

**West Virginia Army National Guard  
Construction and Facilities Management Office**

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WV PURCHASING  
DIVISION



**CEOI 0603 ADJ2000000005**

**Camp Dawson  
Barracks Building 245 Renovations**

 **McKINLEY**  
ARCHITECTURE + ENGINEERING

*in association with:*



**TERRADON**



ARCHITECTURE + ENGINEERING

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11 March 2020

Tara Lyle  
Buyer Supervisor  
Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130

Dear Ms. Lyle and Members of the Selection Team,

McKinley Architecture and Engineering and TERRADON Corporation (McKinley/TERRADON Team) have teamed up again, and are pleased to provide the West Virginia Army National Guard, Construction and Facilities Management Office with our Expression of Interest to provide professional architectural/engineering design services to fully renovate **Barracks Building 245** at Camp Dawson. As you review this submission, we emphasize the following strengths of the McKinley/TERRADON Team with respect to your project:

**McKinley Architecture and Engineering** (McKinley & Associates) is a **full service Architectural / Engineering** firm that has been providing design services since 1981. With offices in Wheeling and Charleston, WV and Pittsburgh, PA, we support a professional staff of **Architects, Engineers, Construction Administrators, LEED Accredited Professionals specializing in Building Design and Construction, a Qualified Commissioning Process Provider**, and more. We know innovative design and the newest technology, and we know **how and when to apply it effectively**. Not only have we won multiple **local and State awards and recognitions** for our designs, we have also won many **National awards and recognitions**.

With our previous experience on **hundreds of projects** which involve **renovations, upgrades, and repairs**, we have gained the knowledge and insight to evaluate these projects, which helps us anticipate unforeseen existing elements that may occur in a renovation project. This knowledge will help save you time and valuable resources because we have been successful with many similar projects. Our philosophy regarding this type of work requires an intimate knowledge of the building so we can determine how to most effectively use the existing resources. Early activity includes carefully mapping out the building and formulating a plan of action for repairs. This process targets the areas of greatest need and helps to control cost. We find this approach is often the most effective. It is with this experience that we are able to bring insight to the design of spaces that will retain long term value.

**TERRADON Corporation** will be utilized for all **utility and road infrastructure**. They offer a multi-faceted approach to design engineering and consulting services. Since 1989, TERRADON staff have provided a wealth of engineering solutions blanketing West Virginia with successful projects. The **second-generation, family-owned business** built its reputation on expert personnel and quality, time-sensitive service. Those same founding principles hold true today. Their service departments work cohesively to provide turn-key solutions that strive to exceed client expectations.

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The TERRADON staff includes **engineers, landscape architects, surveyors, planners, environmental scientists, designers, technicians and LEED Accredited Professionals.** TERRADON offers **professional engineering services** for **civil/site; land development; transportation; energy** including permitting, inspection and design; **environmental** including brownfields, testing and analysis; field services; **utilities; geotechnical** analysis, and much more. TERRADON Corporation maintains leading-edge staff in three locations: Nitro/Poca, WV; Lewisburg, WV; and Fayetteville, WV. TERRADON is a **certified Women's Business Enterprise** as defined by the Women's Business Enterprise National Council and is the largest woman-owned engineering firm in West Virginia.

**In closing**, we love what we do, so we care about the results you get. We are ready to begin **immediately** and will **meet all your Project Goals and Objectives**. Thank you for reviewing our submission and considering the McKinley/TERRADON Team for your project.

Personal Regards,



Ernest Dellatorre

President

McKinley Architecture and Engineering

(304) 233-0140 x115

EDellatorre@McKinleyDelivers.com

**For your convenience, we have ordered and answered our Expression of Interest by following your criteria listed in "SECTION THREE: PROJECT SPECIFICATIONS - Part 3. Qualifications and Experience."**

**"Vendors should provide information regarding its employees, such as staff qualifications and experience in completing similar projects ..."**

For overall capabilities to perform this work; first and foremost, the McKinley/TERRADON Team can state that our design team and large professional staffs will devote the time necessary to provide the West Virginia Army National Guard with a successful project. The McKinley/TERRADON Teams' portfolios include **multiple relevant projects**; examples of which you will see later in our proposal. Together, our Team will handle all of the **goals and objectives** of your project, including **architectural and engineering services, drawings, specifications, designing a new and more efficient heating and cooling system, complete restroom renovations including individual showers and upgraded ventilation, new and more efficient windows, new exterior and interior doors, new interior and exterior LED lighting for the entire building, a new fire alarm system, researching and investigating the location of existing underground and above ground utilities, road infrastructure, cost estimates, energy savings, construction bid services, and more.**

*McKinley Architecture and Engineering* was founded on July 1, 1981. We are a multi-discipline **full service Architecture & Engineering firm**, offering comprehensive in-house professional services in **Architecture, Engineering, HVAC Commissioning, Sustainable and Energy Efficient (LEED) Design, Construction Administration**, and more. Our corporation is Headquartered in Wheeling, West Virginia, and also has satellite offices in Charleston, West Virginia, and Pittsburgh, Pennsylvania. By virtue of our proximity, we can provide project services in an **economical, effective and efficient manner**, while also **responding expeditiously** to your project's needs.

**We believe our strength lies in the quality of the people we employ.** Our seasoned staff has an unsurpassed knowledge of the business and the dedication it takes to make each project a success. As a 39 year old firm, we also take pride in the individual **stability** of the workforce. Our Director of Engineering Services, Tim E. Mizer, PE, RA, QCxP, who is an Architectural Engineer, an Architect, and a Qualified Commissioning Process Provider, has been at McKinley Architecture and Engineering since 1995.

**TERRADON's** diverse team of **95 professionals** work together on projects to offer a wide range of services in house to keep project centrally focused. By providing this range of services, TERRADON is able to work completely as a team to offer clients the most rewarding design. TERRADON is the **largest, woman-owned engineering firm in West Virginia**. TERRADON maintains **professionally registered engineers, landscape architects, and surveyors** as well as a competitive team of highly **certified inspectors and environmental specialists**.

