitup  
Fairmont, West Virginia

West Virginia University Intermodal Garage  
Morgantown, West Virginia

Fairmont State University Hardway Hall Portico Renovation  
Fairmont, West Virginia

Fairmont State University Hunt Haught Hall Renovations  
Fairmont, West Virginia

Fairmont State University Colebank Hall Data Center Buildout  
Fairmont, West Virginia

West Virginia University Greenhouse & Labs  
Morgantown, West Virginia

Fairmont State University Educational Building Reroofing  
Fairmont, West Virginia

### Education

*Bachelor of Science  
in Engineering Technology  
Fairmont State College  
Fairmont, West Virginia  
1996*



# MICHAEL NESTOR, PE

## SUMMARY

Mr. Nestor is a Civil Engineer registered professionally in WV and serves as the Managing Member of Ascent Consulting and Engineering, LLC. He has over 16 years of consulting experience focusing on land development projects and stormwater management in WV, MD, and PA. His expertise allows him to guide projects from concept to completion by understanding the goals/vision of the project, effectively communicating with the project team, and paying careful attention to the details. Mr. Nestor will be responsible for leading and client communication on this project.

## EXPERIENCE

### **ASCENT CONSULTING AND ENGINEERING, (CLARKSBURG, WV)**

Mr. Nestor is the founding/managing member of Ascent. He is responsible for the day to day operations of the firm and Quality Assurance/Control. In addition, Mike serves as the Engineering Division Manager, working with Engineers, CAD Techs, etc. to ensure projects include practical and efficient designs, and are delivered in a timely manner.

### **THE THRASHER GROUP, (BRIDGEPORT, WV)**

Throughout Mr. Nestor's employment with The Thrasher Group, he served in a variety of roles ranging from Staff Engineer up to Site Group Division Manager. This allowed him to work on teams for a wide variety of projects and in a range of capacities.

### **BUSINESS AND INDUSTRIAL PARKS**

Designed and permitted the sites for multiple commercial and industrial properties ranging from major development projects such as the White Oaks Business Park and West Ridge Development to individual development sites for commercial and retail uses.

### **ROADS/SIDEWALKS**

Designed and managed various roadway projects ranging from new road builds to maintenance and improvement projects.

### **STORMWATER MANAGEMENT**

Designed numerous stormwater management facilities and developed stormwater management programs for compliance to the State of WV's MS4 Program in several communities.

## REGISTRATIONS

Professional Engineer:

- West Virginia
- Virginia,
- Ohio
- Pennsylvania
- Maryland

## ASSOCIATIONS

- American Society of Civil Engineers.
- American Society of Highway Engineers (Past President of NCWV Region).

## EDUCATION

Fairmont State College, Fairmont, WV  
Bachelor of Science in Engineering Technology

## YEARS EXPERIENCE

- 16 years
- 2 ½ years at ACE

Email:  
mike@ascentconsultingengineers.com

# ZACH ASSARO, PROJECT MANAGER

## SUMMARY

Mr. Assaro is an Engineering Consultant/Manager and Member of Ascent Consulting and Engineering, LLC. He has 10 years of consulting experience focusing on land development projects and stormwater management in WV and PA. His expertise allows him to guide projects from concept to completion by understanding the goals/vision of the project, effectively communicating with the project team, and paying careful attention to the details. Mr. Assaro will be responsible for managing support staff and project details throughout this project.

## EXPERIENCE

### **WVU Hospitals Waynesburg Clinic, Waynesburg, Pennsylvania**

The WVU Hospitals Waynesburg Clinic project located in Waynesburg, PA was a new facility project that included Mr. Assaro the PM coordinating between the contractor and the WVU Hospitals team. This project included the design of new roadways and parking lots, as well as the design of stormwater drainage including bio-retention facilities. Mr. Assaro also oversaw the design of proposed utilities and the relocation of existing utilities. The 15,000-square-foot clinic includes 30 exam rooms and six procedure rooms. Lab and diagnostic services are also provided.

### **Regional Eye Center White Oaks, Bridgeport West Virginia**

The Regional Eye Associates center located at the White Oaks Development in Bridgeport, WV was a new facility project that included Mr. Assaro coordinating between the contractor and the Eye Center. This project included the design of new roadways and parking lots, as well as the design of stormwater drainage including bio-retention facilities. Mr. Assaro also oversaw the design of proposed utilities and the relocation of existing utilities. The 5,000-square-foot clinic includes 14 exam rooms along with surgical rooms.

### **Jenkins Subaru – Bridgeport, West Virginia**

Site plan development for the addition of a 10,000 sf office space in the parking lot of an existing dealership. The project consisted of layout to allow for circulation within the existing dealership, parking, utility connections, stormwater conveyance, and re-grading of the existing gravel parking lot.

### **THE VALE, Bridgeport, West Virginia**

Layout and engineering design for an upscale housing development in Bridgeport, WV. The community utilizes low impact development practices to provide 22 lots ranging in size from 1 to 7 acres. The project required substantial utility extensions and creativity in stormwater management controls as well as major roadway extensions throughout challenging terrain.

### **STORMWATER MANAGEMENT, Various Locations**

Designed and managed multiple stormwater upgrades for municipalities such as the City of Bridgeport and Fayetteville, WV



## EDUCATION

Fairmont State College, Fairmont,  
WV

Bachelor of Science in Engineering  
Technology

## YEARS EXPERIENCE

- 10 years
- 2 ½ years at ACE

Email:

[zach@ascentconsultingengineers.com](mailto:zach@ascentconsultingengineers.com)

# ERIC SHORT, PROJECT MANAGER



## EDUCATION

B.S., Civil Engineering Technology,  
2003 – Fairmont State University

A.S., Architectural Engineering  
Technology, 2003 – Fairmont State  
University

## CERTIFICATIONS

American Society of Civil  
Engineers  
American Society of Highway  
Engineers

## YEARS EXPERIENCE

- 16 years
- 2 ½ years at ACE

Email:  
eric@ascentconsultingengineers.com

## SUMMARY

Eric Short is a Senior Civil Project Manager/Engineer. In his 16 years of consulting, he has worked on a variety of projects which include all types of development, transportation designs, stormwater management designs, site grading, and oil/natural gas facilities. His tasks involve the design and development of Demolition, Erosion and Sediment Control, Site, Grading, and Utility Plans along with creating details for site specific elements. Mr. Short is also an experienced highway designer with a background in the preparation of roadway construction, right-of-way, sign, and pavement marking plans. Other responsibilities include traffic studies, storm water and sanitary sewer design, and cost estimation.

Eric Short's expertise lies in taking detailed designs and translating them into easy to understand and executable documents. His ability to communicate effectively with contractors and stakeholders while using a commonsense design and approach to construction makes him a very effective Engineer and Manager.

## EXPERIENCE

**City of Ripley, Main Street Revitalization:** This project was one of kind for us in that we took all of the existing overhead utility lines along Main Street and putting them underground in conduit. The project involved direct coordination with the utility companies to ensure they had the necessary number, size, and location of conduit. Beyond the utilities, the Main Street was designed with new sidewalks that incorporated brick pavers, hand railing, decorative street lights, and handicap ramps.

•**City of Grafton, Main Street Revitalization:** The project consisted of designing sidewalks that incorporated decorative street lights, benches, handicap ramps, and landscape islands.

•**Raleigh County Memorial Airport & Industrial Park:** Design of a 1,100 linear footroad extension, Drainage and Erosion and Sediment Control Plan.

•**Cambridge Place Business Park:** Complete Site Design Package, multiple tenant building and parking layout, utility extensions, and storm water system in accordance with the City of Bridgeport regulations.

•**Genesis Youth Crisis Center:** Complete Site Design Package, including approximately 35,000 cubic yards of earthwork, building and parking layout, utility extensions, and storm water management facilities.

# JEFFREY KNEPPER, CPG, LRS



## **REGISTRATIONS**

- Certified Professional Geologist – Virginia
- Licensed Remediation Specialist – West Virginia
- Certified Aboveground Storage Tank Inspector – STI-SP001
- Certified Aboveground Storage Tank Inspector – Pennsylvania

## **EDUCATION**

West Virginia University,  
Morgantown, WV – Bachelor  
of Science in Geology – 1998

## **ASSOCIATIONS**

- American Institute of Professional Geologist
- West Virginia
- Manufacturers Association
- IOGA of West Virginia
- PIOGA – PA

## **YEARS EXPERIENCE**

- 20+ years
- 1 ½ years at ACE

Email:

[jeffk@ascentconsultingengineers.com](mailto:jeffk@ascentconsultingengineers.com)

## **SUMMARY**

Mr. Knepper has 20 years of experience working on complex environmental and regulatory projects specializing in environmental/regulatory compliance, remediation, permitting, and aboveground storage Tank (AST) services. Mr. Knepper is adept at developing practical and innovative solutions to challenging environmental issues often faced by oil and gas and other industrial clients. His track record in regulatory compliance, permitting, soil and groundwater remediation, and environmental impacts make him a key team member on projects. Mr. Knepper is a certified professional geologist and a WV licensed remediation specialist. Mr. Knepper is an experienced AST inspector with over 1,000 completed inspections in various states including: WV, PA, OH, KY, WI, MI, VA and NY.

## **EXPERIENCE**

### **ENVIRONMENTAL INVESTIGATIONS**

*CPFilms, Industrial Facility, Fieldale, VA* – Mr. Knepper performed nature and extent and site characterization studies for volatile organic compounds. He developed corrective action plans, installed groundwater monitoring wells and performed statistical analyses on results.

*Federal Mogul, Industrial Facility, Winchester, VA* – Mr. Knepper performed groundwater sampling and statistical analyses on results to determine the cause of upgradient groundwater contamination. Mr. Knepper received a commendation from the Virginia Department of Environmental Quality for exemplary sampling methods and techniques.

*U.S. Silica, Berkeley Springs, WV* – Mr. Knepper led the field operations team at an emergency spill cleanup for chemicals which included: sulfuric acid, caustic soda and petroleum sulfonate from aboveground storage tanks. Mr. Knepper's full knowledge of the WVDEP regulations for tanks and site cleanup proved invaluable in minimizing potential contamination and receiving high praise from the WVDEP.

### **ENVIRONMENTAL REGULATORY AND COMPLIANCE**

*Dominion Energy Transmission, Bridgeport, WV* – Mr. Knepper developed a permitting guide to monitor permit conditions, permit expirations and regulatory deadlines. This guide encompassed all of Dominion's permits. It helped to mainstream and organize permits regardless of personnel responsibilities and turnover.

*American Electric Power, Mountaineer Plant, New Haven, WV* - Mr. Knepper developed the first Carbon Capture and Sequestration (CCS) permit in WV and the United States. The permit was issued prior to the Environmental Protection Agency releasing the regulations for the newly established class VI rules which now govern CCS.

## **UNDERGROUND INJECTION CONTROL**

Mr. Knepper has over 10 years of experience working with underground injection control projects. He was the state-wide Environmental Resources Program Manager for WV handling all permitting and compliance approvals for mining facilities working closely with various mining companies including: Wolf Run Mining, Greenbrier Minerals, Independence Coal, Brooks Run Mining, Mid-Vol Coal Sales, Pinnacle Mining, ICG-Beckley, LLC and many more. Mr. Knepper has also provided this knowledge to the consulting realm as an alternative to existing permits or lack of efficiency in current treatment options.

*Vesuvius, Globe Mine, Newell, WV* – Mr. Knepper led a team to renew a NPDES permit at an old clay mine. The facility had been violation for many years because of the high concentration of iron. Mr. Knepper was instrumental in renewing the NPDES permit and providing an alternative to help bring the facility back into compliance with the WVDEP.

## **HYDROGEOLOGY**

*Georgia Pacific, Industrial Facility – Martinsville, VA* - Mr. Knepper performed groundwater sampling and statistical analyses on volatile organic compounds, metals and semi-volatile organic compounds from groundwater samples.

*Scott County, Gate City, VA* – Mr. Knepper performed site characterization studies on volatile organic compounds contaminating multiple sites. Mr. Knepper prepared corrective action plans and nature and extent studies. He also performed groundwater statistics that were used by the VDEQ as a model for how to perform the various investigations and studies.

*Patrick County, Stuart, VA* – Mr. Knepper helped design and manage a gas extraction system for the County. He also was instrumental in the approval of a corrective action plan from the VDEQ for vinyl chloride contamination. Mr. Knepper developed alternatives the State of Virginia now uses to evaluate nature and extent studies and site characterization reports.



# JEFFREY A. PAROBEK, PE

## SUMMARY

Mr. Parobek is currently employed as a Engineering Manager. He is responsible for overview of technical aspects of project design, design coordination with clients and other members of the design team, public presentations of projects in front of governing bodies, regulatory agencies and at stakeholder meetings, coordination of project bid process and oversight of services during construction including change order and pay application reviews, coordination with other managers for manpower and scheduling, preparation of price proposals and statements of qualifications, preparation of invoices and supplemental work requests.

## EXPERIENCE

**Vincetian Home** renovations and expansion in the Town of McCandless which included expansion of the existing skilled care facility to provide an assisted living component and renovations to modernize the skilled care facility. As a Project Manager for preparation of site plans, stormwater management, utility upgrades and NPDES permitting.

**Arden Courts Assisted Living Facility** in Monroeville, Pennsylvania for Manor Care Health Services, Inc. Mr. Parobek did comprehensive site planning and development project for an assisted living facility specializing in the care of Alzheimer's residents. As an engineer he was responsible for utility design, site grading, pavement design, permitting, stormwater management, wetlands delineation, and preparing construction documents.

**Lincoln Corner Medical Offices** in North Huntingdon Township, PA for Westmoreland Pediatrics, Mr. Parobek did comprehensive land development planning and design for two 10,000 square foot multi-tenant office buildings. As project manager he provided oversight for land development site plans, stormwater management design including water quality provisions, NPDES permitting, construction documents and presentations at public hearings to obtain municipal approvals.

### **Washington's Landing Housing Development Herr's Island, PA**

Mr. Parobek worked for the Urban Redevelopment Authority of Pittsburgh. This was a public space improvements project for a 7-acre, 100-unit residential development on a brownfield site, completed in 1995. His work included planning, permitting and design as well as construction management services. As an engineer he was responsible for designing roadways, waterlines, sanitary sewer, and storm drainage.

## REGISTRATIONS

Pennsylvania, [REDACTED]  
West Virginia, [REDACTED]  
Virginia, [REDACTED]  
Ohio, [REDACTED]  
North Carolina, [REDACTED]  
Tennessee, [REDACTED]

## EDUCATION

Bachelor of Science Degree in Mining Engineering, The Pennsylvania State University at University Park, Pennsylvania, 1983.

Certification from ASFE, Fundamentals of Professional Practice Management Course, Magna Cum Laude, 1996.

Maryland Erosion and Sediment Control Certification No. [REDACTED] March 30, 2016

## CORE QUALIFICATIONS

Site Development  
Municipal Infrastructure  
Erosion Control Plans  
Brownfields  
Redevelopment  
Regulatory Compliance  
Environmental Permitting  
Storm Water Management  
Technical Writing  
Cost Estimating  
Construction Management

# David R. Simpson, PE, MBA

## President / Principal Engineer

### 40+ Years' Experience



**Allegheny**  
Design Services  
*Consulting Engineers*

#### **Professional Registrations:**

Year first registered: 1984

West Virginia, Pennsylvania, Maryland, Virginia, Florida, New York, New Jersey, North Carolina, South Carolina, Georgia, Ohio, Structural Engineering Certification Board and National Council of Examiners for Engineering and Surveying

#### **Professional Experience:**

Responsible for strategic management, marketing, quality control, personnel development, business development, project management and design at Allegheny Design Services. Experience includes over 40 years in structural design and project management for industrial, commercial, institutional, and nuclear/chemical facilities utilizing steel, concrete, masonry, and wood. Past accomplishments include design and construction administration of health care facilities, hotels, schools, shopping centers, aircraft hangars, numerous retail facilities, and numerous forensic engineering assignments. Experience has been obtained from the following assignments:

#### **Project Assessment Experience Includes:**

The Aquatic Center at Mylan Park – Foundation Stabilization / Leveling  
City of Morgantown Pleasant Street Parking Garage Assessment  
FSU - Parking Garage Structural Assessment of Joints  
FSU Education Building Slab Restoration  
WVDOA Building 97 Floor Repair  
Gabriel Brothers Store Expansion, Clarksburg, WV  
City of Morgantown Structural Foundation Assessment  
Israel Williams Trust - Structural Damage Assessment  
BDC - 1400 N. Main St. Weirton Structural Assessment  
Crest - Structural Assessment 719 Main St., Wheeling, WV  
Woodburn School Structural Assessment  
BB&T Building Assessment  
114 Clay St Structural Assessment  
WVNET Structural Assessment  
Nazareth Farm Comprehensive Facilities Assessment  
Glade Springs Clubhouse Alteration Feasibility Study  
FSU McAteer Building Structural Evaluation  
FSU Parking Garage Structural Evaluation  
Mylan Pharmaceutical Parking Garage Structural Assessment  
WVU Puskar Stadium Seismic Damage Assessment  
WVU Puskar Stadium Facilities Building Vertical Expansion Study  
Mountainview Middle School Structural Foundation Settlement Assessment  
Philippi Public Library Structural Assessment  
Ramada Inn Morgantown Structural Assessment

#### **Education:**

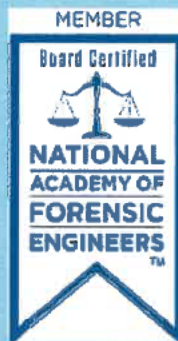
West Virginia Institute of Technology  
B.S. Civil Engineering

West Virginia University  
Masters Business Administration

West Virginia State College  
Architectural Technology Courses

#### **Professional Memberships:**

American Society of Civil Engineers, Structural Engineering Institute, Charter Member, American Concrete Institute, American Institute of Architects – West Virginia Chapter, American Institute of Steel Construction, Inc., American Iron and Steel Institute Member, National Academy of Forensic Engineers



102 Leeway Street  
Morgantown, WV 26505  
304-599-0771  
Dave@AlleghenyDesign.com

Jason D. Robinson, P.E.,  
Vice President / Principal  
10+ Years' Experience



**Allegheny**  
**Design Services**  
*Consulting Engineers*

**Professional Registrations:**

Year first registered:

**Professional Engineer** – West Virginia, Pennsylvania, Maryland,  
Kentucky, Nebraska, Mississippi and Alabama

**Professional Experience:**

Responsibilities include structural engineering design, construction documents, quality control and field engineering.