**For the entire McKinley/TERRADON Team;** your design team members have been chosen, and will devote the time needed to design your project on schedule. We are available to start **immediately** upon being selected. In addition to those key team members whose resumes are seen later in the submittal; the McKinley/TERRADON Team currently has the ability to dedicate additional resources and can also attribute more professionals from our various trades to accomplish your goals. **We will be available during the term of the project. We can and will perform for you on time.**

*A flow chart of the entire design team is seen on the following page, followed by resumes of the key staff, and information about our Corporations.*

## Project Manager / Point of Contact

■■■ Christina Schessler, AIA, LEED AP BD+C

## Architecture

■■■ Christina Schessler, AIA, LEED AP BD+C

*Architect / LEED Accredited Professional Specializing in Building Design & Construction*

## Engineering Team

■■■ Tim E. Mizer, PE, RA, QCxP

*Director of Engineering Services / Architectural & Mechanical Engineer / Architect / HVAC Qualified Commissioning Process Provider*

■■■ Bruce A. Kennedy, PE

*Electrical Engineer*

■■■ Lee Belcher

*HVAC Engineering Designer*

■■■ Scott D. Kain

*Plumbing Engineering Designer*

■■■ David A. Ullom

*Mechanical Engineering Designer*

## Land Development

■ Greg Fox, ASLA, LEED AP

*VP Land Development / Landscape Architect / LEED Accredited Professional*

■ Shawn Gray, ASLA

*Site Designer & Land Planner / Landscape Architect*

■ Pete Williams, ASLA

*Landscape Architect / Storm Water*

■ Kristen McClung, PE, MBA

*Senior Civil-Site Engineer*

■ Jim Nagy, PE

*Senior Engineer / Civil Engineer*

■ Robert Thaw, PS

*VP Survey & Mapping*

## Construction Administration

■■■ Robert E. "Bob" Smith

# Christina Schessler, AIA, LEED AP BD+C

## Architect / Specialized LEED Accredited Professional



### EDUCATION:

The Pennsylvania State University  
Bachelor of Architecture - 1988

Savannah College of Art & Design (SCAD)  
Masters Degree in Historic Preservation - 2012

### PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

#### Registered Architect in:

Ohio  
Pennsylvania  
Virginia  
West Virginia

#### NCARB Certificate - 2005

#### LEED® Accredited Professional

#### Specialized Training:

AIA Safety Assessment Program (SAP)

#### Member:

American Institute of Architects  
City of Wheeling - Planning Commission  
Preservation Alliance of West Virginia  
The Association for Preservation Technology Int'l

#### Board Member:

Friends of Wheeling Historic Preservation Group

#### Treasurer:

Wheeling Collegiate Alumnae

#### Former Member, Board of Director, & Treasurer:

The Midwife Center for Birth & Women's Health

### PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering  
Wheeling, WV (2004 to present)

MacLachlan, Cornelius & Filoni Architects  
Pittsburgh, PA (1999-2004)

Perfido Weiskopf Architects  
Pittsburgh, PA (1996-1999)

T.L. Cox & Associates  
Beaver, PA (1990-1996)

Valentour English Bodnar Architects  
Mt. Lebanon, PA (1989-1990)

Kenny Williams & Williams Building Diagnostics  
Maple Glen, PA (1988)

### SUMMARY OF EXPERIENCE:

For over 30 years, Ms. Schessler has obtained a wide range of **architectural** project experience in **governmental, emergency service, housing/residential**, commercial/office, forensic, medical, and educational projects. She has had the opportunity to participate in the design of a few uncommon building types, such as a fire fighting training center, funeral homes, and animal research facilities to name a few. Christina Schessler recently attended an **AIA Safety Assessment Program (SAP)** conducted in accordance with the California Governor's Office of Emergency Services (Cal OES), successfully passed the training courses, and is a registered **SAP Evaluator**. Ms. Schessler is adept at developing space and utilization programs with Clients who are unfamiliar with the architectural design process. As a **LEED Accredited Professional specializing in Building Design & Construction**, Christina will also be able to provide direction to your project to develop a design that includes energy efficiency. She completed her Masters in **Historic Preservation**, and has a passion for **renovation**, restoration, and modernization projects. For Independence Hall and Bennett Square, she won Heritage Tourism Awards from the Preservation Alliance of WV. She has also won other design awards for WV and PA projects.

### NOTABLE PROFESSIONAL EXPERIENCES:

Wheeling Island Fire Station

WVU State Fire Training Academy at Jackson's Mill

United States Postal Service - 2 Open-End IDIQ contracts / multiple projects in West Virginia and Pennsylvania

Sisters of St. Joseph housing complex

Harbor Point Housing renovations

Valley Ambulance addition

Panhandle Cleaning & Restoration Warehouse & Offices

Bennett Square Office Building - 3 Phases of renovations

Wagner Building - multiple renovation projects

Ft. Henry Building - multiple phases, several renovations

Franciscan University Multi-Tenant Buildings OP #1 & OP #2

Cornerstone Group - new Highlands Office

The Towers Building multiple renovations

Jefferson County Board of Elections office renovations

West Virginia Independence Hall historic preservation

Harrison County Courthouse

Wheeling Island Hotel•Casino•Racetrack multiple projects

Braxton County Senior Citizen Center

Lincoln National Bank

# Tim E. Mizer, PE, RA, QCxP

Architectural Engineer / Architect / Commissioning Provider

Director of Engineering Services

## EDUCATION:

Kansas State University  
B.S. Architectural Engineering - 1983

University of Cincinnati  
Architecture

## PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

**Registered Engineering in:**  
Ohio  
West Virginia

**Registered Architect in:**  
Ohio

**Qualified Commissioning Process  
Provider**

## PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering  
Director of Engineering Services  
Architect / Engineer  
Wheeling, WV (1995 to present)

M.C.C. Engineering  
Director of Design  
Columbus, Ohio (1988-1995)