**Project Experience Includes:**

University Place Parking Garage, Morgantown, WV  
University Park Mixed Use Building, Morgantown, WV  
Mylan Parking Garage Concrete Repairs, Morgantown, WV  
BFS Suncrest, Morgantown, WV  
Pikewood Creative Addition and Renovation, Morgantown, WV  
GSD Fairmont, Fairmont, WV  
Bridgeport Public Safety Substation, Bridgeport, WV  
Canaan Valley Institute, Davis, WV  
Charles Pointe BFS, Bridgeport, WV  
Fairmont AFRC, Fairmont, WV  
Gabriel Brothers Renovation, Clarksburg, WV  
Genesis Youth Crisis Center, Clarksburg, WV  
Goshen Baptist Church, Morgantown, WV  
GSA DOE, Morgantown, WV  
ICC Parish Center, Clarksburg, WV  
Mason Dixon, Bridgeport, WV  
GSA, Charleston, WV  
Progress Centre 2, Bridgeport, WV  
WVU Child Development, Morgantown, WV  
White Oaks Progress Center, Bridgeport, WV  
Thrasher Office Building, Bridgeport, WV  
WVU Greenhouse Building, Morgantown, WV  
Courtyard Marriott– University Towne Center, Morgantown, WV  
Morgantown Event Center, Morgantown, WV  
Hawthorn Suites by Wyndham, Bridgeport, WV  
Hawthorn Suites by Wyndham, Wheeling, WV  
Chestnut Ridge Church, Morgantown, WV  
WVU Rockefeller Neuroscience Ins. Inn. Cntr, Morgantown, WV  
WVU Cancer Center RTU Roof Analysis, Morgantown, WV

**Education:**

West Virginia University  
B.S. Civil Engineering

**Professional Registrations:**

Professional Engineer – West Virginia  
Pennsylvania, Maryland, Kentucky, Nebraska,  
Mississippi and Alabama

**Experience Record:**

Allegheny Design Services, LLC  
June 2007 to Present

**Professional Memberships:**

Member of AISC  
Associate Member of ASCE



102 Leeway Street  
Morgantown, WV 26505  
304-599-0771  
Dave@AlleghenyDesign.com

# Bryan R. Gallion, EIT, Jr. Structural Engineer 6+ Years' Experience (ADS)



**Allegheny**  
**Design Services**  
*Consulting Engineers*

#### **Professional Experience:**

##### **Graduate Research Assistant, WVU - June 2014 - May 2016**

Instrumented an eSpan140 demonstration bridge in Jesup, Iowa with strain gages. Applied an AASHTO HL-93 vehicular live load to the bridge while collecting strain measurements to determine if the design moment capacity was met.

##### **Graduate Teaching Assistant, WVU—August 2014 - May 2016**

Steel Design, Structural Analysis II, and Structural Analysis I  
Assisted the professor with creating homework's and tests, along with solutions and as well as grading all assignments  
Provided out-of-class assistance to students having difficulties with course content.

##### **Undergraduate Student Research Assistant, WVU—Summer 2013**

Constructed wooden frame and poured concrete deck for simply supported cold press braked steel tub girder in WVU's structures lab under the supervision of my advisor / professor . Drew AutoCAD layouts of the girder and supports

#### **Project Experience Includes:**

The WVUH Residential Treatment Center at Mylan Park, Morgantown, WV  
WVU Coliseum Visitor Center, Morgantown, WV  
Health Access Addition, Clarksburg, WV  
Woodburn School ADA Improvements, Morgantown, WV  
Mylan Suburban Lab Renovation, Morgantown, WV  
Pressley Ridge, Clarksburg, WV  
Tampa Bay Humane Connections, Tampa Bay, Florida  
Grand Central Mall Connections, Vienna, WV  
Ruby Memorial Roof Screen & Duct Enclosure, Morgantown, WV  
St. Mary's Church Addition, Petersburg, WV  
Jefferson County Visitor's Center Renovation, Jefferson County, WV  
White Hall Public Safety Building, White Hall, WV  
Sabraton Popeye's, Morgantown, WV  
Morgantown Energy Platforms, Morgantown, WV  
Preston Machine Hopper Analysis, Kingwood, WV  
Jewel City Church, Shinnston, WV  
Spencer USPS, Spenser, WV  
Brownsville Marine Rack Analysis, Brownsville, PA  
HP Hood Building Addition, Winchester, VA  
453 Oakland St Light Gage Design, Morgantown, WV  
Woodford Oil Mezzanine, Morgantown, WV  
7 Players Club Drive, Charleston, WV  
Hampton Inn, Weston, WV  
Keyser Block Factory, Keyser, WV

#### **Education:**

West Virginia University  
B.S. Civil Engineering

West Virginia University  
M.S. Civil Engineering

**Professional Registrations:**  
West Virginia EIT Certification

**Experience Record:**  
Allegheny Design Services, LLC  
May 2016 to Present

**Professional Memberships:**  
American Society of Civil Engineers



102 Leeway Street  
Morgantown, WV 26505  
304-599-0771  
Dave@AlleghenyDesign.com

Todd has over 40 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 health care clients. He is also recognized as a campus master planner for utility infrastructure providing master planning 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 structures including high-rise commercial building renovations. Todd designed renovations to many existing facilities which received **Energy Star Certifications** placing them in the nation's top 25% of energy efficiency schools. *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 EAct 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.

**CEM**<sup>®</sup> Certified Energy Manager  
(C.E.M.) National  
Certification No.

**LEED AP** LEED Accredited Professional,  
National Certification through

## 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.

## HEALTH CARE EXPERIENCE

- Bluefield Regional Medical Center
- Cabell Huntington Hospital
- Charleston Area Medical Center Memorial Division (millions in renovation and new construction design, including commissioning of CAMC Surgery Center
- Charleston Area Medical Center General Division (millions in renovations)
- Charleston Area Medical Center Women & Children's Hospital (millions in renovations)
- Charleston Surgical Center
- Family Practice Center
- Jackie Withrow Hospital
- John Manchin Sr. Health Care Center
- Hometown Healthcare Center
- Hopemont Hospital
- Lakin Hospital
- Lewistown Outpatient Surgical Facility, PA
- Mercy Medical Center
- Mildred Mitchell-Bateman Hospital
- Monongalia General Hospital
- Montgomery General Hospital
- Office of Chief Medical Examiners CT Scanner Renovations
- Roane General Hospital
- St. Joseph's Hospital
- St. Mary's Hospital
- Summersville Regional Medical Center
- Surgicare Center
- Thomas Memorial Hospital
- United Hospital Center
- VA Hospital - Clarksburg
- VA Hospital - Huntington
- Wayne Memorial Hospital
- Webster Memorial Hospital
- Welch Community Hospital
- William R. Sharpe, Jr. Hospital Additions and Renovations

# Todd Zachwieja, PE, CEM, LEED AP

## 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

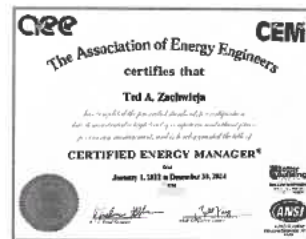
Charter Life Member of the Association of Energy Engineers

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

1<sup>st</sup> 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



Ted has over 16 years of experience in building construction design industry. His strategic thinking and development of technical resources at ZDS has helped streamline design processes and improve quality of work office wide. Ted is an innovative problem solver in engineering design, communication methods and management of BIM models between stakeholders during a design project. As a pioneer and a believer in technological processes Ted has championed Integrated Design Practices that has become the fabric of ZDS's day to day operations.

Ted developed ZDS's 3D Scanning 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, health care, industrial, and commercial facilities. He also has experience in speaking on how 3D laser scanning impacts our industry today.

Ted develops, designs and manages the IT systems. The experience encompasses development and deployment of central server systems to networked client computer systems, strategic development for ZDS' Integrated Design Processes, and research and development into new technologies to continue staying on the cutting edge for ZDS and others.

Ted's project experience includes design and commissioning for heating, ventilating, air conditioning, plumbing, fire protection, electrical and lighting systems for educational, health care, industrial and commercial facilities. His experience encompasses working both on new construction and renovation projects. He also is experienced in historical facilities including theatrical.

Ted maintains an active membership to the ASHRAE professional society and also has a lifetime membership to 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 was recently appointed to the Electronic Communications Standing Committee with ASHRAE. Ted has designed renovations to existing K-12 schools which received **Energy Star Certifications** placing them in the nation's top 25% of energy efficiency schools.

## HEALTH CARE EXPERIENCE

- CAMC Patient Room Renovations
- Jackie Withrow Hospital, Beckley: Master Planning Study, new central steam plant and renovations to heating system and lighting renovations.
- Hopemont State Hospital, Terra Alta: Master Planning Study, renovations to heating system and lighting systems.
- John Manchin, Sr. Health Care Center, Fairmont: Master Planning Study, renovations to lighting systems.
- Lakin State Hospital, West Columbia: Master Planning Study and exterior envelop renovations and lighting renovations.
- Mildred Mitchell-Bateman Hospital, Huntington: Master Planning Study and lighting renovations.
- Office of Chief Medical Examiners CT Scanner Renovations
- Roane General Hospital, Spencer, WV
- United Hospital Center Renovations, Clarksburg, WV
- VA Hospital Clarksburg and VA Hospital Huntington, WV including new Fisher House
- Welch Community Hospital, Welch: Master Planning Study and lighting renovations.
- William R. Sharpe, Jr. Hospital, Weston: fifty bed forensic addition and renovations to entire existing hospital while building remains in use including new central heating/cooling plant, 1,800 KW emergency power station and comprehensive HVAC and electrical renovations throughout the facility.



## PROFESSIONAL REGISTRATIONS

Professional Engineer:

Florida

West Virginia

Certified Energy Manager (C.E.M.)

National Certificate

No.

**CEM**

## 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



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

Jim has over 40 years' 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 facility's campus totaling \$10,000,000 in construction costs on various projects, including the conception, design and construction administration for the installation of a 1.5 Megawatt emergency generator. The propane-fired generator and associated switchgear in conjunction with 60,000 gallons of propane fuel storage served to provide peak shaving/load shedding to save on the campus utility costs as well as emergency power functions. 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



## HEALTH CARE EXPERIENCE

- Cabell Huntington Hospital
- Charleston Area Medical Center (CAMC) (prior to joining ZDS)  
Lab III Renovations; 750 kW Emergency Generator/Underground Fuel System; Two-Four West Nursing Wing; Main Electrical Service Upgrade; Emergency Room Renovations; Surgical Intensive Care Retrofit Two/Three East Patient Room Renovations; Four-North HVAC Renovations; Nuclear Medicine Renovations; Special Care Facility Contract Administration; Allied Health, Physical Therapy & Hydrotherapy; Three-Six Floor Patient Room South; Emergency Generator Retrofit Design; Heliport and pilots quarters; Wound Center; Pediatric Intensive Care & Newborn Intensive Care Unit; Central Electric Metering Design; CT Scan Addition; LDRP/Gynecology; Surgery Addition; Operating and Recovery Room HVAC System; Medical Office Building – General Division
- Kings Daughters Medical Center, Ashland (prior to joining ZDS)  
Projects included: Cardiac Care Center; Medical Office Building
- Thomas Memorial Hospital
- St. Mary's Medical Center, Huntington
- United Hospital Center
- VA Hospital, Huntington –steam distribution system to serve six additional facilities on campus, main hospital domestic water line replacement and CT Scan renovations
- Jackie Withrow Hospital, Beckley: new central steam plant and renovations to heating system and lighting renovations.
- Hopemont State Hospital, Terra Alta: renovations to heating system and lighting systems.
- John Manchin, Sr. Health Care Center, Fairmont: renovations to lighting systems.
- Lakin State Hospital, West Columbia: lighting renovations.
- Mildred Mitchell-Bateman Hospital, Huntington: lighting renovations.
- Welch Community Hospital, Welch: lighting renovations.
- William R. Sharpe, Jr. Hospital, Weston: fifty bed forensic addition and renovations to entire existing hospital, 1,800 KW emergency power station.

David is a professional Mechanical Engineer with over 16 years of experience in the design and construction of over 500 projects having construction values up to \$35 million. His design experience ranges from commercial, industrial, institutional, healthcare, education, restaurant, retail, government, airport, and recreational facilities.

David collaborates well with fellow engineers, architects, owners, commissioning agents, contractors, and vendors to define project scope and develop conceptual designs. As a project manager he successfully manages projects from start to finish in design, bidding, and construction administration.



## PERSONAL PROJECT EXPERIENCE

- Dominion Office Building—LEED Gold, Bridgeport, WV
- Mon General Hospital Echo Renovations, Morgantown, WV
- Mon Health LTAC for Acuity, Morgantown, WV
- UHC POB 4th Floor Fitout, Clarksburg, WV
- Clarksburg Comprehensive Care Clinic Renovations, Clarksburg, WV
- Jerry Dove Medical Office Building, Bridgeport, WV
- Medbrook Building HVAC Replacement, Bridgeport, WV
- Mylan Pharmaceuticals, Morgantown, WV
- Total Dental, New Multi-Tenant Building for PCE, LLC, Bridgeport, WV
- Beckley Police Station, Beckley, WV
- Doddridge County Athletic Complex, Doddridge County, WV
- Boy Scouts of America, Rex W. Tillerson Leadership Center, Fayette County, WV
- White Hall Public Safety Building, White Hall, WV
- Beitzel/Pillar Innovations Office Building, Garrett County, MD
- Shady Spring Middle School HVAC Renovations, Shady Spring, WV
- Maxwell Hill Elementary School HVAC Renovations, Beckley, WV
- Percival Hall Absorption Chiller and Cooling Tower Replacement, Morgantown, WV
- Thrasher Engineering Office Building, Bridgeport, WV
- WVU Creative Arts Center Rehearsal Hall, Morgantown, WV
- WVU Towers Dining Hall Renovations, Morgantown, WV
- WVU Athletic Performance Center, Morgantown, WV
- HP Hood Addition/Renovations, Winchester, VA
- Dominion Office Building, Delmont, PA
- University of Pittsburgh Softball Practice Facility, Pittsburgh, PA
- Westmoreland Community and Technical College, Indiana, PA
- WVU Alumni Center, Morgantown, WV
- WVU Biomedical Research Facility, Morgantown, WV
- WVU Milan Puskar Locker Room Renovations, Morgantown, WV
- NOAA GOES-R Supercomputing Center, Fairmont, WV
- Columbia Gas Transmission Compressor Station, Mathias, WV
- Mabscott Elementary School HVAC Renovations, Beckley, WV
- Independence Middle School HVAC/Roof Upgrades, Coal City, WV

## 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, Current President

National Fire Protection Association

WV Society of Healthcare Engineers

# Mike Chancey, PE, LEED AP



Mike has over 35 years of experience in electrical design and project management for industrial, commercial, residential, institutional, educational and recreational facilities. Building system design includes lighting, site lighting, power distribution, communications, surveillance, access control, and fire protection. Past accomplishments include design and construction administration of health care facilities, schools, municipal, sports, commercial and retail facilities.



## PERSONAL PROJECT EXPERIENCE

- Jefferson Co., OH Courthouse Courtroom Renovations
- Mon Co. Courthouse Entry Plaza
- Morgantown Public Safety Building
- Whitehall Public Safety Building
- Pocahontas Co. Courthouse Lighting Upgrade
- Davis & Elkins College Hermanson Center Renovations, Elkins, WV
- Clarksburg Aquatic Center, Clarksburg, WV
- Harrison County Recreation Complex 4-H Center, Bridgeport, WV
- East Marion Pool Renovations, Fairmont, WV
- WVU Mountaineer Station Phase II, Morgantown, WV
- WVU Wrestling Locker Room Renovation, Morgantown, WV
- WVU Milan Puskar Stadium Ad Board Upgrades, Morgantown, WV
- WVUH Residential Treatment Center at Mylan Park, Morgantown, WV
- WVU Milan Puskar Stadium (AD) Athletic Director's Suite Renovations, Morgantown, WV
- WVU Marina Tower Fitout, Morgantown, WV
- WVU Honors Dormitory, Morgantown, WV
- WVU CAC Rehearsal Hall, Morgantown, WV
- WVU Visitor's Resource Center, Morgantown, WV
- WVU College Park Apartments, Morgantown, WV
- Boy Scouts of America, Rex W. Tillerson Leadership Center. Glen Jean, WV
- Mountaineer Medical Office Building, Bridgeport, WV
- Morgantown Event Center, Morgantown, WV
- Morgantown Event Center Parking Garage, Morgantown, WV
- The Health Plan, Wheeling, WV
- West Virginia State Police, Fairmont, WV
- White Hall Public Safety Building, White Hall, WV
- Pocahontas Co. Courthouse Lighting Upgrade, Marlinton, WV
- Mon County Extension Building, Morgantown, WV
- Beckley Police Department, Beckley, WV
- Beckley Fire Station # 3, Beckley, WV
- Morgantown Public Safety Building, Morgantown, WV
- Mon County Courthouse Plaza, Morgantown, WV

## PROFESSIONAL REGISTRATIONS

### Professional Engineer:

West Virginia

Maryland

Virginia

Ohio

Pennsylvania

LEED Professional Accreditation

## EDUCATION

Bachelor of Science

Electrical Engineering

WV Institute of Technology

## MEMBERSHIPS

National Society of Professional Engineers

WV Society of Professional Engineers

WV American Institute of Architect

Mark has over 18 years of experience and is responsible for the design of commercial, institutional, and industrial mechanical and electric projects. He works with architects, civil and structural engineers to coordinate design and construction documents. He is responsible for project specifications and submittal review. Mark holds Degrees in Engineering and Architectural Technology which provide more than engineered solutions. He designs solutions that incorporate essential and functional needs, as well as aesthetic, life-safety, and constructability considerations.

Before joining ZDS, Mark was the President and Principal Engineer of another firm where he provided mechanical and electrical engineering design and analysis for commercial construction projects and was responsible for acquiring new projects.



## PERSONAL HEALTHCARE PROJECT EXPERIENCE

- Office of Chief Medical Examiners CT Scanner Renovations
- Valley Health Medical Center; New one-story medical office building
- HIMG Region Medical Center; Design-build, 150,000 sf renovation of a former Wal-Mart building into a multi-tenant medical mall
- Summersville Hospital Air Handler
- Cancer Treatment Centers; Approximately 7,000 sf each, the treatment centers provided a CT scan and radiation treatment. The facilities also provided exam rooms, waiting areas, and administrative offices
- St. Mary's Medical Center; 510 car, four elevated-levels. Parking facility also has a pedestrian connection bridge to the main hospital facility
- King's Daughters Hospital Parking; 530 cars on five levels. The garage is design to add three additional elevated levels
- New River Health Association; New Medical Office Building
- Pretera Center; Elevator Implementation
- WV Department of Health and Human Resources; Completed several WVDHHR projects throughout the State

## PROFESSIONAL REGISTRATIONS

Professional Engineer:

West Virginia   
Maryland   
Virginia   
Kentucky   
Ohio

## EDUCATION

Bachelor of Science  
Mechanical Engineering  
WV Institute of Technology

Bachelor of Science  
Architectural Engineering Technology  
Associates of Science  
Mechanical Engineering Technology  
Fairmont State College



Paul has 30 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.

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## GOVERNMENT/HISTORIC/COMMERCIAL PROJECT EXPERIENCE

- WVARNG Armory/Annex
- 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 Lordstown Assembly Plant
- GMC Janesville Assembly Plant
- GMC Pontiac East Assembly Plant
- GMC Bowling green Assembly Plant
- GMC Arlington Assembly Plant
- Harrison County Bank
- IMC Office Bldg.
- Kanawha County Commission, Judicial Annex
- WV Capitol Complex Central Boiler Plant
- Appalachian Tire
- Laidley Towers
- Robinson Grand Performing Arts Theatre
- USDA Forestry Building
- University of Charleston Innovation Center Additions/Renovations
- World Trade Center, MD
- William R. Sharpe, Jr. Hospital Additions/Renovations, WVDHHR
- Numerous K-12 School Renovations



## 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

Vineel is a professional Mechanical Engineer with a Masters Degree in Mechanical Engineering and nearly 5 years experience in HVAC & Refrigeration. Technically sophisticated engineering professional with solid history of effective integration, qualification and deployment of HVAC systems. Significant experience in designing, commissioning and implementing efficient HVAC systems for various commercial, healthcare and educational facilities.

Vineel is knowledgeable on HVAC systems, Heat Transfer, Refrigeration and Thermodynamic specializing in HVAC heating and cooling load calculations, Psychrometric and hydronic analyses and Energy modeling. He has applied that foundation in the manufacturing industry and the commercial industry. Vineel has a comprehensive knowledge of mechanical principles and drafting techniques.

He is experienced hands-on in designing Variable Refrigerant Flow systems, Steam Systems, hydronic systems, Geothermal systems and Building Automation System. He is also proficient in Revit, AutoCAD, IESVE, Navisworks, and Autodesk Recap. Vineel is experienced in utilizing point clouds in the development of Scan to Building Information Modeling (BIM) and performing 3D scanning. Vineel is well-versed in technical specification writings and development of construction drawings. He has hands-on experience in performing Functional Performance Testing in leading Commissioning projects.



## PROFESSIONAL REGISTRATIONS

Professional Engineer:  
West Virginia

## PROJECT EXPERIENCE

- St. Marys High School
- New Bluefield Elementary School Commissioning
- Clay County High School Commissioning
- North Fork Elementary School HVAC/Roof Renovations, 3D Scanning, Scan-to-BIM and Commissioning
- Pendleton County Middle/High School HVAC/Roof Renovations, 3D Scanning, Scan-to-BIM and Commissioning
- New 911 Center high performance "Net Zero" facility and Commissioning
- Tyler County Courthouse Additions/Renovations and Commissioning
- Riverside High School HVAC/Lighting Renovations
- Roane General Hospital Commissioning
- Kanawha County Judicial Building Renovations & Commissioning
- New Clendenin Elementary School Commissioning
- Marshall University—Jomie Jazz HVAC Renovations
- Veteran Administration Clarksburg Hospital Mechanical BIM
- Veteran Administration Huntington Hospital Mechanical-Electrical BIM
- WV Capitol Complex Campus Heating System Renovations Buildings #1, #3, #4, #5 and #7 over multiple phases

## EDUCATION

VIT University  
Bachelor of Science  
in Mechanical Engineering

Southern Illinois University Edwardsville  
Master of Science  
in Mechanical Engineering

University of Cumberland  
Working on PhD in Project Management

## AWARDS AND RECOGNITIONS

Certified by ASHRAE in  
HVAC Design Essentials & Applications

Meher is a graduate Electrical Engineer with a Masters Degree in Electrical Engineering and nearly 5 years of experience in Power Distribution & Protection, Lighting design, Lightning protection, Fire Alarm, Communications and Schematics. He also is experienced in plumbing design for educational, commercial and governmental facilities.

He leads solar power applications including WV's first net zero 911 Center involving aggregate net metering where the additional solar power generated at a new 911 Center is credited towards the County's Courthouse. Knowledgeable in High performance building design.



## PROJECT EXPERIENCE

- St. Marys High School
- CEA office
- Blennerhassett Island Dock Study
- Coney Island Hot Dogs Central Kitchen
- Brushfork Armory Renovations
- C.R. Hipp Industrial Warehouse
- Eucalyptus Wellness Company
- Ed Harleys Private Garage
- High Wire Distillery
- Kanawha County Judicial Bldg.
- Jones Trading Upfit office space
- Kimley Horne Charleston Buildout
- HSGS Solar Office Space
- IX Artistry Salon
- JW Aluminum upfit office space
- J McLaughlin Upfit Retail Outlet
- Maple Street Office Building
- North Fork Elementary Retrofit
- Northwood Middle School
- River Oaks Storage
- Raleigh County Schools  
4 Schools Renovations
- Riverside High School Renovations
- Orange Theory Fitness, Acworth
- Orange Theory Fitness, Milton GA
- Pack Rat Storage Bees Ferry road
- Pendleton County Middle/High School Renovations
- Sherwin Williams
- South State Bank Renovations
- Steel City Pizza Cranes
- Stella Nova Cigar Factory
- Trimnal Mayers Law office
- Tyler County Schools
- Tyler County 911 Center
- Tyler County Courthouse Retrofit
- VA Hospital - Clarksburg
- VA Hospital - Huntington
- WV Capitol Complex Renovations Bldg. #1, #3, #4, #5 and #7
- WVDOT - Servia Rest Area
- Airforce Base Clinic
- Canadian Consulate office
- JBL Harman office space
- HP Office Space

## PROFESSIONAL REGISTRATIONS

Engineer in Training (E.I.T)  
Fundamentals of Engineering (F.E)

## EDUCATION

Bachelor of Technology, Electrical and  
Electronics Engineering

UNC Charlotte  
Master of Science  
Electrical & Computer Engineering

Billy provides design, bidding, construction administration and Commissioning support for mechanical, plumbing, fire protection and electrical systems. His experience encompasses a broad range of Projects including, but not limited to Commercial, Government, Healthcare, Educational and Industrial facilities. Billy also has experience designing multiple building HVAC systems intended to meet high performance criteria, including one that will achieve net zero energy consumption. Knowledgeable with ASHRAE codes and Standards.

Experience includes 3D Scanning, high definition reality capture and Scan-to-BIM which is invaluable for renovation projects and to assist in the development of "Built" conditions in 3D space for Revit. Proficient in Revit, HVAC load programs and air side HVAC equipment selection. Experience in steam heating and distribution systems, hydronic piping/pumping, geothermal, commissioning, custom air handling unit design and HVAC equipment selection and specifications.

Billy is an active ASHRAE professional society member, serving in leadership roles and on committee chairs for the WV ASHRAE Chapter. He regularly participates in chapter activities and works to maintain an active continuing education towards today's standards, codes, and technology while working with college students as Student Activities Chair of ASHRAE.



## EDUCATION

West Virginia University  
Bachelor of Science  
in Mechanical Engineering

## PROJECT EXPERIENCE

- St. Marys High School HVAC Renovations, 3D Scanning
- North Fork Elementary HVAC/Roof Renovations, Commissioning & 3D Scanning
- Pendleton County Middle/High School HVAC/Roof Renovations, Commissioning & 3D Scanning
- Historical Tyler County Courthouse Additions/Renovations
- New Tyler County 911 Center, projected Net Zero high performance facility
- WV Capitol Complex Campus Heating System Renovations for Buildings #1, #3, #4, #5 and #7 over multiple phases
- Marshall University, Jomie Jazz Center HVAC Renovations & 3D Scanning
- Riverside High School HVAC Renovations including geothermal closed loop HVAC system designed to reduce HVAC Energy by 50% over previous system
- Kanawha County Judicial Building HVAC Renovations, Commissioning, & 3D scanning
- Veteran Administration Clarksburg Hospital Mechanical-Electrical BIM
- Raleigh County School  
4 Schools Renovations & 3D Scanning

## RECOGNITIONS

WVU Valedictorian Scholarship  
Promise Scholarship  
WVU Honors Program  
Presidential Scholarship  
WV Engineering,  
Science & Tech. Scholarship  
WVU Deans list:  
Fall 2016, Fall 2017, Spring 2018

## AFFILIATIONS

WV ASHRAE  
Committee Member  
Student Activities Chair



# Michael Ventresca

## Foodservice Design Consulting

FCSI | PRINCIPAL-IN-CHARGE



Michael has over 23 years experience in the food service industry. His experience ranges from small scale renovations, managing installations, and the planning of large scale multi-venue facilities. Michael is the owner and principal in charge of all projects at FFC, Inc. He will be involved in the entire process from schematic design through construction administration.

Michael initiates the design process by focusing on the clients needs, vision, and menu prototype. He develops layouts focusing on process flow through the facility with flexibility in equipment selections and how equipment is built-into a facility from an MEP perspective. His experience with detailing drawings, managing large scale installations of equipment, and years of construction administration work allow him to lead his team in developing a set of highly detailed construction and bid documents. Special attention to minimizing the impact of commercial equipment in order to enhance the customer experience is a particular area of focus that Michael employs. This includes how equipment is integrated and utilizing equipment with certain characteristics that lessens its impact to the facility. Michael was also the lead food service designer in the first Reset Certified restaurant in the world.

#### CONTACT

o: 412-276-9090 c: 724-777-1681  
mventresca@ffcinc.biz

#### EDUCATION

Associates in Specialized Technology of  
Computer Aided Drafting and Design, ITT  
Pittsburgh, PA

#### ASSOCIATIONS

Foodservice Consultants Society International

#### INDUSTRY TRADE SHOW ATTENDANCE

National Restaurant Association  
National Food Equipment Manufacturer's Show

#### CONTINUING EDUCATION (Most Recent)

Designing Kitchens of the Future, FCSI Training  
Latest in Refrigeration Technologies  
Operational Impacts of Customer-Facing  
Technologies  
Waves of Change in Food Service  
You Want to Cook Where Ventless Webinar  
How to Succeed in Food Waste Prevention  
Mars AirCurtain Solutions  
Designing Open Kitchens  
Bar Design Fundamentals  
Ventless Dishmachines Webinar  
Induction Cooking and Holding Technology

## Select Experience

**Children's Hospital Omaha**  
*Omaha, Nebraska*

**Shelting Arms Rehab Hospital**  
*Richmond, Virginia*

**Anthony Correctional Center**  
*Neola, West Virginia*

**Virginia Center Behavioral  
Rehab**  
*Burkeville, Virginia*

**Medical Mutual of Ohio**  
*Brooklyn, Ohio*

**Highmark Blue Cafe**  
*Pittsburgh, Pennsylvania*

**All Children's Hospital**  
*St. Petersburg, Florida*

**USCB School of Hospitality Hilton**  
*Head Island, South Carolina*

**Old Mount Vernon School  
Redevelopment - Staging  
Kitchen and Day Care Kitchen**  
*Alexandria, Virginia*

**University of Pittsburgh Alumni  
Hall Coffee Shop & Staging  
Kitchen**  
*Pittsburgh, Pennsylvania*

**Pressley Ridge Academy**  
*Pittsburgh, Pennsylvania*

**Steubenville High School**  
*Steubenville, Ohio*

**Campbell Univ. Student Dining**  
*Buies Creek, North Carolina*

**Elon University Student Dining**  
*Elon, North Carolina*

**Cameron High School**  
*Cameron, West Virginia*

**Montour High School**  
*Westwood, Massachusetts*



## Projects & References



Tab 3



## West Virginia University Medicine Center for Hope & Healing | Morgantown, WV

In response to the growing drug addiction epidemic, the new 30,000 SF residential treatment facility represents a public-private development between Glenmark Holdings, Ascension Recovery Services, and WVU Medicine. Care is provided in a facility that is specifically designed to emphasize residential character. The facility can accommodate 30 standard care residents and an additional 12 individuals in the Detoxification unit. In addition to administrative offices, counselling offices and group therapy rooms, the building offers a wide variety of amenities. These include the lobby, library, meditation room, exercise room, resident laundry, and community rooms. Meals are prepared in a commercial kitchen and served in a 2,200 SF dining room that also doubles as a large meeting room.

The site development provides expansive views of the Mylan Park surroundings and includes covered porches, walking trails and landscaping. The architectural style of the building features forms and materials that reflect the feel of a mountain lodge.

**Owner:** GMH Capital, LLC

**Completed:** Spring 2019

**Cost:** \$9.8 Million

**Size:** 30,000 Square Feet

**Delivery Type:** Design-Build

**Contractor:** March-Westin Company, Inc.



## WVU Hospitals POC 2nd/3rd/4th Floor Renovations | Morgantown, WV

Renovations of 71,932± SF on second, third and fourth floors of the existing 1980s Physician Office Center at West Virginia University Healthcare System. Project was phased for renovations to occur one floor per year to reduce inconvenience for patients and staff. Additional phasing was necessary for each floor.

### Design Goals:

- Eliminate separate waiting and check-in/out function into one centralized waiting room and include separate patient computer check in capabilities.
- Eliminate the separate doctors' suite concept in the original design.
- Develop cross circulation pathways for patient and staff between the original separate suites. Doctors are assigned exam rooms based on needs for each day. The cross-circulation pathways made it easier to maximize usage of all available exam rooms.
- Develop standard size exam room for doctors practicing different disciplines.

### Exam rooms include the following features:

- Standard size and layout with base/wall cabinets
- Introduce larger exam doors to corridors to move equipment.
- Add computer terminals in each exam room for easy patient record access and documentation.
- All engineering systems such as sprinklers, plumbing, mechanical, electrical and data to receive required updates.

**Owner:** WVU Hospitals, Inc.  
1 Medical Center Drive  
Morgantown, WV 26506

**Owner's Representative:** Alan Neptune - 304-598-4125 ext. 73755

**Cost:** \$6.5 Million      **Funding:** State

**Size:** 71,932 Square Feet

**Delivery Type:** Negotiated

**Contractor:** Landau Building Co.



## West Virginia University Medicine Behavioral Medicine Build-Out at POC Level 6 | Morgantown, WV

The Behavioral Medicine Build-Out at POC Level 6 is roughly 30,000 square feet and the program requires 24,000 square feet of space. The scope of the project includes schematic design, design development, construction documents, bidding, and construction administration. Paradigm has worked closely with the client to produce a program and plan that exactly fits the needs of the patient and staff. Since behavioral medicine encompasses a wide variety of needs, it was critical to work together with the owner to understand needs, desires, and specific adjacencies of use in order to create the most efficient plan possible. The project started out as a stand alone building, but after further consideration, was decided to be located in the client's existing POC Building.

Owner: WVU Medicine  
1 Medical Center Drive  
Morgantown, WV 26506

Owner's Representative: Kenneth M. Rockwell- 304-598-4125

Completed: TBD

Cost: \$3.6M Funding: Hospital Funded

Size: 24,000 SF

Contractor: TBD



## Mon Health Medical Center Renovations

Morgantown, WV

Various renovations to Mon Health Medical Center to which include the Cardiothoracic renovation, Echocardiogram Renovation, the North Tower West AHU, Pharmacy laboratory renovation, hospital lab renovation in multiple phases (kept lab operational) and renovation and expansion to the hospital's Hazel Ruby McQuain Family Birth Center which will expand the Labor, Delivery, Recovery and Postpartum (LDRP) concept to all 16 of its licensed obstetric beds, relocate the nursing station to improve the security and safety of the unit and add a C-section delivery room within the Birth Center.

**Owner:** Mon Health Medical Center  
 1200 J. D. Anderson Drive  
 Morgantown, WV 26505

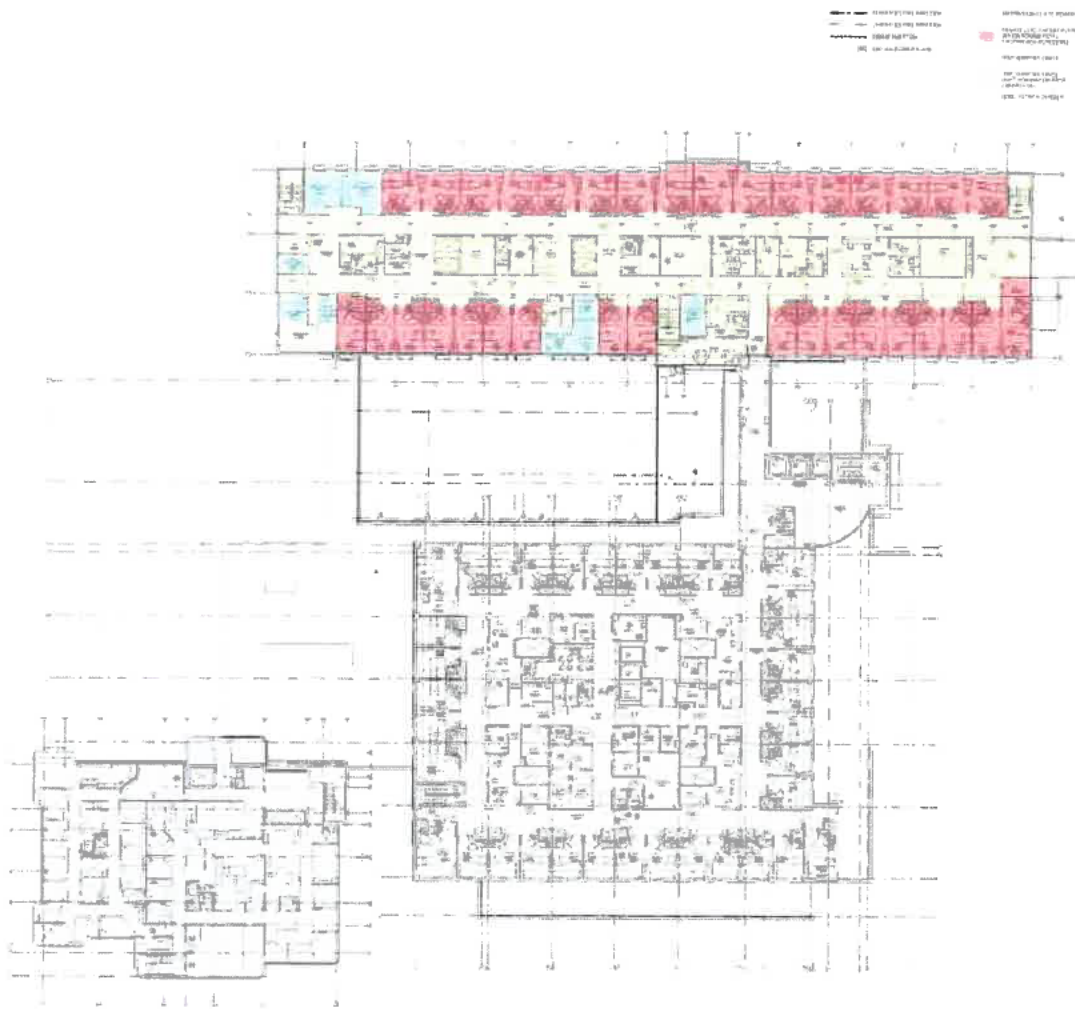
**Owner's Representative:** Joseph Teets - 304-598-1227

**Completed:** Varies from 2011 to current

**Cost:** Ranges from \$375,000 to \$3.5 million; **Funding:** MHMC

**Size:** Ranging from 850 to 13,566 SF

**Delivery Type:** Bid Single Prime Contractor



## Acuity Specialty Hospital of Morgantown | Morgantown, WV

The Acuity Specialty Hospital of Morgantown is a twenty-five bed Long Term Acute Care Hospital. The LTACH is a “hospital within a hospital” located at Mon Health Medical Center’s Morgantown campus. In addition to the twenty-five patient rooms there are also administrative offices, educational training areas, and support spaces. The facility is the first and only in the region to offer long term acute care options.

**Owner:** Acuity Healthcare

**Owner Representative:** Ed Cooper, President/CEO- 512.423.1143  
11001 Sierra Ridge Ct.  
Austin, TX 78739

**Completed:** Fall 2019

**Cost:** \$617,116

**Size:** 20,601 SF

**Delivery Type:** Negotiated

**Contractor:** March-Westin Company, Inc.



## George H. Lanier Memorial Hospital Additions & Renovations | Valley, AL

Various ongoing renovations and additions to the existing hospital since 2003 under an Open-End Contract. Projects include a \$4.3 million Surgery Addition & OB Renovations completed in 2006, \$1.2 million ICU/Cardiopulmonary/Pharmacy Renovations completed in 2007, \$750,000 Replacement CT project completed in 2012, and \$761,000 Emergency Department Renovations also completed in 2012. A new freestanding outpatient clinic was completed in 2012 at a cost of \$2.3 million and 15,772 SF and in 2019, Paradigm provided documentation of existing conditions.