Schooley Caldwell and Associates  
Electrical & Mechanical Design  
Columbus, Ohio (1986-1988)

Mizer Design  
Free Lance Architectural Engineering Design  
Columbus, Ohio (1985-1986)

Envirotek, Inc.  
Drafting and Electrical & Mechanical Design  
Raleigh, NC (1984-1985)

## SUMMARY OF EXPERIENCE:

Mr. Mizer is a very talented and unique professional being both a **Professional Engineer** and a **Registered Architect**. He joined McKinley Architecture and Engineering in 1995, and has over 35 years of experience. Mizer's background as an Architect and Engineer has provided him with a total understanding of the engineering components and the process necessary for integrating architectural design and building systems. Furthermore, he is also a **Qualified Commissioning Process Provider**, and has been formally trained to fully understand how integrated HVAC systems function and how systems interface with others to run your building efficiently. As the **Director of Engineering Services**, Mr. Mizer's presence is a key to the design procedures required to coordinate the functionality of the engineering systems into the aesthetics of a building space.

## NOTABLE PROFESSIONAL EXPERIENCES:

West Virginia Army National Guard - multiple projects

Wheeling Park Commission - multiple projects at Oglebay Park & Wheeling Park, including hospitality

United States Postal Service - dozens of projects throughout Pennsylvania and WV, including renovations

Building 55: WV State Office Complex in Logan (LEED Certified)

Building 34: WV State Office Complex in Weirton

West Virginia Department of Health & Human Resources' Ohio County office fit-out / renovations

Holiday Inn Express & Suites - 5 projects in 4 States, including PA

Candlewood Suites Hotels

Fairmont State University - 3 building "University Terrace" Student Housing College Apartments Complex (\$30M)

WVU Institute of Technology - Maclin Hall Dormitory renovations

West Virginia State Police Academy - Buildings A, B, & C dormitories renovations

Braxton County Senior Center renovations

West Virginia Independence Hall renovations

Lincoln National Bank renovations

Orrick's Global Operations Center renovations

Maxwell Centre renovations

Wagner Building renovations

Bennett Square renovations

Ft. Henry Building renovations

The Towers Building renovations

Marshall County Schools - Hilltop Elementary (LEED Certified)

# Bruce A. Kennedy, PE

## Electrical Engineer

### EDUCATION:

The University of North Dakota  
B.S. Electrical Engineering - 1975

DeVry Institute of Technology

### PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

#### Registered Engineering in:

West Virginia  
Ohio  
Pennsylvania  
Texas

### MILITARY SERVICE:

US Air Force - Honorable Discharge

### PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering  
Electrical Engineer  
Wheeling, WV (2018 to present)

Advanced Electrical Simulations LLC  
Owner/Principal Engineer  
Spring, TX (2014 to present)

Cameron International  
Principal Electrical Engineer  
Houston, TX (2011-2014)

### SUMMARY OF EXPERIENCE:

Mr. Kennedy has been an **Electrical Engineer** since 1975. He is an experienced power electronics/electrical systems design engineer with extensive electrical simulation experience using ETAP, SKM, EasyPower and PSIM. He personally owns and maintains ETAP license. He has completed electrical system designs for industrial, office, medical, educational, retail construction, and more.

### NOTABLE PROFESSIONAL EXPERIENCES:

WVDOT, Division of Highways - District 6 Moundsville Headquarters renovations

Belmont County Divisional Courts & Offices renovations

The Towers Building renovations

Harrison County Schools - Johnson Elementary School

Tyler County Schools - multiple projects

Wetzel County Schools - New Martinsville School renovations

Wetzel County Schools - Valley High School meat lab

Wetzel County Schools - Valley Field House

Facilities arc-flash, short-circuit fault, protective device coordination, load flow and harmonics studies.

Facilities electrical system existing conditions, code compliance and problem solving surveys.

Drilling rig short-circuit fault current, protective device coordination, load flow and harmonics studies.

Application of NEC, IEC and ABS standards to mobile offshore drilling rig electrical systems.

Computer data center electrical system design and onsite project management.

Data center short-circuit fault current, protective device coordination and arc-flash studies.

Electrical system designs for medical, industrial, office and retail construction.

Building load analyses, emergency generator sizing and fault current studies.

Electrical system designs for hospitals, medical clinics and educational buildings.

Short-circuit fault current, protective device coordination and arc-flash studies.

Industrial battery charger and UPS systems power electronics design.

Custom power conversion equipment/systems design.

# Lee Belcher

## Senior Engineering HVAC Designer

### EDUCATION:

John Tyler Community College  
Mechanical Engineering Technology - 2012

### PROFESSIONAL AFFILIATIONS:

ASHRAE

ISPE

### PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering  
Senior Engineering HVAC Designer  
Wheeling, WV (2020 to present)

ARBAS, Inc.  
Vice President  
Midlothian, VA (2013 to 2020)

### SUMMARY OF EXPERIENCE:

Mr. Belcher has greater than 30 years of experience leading design teams and managing construction efforts and contracts for Owner projects ranging from support buildings to multi-million-dollar facilities with diverse project scopes, sizes, and personnel. Since 1985, his HVAC project work has included educational facilities, dormitories, healthcare facilities, laboratory and cleanrooms, office buildings, mixed-use facilities, key project proposals, heat gain/heat loss calculations, equipment selection, project specific mechanical specification writing, code analysis; QA/QC for drawings, specifications, construction efforts and managing construction efforts to the Certificate of Occupancy. He has performed code evaluation and its application to project work which is an important component to project success. He has generated Construction Documents, performed QA/QC work on Construction Documents, as well as performed Construction Administration duties with QA/QC work during construction to punch list and through to Owner's Certificate of Occupancy.

### NOTABLE PROFESSIONAL EXPERIENCES:

#### Longwood University - Real Estate Foundation\*

Completed the Longwood University HVAC and electrical upgrades for multiple student housing buildings. Started project in the Conceptual Design phase and continued into construction with construction administration efforts. Led the mechanical design and managed project from conceptual design to completion. The project consisted of the upgraded replacement of hundreds of air-to-air heat pumps for student housing communities. Managed the contract for the 2.5 million-dollar upgrade effort through three phases of construction. Completed project with a pleased Client.