**Owner:** George H. Lanier Memorial Hospital

4800 48th Street

Valley, AL 36854

**Owner's Representative:**

**Completed:** Ongoing

**Cost:** \$8.1 Million      **Funding:** Unknown

**Size:** 32,962 Square Feet

**Delivery Type:** Design-Build-Negotiated

**Contractor:** Various

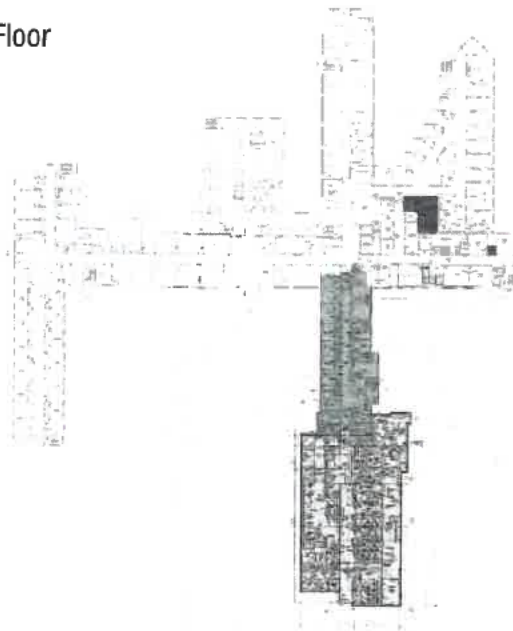
# Lanier Memorial Hospital Additions and Alterations | Alexander, AL



First Floor

**ICU/Cardiopulmonary/Pharmacy/  
Classrooms & Offices Renovation**  
Completed: Winter 2007  
Cost: \$1.2 million  
Size: 12,882 sf

**Surgery Addition & OB Renovations**  
Completed: Spring 2006  
Cost: \$4.3 million  
Size: 25,800 sf



Second Floor

**Emergency Department Renovations**  
Completed: Winter 2012  
Cost: \$761,000  
Size: 1,650sf

**Replacement CT Project**  
Completed: Spring 2012  
Cost: \$750,000  
Size: 2,250 sf



Third Floor

**Lanier Family Practice**  
Completed: 2012  
Cost: \$2.3 million  
Size: 15,722 sf



## George H. Lanier Memorial Hospital Family Practice | Valley, AL

The Lanier Family Practice building is located at 267 Fob James Drive, on a 7-acre parcel of land near the Lanier Memorial Hospital. This single story 15,772 SF general practice and urgent care clinic features 36 exam rooms and 11 practicing physicians to serve the needs of the community.

**Owner:** George H. Lanier Memorial Hospital  
4800 48th Street  
Valley, AL 36854

**Owner's Representative:** Jeffery Cash - 334-756-9180

**Completed:** March 2012

**Cost:** \$2.3 Million      **Funding:** Unknown

**Size:** 15,722 Square Feet

**Delivery Type:** Design-Bid-Build

**Contractor:** Langford Construction Company

## West Virginia Department of Health and Human Resources Projects



Jackie Withrow Hospital

Lakin Hospital Capital Improvements  
Beckley, WV  
Window Replacement & Electrical Upgrade

John Manchin Sr. Health Care Facility  
Fairmont, WV  
Electrical System Upgrade



Hopemont Hospital

Hopemont Hospital  
Terra Alta, WV  
HVAC & Electrical System Upgrade

Welch Community Hospital  
Welch, WV  
HVAC & Electrical Systems Upgrade

Mildred Mitchell-Batemann Hospital  
Huntington, WV  
HVAC Renovations



William R. Sharpe Jr. Hospital

Jackie Withrow Hospital  
Beckley, WV  
Mechanical Systems Upgrade

William R. Sharpe Jr. Hospital  
Weston, WV  
Roof Replacement & HVAC Renovations

Completed: Spring 2012  
Cost: \$3.5 Million



## Russell Medical Center Additions & Alterations | Alexander City, AL

Working under an open end contract, various renovations to Russell Medical Center have been ongoing. These projects involved redesigning all major departments and services including: various doctor's suites, physical therapy, lab, open MRI addition, emergency department, sleep lab, pre-admit testing and satellite lab, women's center, hospice, PET scan, lanier accelerator, cafeteria, pharmacy, and site renovations.

**Owner:** Russell Medical Center

**Owner's Representative:** Mike McCaleb

**Phone:** 256-329-7176

**Completed:** Varies from 1999 to current

**Cost:** Ranges from \$200,000 to \$2.5 million

**Funding:** Private

**Size:** 145,787 Square Feet

**Delivery Type:** Negotiated Single Prime Contractor

**Contractor:** Various



## Russell Medical Center Office Building #4

Alexander City, AL

**Summary:** A new facility for four primary doctors employed by Russell Medical Center. The stand-alone clinic is 12,000 square feet with an urgent care component, x-ray, and lab.

**Site:** While on the Russell Medical Center campus, the site selected was separate from the existing facility establishing a new direction in medical care on campus. Site amenities include surface parking, drop off canopy, handicapped accessible parking, and sidewalk access to building.

**Owner:** Russell Medical Center

**Owner's Representative:** Mike McCaleb  
256-329-7176

**Cost:** \$4 Million      **Funding:** Private Bond/USDA

**Size:** 12,000 Square Feet

**Delivery Type:** Design-Build-Negotiated



**Program/Goals:** Build a new stand-alone medical office building for four new physicians using a new medical delivery approach called 'Patient-Centered Medical Home'. A Patient-Centered Medical Home is a health care setting that facilitates partnerships between individual patients, and their personal physicians, and when appropriate, the patient's family. Care is facilitated by registries, information technology, health information exchange and other means to assure that patients get the indicated care when and where they need. Care that is patient-centered considers patients' culture traditions, their personal preferences and values, their family situations, and their lifestyles. It makes the patient and their loved ones an integral part of the care team who collaborate with health care professional in making clinical decisions. Additionally, an Urgent Care facility was added to address patient health care needs 24 hours / 7 days a week.

**Solution:** The design approach for this one-story building includes an efficient work flow for each physician in separate zones with shared spaces like patient waiting room, check-in/out, nurse stations, medication rooms, x-ray, and lab. Exterior building materials include similar brick veneer; new materials like fiber cement and composite aluminum canopy panel are introduced. The overall building scale, composition, and exterior expression are much more contemporary.

# Russell Medical Center

## Additions and Alterations | Alexander, AL



Physical Therapy



Linear Accelerator



Cath Lab

### Emergency Department Renovations

Completed: Spring 2008

Cost: \$1.5 million

Size: 8,000 sf

### Physical Therapy

Completed: Spring 2008

Cost: \$1.6 million

Size: 10,000 sf

### Sleep Lab

Completed: Winter 2006

Cost: \$115,000

Size: 750 sf

### Women's Center

Completed: Winter 2006

Cost: \$150,000

Size: 1,650 sf

### MRI and Open MRI Addition

Completed: Spring 2005

Cost: \$550,000

Size: 1,650 sf

### Lab Addition and Renovation

Completed: Spring 2005

Cost: \$650,000

Size: 1,850 sf

### Professional Office Building #3

Completed: 2004

Cost: \$4.1 Million

Size: 46,510 sf

### Satellite Lab

Completed: Winter 2003

Cost: \$100,000

Size: 1,000 sf

### Dialysis Suite

Completed: Summer 2003

Cost: \$100,000

Size: 2,250 sf

### Various Doctor's Suites

Completed: Varies

Cost: ranges from \$75,000 to \$400,000

Size: ranges from 1,350 sf to 2,300 sf

# Healthcare Experience



## **West Virginia University Hospitals, Morgantown, WV**

Communication & Health Disorders Renovation  
Health Sciences Center Surgical Simulation Room Renovation  
Physician Office Center, 2nd, 3rd, 4th Floor Renovations  
Physician Office Center Space Planning  
Physician Office Center First Floor ENT MRI Renovation  
Ruby Office Complex - Information Technology Renovations  
Anesthesia Renovation  
Cheat Lake Addiction Rehab Clinic  
School of Pharmacy Lab Renovation  
Center for Hope and Healing Rehabilitation Facility  
Health Sciences Center Physical Therapy-Occupational Therapy Clinic  
Health Sciences Center Third Floor Renovation  
Health Sciences School of Dentistry Urgent Care Renovation  
Health Sciences Center Medical Museum

## **American Red Cross**

West Park Drive Conference Room Fitup, Birmingham, AL  
Blood Donor Center Fitup, Myrtle Beach, SC  
Blood Donor Center Renovation, Madison, WI  
Chicago Blood Services Distribution Center & Chapter Services Renovation, Chicago, IL  
Regional Blood Donor Center, Distribution & Bio-Med Tenant Fitup, San Diego, CA  
Relocation of Testing Support, Charlotte, NC  
Biomedical Lab Interior Renovations, Rio Pedras Facility, San Juan, PR  
Relocation of Chapter Services & Biomed Blood Services, Springfield, MA  
Interior Office Renovations, St. Vardell Lane Facility, Charlotte, NC  
Blood Donor Center Renovation, Virginia Beach, VA  
Alt Operations Site (Disaster Services), Richmond, VA  
IRL Renovation, Houston, TX

## **Miscellaneous Medical Experience**

Psychiatric Counseling Renovations, Wedgewood Family Practice, Morgantown, WV  
Medical Office Park (Design), Monongalia General Hospital, Morgantown, WV  
McDaniel-Stire Chiropractic Office (Design), Morgantown, WV  
New Facility, Doctors' Suites/Patient Treatment/Physical Therapy, Summersville Pediatrics, Summersville, WV  
The Circulatory Centers, Marquis Center, Morgantown, WV  
Parking Deck, Carraway Hospital, Birmingham, AL\*  
Cancer Center, Carraway Methodist Medical Center, Birmingham, AL\*  
Glenaire Retirement Community, Cary, NC\*  
Medical Office Renovations, Brookshire Park, Beckley, WV\*  
Ashe Nursing Home, Jefferson, NC\*  
New Transitional Facility, William R. Sharpe Jr. Hospital, Weston, WV\*  
Wilkes Senior Village, North Wilkesboro, NC\*  
Oncology Expansion & Renovations, Catawba Valley Medical Center, Hickory, NC\*  
Women's Center Addition, Shelby Baptist Hospital, Alabaster, AL\*  
WV Veterans Nursing Facility, Clarksburg, WV\*  
New River Family Health Birth Center, Scarbro, WV\*  
Laurel Crest Retirement Community, Columbia, SC\*  
Continuing Care Retirement Community, Twin Lakes @ Montgomery, Cincinnati, OH\*  
Jackson County Nursing Home Renovation, Scottsboro, AL\*  
Retirement Community, Suffield Meadows Continuing Care, Warrenton, VA\*  
Norwood Clinic 12th Floor, Lloyd Noland Long-Term Care Unit, Birmingham, AL\*

\*Key involvement in project with firm(s) other than Paradigm Architecture, Inc.

# Healthcare Experience



## **Monongalia General Hospital, Morgantown, WV**

- Echocardiogram Renovations
- Radiology Renovation
- Microlab Renovation
- Cardiothoracic Suite Renovation
- Birthing Center
- North Tower West AHU
- Complete Hospital Lab Renovation
- Cath Lab Fit-Out
- Magnetic Resonance Imaging Addition
- Radiology Check-In
- COVID Drive-Thru
- Information Technology Department Study
- Sim Lab
- Mon General Cafe

## **UAB Medicine - The Cancer Center at RMC\*, Alexander City, AL**

- Linear Accelerator Addition
- Modified Lab Renovations
- Exam Rooms Renovation

## **Russell Medical Center, Alexander City, AL**

- Additions & Alterations
- Cafeteria Renovations
- Cath Lab Renovation
- Dadeville Clinic - New Facility\*
- Dialysis Suite
- Doctors' Parking
- Emergency Room Canopy
- Emergency Department Renovation
- Eye Surgery
- Hospice House
- Information Technology Suite
- Lab Addition & Renovation
- MRI & Open MRI Addition
- MRI/Cath Lab\*
- Master Plan
- Multiple Doctors' Offices (13+)
- Nurse Station Renovations
- Orthopedic Surgery
- Parking Expansion
- PET Scanner
- Pharmacy Renovations
- Physical Therapy
- Physicians' Office Building #3
- Physicians' Office Building #4 Master Plan
- Physicians' Office Building #4
- Pre-Admit Testing
- Satellite Lab
- Sleep Lab
- Surgery Soiled Workroom Renovation
- Women's Center
- Wound Care Center
- X-Ray Renovation

\*Key involvement in project with firm(s) other than Paradigm Architecture, Inc.

# Healthcare Experience



**George H. Lanier Memorial Hospital**, Valley, AL  
Emergency Department & Endoscopy Suite  
Cardiopulmonary/Pharmacy Renovations  
New Facility, Lanier Family Practice  
ICU Renovations  
Surgery & OB Addition



**West Virginia Department of Health and Human Services**  
Electrical System Upgrade, John Manchin Sr. Health Care Facility  
Mechanical & Electrical Systems Upgrade, Hopemont Hospital  
HVAC Renovations, William R. Sharpe Jr. Hospital, Weston  
Capitol Improvements, Lakin Hospital, West Columbia  
HVAC Renovations, Mildred Mitchell-Bateman Hospital, Huntington  
Mechanical Systems Upgrade, Jackie Withrow Hospital, Beckley  
HVAC & Electrical Systems Upgrade, Welch Community Hospital



\*Key involvement in project with firm(s) other than Paradigm Architecture, Inc.

## References

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## Approach



Tab 4

## 2.1 Goal/Objective 1 - Design of Facility

### Design Approach

**Paradigm Architecture** believes that relationship is the heart of design. Success is dependent on the relationship between the architect and the client. We believe that in order to provide a good solution, the client and architect must collaborate from the initial phase of the design through its completion. We want to know your history, where you have been, where you are going, so the architecture that we create will speak to your rich history and help facilitate your future mission.



Ultimately, our goal is to provide a professional relationship that exemplifies integrity in order to provide our client with a final product that is creative, functional, and responsive to their needs.

#### Client/Program:

Architectural design originates with the client, their unique program requirements, and their particular goals for the project. This purpose is the reason the project exists and it is the understanding of that intent that provides direction for the solution. Most projects are born from functional needs. Others are motivated by vision. On the most elementary level, projects must function properly. Ideally, buildings reflect in built form the goals and ideals of the client by the very image they project.

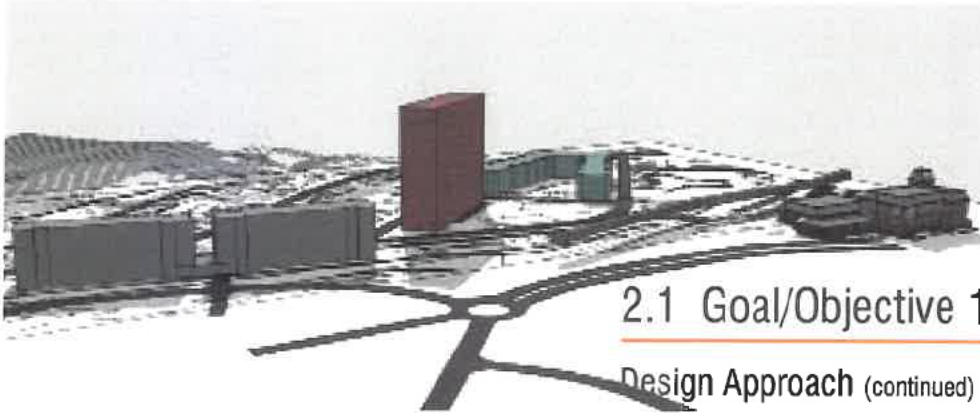
#### Site:

The site is one of the greatest influences on design. Property proportions, topography, vegetation, views, natural light, and access shape the solution. Even the surrounding architecture can influence the design solution. Often it is the limitations of the site that becomes the project's greatest assets.

#### Influence:

Training in proportion, order, historic precedent, materials, and pattern influence design solutions. It is the personal incorporation of these design elements that determines a firm's unique architectural character. Our work is most often defined by an emphasis on strong forms, attention to material detailing and response to context. Our solutions are unique to the project requirements rather than a rigid philosophy. We strive to provide designs that reflect our clients rather than ourselves.



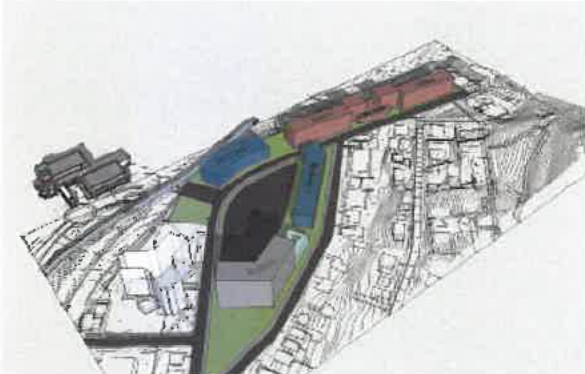


## 2.1 Goal/Objective 1 - Design of Facility

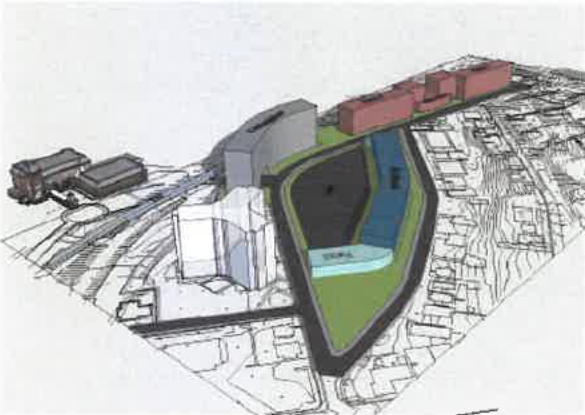
### Design Approach (continued)

#### Design Process

To begin the process of design, Paradigm will work with you to develop a site massing plan. This will be done in AutoCAD Plans and three dimensional documentation. We utilize a program called Sketchup to create 3D images and animations. These help the client to fully comprehend the mass of the design and how it relates to the sites characteristics such as topography and surrounding structures.



Once the site massing is established, we will further develop the details of the plans and will also start documenting the architectural language of the exterior. Again, we will utilize Sketchup to start exploring materiality and form in 3D because it is quick and allows development of different variations of the design in a timely manner. Many examples of this technique are included in this narrative.



Upon your approval of design, we will produce construction documents using Revit. Revit is a Building Information Modeling software which continues the three dimensional documentation in a highly technical manner. Our consultants use the same program which aides in the document accuracy. The finished result incorporates, architectural, structural, mechanical, electrical, plumbing and civil into a coordinated model. This design process has been very successful for us in recent years. In the beginning, we are able to use quick and efficient design tools that enable you to not only fully comprehend the architecture, but also allows us to interact with you much better and understand your wants and needs. By doing this, we can then proceed with construction documents with a clear picture of the design solution.





Canaan Valley Resort Lodge



## 2.2 Goal/Objective 2 - Delivery of AIA Documents

**Paradigm Architecture's** practice for all projects begins and ends with standard AIA documents which are used throughout the project. We update the AIA software yearly which keeps us current in the industry.

## 2.3 Goal/Objective 3 - Construction Bid Assistance

Once Bidding Documents have been approved by the Owner, Paradigm Architecture will assist the Owner in the Procurement Phase by prequalifying contractors, holding a Pre-Bid Conference, responding to questions, and issuing Addenda. After bids have been received, Paradigm Architecture will review the lowest responsible bidder submission to verify that all requirements have been met. At that point a Construction Contract will be issued to the Contractor for signature. Upon receipt of a Notice to Proceed from the Owner, we will begin our Construction Contract Administration Services.

## 2.4 Goal/Objective 4 - Construction & Site Prep Oversight

A Construction Contract Administrator will be assigned to each project. This individual will have extensive experience with the Client's established Design Guidelines and Standards and Construction Contract procedures. Unique to our firm, this person will have been actively involved with the project during design and will have firsthand knowledge of the project's design and construction documents. The Construction Administrator's role will include managing and reviewing shop drawings, submittals, and RFIs for the entire design team. Additional roles include attendance at job site meetings, documenting construction progress and actively keeping the Owner informed through direct correspondence. The Contract Administrator will endeavor to have a good working relationship with the successful contractor bidding on the project to ensure that the project is a success for all parties involved.

All of our engineers and consultants perform construction administration including shop drawing review and site visits to observe mechanical/electrical systems compliance with drawings and specifications. We believe the involvement of the design engineer during this phase allows for verification that the designed systems are installed as specified, and we have a consistent track record of providing quick response times to immediate issues that arise. In addition, we take advantage of electronic shop drawing reviews, videoconferencing, and web-based collaboration to provide expedited response for those consultants who are not immediate to the project site. All of our clients know that we are "just a phone call away" and readily available to address any need that they may have.



CAMC - Women's & Children's Hospital



Elkins Middle School



Mountain Valley Elementary School

## 2.5 Goal/Objective 5 - Final Commissioning of Completed Facility

Commissioning is the missing link between design and implementation. Prior to joining ZDS, Todd Zachwieja established commissioning services for one of the nation's largest energy service companies. He is also a LEED Accredited Professional. Many utility companies and building owners now require commissioning for new or renovated facilities in order to maximize the use of their investments in their facilities and to obtain LEED certification.

ZDS offers commissioning services for their clients, including meeting LEED enhanced commissioning requirements. These services include strategic planning and operations assistance for renovation and new construction projects. Commissioning services consist of construction document review, equipment performance testing, documentation of design criteria, value engineering, operational fine tuning, coordination of professional operations training programs and site-specific engineering consultation. Our project team has the unique experience of in-depth design knowledge and hands-on operations knowledge that fills in the gap between traditional design services and the building owner's operational needs.

The commissioning process offers the following benefits:

- Improved comfort, serviceability and owner understanding of systems and design intent.

- Added technical support for the owner and being proactive in preventing new problems.

- Reduced maintenance and decreased expenses related to operating deficiencies.

- Early identification and resolution of system discrepancies while designers and contractors are still under contract and on the job.

- Verification of system performance while meeting financial restraints.



Ascent - Site | Civil



Tab 5



## **FIRM IDENTIFICATION AND BACKGROUND**

### **FIRM PROFILE**

Founded in January 2018, Ascent Consulting and Engineering is a young company with big experience. Ascent employs a diverse staff, bringing expertise in nearly every facet of Civil and Environmental Engineering. We are committed to providing quality services, building long lasting relationships, and supporting/encouraging our employees.

### **LAND DEVELOPMENT**

Ascent knows development. Our knowledge in Site Development ranges from one thousand-acre mixed use developments and business parks to small commercial site plans and residential housing communities. We pride ourselves in understanding the goals of the development and our designs are practical, complete, well-coordinated, and on budget.

### **UTILITIES**

Ascent has a wide range of experience in utility designs and upgrades. From service line extensions to major system expansions and replacement projects, ACE has the technical knowledge and personnel to meet your needs.

### **STORMWATER MANAGEMENT & DRAINAGE**

Every project is different. Ascent evaluates drainage patterns and works with clientele to determine which best management practice are best suited for each project. From traditional basin design to underground systems and bio-retention facilities, Ascent has the knowledge to work with any site, providing a responsible design that compliments the landscape and fits the budget.

### **ENVIRONMENTAL SERVICES**

With over twelve years of experience, our environmental capabilities cover a wide range of services including Phase I and Phase II Environmental Site Assessments, aquatic resource surveys/permitting, endangered species consultations, asbestos inspections, operating permit compliance, and general environmental consulting.

### **INSPECTION SERVICE**

We have built a senior team of construction inspectors that have knowledge in utilities, earthwork, slip repairs, retaining walls, pipeline, etc. No matter what your project is we will always strive to give you the best service, with the highest quality at all times.

## **ASCENT CONSULTING AND ENGINEERING**

2361 Davisson Run Rd, Suite 103 Clarksburg, WV 26301

304.933.3463

**Figure 1- Ascent Team Management Methodology**

The primary objectives of the management framework / processes are:

- **Time, Cost and Scope** – Cost, schedule, and quality control are key components of the Ascent Team’s management approach. This module is primarily concerned with defining and controlling the project; tracking, modifying, and controlling the steps for realizing the anticipated project benefits; and providing a structure to manage change. We will use cost, schedule, and quality performance measures agreed to during the kickoff meeting to monitor progress.



This module is primarily concerned with defining and controlling the project; tracking, modifying, and controlling the steps for realizing the anticipated project benefits; and providing a structure to manage change. We will use cost, schedule, and quality performance measures agreed to during the kickoff meeting to monitor progress.

- **Communications and Reporting:** Ascent understands communication is a key to success for this effort, and good communication will deliver key messages to stakeholders and other team members. This includes status of activities, schedule, and informational awareness on the project and/or task, as well as reporting on a weekly, monthly, or contract basis.

- **Financials:** Ascent utilizes resource planning, cost estimating based on effort, cost budgeting and cost control

processes to ensure that the project is completed within the approved budget. Projects are tracked financially and billing activities are monitored and controlled along with the collection processes.

- **Quality Management:** All studies for the project will be performed to the industry standard to adhere to proven guidelines. The reports that are generated are peer reviewed internally as a quality control measure.
- **Resource Management:** Our resource management approach ensures that pre-planning, scheduling, and the allocation of Ascent’s resources will maximize efficiency for the Brownfield Environmental Assessment and Planning project.
- **Change Management:** Ascent’s change management approach is to first stop and pause to understand what is driving the change. Once this is understood, it is communicated directly to the client so that a clear path forward can be developed.
- **Knowledge Management:** Our knowledge management process includes collecting, organizing, clarifying, and disseminating information and knowledge throughout an organization and our customers. Ascent has developed and maintains an in-house Sharepoint knowledge management site. This knowledge management site is used to house project specific documentation including workflows for routing and approvals.
- **Risk / Issue Management:** Our risk management approach is to reduce the variation in expected project results, including cost, schedule, and performance. Risk management begins with the development of our Risk Management Plan that will continue throughout the life of the project with active participation by all stakeholders. Our PM will manage the Risk Plan, which will contain a description of the risk, the risk category, the risk impact assessment, the risk ranking and urgency, the originator, and the name of the assigned manager/staff member. All problems and issues associated with project performance or related issues will be identified, qualified, and documented in the form of action items, assigned to a responsible individual, entered our Quality Control database, and tracked to resolution. We will employ our rapid issue escalation process via daily stand-up meetings and weekly status reports from our key personnel staff. The Project Manager will ensure that any adverse trends are analyzed for root causes and that appropriate corrective actions are taken.



## PROJECT HISTORY

- **Project Name:** WVU Recreational Center, Monongalia County, West Virginia  
**Project Description:** Zachary Assaro was tasked with the construction management and civil design of the WVU Recreational Center Building Extension. This project included (1) design of the new parking lot addition to help better create traffic movement. (2) stormwater drainage. (3) relocation of utilities. (4) pedestrian movement including accessibility per ADA standards. Mr. Assaro worked with the Contractor and other teams throughout the duration of this project helping to ensure it was completed on time and on budget.
- **Project Name:** WVU Evansdale, Monongalia County, West Virginia  
**Project Description:** The Evansdale Crossings project located adjacent to the WVU recreational center within the Evansdale Campus was a new facility project that included (1) the coordination between the contractor and the WVU facilities team. (2) the design of new roadways and parking lots. (3) design of stormwater drainage including bio-retention facilities. (4) design of proposed utilities and the relocation of existing utilities. Mr. Assaro led the civil design and construction of the Evansdale Crossings project.
- **Project Name:** WVU Creative Arts Center (CAC), Monongalia County, West Virginia  
**Project Description:** Mr. Assaro was the Project Manager for the WVU Creative Arts Center civil upgrades. He was responsible for (1) the design of new traffic movement to help create better traffic flow. (2) parking lot design including handicap accessible spaces. (3) stormwater drainage. (4) relocation of utilities. (5) pedestrian movement including accessibility per ADA standards.
- **Project Name:** Athletic Fields, Taylor County, West Virginia  
**Project Description:** Ascent completed master facilities plan for Taylor County fairgrounds that includes the addition of baseball fields, multi-purpose fields, indoor recreation space, amphitheater, etc. In general, Ascent has been providing general consulting services for the Fair Board, walking them through the processes in order for them to make decisions on how to proceed with their project. Ascent has provided plans, schedules, cost estimates as well as many other services for this future land development.



## Allegheny Design - Structural



Tab 6



# Alleghey Design Services

102 Leeway Street, Morgantown, WV 26505  
(304) 599-0771 | [www.allegheydesign.com](http://www.allegheydesign.com)



- Dorms, Student Housing & Apartments
- Athletic & Recreation
- Religious & Non-Profit
- Health Care
- Higher Education
- Historic Restoration
- Industrial
- K-12
- Government
- Office Buildings
- Parking Garages
- Retail & Commercial
- Metal Building Systems
- Hotels & Resorts
- Pedestrian Bridges



**Innovative Designs, Practical Solutions**

**In Service for 20 Years: 2002-2022**

## STRUCTURAL ENGINEERS

**"Providing reliable,  
responsible services  
of building system  
design and analysis"**

**LOCATION:**  
102 Leeway Street  
Morgantown, WV 26505  
P - 304.599.0771  
F - 304.212.2393

**SITE:**  
[allegheydesign.com](http://allegheydesign.com)

Alleghey Design Services (ADS) is a consulting engineering firm specializing in structural building design and building analysis. Dedicated to serving West Virginia and the surrounding region, ADS recognizes the need for reliable and full-service engineering support. ADS provides all phases necessary for the successful completion of a building project including schematic design studies, design development, construction documents and specifications, and construction administration.

ADS' experience in Design and Project Management includes:

- Commercial Facilities
- Industrial Facilities
- Institutional Facilities
- Educational Facilities

ADS was established by David Simpson, PE, MBA, in 2002 as a result of a need in North Central West Virginia for reliable structural engineering services. ADS utilizes a combination of office technology and a motivated staff capable of delivering projects of all sizes and complexities. Our clients include architects, contractors, developers, attorneys and insurance companies.

ADS currently utilizes the latest engineering design and BIM software for the development of project work.



# Allegheny Design Services

Consulting Engineers

## Medical Buildings

### Hospitals



The WVUH Residential Treatment Center at Mylan Park, Morgantown, WV

New, 2-story, 24,800 SF drug rehab facility located in Morgantown, WV. The facility will include admin offices, large group rooms, commercial kitchen, dining area, laundry area, 30-bed dormitory on second floor with central shower rooms and shared toilets in double resident rooms.

A detached detox building will be located on the same site with an office, group room, residential kitchen, dining area, laundry room, and 12-bed dormitory with central shower rooms and shared toilets in double resident rooms.



## Welcome to

### Allegheny Design Services

Specialties—  
Structural Engineering  
Building Information Modeling  
Forensic Investigation  
Structural Assessments



#### Value Added Services

Our company strives to provide efficient, quality engineering services that serve both the needs of the client as well as the needs of the design team. We achieve this level of service by leveraging our extensive project experience with a workflow built upon the cohesive integration of 3D Revit modeling and the latest analysis software. This integration allows us to produce the highest quality designs in the timeframe needed for successful design-build projects. Our staff is comprised of multiple licensed Professional Engineers.



## Assisted Living Facilities

### Nursing Homes



Assisted Living @ White Oaks, Bridgeport, WV

The facility is approximately 12,269 SF with 20 private bedrooms and bathrooms. Additional spaces include a lounge area, hair salon, commercial grade kitchen, and dining/activity areas with an attached covered patio.



Seneca Village Senior Living Morgantown, WV

A Senior Living Facility with 50,451 Square Foot Floor Area, Lower level Parking, Structural Steel Frame Caisson Foundations





**PROJECT PROFILE**

**“The WVUH Residential Treatment Center at Mylan Park a partnership between WVU Medicine and Recovery Properties LLC”  
Morgantown, WV**



**PROJECT ARCHITECT:**  
**STRUCTURAL ENGINEER:**  
**CONTRACTOR:**

Paradigm Architecture, Inc., Morgantown, WV  
Allegheny Design Services, LLC, Morgantown, WV  
March-Westin Company, Inc., Morgantown, WV

**PROJECT SCOPE:**

- New, 2-story, 24,800 SF drug rehab facility located in Morgantown, WV.
- The facility will include admin offices, large group rooms, commercial kitchen, dining area, laundry area, 30-bed dormitory on second floor with central shower rooms and shared toilets in double resident rooms.
- A detached detox building will be located on the same site with an office, group room, residential kitchen, dining area, laundry room, and 12-bed dormitory with central shower rooms and shared toilets in double resident rooms.



**PROJECT VALUE:**  
**PROJECT COMPLETION:**

\$ 9.8 Million  
2019



**Allegheny**  
Design Services  
*Consulting Engineers*

## **PROJECT PROFILE**

### **Delaware Valley Veteran's Home Philadelphia, PA**



**STRUCTURAL ENGINEER:** David Simpson of Allegheny Design Services, Morgantown, WV  
in former employ of R. M. Gensert Associates, Pittsburgh, PA

**PROJECT FEATURES:**

- New State-of-the-Art 170 Bed Care Facility
- Personal and Alzheimer's Care
- Interior Skylit 'Main Street' Corridor
- Designed and bid in eight months

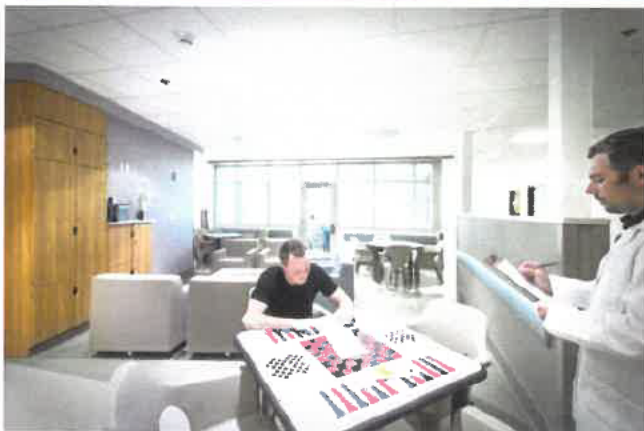
**PROJECT VALUE:** \$19 Million

**PROJECT COMPLETION:** 2002



## PROJECT PROFILE

### William Sharpe Hospital Addition Weston, WV



**STRUCTURAL ENGINEER:**  
**CONTRACTOR:**

Allegheny Design Services, LLC, Morgantown, WV  
Landau-Marks Construction, Wexford, PA

**PROJECT SCOPE:**

- 50 Bed Addition to Existing Facility
- 30,000 Square Foot Addition

**PROJECT VALUE:**

\$12 Million

**ESTIMATED PROJECT COMPLETION:**

2014





**Allegheny**  
Design Services  
*Consulting Engineers*

## **PROJECT PROFILE**

### **Davis Memorial Hospital Addition Elkins, WV**



**STRUCTURAL ENGINEER:**  
**CONTRACTOR:**

Allegheny Design Services, LLC, Morgantown, WV  
Wil-Ken, Inc., Elkins, WV

**PROJECT SCOPE:**

- 81,000 Sq. Ft. Addition
- Physicians Offices, Outpatient Services Center
- Morgue, New Entrance

**PROJECT VALUE:**                      \$ 11.5 Million

**PROJECT COMPLETION:**            2014



ZDS Design - MEP | FP | Commissioning



Tab 7

# Company Overview



## 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.

# Company Overview



## CLIENTS & EXPERIENCE

- **Bluefield Regional Medical Center**
- **Cabell Huntington Hospital**
- **Charleston Area Medical Center (CAMC)**
  - General Division
  - Memorial Division
  - Teays Valley Hospital
  - Women & Children's Hospital
- **Concord University**
  - Campus High-Voltage Upgrades
  - Nick J. Rahall Technology Center
- **Harvard University**
  - Arnold Arboretum
  - Weld Hill Research & Administration Building
- **Marshall University**
  - Smith Hall and Harris Hall
- **Montgomery General Hospital**
- **Ohio University - Athens**
  - Chiller Water Master Plan
  - Campus-Wide Performance Contracting
- **Ohio University - Chillicothe**
  - Stevenson Library/Bennett Hall ME
  - Renovations/Performance Contracting

- **Roane General Hospital**
- **Saint Joseph's Hospital - Parkersburg**
- **Saint Mary's Medical Center - Huntington**
- **Stonerise Healthcare - Charleston**
- **Summersville Regional Medical Center**
- **University of California Davis Veterinary Medicine**
- **United Hospital Center**
- **Veterans Affairs (VA) Hospital Administration**
  - Clarksburg, WV
  - Huntington, WV
- **Washington & Lee University**
- **Webster County Memorial Hospital**
- **WV Department of Health & Human Resources**
  - Hopemont State Hospital
  - Jackie Withrow Hospital
  - John Manchin, Sr. Health Care Center
  - Lakin Health Care Center Retrofit
  - Mildred Mitchell-Bateman Hospital
  - Welch Community Hospital Retrofit
  - William R. Sharpe, Jr. Hospital Addition
  - William R. Sharpe, Jr. Hospital Retrofit
- **WVU NASA Emergency Generator Upgrades**
- **West Virginia University**

**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.

# Company Overview

## INDOOR AIR QUALITY SERVICES

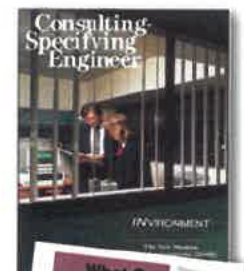
**ZDS** provides consulting engineering services for the indoor air quality (IAQ) environment. These services include: strategic planning for renovation and new construction projects; technical research and writing; specialized applications software development; corporate and professional training programs; 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.