#### Media General - Office Building Renovation\*

Led the mechanical design of a newly constructed 9.6-million-dollar multi-story 40,000 sf building.

#### Department of Corrections - Adult Services Division Campus\*

Led the mechanical design of a new campus style training complex with multiple buildings including a commercial kitchen, dining space, multi-story classroom building, administration building, gymnasium and multi-story holding cells.

#### American University - Dormitory Renovation\*

Led the mechanical design for three aged dormitories with total of 114,000 sf into classroom and office space.

#### Franklin Military Academy at Richmond City Public Schools\*

Managed the construction administration for the replacement of system level equipment. Performed construction administration duties with QA/QC work during construction to punch list and through to Owner's Certificate of Occupancy.

#### Bolling Air Force Base - Washington, DC - DIA Mail Facility\*

Led the mechanical design for 3000 sf of newly constructed mail facility on a military base. Provisions were made for the application to combat bioterrorism concerns.

*\* previous work experience with a firm other than McKinley Architecture and Engineering*

# Scott D. Kain

## Plumbing & Electrical Engineering Designer

### EDUCATION:

Technology Education College /  
Ohio State University  
Associates in Mechanical Design - 1996

### PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering  
Engineering Designer  
Wheeling, WV (2001 to present)

HAWA Inc.  
Mechanical Designer  
Columbus, OH (1998-2001)

Autotool Inc.  
Engineer  
Columbus, OH (1995-1998)

### SUMMARY OF EXPERIENCE:

Mr. Kain is an accomplished engineering designer who has performed in all the engineering trades we provide; specializing in electrical, plumbing, and fire protection. He has been utilized for various McKinley Architecture and Engineering' projects that needed additional mechanical, structural, and architectural manpower. In addition, Mr. Kain has also provided 3D renderings, to aid in business development, during his long tenure at McKinley Architecture and Engineering.

### NOTABLE PROFESSIONAL EXPERIENCES:

WV Army National Guard - multiple projects / new & renovations

Wheeling Park Commission - multiple projects at Oglebay Park & Wheeling Park

United States Postal Service - multiple projects / new & renovations

Building 55: WV State Office Complex in Logan (LEED Certified)

Building 34: WV State Office Complex in Weirton

WVDHHR's new Ohio County office fit-out / renovations

Wheeling Island Hotel•Casino•Racetrack multiple projects

Holiday Inn Express & Suites - multiple projects in 4 States

Candlewood Suites Hotels

Sisters of St. Joseph's Convent renovations

West Virginia State Police - multiple projects / new & renovations

West Virginia University - new State Fire Training Academy

Wheeling Island Fire Station

Boone County Schools - multiple projects

Brooke County Schools - multiple projects

Grant County Schools - multiple projects

Hancock County Schools - multiple projects

Marshall County Schools - multiple projects, including LEED Certified

Ohio County Schools - multiple projects

Tyler County Schools - multiple projects

Wetzel County Schools - multiple projects

Wood County Schools - multiple projects

Orrick's Global Operations Center

Millennium Centre Technology Park

VAMC Beckley renovations

Jefferson County Jobs & Family Services renovations

Harrison County Jobs & Family Services renovations

Charleston Enterprise Center renovations (2009 WV AIA Design Award)

# David A. Ullom

## Mechanical Engineering Designer

### EDUCATION:

Fairmont State University  
B.S. Mechanical Engineering Technology - 2011

Pierpont Community and Technical College  
Associates Degree in Applied Sciences:  
Drafting and Design - 2011

### PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering  
Engineering Designer  
Wheeling, WV (2019 to present)

Kennametal Inc.  
Sales Engineer (2016-2019)  
Applications Engineer (2012-2016)  
Latrobe, PA

Marion County Assessors Office  
Map Developer  
Fairmont, WV (2010-2012)

### SUMMARY OF EXPERIENCE:

Mr. Ullom is a results-driven individual who prioritizes safety, cost-effective solutions, and exceeding customer expectations. He is proficient in Autocad, Inventor, and Revit software. David also has experience as a Sales Engineer, Applications Engineer, and Map Developer, which provides an unique understanding for problem solving.

### NOTABLE PROFESSIONAL EXPERIENCES:

General Services Administration - Social Security  
Administration's Wheeling, WV Office

The Towers Building HVAC

Belmont County Divisional Courts

Jefferson County Justice Center

WVU Medicine - Reynolds Memorial Hospital

Trinity Health System - Crisis Rehabilitation Unit

Ohio County Schools - Bridge Street Middle School

Ohio County Schools - Madison Elementary School

Ohio County Schools - RESA 6 Building

Mid-Ohio Valley Technical Institute (MOVTI) HVAC

Mining sales in Illinois, Alabama, Kentucky, Ohio, and West Virginia.

Specialist in conical cutting and drilling tools for coal applications.

Reviewed test plans and procedures to ensure adequate coverage of system requirements.

Collaborated with scientific, engineering, and technical personnel to resolve testing problems and system malfunctions.

Created comprehensive test plans, test scripts, and use cases to support testing objectives.

Worked in different geologies across North America assisting sales force in finding the best product for the customer.

Developed and edited maps for the Assessor's office in Marion county, WV (Fairmont).

Gained experience in geographic information systems (GIS).