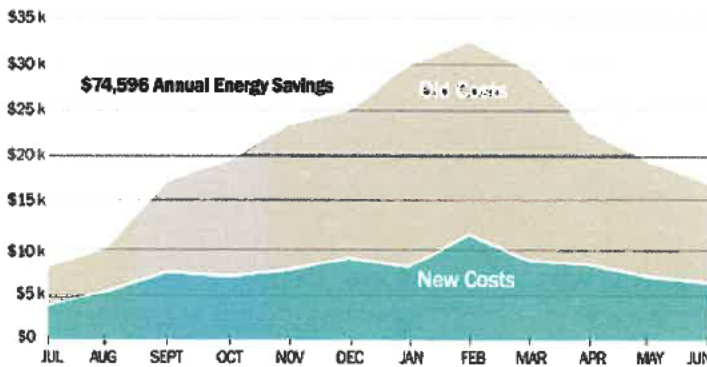


# Company Overview

At **ZDS**, our engineering staff integrates energy efficiency into each project design to provide you, our client, with the added value that you expect and deserve. The **ZDS** team approach represents a tremendous amount of experience in designing energy efficient facilities. **ZDS** offers a comprehensive range of energy management services including:

- Providing detailed analysis of facilities
- Recommending sound and proven energy saving solutions
- Implementing energy management improvements
- Determining, quantifying and assisting in securing available Utility and Government grants

The **ZDS** team members take pride in the quality of their projects and have been responsible for designing and implementing numerous energy management programs. These programs are providing significant energy improvements and include optimizing, central utility plant equipment, control systems, air handling systems, lighting systems, and other energy consuming equipment.



**ABOVE:** ZDS designed and implemented the region’s first and largest commercial geothermal system saving Webster County High School over **over 50% reduction** in energy and operating savings for the HVAC systems.

## Recent projects include:

- Design of High Performance Buildings
- Interconnecting boilers and chiller plant systems
- Designing Geothermal HVAC systems
- Optimizing HVAC equipment and operating sequences, including upgrades to variable speed operation
- Installing Direct Digital Control (DDC) Energy Management Systems
- Replacing inefficient lighting equipment with energy efficient systems
- Modifying air handling equipment from 100% outside air to return air operation
- Implementing heat recovery units into HVAC equipment
- Improving laundry, kitchen and other process application efficiencies



In addition to the energy management projects outlined above, the **ZDS** team members have extensive experience in identifying and implementing energy efficient operating and maintenance measures. These are typically low cost or no cost measures that include:

- Inspecting, calibrating temperature controls and adjusting outdoor air dampers
- Commissioning economizer cycle operation
- Testing steam traps and pressure relief equipment operation
- Enabling heating and cooling equipment only when required

# Company Overview

The **ZDS** team is trained and experienced in advising you of program options to incorporate energy efficiency and operational savings features into the design of your new construction and renovation projects. At **ZDS**, we view our role as helping you to define your own energy efficiency needs and goals through identifying energy savings options and providing supporting financial information. We then help you fit your energy efficiency needs and goals into a workable budget and schedule, and then design a program to fill those needs.

Sustainable “Green Building” design, including LEED certification, recognizes the importance of commissioning. The design and construction industry have had start-up problems when a facility is occupied and construction deficiencies were not discovered until the contractor’s traditional one-year warranty period expired. The mechanical and electrical systems have continued to become more complex with sophisticated control systems and equipment, and a mountainous amount of changing technology. If not properly addressed, building owners could face numerous operational problems from “Sick Building Syndrome,” excessive energy costs, and uncomfortable indoor environments.

Commissioning is the missing link between design and implementation. Prior to joining **ZDS**, Todd Zachwieja established commissioning services for one of the nation’s largest energy service companies. He is also a LEED Accredited Professional. Many utility companies and building owners now require commissioning for new or renovated facilities in order to maximize the use of their investments in their facilities and to obtain LEED certification.

**ZDS** offers commissioning services for their clients, including meeting LEED enhanced commissioning requirements. These services include strategic planning and operations assistance for renovation and new construction projects. Commissioning services consist of construction document review, equipment performance testing, documentation of design criteria, value engineering, operational fine tuning, coordination of professional operations training programs and site-specific engineering consultation. Our project team has the unique experience of in-depth design knowledge and hands-on operations knowledge that fills in the gap between traditional design services and the building owner’s operational needs.

The commissioning process offers the following benefits:

- Improved comfort, serviceability and owner understanding of systems and design intent
- Added technical support for the owner and being proactive in preventing new problems
- Reduced maintenance and decreased expenses related to operating deficiencies
- Early identification and resolution of system discrepancies while designers and contractors are still under contract and on the job
- Verification of system performance while meeting financial restraints

The National Conference on Building Commissioning invited Todd Zachwieja to speak and he jointly presented a paper with the Director of Maintenance of Charleston Area Medical Center’s Memorial Division. The Tampa, Florida Conference involved experts nationwide.

Since 1958, the **ZDS** design staff has provided millions of dollars of engineering design services on a variety of project types. The **ZDS** design team will provide comprehensive services utilizing experienced staff through planning, cost estimating, engineering, coordination of bidding, regular site visitation during construction and specifications for equipment.



You, our client, will greatly benefit from a single point of responsibility for every need your project may have.

ZDS's staff prior to joining ZDS, while employed by others, as well as after joining ZDS have worked on numerous Healthcare Facilities and projects which include the following:



### **Charleston Area Medical Center, Charleston, WV**

#### **Memorial Division, 3200 MacCorkle Avenue**

- Cath Lab III Renovations
- 750 kW Emergency Generator & Underground Fuel System
- Two-Four West Nursing Wing
- Main Electrical Service Upgrade
- Emergency Room Renovations
- 600 Ton Central Chiller Plant and Variable Water Pumping
- 700 Ton Chiller Replacement and Variable Water Pumping
- Surgical Intensive Care Retrofit
- Two/Three East Patient Room Renovations
- Four-North HVAC Renovations
- Nuclear Medicine Renovations
- Laboratory Fume Ventilation Problem

#### **General Division, Washington & Broad Street**

- Special Care Facility Contract Administration
- Allied Health, Physical Therapy & Hydrotherapy
- Three-Six Floor Patient Room South
- Emergency Generator Retrofit Design
- Heliport and pilot's quarters
- Wound Center

#### **Women and Children's Hospital, 800 Pennsylvania Avenue**



- Pediatric Intensive Care Unit
- Newborn Intensive Care Unit
- Central Electric Metering Design
- CT Scan Addition
- LDRP/Gynecology
- Surgery Addition
- Operating and Recovery Room HVAC System

#### **Teays Valley, Hospital, 1400 Hospital Drive**

- ADA Patient Room Renovations

#### **Cabell Huntington Hospital, Huntington, WV**

- Numerous mechanical and electrical renovations projects including master planning for renovations to chiller plant



#### **Charleston Surgical Center, Charleston, WV**

- Design for numerous mechanical and electrical renovations projects

#### **Hopemont State Hospital, Terra Alta, WV**

- Master Plan for Engineering upgrades
- Campus Addressable Fire Alarm System Design
- Steam System Upgrades
- Facility Lighting Upgrades



#### **Jackie Withrow Hospital, Beckley, WV**

- Master Plan for Engineering upgrades
- Central Plant HVAC/Steam System Upgrades
- New natural gas service to campus including emergency systems

#### **John Manchin, Sr. Health Care Center, Fairmont, WV**

- Master Plan for Engineering upgrades
- Facility Lighting Upgrades



**Kings Daughters Medical Center, Ashland, KY**

Cardiac Care Center  
Medical Office Building

**Lakin State Hospital, West Columbia, WV**

Master Plan for Engineering upgrades  
Facility Lighting and Window Upgrades

**Lewistown Outpatient Surgery Facility, Lewistown, PA**

New Outpatient Surgery Facility

**Mildred Mitchell-Bateman Hospital, Huntington, WV**

Master Plan for Engineering upgrades  
Facility Lighting Upgrades  
Structural evaluation of multiple buildings  
Emergency Generator upgrades, extensions



**Montgomery General Hospital, Montgomery, WV**

Isolation Rooms Ventilation Design  
Domestic Hot Water System Design



**Roane General Hospital, Spencer, WV**

Ambulatory Care Addition, Renovations Commissioning

**St. Joseph hospital, Parkersburg, WV**

Endoscopy Suite Renovations



**Saint Mary's Medical Center, Huntington, WV**

Cancer Center Renovations  
Isolation Room Renovations

**Stonerise Healthcare, Charleston, WV**

Master Plan for Engineering upgrades and addition  
to Eastbrook Nursing Home



**Summersville Regional Medical Center, Summersville, WV**

Numerous Mechanical and Electrical Renovations.

**Surgi-Care Center, Huntington, WV**

Retrofit existing commercial building into Outpatient Care facility



**Thomas Memorial Hospital, South Charleston, WV**

Design for numerous mechanical and electrical renovations projects

**United Hospital Center, Clarksburg, WV**

Emergency Room Addition M/E Design  
Emergency Generator & Fire Alarm Design  
Boiler Plant Renovations Design  
Comprehensive Energy Conservation Program Development  
Complete facility Building Automation System and HVAC Renovations  
Skilled Nursing Unit  
Med-Brook Office Building  
Wound Center  
Walkway Entry Renovations





**VA Medical Center, Huntington, WV**

Underground Steam Piping System Replacement entire campus  
Domestic Water Piping Upgrades  
CT Scan  
New Mental Health Transitional Living Facility renovation and Additions  
Central Heating Plant Renovations



**VA Medical Center, Clarksburg, WV**

Medical Office Building Renovation

**Veterans Administration, Brooklyn, NY**

Cypress Hills National Cemetery Record Documentation

**Webster Memorial Hospital, Webster Spring, WV**

Numerous Mechanical and Electrical Design renovations design and master planning for a replacement hospital



**Welch (Emergency) Community Hospital, Welch, WV**

New Hospital Mechanical and Electrical Design constructed in two phases  
Facility Lighting Upgrades  
Master Plan for Engineering upgrades



**William R. Sharpe, Jr. Hospital, Weston, WV**

Master Plan for Engineering upgrades  
Facility Lighting Upgrades  
Comprehensive HVAC, electrical, and new central heating and cooling plant  
Natatorium HVAC upgrades  
Kitchen plumbing and HVAC upgrades  
New emergency power plant, distribution system and fuel storage/delivery  
50 Bed Addition for Forensic Patients with Sally Port entrance  
Airborne Infectious Isolation Patient Room Renovations  
Comprehensive Commissioning for Hospital Renovations

# Veterans Administration Steam Line Replacement

## Huntington, WV



**ZDS** provided an evaluation of the existing steam distribution system from a central boiler plant to buildings #5, #6, #7, #8 and #28. Following the evaluation, and as determined by the Owner, Construction Documents were developed for new/replacement of existing piping, valves, manholes, building connections and condensate recovery. The project required coordinating with three other building renovation projects involving two different design teams and was completed on schedule and within budgetary limits.



Health Care Project Experience

# William R. Sharpe, Jr. Hospital

Weston, WV



**Size:** 219,754 ft<sup>2</sup> plus 33,000 ft<sup>2</sup> Addition

**Date Complete:** 2017

**219,754 ft<sup>2</sup> Renovation plus 33,000 ft<sup>2</sup> New Construction**

Prime for Engineering Master Planning, HVAC Renovations, Lighting Upgrades, Emergency Generator, Fire Protection, Electrical Renovations, Roof Replacement, Commissioning, 3D Scanning.  
Consultant for all MEP engineering through IKM, Inc. for the addition.

MEP Engineering design and Commissioning services for both the HVAC/lighting/roof Renovation project retrofitting Hospital and the patient wing addition. Comprehensive MEP engineering and commissioning services for a central domestic hot water services, central boiler/chiller plant and 1.8 MW bi-fuel emergency generator system. VVW Pumping for heating, cooling and domestic hot water. Integrated DDC controls for central monitoring, troubleshooting and control including demand control ventilation and outside air measuring/monitoring. The HVAC system is also an integral part of the smoke control system. Lighting systems upgraded to LED and controlled to minimize energy. IAQ enhancements were incorporated into the high performance HVAC systems. Careful phasing, and the need to disrupt only small portions of the Hospital at a time, resulted in an extended construction period.

*“The **ZDS** staff are great planners and designers! They help us make the best decisions for the long term. We would recommend them to anyone!”*

Greg Nicholson, former Chief Operations Officer



**Renovations resulted in a 48% reduction in lighting and 28.8% reduction in energy for HVAC renovations over ASHRAE 90.1-2001 standards qualifying the project for EPA Act.**

<b>Construction Costs:</b>	Phase I HVAC Cost	\$ 1,403,000
	ARRA Funded Lighting Upgrade Costs	\$ 618,700
	Comprehensive Renovation Cost	\$30,000,000
	Addition Project Cost	\$13,500,000

## Charleston Area Medical Center (CAMC)

Charleston, WV



### **CAMC General Division**

CAMC is one of the largest health care providers in West Virginia and consists of several separate hospital campuses and facilities encompassing nearly 10 million square feet. Prior to forming **ZDS**, their principals and personnel's work at the General Division included the following: Special Care Facility, Physical Therapy, Emergency Room Retrofit, 3-4-5-6 South Patient Retrofit, District Chiller Plan Replacement and Interconnect, boiler plant and emergency generator systems.



**Charleston Area  
Medical Center**

### **CAMC Memorial Division**

Prior to forming **ZDS**, their principals and personnel were involved at CAMC with review of the design and commissioning of a \$40 million surgery addition to the Memorial Division campus. This work paid for itself in less than two years from the savings generated and addressed maintenance reliability and future expandability issues. Their involvement at this location included Emergency Room Renovations, Patient Room Renovations, Chiller Replacement/Interconnect, boiler systems, Radiology/Nuclear Medicine Renovations, Cath Lab, SICU, MICU Renovations and CT Scan, emergency generator, Fuel Oil Storage, Surgery Addition Commissioning, and Laundry Facility Renovations.



### **CAMC Women & Children's Hospital**

**ZDS'** principals and personnel have worked with CAMC since 1982 while at **ZDS** and through previous employers on many design, energy conservation and commissioning projects involving sophisticated mechanical and electrical systems while meeting stringent health care requirements and safety of the patients for. Some of their involvement at CAMC's Women & Children's Hospital included LDRP Additions/Renovations, NICU & PICU Renovations, Emergency Room Renovations and Patient Room Renovations.



**Health Care Project Experience**

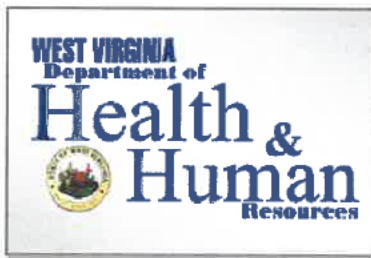


### **Hopemont Hospital, Terra Alta, WV Boiler Plant Renovations**

**ZDS'** initial work addressed their fire alarm needs in 2003. ZDS was contacted again in 2010 to provide master planning, boiler system upgrades and ARRA funded lighting upgrades. The boiler plant optimization initial phase involved replacing underground piping between the central plant and hospital, along with comprehensive steam trap upgrades. This required engineering planning, design, supervision, preparation of construction documents, specifications, and construction administration of the boiler systems including lighting upgrades with replacement of T-12 lighting fixtures and incandescent lights with energy efficient T-8/T-5 and LED lighting, reducing lighting energy usage by over 30%.



**Project Cost:**  
ARRA Renovation \$760,000;  
Fire Alarm \$175,000;  
**Hospital Size:** 124,800 ft<sup>2</sup>



### **Jackie Withrow Hospital, Beckley, WV Boiler Plant Renovations**

**ZDS** was the Prime for this project. Renovations included creating a central plant at one end of the large facility which included three 3,000 MBH, 125 psi steam boilers with upgrades to the condensate return system and comprehensive steam trap upgrades, providing a new gas service to the new boiler plant. The existing boiler plant in the opposite end of the large facility was upgraded to lengthen the life of it including a 2,500 MBH steam boiler. Several old or poor condition boilers were removed or isolated from providing heat to the system. The natural gas service upgrades were coordinated through the State Fire Marshal for approval to meet emergency backup fuel needs required by current code for both heating and emergency power.



**Heating Project Cost:** \$1,907,000  
**Hospital Size:** 408,820 ft<sup>2</sup>

# 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**



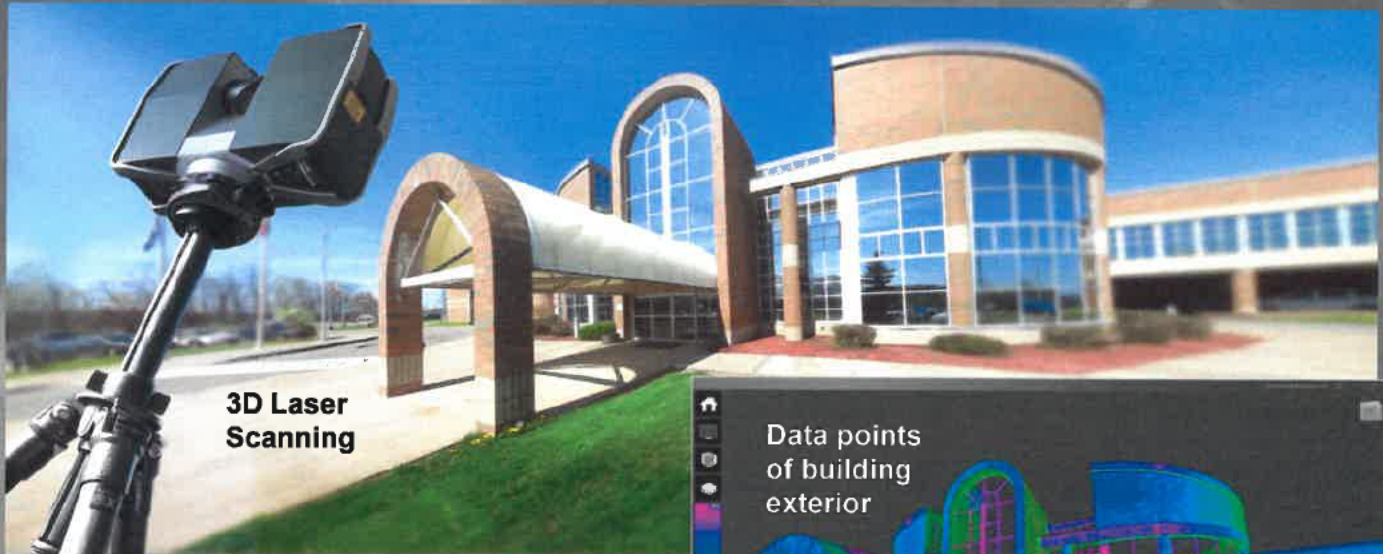
**Harvard University  
Arnold Arboretum Weld Hill  
Research and Administration Building**

**LEED Gold Certified**

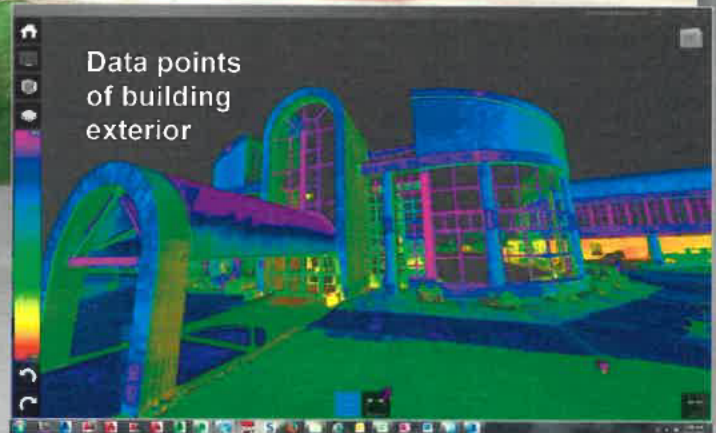
- General Motors (GM) of North America
- Washington & Lee University
- Maryland – Calvert County Indoor Aquatic Center
- WV Museum of Culture and Natural History
- Montgomery County Departments of Correction and Police
- WV State Capitol Complex
- Ohio University – Chillicothe Campus, Stevenson Library and Bennett Hall
- WVU—Downtown Campus
- Santa Ana Federal Building Renovations
- CAMC General Division
- University of California, Davis School of Veterinary Medicine Instructional Facility
- CAMC Memorial Division
- CAMC Women & Children’s Hospital
- Milledgeville Georgia Correctional Facility
- United Hospital Center

# BIM - 3D Digital Imaging

**Our 3D Laser Scanning Services helped William R. Sharpe, Jr. Hospital document existing conditions and integrate their 50-bed addition.**



**3D Laser Scanning**



## **Why 3D Laser Scanning is better:**

3D laser scans reveal significant differences between existing conditions and the original drawings.

3D laser scans also provide superior details by capturing data that is more comprehensive and precise than conventional methods.

**“With the 3D laser scanning service, ZDS saved us countless hours communicating to all project team members, even to those who work or live far away.**

**Also, we now have an accurate record of the existing conditions that DHHR can easily access now and into the future.”**

*former Chief Operations Officer*



## **Web Share:**

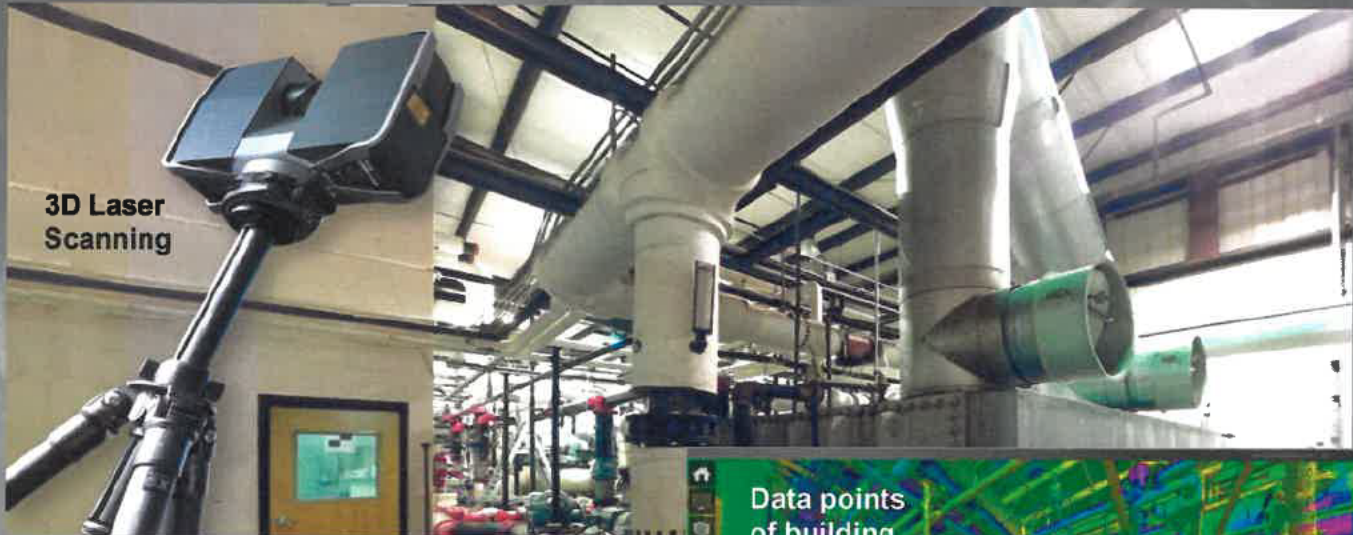
3D laser Scanning allows facility owners to view and measure areas with others on their planning and construction team.



# BIM - 3D Digital Imaging

**“The 3D laser imaging improves quality, saves time and money while providing a valuable resource now and into the future.”**

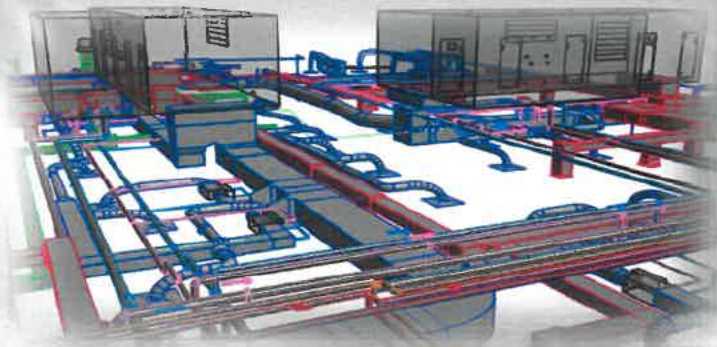
*DHHR*



**“The 3D laser scans safely document hard-to-reach interior areas — this greatly reduces our risk for liability.**

**Also, the excellent details of the laser scans convert to accurate construction drawings, both architectural and engineering.”**

*DHHR Director of Construction & Project Management*



**3D Engineering Drawing:**  
Sample of 3D mechanical drawing converted from 3D laser scan data points.

**Web Share:** Helps construction team members integrate existing conditions into BIM models.



# INTEGRATING BIM: A PRACTICAL SOLUTION FOR A COMPLEX INDUSTRY

ZDS Design/Consulting Services

## BIM & Integrated Design for the Modern Construction Project

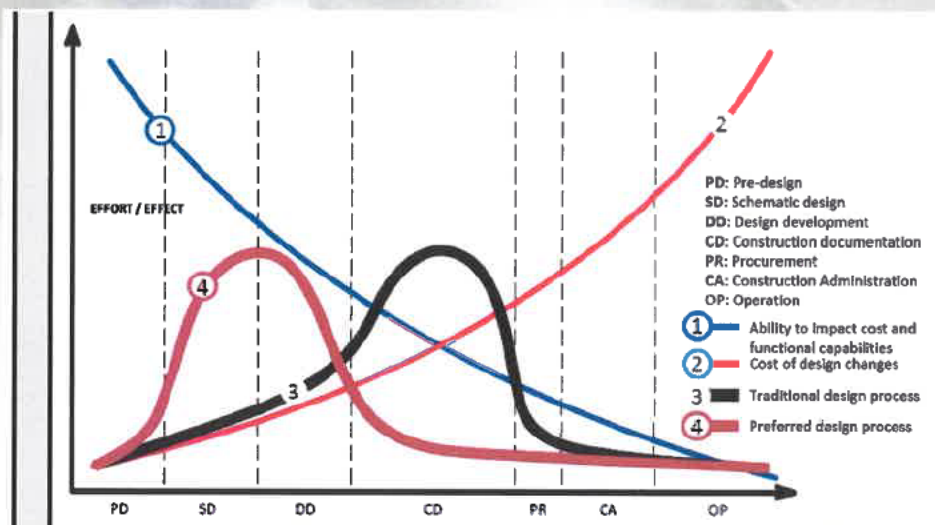
Building Owners/Operators have been given a serious challenge of maximizing every capital expense dollar to achieve the greatest possible value. In an ever evolving world where project deadlines are getting compressed, buildings are becoming more complex, and codes continue to drive for higher efficiencies the industry needs new techniques to solve these problems. Building Information Modelling (BIM) & Integrated Design processes (IDP) help conquer these challenges presented.

### 3D scanning & BIM

The IDP emphasizes making key design decisions EARLY, which is the most effective time frame. The advantages of this process allows for the greatest amount of change to occur with the least amount of impact on total project costs and schedules. In order for the design team to make early decisions reliable information is vital. In addition and renovation projects, 3D scanning bridges the gap between traditional survey methods and modernized methods.

*"With the 3D laser scanning service, ZDS saved me countless hours communicating to 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."*

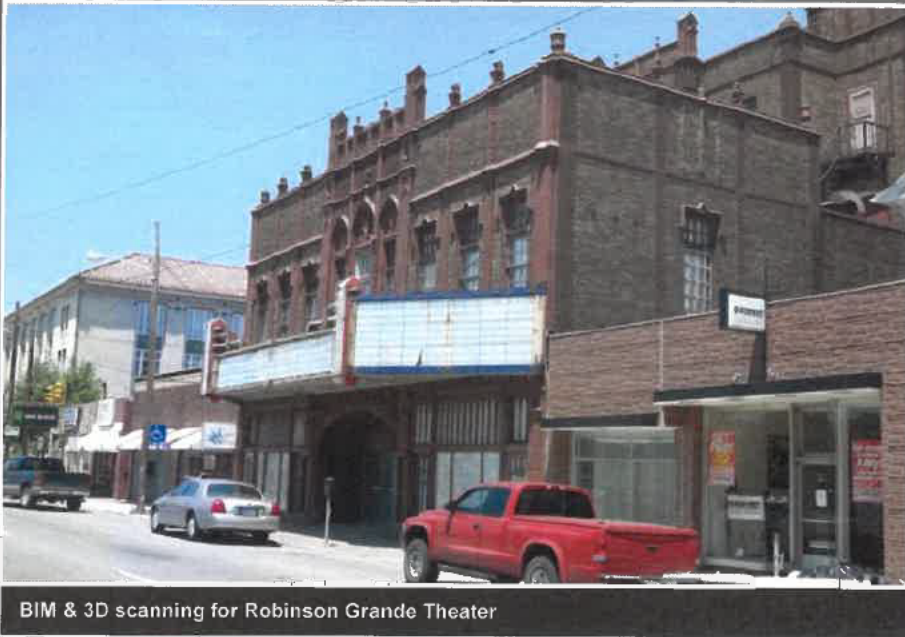
- former WVDHHR Chief Operations Officer



MacLeamy Curve comparing traditional design versus Integrated Design

### In This Issue

- BIM & IDP applications on projects
- 3D scanning's place in the process
- Advantages & overall goals of each



BIM & 3D scanning for Robison Grande Theater

## Historical Buildings Restoration

A 100+ year old theater located in Clarksburg, WV is going through a major renovation and restoration. The unique character of historic buildings challenges designers to coordinate at a very high level. **Every inch** in the building becomes prime real estate for various systems. 3D scanning was utilized to capture dimensional data throughout and shared with the entire design team. The existing building was then modelled directly from 3D scans to create the BIM. This allowed for coordination to occur at levels not available in traditional survey methods.

## Addition at William Sharpe Jr. Hospital

There is a growing need for behavioral healthcare facilities in West Virginia. ZDS was involved in the design and planning of a 33,000 SF addition at William Sharpe Jr. Hospital where both primary forensic population as well as highly violent populations will reside. Key design challenges revolved around creating a safe environment for patients that can be at risk for violence, suicide, and elopement. BIM & IDP were instrumental for the design team to coordinate these processes/challenges and communicate effectively with the client for design intent. By utilizing modern coordination tools many issues were resolved before construction began resulting in savings.

IDP is the bridge that allowed all the design team members to operate as one unit from project inception through construction administration. Weekly BIM updates were sent to all team members for project design coordination. Having current design models played a crucial role in meeting the project schedule as well as coordinating all the key elements for this project.

### Our Mission:

“Provide dynamic value and be an extension of our clients’ professional team.”

ZDS’s strong belief in our mission as a firm led us to adopting Integrated Design Practices (IDP) in 2008. It is through refining and perfecting our processes that we’ve been able to provide top quality designs throughout our company’s history.



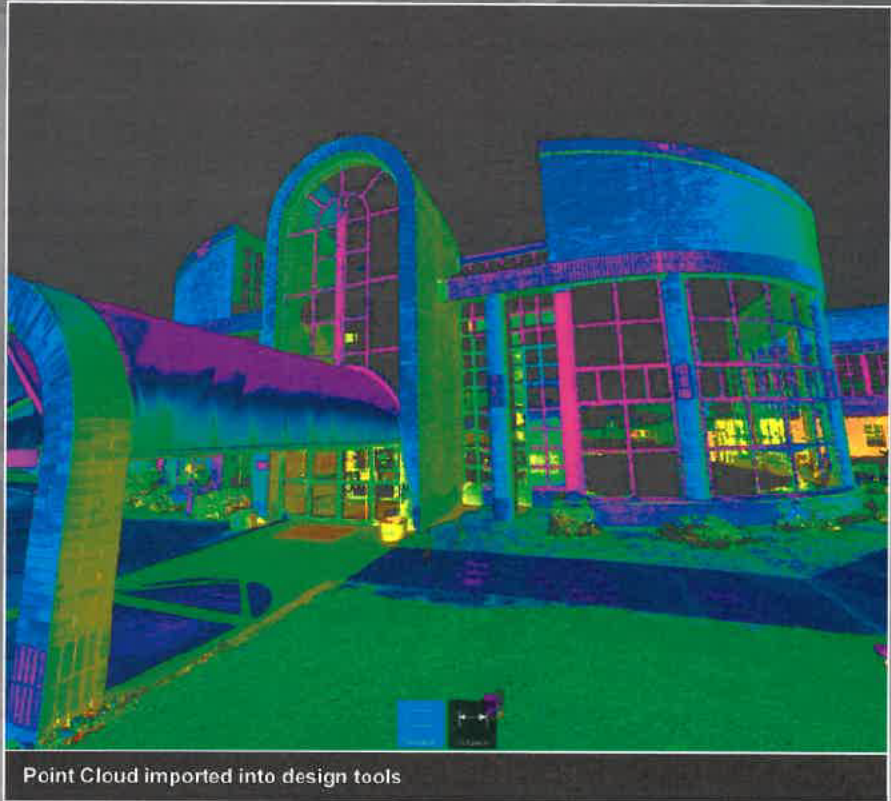
William Sharpe Jr. Hospital



## Benefits of Pairing 3D scanning with BIM

3D scanning provides many benefits that carry through the life of a project. The scan data collects millions of x,y,z coordinate points that are compiled to form a point cloud representing the facility. Proper use of this data can create complex models with high degrees of accuracy generating higher degrees of confidence in the design. Some key benefits when considering this service:

- Precise measurements with accuracies up to +/- 2mm per scan position.
- Safe method of data collection.
- Mitigates project risk by having more detailed information for design.
- Comprehensive collection method basically collects points of everything within line of sight.
- A Non-intrusive survey method can be accomplished while the building is occupied.
- Most importantly it provides an excellent collaboration method that can be shared with the whole design team.



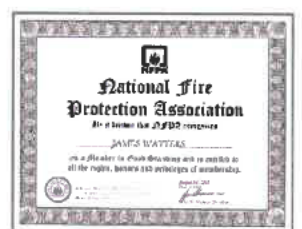
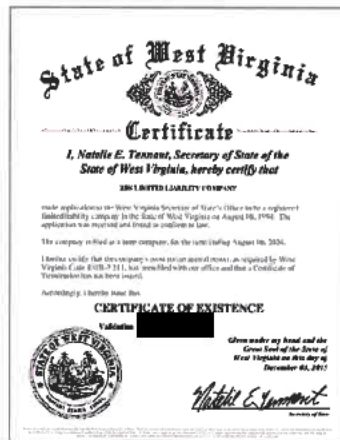
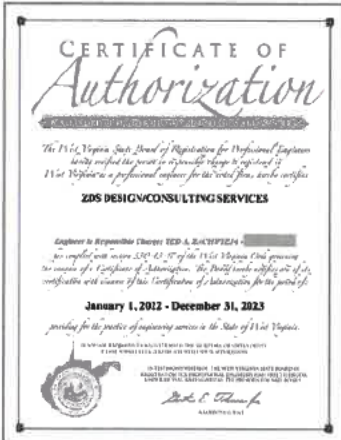
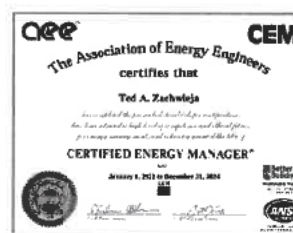
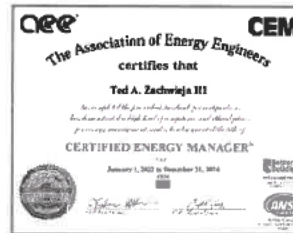
Point Cloud imported into design tools

## Big to Small BIM with IDP has its Application

We've reviewed how BIM/IDP/3D scanning can greatly impact large projects. Let's discuss a smaller project where 3D scanning integrated with bid documents provided great value for water service upgrades on schools located in Raleigh County, WV. ZDS was tasked with evaluating and designing water service upgrades for all the schools in Raleigh County in order to meet current codes. With 22 schools needing upgrades one of the challenges with bidding was ensuring that contractors had access to see each site. The 3D scans taken during the initial evaluations were utilized in a Web Share format that contractors could log in for a virtually walk-through at each site. Contractors could take measurements of existing conditions directly from the Web Share to prepare their bids. This led to contractors having a high degree of confidence in existing conditions. The result was a successful project within budget.



# Certifications



# References



**ZDS** has worked on hundreds of projects in West Virginia. We encourage you to call the references listed below:

**Dale Freeman**, Director of Facilities, Roane General Hospital: (304) 927-6345, [dafreeman@rghwv.org](mailto:dafreeman@rghwv.org); for renovations to Roane General Hospital.



**Gary Boyd**, Director of Facility Services, University of Charleston & WVU: (304) 357-4871, [garyboyd@ucwv.edu](mailto:garyboyd@ucwv.edu); worked on projects at both WVU and University of Charleston involving MEP systems since 1990's.



**Amanda Kimble**, Director of Facilities, Tyler County Schools: (304) 758-2145, [akimble@k12.wv.us](mailto:akimble@k12.wv.us); for renovations to Tyler Consolidated Middle/High School.



**Jerie Whitehead**, Director of Purchasing, Kanawha County Commission: (304) 357-0101.



**Patrick O'Neill**, Project Manager, WV General Services Division: (304) 352-5514, [Patrick.S.ONeill@wv.gov](mailto:Patrick.S.ONeill@wv.gov).



**Mike Pickens**, Executive Director, National Council for School Facilities: (304) 400-9993.

# Boyd, Gary MA, CEFP

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

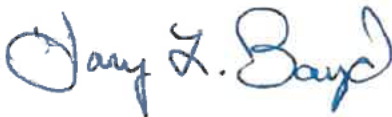
To Whom It May Concern

With well earned respect I would like to recommend ZDS as a high quality MEP design firm.

I have had multiple opportunities to work on highly technical projects with Todd Zachwieja and his team of skilled engineers. The first project that I had the opportunity to work with ZDS was a WVU project that connected several older chillers to develop a chilled water loop on the downtown campus. The project included piping through congested areas, load calculations, differential pressure and pump control, and load balancing. This project was designed to become a phased approach to a central chiller plant which is now in operation. The project was efficiently managed and the performance exceeded expectations. As the system changed and older chillers were removed from the loop, Todd always responded to questions and concerns to insure a positive outcome for the overall objective.

At present I am working with ZDS on a University of Charleston project constructing a new Innovation Center and Athletic Complex. ZDS has accommodated many twist and changes to this project. We are on track to open the new facility in December of this year. I have found Todd and his team to be highly responsive and professional.

Sincerely,



**Boyd, Gary MA, CEFP**  
**Director of Facilities**  
**University of Charleston**

# Tyler County Schools

## Reference Letter

P.O. Box 25  
Middlebourne, WV 26149  
(304) 758-2145  
Fax (304) 758-4566

A. Shane Highley, Superintendent

Linda Hoover, President  
Katrina Byers, Vice-President  
Dave Roberts, Member  
Larry Thomas, Member  
P.J. Wells, Member

February 4, 2020

To Whom It May Concern:

This letter is to recognize the outstanding performance of ZDS Design/Consulting Services regarding their team and services rendered to Tyler County Schools. ZDS worked with Tyler County Schools on the Tyler Consolidated Middle/High School HVAC Equipment Replacement Project.