# Robert E. "Bob" Smith

## Construction Administrator

### EDUCATION:

University of Pittsburgh  
M.S. Industrial Engineering - 1989

United States Air Force Academy  
B.S. Behavioral Science /  
Human Factors Engineering - 1983

### PROFESSIONAL AFFILIATIONS AND REGISTRATIONS:

#### Board Member:

Indian Creek School District (elected in 2009)

#### Instructor:

Mechanical Engineering, Eastern Gateway  
Community College

#### Village Administrator:

City of Mingo Junction (2015 to present)

#### Commander:

American Legion Post 351 (2008 to present)

### PROFESSIONAL EMPLOYMENT:

McKinley Architecture and Engineering  
*Construction Administrator / Project Coordinator*  
Wheeling, WV (2009 to present)

Jefferson County Regional Planning Commission  
*Regional Planner*  
Steubenville, OH (2008-2009)

Edison Local School District  
*Director of Operations* (1999-2008)  
*Transportation Supervisor* (1998-1999)  
Hammondsville, OH

### MILITARY SERVICE:

Wright Patterson Air Force Base - Dayton, OH  
*Chief B-2, Block 20 Field Retrofit, \$300 million*  
B-2 Systems Program Office (1994-1996)  
*Team Leader, Process Improvement Technology*  
Armstrong Laboratory (1989-1994)

Randolph Air Force Base - San Antonio, TX  
*Chief, Test Construction Section*  
Occupational Measurement Center (1987-1988)  
*Quality Control Psychologist*  
Occupational Measurement Center (1985-1987)  
*Supervisor of Test Construction Team*  
Occupational Measurement Center (1983-1985)

### SUMMARY OF EXPERIENCE:

Mr. Smith has been a **Construction Administrator** at McKinley Architecture and Engineering for over 10 years. Bob is a self confident, articulate and highly motivated individual with superior interpersonal and teamwork skills. He has a plethora of experience in mid to upper level personnel management, advanced information systems integration, training, acquisition, contract management, transportation and maintenance, and quality control. He has 23 years of direct supervisory experience, as well as 13 years of documented success as an **Air Force Officer**. He is currently a member of the Board of Education for the Indian Creek School District in Jefferson County, Ohio. He is also an Adjunct Professor at Eastern Gateway Community College in Steubenville, Ohio, where he is teaching Mechanical Engineering.

### NOTABLE PROFESSIONAL EXPERIENCES:

Fairmont State University's new 3 building "University Terrace"  
Student Housing Apartment Complex

West Virginia Army National Guard - AASF#1 HVAC renovations

Towers Building renovations, multiple phases

Lincoln National Bank Building renovations/historic

Harrison County Courthouse historic roof

United States Postal Service - multiple projects thru multiple  
open-ended IDIQ contracts, including renovations

City of Steubenville - multiple renovation projects

Steel Valley Regional Transit Authority roof

Jefferson County Jobs & Family Services renovations

Brooke County Schools - Brooke High HVAC, new Brooke Middle,  
Follansbee Middle & Carlin Dodrill Fieldhouse renovations

Grant County Schools - Maysville Elementary & gymnasium  
renovations/HVAC & Union Educational Complex renovations

Hancock County Schools - A.T. Allison Elementary renovations,  
New Manchester Elementary renovations, Oak Glen High  
renovations/HVAC, Oak Glen High Multi-Sports Complex, Oak  
Glen Middle addition/renovations, Senator John D. Rockefeller IV  
Career Center HVAC, Weir High Multi-Sports Complex, Weir MS/  
HS HVAC, & new Weirton Elementary

Ohio County Schools - multiple renovation projects

Marshall County Schools - new Cameron High (LEED Registered)  
& new Hilltop Elementary (LEED Certified)

The Linsly School - Banes Hall addition/renovations & Behrens  
Memorial Gymnasium renovations

Follansbee City Building renovations

Cabela's Eastern Distribution Center

Cameron American Legion Exterior Renovations

## Firm History

Founded in 1981, McKinley Architecture and Engineering is a multi-discipline **full service Architectural & Engineering firm**, offering comprehensive **professional services in Architecture, Engineering, Energy Efficient and Sustainable (LEED) Design, Commissioning, Construction Administration, Learning Environment and Educational Facility Planning, and Historic Preservation.**

We have a broad range of skill and experience for projects involving **governmental, hospitality, emergency service, commercial/office, PK-12 schools, higher educational, sports & recreation, medical, private sector, and much more.**

Over the years, our firm won multiple **State and National awards and recognitions** for our works.



## Firm Information

**Ernest Dellatorre**  
President

**Tim Mizer, PE, RA, QCxP**  
Director of Engineering Services

**Patrick J. Rymer, AIA, ALEP**  
Director of Architectural Services

## Date of Incorporation

July 1, 1981  
Wheeling, West Virginia

## Professionals

Architects  
Engineers  
Arch./Eng. Designers  
Construction Admins.  
**LEED AP BD+Cs**  
ALEP (CEFP)  
REFP  
Commissioning Provider  
Historic Preservationist

## Locations

32 Twentieth Street  
Suite 100  
Wheeling, WV 26003  
P: 304-233-0140  
F: 304-233-4613

129 Summers Street  
Suite 201  
Charleston, WV 25301  
P: 304-340-4267

5000 Stonewood Drive  
Suite 220  
Wexford, PA 15090  
P: 724-719-6975

## Credentials

**McKinley Architecture and Engineering** is a member of the following **organizations:**

A4LE (formerly CEFPI), ACI International, AIA, ASCE, ASHRAE, ASPE, AWI, BOCA, NCARB, NFPA, WVEDC, and more

## Follow Us

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[www.Linkedin.com/company/McKinleyDelivers](https://www.linkedin.com/company/McKinleyDelivers)

Instagram: @McKinleyDelivers



Greg Fox oversees TERRADON's Land Development Sector. Fox has been responsible for hundreds of notable commercial, educational and recreational site development projects during his 28 year career. During his time as Land Development Department Head, TERRADON has earned Engineering Excellence Awards from the West Virginia Association of Consulting Engineers, numerous Merit Awards from the American Society of Landscape Architects, and the Gold Award from the American Council of Engineering Companies. Fox has performed a number of site selection and analysis services on projects over the last 30 years.

### **Project Experience**

#### **The Summit Bechtel Family National Scout Reserve, Fayette County, WV**

Provide Site Selection and Design for the 10,600+ acre site in Fayette County, WV. Responsible for site prioritization and selection criteria, feasibility studies, cost analysis, site grading, construction drawings, NPDES design and coordination for all project sub-consultants for NPDES permitting with WVDEP.