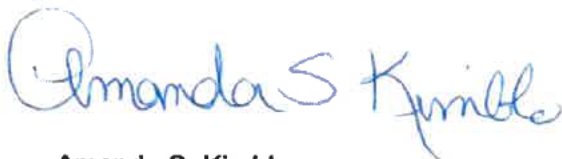
ZDS Design/Consulting Services are to be commended for their patience, diligence, and HVAC engineering expertise with our recent project. The project was complicated with funding and scheduling issues, and ZDS was able to overcome these hurdles and deliver a construction project that had very little issues. Their knowledge of the building systems and project construction administration were key.

From initial project planning, design development, bidding, construction administration, and closeout, ZDS was beside Tyler County Schools to provide any necessary support needed to make this project successful. Their professional team worked closely with our staff to ensure the design accommodated all of the needs for our students and staff.

It has been a pleasure working with the staff at ZDS. I wholeheartedly recommend ZDS Design/Consulting Services for projects similar to the scope of this one.

Please feel free to contact me if you may have any questions or comments.

Sincerely,



Amanda S. Kimble  
Director of Support Services and Facilities  
Email - [akimble@k12.wv.us](mailto:akimble@k12.wv.us) Office - # 304-758-2145



Food Facilities Concepts - Foodservice



Tab 8

# FOOD FACILITIES CONCEPTS, INC.



## Foodservice Design Consulting

### Company Profile



#### **Food Facilities Concepts, Inc. was established in 1989**

The founders of the company were two former food service equipment sales people. The company was established when the founders realized that the industry was in need of design professionals focused on the specific needs of their clients and not focused on equipment sales numbers while designing facilities.

#### **A corporate ethos was established from the onset and is still in use today. This includes:**

Keeping principal involvement and primary contact throughout the duration of the project.

Focus on the needs of the client based on menus, client vision, and customer needs and not brand or volume of equipment.

Establish fees based on size and complexity of the project, not equipment costs.

#### **What makes us different from others in the industry?**

Dedicated to providing clients with design focused service custom tailored to meet their needs and budget.

Holistic design approach that considers the client's ethos.

Close collaboration with the client and entire design team throughout the design process to ensure the food service equipment is implemented in a manner that does not detract from the customer experience.

Not a stocking equipment dealership allows us to specify any brand or type of equipment that best suits the needs of the client.

Principal involvement and point of contact throughout the entirety of the project.

We have achieved a 95% repeat client base.

#### **Utilization of most current BIM and Construction Management Tools**

Revit BIM modeling is utilized in the version required by the project team. Equipment is modeled in three dimension allowing the design team to create elevations, isometrics and renderings.

Our team utilizes and is familiar with a wide array of construction administration tools for reviewing and commenting on action submittals. These tools can be utilized in real-time submittal and drawing review sessions.

#### **Sustainability**

We have the experience in working on and achieving various levels of LEED and Green Globe Certified projects. This experience allows us to make recommendations for sustainable and energy efficient products to meet the specific certification or general guidelines established by the client.



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# FOOD FACILITIES CONCEPTS, INC.

## COMPANY PROFILE & SERVICES



Our Food Service Design Process consists of many integrated steps that produce solutions, which are functional, efficient and enduring.

**PRELIMINARY PLANNING** - The preliminary planning involves the development of the service concepts and the determination of the project scope and feasibility.

**SPACE ANALYSIS** - An analysis of each area takes into account the amount of space required, along with the relationship to other functions and special design features.

**PROJECT DESIGN PHASES** - A typical food service and/or interior design project is comprised of Programming, Schematic Design, Design Development, Construction Documents, Submittal Review, and Installation & Project Inspection.

**DESIGN CRITERIA** - Design criteria are developed to meet the specific management goals and objectives for the facility.

**BASIC DESIGN PRINCIPALS** - Each design component is evaluated for flexibility, simplicity, ease of sanitation, space efficiency and value.

**EFFECTIVE LAYOUT** - An effective layout creates a systematic flow within functional areas and provides easy access to raw materials, utensils and equipment components. It organizes efficient relationships with other departments and work areas to assure a productive facility.

**EQUIPMENT PLACEMENT** - The location of the food service equipment takes into consideration the precise configuration and spacing of each element for the optimum operation and the ease of cleaning and sanitation.

Food Facilities Concepts, Inc. specializes in meeting the design requirements of the institutional food service industry. Our design team has experience in planning projects for health care, long-term care, educational, hospitality and industry food service facilities, as well as teaching facilities for culinary schools.

We have expertise in all phases of design - from determining project feasibility through installation management. Food Facilities Concepts, Inc.'s design projects encompass small and large scale endeavors; from the renovation of small, outdated serving areas, to the total development of expansive food service departments for new multi-unit facilities.

We have made a commitment to provide the best services possible. Following are some of the advantages of working with Food Facilities Concepts, Inc.

**PRINCIPAL INVOLVEMENT** - Your project will be designed by the principal of our firm. This total personal involvement enables prompt, comprehensive development of your design.

**QUALITY OF DOCUMENTATION** - We utilize the most advanced food service CAD and BIM modeling design programs to produce precise detailed drawings and documentation.

**EXPERIENCE** - The principal of our firm has more than fifteen years of food service design experience. As the food service consultant for numerous architects, our staff is also knowledgeable in construction design and coordination requirements.

**INTERIOR DESIGN** - Our interior design department is available to assist your design team in selection and specification of furnishings and interior finishes that will compliment and endure in their environment.

**FEES** - Our fees are typically fixed, as opposed to a percentage of equipment costs. This fee structure helps keep food service equipment costs in line, as our fee is unrelated to the cost of the specified equipment.





# Children's Hospital of Omaha

CHMC | Omaha, Nebraska

SIZE  
4,700 sf

SERVICES

Food Service Design  
Consulting

The Children's Hospital Medical Center teamed with FFC, Inc. in the planning and design of a new central production kitchen, commissary, patient meal delivery model, and front of house serving space. The project included 4,700 square feet of space dedicated to the food service program. The food service equipment budget totalled \$1,175,000. Energy efficient equipment was utilized throughout where possible, including the use of variable volume hood controls that utilize temperature and smoke sensors to adjust hood speeds accordingly. The production kitchen included the development of a customized tray delivery assembly area, high volume warewashing, commissary storage, production cooking, and catering support spaces.

The front of house space was developed to offer a variety of themed outlets with front of house cooking in most stations. Type 1 Vented Hood systems could not be utilized in this area due to the ductwork constraints within the building and in order to maintain the project's budget. FFC, Inc. utilized ventless cooking technology in a number of the spaces. These technologies included ventless pizza ovens, pannini presses, and induction saute station.



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# Cameron High School

Cameron, West Virginia

The Cameron High School project was new construction for replacement of the existing school. Food Facilities Concepts, Inc. services included the design of the cafeteria, production kitchen, as well as the school's Meat Processing Classroom. The cafeteria consisted of a multi-station concept without utilizing allot of space. Being efficient with the layout allowed us to work within the state's square footage guidelines without requiring additional funding by the district. FFC, Inc. selected and specified sustainable energy efficient equipment in order to help the school achieve several awards.

SIZE  
5,000

DESIGN SERVICES  
Food Service  
Consulting

PROJECT FEATURES  
Production  
Kitchen, Serving  
Space, and Meat  
Processing  
Classroom

Part of the high school's curriculum is a meat processing program. Students that enroll can learn how to fabricate half hog carcasses into a variety of cuts, sausages, bacon, and country cured hams. Students hold a fund raising sale once the hams are fully cured. The meat lab required student work tables, holding coolers, curry/drying coolers, smoker room and a meat rail system all of which were designed and specified by FFC, Inc. Student safety, flexibility, and budget were key design factors for this space. FFC, Inc. went on to design several other meat labs for schools in West Virginia.

PROJECT  
ACHIEVEMENTS  
Production  
Placemaker Award  
for Innovation from  
West Virginia  
Greenworks

Black Bear Award  
for Highest  
Achievement in  
West Virginia  
Sustainable  
Schools Program

U.S. Department of  
Education Green  
Ribbon School



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# Sheltering Arms Rehab Hospital

VCU Health | Richmond, Virginia

SIZE  
6,900 sf

SERVICES

Food Service Design  
Consulting

Food Service Consulting services for the construction of a new rehabilitation hospital. Commercial food service spaces included the central storage, production kitchen, patient meal delivery line and cafeteria. The food service program was developed to support approximately 114 patient beds, staff and visitors. Food service program totaled 6,900 square feet and a budget of \$1,693,000. The serving space was designed for ease of use by rehabilitation patients.



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**FOOD FACILITIES CONCEPTS, INC.**



# Steubenville High School

Steubenville, Ohio

Food Facilities Concepts, Inc. was contracted to redevelop the school's current straight-line serving line into a more modern food court style serving areas. Also included in the project's scope was the addition of cold storage, redesigned high density dry storage, new dishroom, and production kitchen equipment replacement.

SIZE  
4,000 sf

DESIGN SERVICES  
Food Service  
Consulting

The expanded serving space now includes two lines that flow from opposite ends of the serving space to the center where there are two salad bars located. The kitchen is open to the serving space to allow for easy replenishment of the hot lines, specials, salad bar, and pre-packaged to-go items. Hydration counters with juice and infused water stations were also a welcomed addition to the program.

PROJECT FEATURES  
Production  
Kitchen, Serving  
Space, Coffee  
Shop/Concession  
Stand and Storage  
Areas

A dual purpose coffee shop and concession stand was incorporated in to the entrance of the dining space. The coffee shop will help support for quick breakfast items during the morning rush and convert to a concession stand for winter athletic programs.

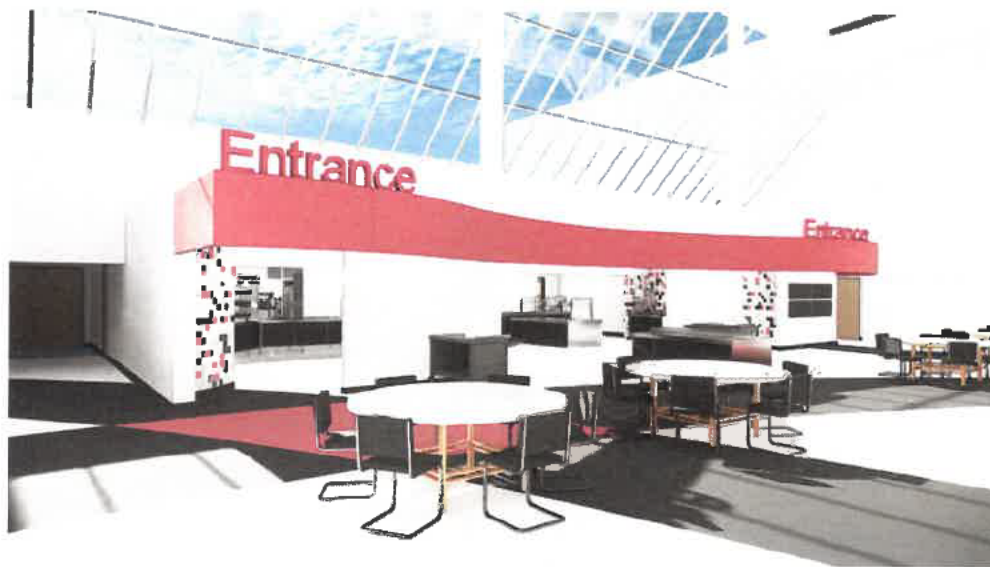
This project is currently under construction and scheduled to open for the 2021 school year.

Example Renderings Pictured Below utilizing the BIM model produced by FFC, Inc.



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FOOD FACILITIES CONCEPTS, INC.



BEFORE IMAGE OF  
STRAIGHT-LINE  
SERVING SYSTEM





# Campbell University Foundation Student Union

CAMPBELL UNIVERSITY | BUIES CREEK, NC

SIZE  
113,000 sf

SERVICES

Food Service Design  
Consulting

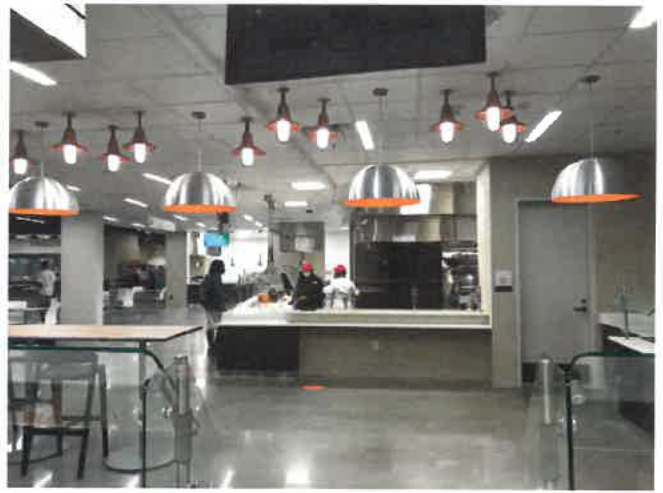
The construction of the new student union building was able to be completed by the funding efforts of the university's student union foundation fund raising campaigns. The 113,000 square foot building included a commercial food service equipment budget of approximately \$5,000,000. FFC, Inc was responsible for the design and layout of multiple outlets on campus including the multi-station food hall with open production kitchen, event kitchen, and fast casual snack/smoothie concept. FFC, Inc. collaborated with the design team to integrate the open kitchen concepts utilizing design methods and technology that would not negatively impact the customer/student experience.

The design of the new dining venues embraces the concept of transparency, food safety, and highly varied menu with food cooked and then served with little to no holding times. The facility was completed during the COVID-19 pandemic. The facility did open during the pandemic. This was done without any adjustments to the original design due to the careful attention to food safety, process flow, line queuing and flexibility in equipment that was already implemented in the original design by FFC, Inc.



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# Montour High School

McKess Rocks, Pennsylvania

SIZE  
6,000 sf

DESIGN SERVICES  
Food Service  
Consulting

PROJECT FEATURES  
Production  
Kitchen, Serving  
Space, and Coffee  
Shop

The Montour High School project was a complete renovation and expansion of their existing receiving/storage, kitchen, warewashing, and serverly areas. The cooking program was updated with modern cooking technology to allow for higher production within the same footprint of the existing cookline. The serverly area was updated to a food court style serving area which continues to set the precedent for high schools in the region. The serving space receives the majority of the bulk food from the back of house production kitchen but also has front of the house cooking for the grill and pizza programs. Healthy food selections were introduced via the generously sized salad bar and the prepackaged salad and fruit offerings merchandised in open front c-store style cases.

The school also includes a small coffee shop with several barista style hot and cold coffee selections as well as a variety of bottled beverages and pastries.

Food Facilities Concepts, Inc. was the design consultant for the spaces mentioned above and assisted with the design of the counter fronts, light selections, and finish selections for the serving space while keeping in mind the spirit of the school's color theme.



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# Cascade Culinary

CENTRAL OREGON COMMUNITY COLLEGE | BEND, OREGON

The Central Oregon Community College's Cascade Culinary Institute project allowed for the major expansion of the school's culinary program. A new building was built from the ground up to support the school's vision of creating the region's premier culinary program.

SIZE  
18,200 sf

DESIGN SERVICES  
Food Service  
Consulting

PROJECT FEATURES  
Mixed Use Culinary  
Education, Public  
Event Space,  
Demonstration  
Kitchen

Food Facilities Concepts, Inc. worked with the project team to develop the program, curriculum, and design for the new facility. Kitchen spaces include; Le Patisserie, Multi-Purpose/Bake Skills, and Skills/A La Carte Kitchen. The skills/A La Carte kitchen supports the schools restaurant program. This project also includes a demonstration kitchen with a 50 seat theater classroom setting.



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# USCB School of Hospitality

UNIVERSITY OF SOUTH CAROLINA BEAUFORT | HILTON HEAD ISLAND, SC

Designed to and achieved two Green Globes energy certifications. The School of Hospitality was designed to support the growing demand for qualified hospitality employees to service the island and surrounding areas. Design of the school from an energy and aesthetic standpoint was important to the client to allow the school to blend into the natural surroundings and have a minimized carbon footprint.

Food Facilities Concepts, Inc. worked closely with the design team in developing the program to meet the strict energy usage guidelines of the Green Globes certification. The first floor food service program included a multipurpose teaching/demonstration/events kitchen, central storage, and beverage production lab. The upper level includes a quick serve fast casual bistro/coffee shop. The teaching lab was developed to provide students individual work stations as well as to hold private teaching events for the community and be reconfigured as needed for catering of special events. The beverage lab is designed as a full service bar that includes four stations of identical equipment for students to mix and serve drinks.

*Images sourced from [www.liollo.com](http://www.liollo.com)*

SIZE  
40,000 sf

DESIGN SERVICES  
Food Service  
Consulting

PROJECT FEATURES  
Mixed Use Culinary  
Education, Public  
Event Space, and  
Student Amenities

SUSTAINABILITY  
FEATURES  
Green Globe

AWARDS  
Two Green Globe  
Sustainability  
Certifications



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**FOOD FACILITIES CONCEPTS, INC.**



30<sup>Years</sup>  
FFC

# Recently Completed Fast Casual Cafe's



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## Executed Documents



Tab 9



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

State of West Virginia  
 Centralized Expression of Interest  
 Architect/Engr

<b>Proc Folder:</b> 1102081			<b>Reason for Modification:</b> ADDENDUM 2 TO PROVIDE ANSWERS TO VENDOR QUESTIONS
<b>Doc Description:</b> A/E SERVICES FOR CHILDREN'S CRISIS CENTER			
<b>Proc Type:</b> Central Purchase Order			
<b>Date Issued</b>	<b>Solicitation Closes</b>	<b>Solicitation No</b>	<b>Version</b>
2022-09-16	2022-09-29 13:30	CEOI 0511 BSS2300000001	3

**BID RECEIVING LOCATION**

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

**VENDOR**

**Vendor Customer Code:** 501151510  
**Vendor Name :** Paradigm Architecture, Inc.  
**Address :** Suite 300  
**Street :** 2223 Cheat Road  
**City :** Morgantown  
**State :** West Virginia **Country :** USA **Zip :** 26508  
**Principal Contact :** Paul A. Walker, AIA  
**Vendor Contact Phone:** (304) 284-5015 **Extension:** 1

**FOR INFORMATION CONTACT THE BUYER**

Crystal G Hustead  
 (304) 558-2402  
 crystal.g.hustead@wv.gov

Vendor  
 Signature X

FEIN# 63-1263568

DATE 9/28/22

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

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: BSS230000001**

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

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

**Addendum Numbers Received:**

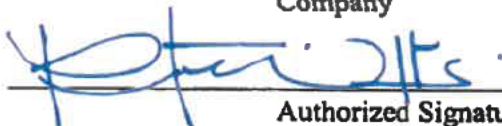
(Check the box next to each addendum received)

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

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Paradigm Architecture, Inc.

Company



Authorized Signature

9/28/22

Date

**NOTE:** This addendum acknowledgment should be submitted with the bid to expedite document processing.  
Revised 6/8/2012