#### **Advanced Technology Centers, WV**

Provided site design services for two West Virginia Higher Education Policy commission Advanced Technology Centers located in Fairmont, WV and South Charleston, WV. Responsibilities included site identification, prioritization, evaluation, ranking matrix's, site record data, feasibility studies, and final site suggestions. Additionally provided grading, erosion and sediment control and utility design.

#### **Steel Dynamics, Cabell & Mason County, WV**

TERRADON was approached by the West Virginia Development office to provide site selection and evaluation services of a large industrial site for a prospective large scale industrial tenant in Cabell and Mason counties. To select and prioritize possible site options, TERRADON worked with WVDO, Mason County Development Authority, and AEP to visit and review potential sites across the two counties. TERRADON evaluated multiple sites before ultimately suggesting a selected 550 acre site that had an additional 800 acre adjacent lot available for additional development. TERRADON services expanded from site selection and prioritization to survey, site planning, and design work for the prospective site tenant.

#### **K-12 Educational Facilities, WV**

Responsible for Master Planning, Site Layout and Design, Schematic Renderings, Parcel Identification, Feasibility and Cost Analysis, and construction drawings for hundreds of k-12 educational facilities throughout West Virginia. Additionally, Fox has provided site selection services on new school projects or relocation of school facilities throughout West Virginia. Projects include new construction as well as renovations and additions.

#### **Marshall University, Huntington, WV**

Responsible for Site Design, Utility Design, Grading and Drainage for Applied Sciences Building, Student Housing, Wellness Center and Parking Garage. Provided ADA compliancy on campus buildings and site design for existing soccer field.

### **Education**

B.A. Landscape Architecture  
West Virginia University

B.A. Geography & Planning  
West Virginia University

### **Certifications**

Registered Professional Landscape Architect: WV

LEED Accredited Professional

**Total Years Experience**  
+30

**Greenbrier Valley Medical Center, Lewisburg, WV**

Responsible for master planning through site/civil construction documents for the Greenbrier Valley Medical Center in Lewisburg, WV.

**Tazewell Community Hospital, Tazewell, VA**

Responsible for master planning through site/civil construction documents for the East Addition of the Tazewell Community Hospital in Tazewell, Virginia.

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

Responsible for site/civil construction documents for Thomas Memorial Hospital in South Charleston, WV.

**Grand Vue Park, Marshall County, WV**

Created a Master Plan for the expansion of the Marshall County, WV park. The Master Plan was followed by a Phase I design and construction drawing package that included six "tree house"-style lodges and a high adventure park to complement the park's existing zip lines. High adventure features include a 30' high aerial obstacle course, a 28' high rock climbing wall, a 60' gravity swing, a rappelling wall, a 43 ft mega jump and a giant trampoline.

**Greater Greenbrier Sports Complex, Lewisburg, WV**

Provided Master Planning and Grading Design Services for the Greater Greenbrier Sports Complex located north of Lewisburg, WV. Five phases include: Master Planning, Grading Study, Full Construction Documents, Utility Layout, Road Design, Erosion and Sediment Control.

**Glade Run, Zelienople, PA**

Conducted a master facility plan for a 300+ acre development for Glade Run Lutheran Services. This project involved a mixed-use development which included an equestrian trail, senior housing, single family residential, office, and retail.

**Palatine Park Master Planning, Fairmont, WV**

Provided master Planning Services for the City of Fairmont for the redevelopment of Palatine Park on the east side of the Monongahela River adjacent to downtown Fairmont, WV. The Master Plan featured new parking areas, walking trails, a vista overlook, a picnic gazebo and retail space.

**Putnam County Parks Master Planning, Putnam County, WV**

Provided Master Planning and site civil design services for the expanding Valley Park in Hurricane, Putnam County, WV. This work is part of a nearly \$2 million expansion, which was completed in 2013 and adds an additional 6 acres to the park. The project included planning for athletic fields, multiple parking lots, access roads and greenspace, but also incorporated a walking trail that ties into existing park trails. The plan was produced in coordination with the WVDOT to determine roadway/walkway ingress/egress and designed in accordance with local, state and federal regulations.

**Fairmont Riverfront Park Master Plan, Fairmont, WV**

The City of Fairmont and the Fairmont Renaissance Corporation intend to develop new recreation opportunities and at the same time enhance economic development opportunities for the community. The main goal of the planning process was to develop a plan that will allow for the comprehensive development and implementation of new elements to the riverfront. The elements planned will include rehabilitation of an existing park and new recreation, commercial, and residential opportunities.

Shawn Gray is an experienced Site Designer and Land Planner who serves as an integral part of the TERRADON design team. He offers experience on many of TERRADON's highest profile projects, focusing on large scale site development and parks and recreation projects. Gray also provides site design and landscape architecture services for K-12 and Higher Education projects. He is responsible for developing site, grading, landscape and utility plans, site detailing and erosion sediment control plans and permitting.

### **Project Experience**

#### **Bible Center Church Master Plan, Charleston, WV**

Project consisted of the layout of a soccer field, youth soccer fields, track, softball field, cross country/walking trail, a new sanctuary, chapel, pre k-8 school/gym, ministry village, new parking, independent living facilities, and assisted living facilities. Project also consisted of site grading and utility study and a budget estimate.

#### **Ohio Valley University, Vienna, WV**

Project consisted of designing a sports complex for the university. New amenities included a track and field events, soccer field, baseball field, new softball field, tennis courts, parking, basketball arena with amenities, and an outdoor sports hall of fame. Project also consisted of site grading and a budget estimate.

#### **Cabin Creek Health Systems, Sissonville, WV**

New medical/dental office building. Services included site layout, grading, drainage, utility, erosion and sediment control, details, and landscape. Site also included retaining wall layout and design, underground stormwater design, creek bank stabilization.

#### **Greater Greenbrier Sports Complex, Greenbrier County, WV**

Provided 5-Phased, Master Planning and Grading Design Services for the Greater Greenbrier Sports Complex located north of Lewisburg, WV.

#### **Valley Park Master Planning & Expansion, Hurricane, WV**

Served as a Site Designer for the expanding Valley Park in Hurricane, WV. The project included planning for athletic fields, multiple parking lots, access roads and greenspace, but also incorporated a walking trail that ties into existing park trails. The plan was produced in coordination with the WVDOT to determine roadway/walkway ingress/egress and designed in accordance with local, state and federal regulations.

#### **Volcano Island Master Planning, WV**

Provided land planning and design engineering, utility location and mapping services for the properties. The master planning provided vision for Volcano Island Water Park, allowing the City of Fairmont efficient and value-based use of the former environmentally concerned site.

#### **Sheetz, WV**

Provided site design services for Sheetz Service Centers at Scott Depot, Cross Lanes and Green Acres, WV. The projects consisted of site layout and design, utility design, hardscapes and landscape architecture.

### **Education**

B.A. Landscape  
Architecture  
West Virginia  
University

### **Total Years Experience**

+15

Pete Williams is a graduate of West Virginia University with a Bachelor of Science in Landscape Architecture. His responsibilities include landscape architectural design, grading and storm water drainage design, the design of pedestrian circulation systems and related amenities, roadway design, site planning, and quality control. Mr. Williams is registered as a professional Landscape Architect in West Virginia with more than 16 years of experience at TERRADON and more than 27 years of overall experience.

### **Project Experience**

#### **Fire Stations, Medical, First Responder, Public Facilities—Master Planning & Site Design Services, WV**

Yeager Airport Fire/Crash/Rescue Station, Fairmont Public Safety Building & Fire Safety Station, South Charleston Fire Station, Greenbrier Valley Medical Center, A New Marshall County Public Safety Annex, Putnam County Courthouse, A new West Virginia State Police Facility at Sharon Steel, A new Stonerise Care Facility at Thomas Hospital

#### **Advanced Technology Centers, WV**

Provided site design services for two West Virginia Higher Education Policy commission Advanced Technology Centers located in Fairmont, WV and South Charleston, WV. Responsibilities included site identification, prioritization, evaluation, ranking matrix's, site record data, feasibility studies, and final site suggestions. Additionally provided grading, erosion and sediment control and utility design.

#### **Higher Education— Master Planning & Site Design Services, WV**

Marshall University Student Recreation Center, Marshall University Student Housing, Fairmont State Inner Campus Design

#### **Grand Vue Park, Marshall County, WV**

Created a Master Plan for the expansion of the Marshall County, WV park. The Master Plan was followed by a Phase I design and construction drawing package that included four "tree house"-style cabins and a high adventure park to complement the park's existing zip lines. High adventure features include a 30' high aerial obstacle course, a 28' high rock climbing wall, a 60' gravity swing, a rappelling wall, a 43 ft mega jump and a giant trampoline.

#### **YMCA of Kanawha Valley, Kanawha County, WV**

Provided master planning services and prepared construction documents for the development of a baseball field and large multi-purpose field along with a walking trail system for the existing YMCA facility.

#### **Trace Fork Soccer Complex & Ice Arena, Kanawha County, WV**

Provided master planning and site design services as well as prepared construction documents for the development of six carrying sized soccer fields, an indoor ice arena, and associated roadway and parking to serve the large facility.

#### **Harveytown Park, WV**

Provided master planning and site design services and provided construction documents for the development of a new neighborhood park with walking trails, children's play areas, & basketball courts.

### **Education**

B.S. Landscape Architecture  
West Virginia University

### **Certifications**

American Society of Landscape Architects

West Virginia Chapter of American Society of Landscape Architects

### **Total Years Experience**

+20

Kristen Stinson McClung serves as a Civil-Site Engineer for TERRADON Corporation and is based in the Lewisburg, WV office. She brings nearly 20 years of engineering practice to public and private sector clients. From conception through acceptance of projects, McClung offers experience in civil, environmental, land development, streetscapes, survey, permitting, water, wastewater, paving, storm drainage, transportation and erosion-sedimentation control.

### **Project Experience**

**Tanyard Station Sanitary Sewer Design, Village of Barboursville, WV**  
McClung performed the Sanitary Sewer for this new commercial, out-door shopping mall. She performed the sanitary sewer calculations for the sizing of the trunk line through the development; for the new sewer pump station within the development for that area of the development that was too low for the primary gravity system; and for the new pumps associated with the Village's existing Pump Station #4. As part of the proposed development, the existing forcemain for Pump Station #4 had to be re-routed into the development's new sanitary sewer trunk line, resulting a new pump curve for the existing station.

### **Schoenbaum Tennis Court Asphalt & Storm Drainage Repairs, Charleston, WV**

McClung designed a new storm drainage underdrain system for the existing tennis courts. The courts were experiencing weeping from beneath the courts of trapped storm water runoff/ground water. As the existing courts were nearing the end the existing asphalt surface course's useful life, the Parks and Recreation Department decided that this was the appropriate time to install the needed underdrain system and re-surface the course, as the new underdrain system would require the demolition of the existing asphalt surface course. McClung, also developed the Contract Documents and Construction Specifications in coordination with the City of Charleston for the public bidding of this project.

### **The Greenbrier Sporting Club Driveway Drainage Projects, White Sulphur Springs, WV**

McClung was brought in to evaluate various private homes' driveways which were experiencing surface water runoff ponding issues from incorrectly graded driveways and non-functioning/undersized storm drainage systems. McClung developed new driveway grading plans and new stormdrainage collection and conveyance systems to alleviate the stormwater runoff ponding.

### **Tru-Hotel by Hilton, Lewisburg, WV**

McClung prepared the Site Drainage Plan for this proposed hotel within a new commercial development. Design responsibilities included the Site Layout and Parking Plan, the Site Grading Plan, and the Storm Drainage Plan. McClung also prepared the Site Design Package required by the City of Lewisburg's Planning Commission for review and approval by the City.

### **The Crossing – Cameron Martin Properties, Village of Barboursville, WV**

McClung design the new stormwater culvert beneath the proposed entrance drive for this new commercial development. In addition,

### **Education**

M.B.A. University of Georgia

M.S. Civil Engineering, Auburn University

B.C.E. Civil Engineering, Auburn University

### **Certifications**

Georgia Soil & Water Conservation Commission

Level II Certified Design Professional

### **Registration**

Professional Engineer: WV, GA, AL

### **Total Years Experience**

22



McClung performed the Pre-Development and Post Development Stormwater Runoff Calculations for this project for use by other Design Team members.

**Meadows Estates Neighborhood, Greenbrier Sporting Club, White Sulphur Springs, WV**  
Served as the civil-site design engineer of record for the newly created 11 lots within the Meadows Estates Neighborhood on the Meadows Golf Course. Design responsibilities included newly designed roads, water line extension, sanitary sewer extension, new storm drainage collection systems to replace existing ditches through the lots, and coordination with Mon Power of underground power extension/relocation.

**Center Court at Creekside, The Greenbrier, White Sulphur Springs, WV**  
Served as the project manager for this project, a 2500 seat outdoor tennis stadium and the historic Greenbrier Resort. Responsibilities included site grading to accommodate the bowl stadium, which required over 30,000 cy of fill material. McClung also sized and designed the storm water drainage system, sanitary sewer system, and water distribution system for the project.

**Creekside Stormdrainage Improvements for the Greenbrier Sporting Club, White Sulphur Springs, WV**  
Ms. McClung designed a new stormwater drainage collection and conveyance system for the Creekside Neighborhood in the Greenbrier Sporting Club. The existing neighborhood had poor drainage due to several low lying areas and an existing poor/inadequate stormdrainage collection system. Ms. McClung utilized an aerial survey to design a new stormdrainage collection system with special attention to the low lying areas. In addition, all the existing home downspouts were connected to the new system to remove the roof area runoff from the surface runoff.

**Summit Bechtel Reserve As-Built Drawings, Fayette County, WV**  
As project manager for the as-built portion of this landmark project, responsible with TERRADON's survey team for capturing all the as-built data for the large amount of underground utilities installed during the construction phase of this historic project.

**Seneca Trail Animal Hospital, Lewisburg, WV**  
Served as the civil-site design engineer of record for the Seneca Trail Animal Hospital. Design responsibilities included a new entrance road on shared right-of-way, grading of the subject site to include 2 new buildings, a new parking lot, an underground detention system with new injection well, and the required permitting of the proposed facility at the local and state levels.

**West Virginia School of Osteopathic Medicine New Entrance Road, Lewisburg, WV**  
Responsible for the civil-site design associated with the O-school's proposed new entrance road off WV State Route 219. The proposed entrance road will bisect an existing greenspace and provide visibility to the front of the school from 219. Design responsibilities included site grading, storm water drainage design, permitting of the project through the WVDOH, and the production of construction drawings.

**Spill Prevention, Control & Countermeasure Plan for The Greenbrier Resort, White Sulphur Springs, WV**  
Prepared the 2015 calendar year SPCC Plan for the 10,000 Acre hotel campus. Special emphasis was given to the on-site oil and gasoline storage facilities as well as the on-site electrical transformers.



As a Senior Engineer at TERRADON, Jim Nagy's primary focus is on designing civil engineering projects for public and private development projects throughout West Virginia. Nagy specializes in the design of water distribution systems as well as sewage collection systems. Nagy offers decades of hands-on experience and has previously provided design engineering services for schools, commercial developments, residential developments, public utilities and more. He earned a B.S. in Civil Engineering from West Virginia University and is a Professional Engineer in the State of West Virginia.

### **Project Experience**

#### **SPCC Planning**

updated SPCCs for All Crane & Equipment Rental and Spirit Services, Inc.

#### **School Projects**

Responsible for layout, design, and permitting of water and sewer lines for numerous school projects in WV. Projects entailed coordination with PSDs, municipal water and sewer departments, State and Federal regulatory agencies for design of facilities. Schools include: Blue Ridge Community and Technical College, Blue Ridge K-12, Burnsville Elementary, Flatwoods Elementary, Davis Elementary, Sutton Elementary, Little Birch Elementary, Frametown Elementary, Buffalo High School, Clay-Battelle High School, Confidence Elementary, Jefferson Elementary, East Hardy High School, Eastwood Elementary, Flinn Elementary, Geary Elementary, Gilbert High School, Greenbrier West high School, Hampshire High School, Harpers Ferry High School and 19 additional schools.

#### **Commercial Developments**

Responsible for layout, design, and permitting of water and sewer lines for numerous commercial developments in WV. Projects entailed coordination with PSDs, municipal water and sewer departments, State and Federal regulatory agencies for design of facilities. Developments include: Fairmont Federal Credit Union, Allegheny Energy Union (Fairmont), First Ward (Clendenin) Apartments, Milton Crossing, Tri-State Hotel and multiple convenience store sites throughout WV.

#### **Charleston Replacement Housing**

Utility design, primarily water, sewer and stormwater, and coordination of overall site activities with the project developer for multi-unit housing development. Each phase entailed the design and layout of several hundred feet of water, sewer and stormwater line, including multiple connections with the utility providers, i.e., the Charleston Sanitary Board and West Virginia American Water, and applicable permit applications. Also responsible for construction monitoring and provision of as-built drawings as required by the respective utility providers.

#### **Cathcart – Devonshire Development, Scott Depot, WV**

Designed sanitary sewer and water distribution system to serve more than 900 housing units in this private development.

### **Education**

B.A. Civil  
Engineering  
West Virginia  
University

### **Certifications**

Registered  
Professional  
Engineer: WV

### **Total Years Experience**

45

**Washington Woods Subdivision, Ravenswood, WV**

Designed more than 9,000 feet of water and sewer line and a 500 gpm fire pump water booster station to serve a 150 lot subdivision.

**Sawmill Village, Snowshoe, WV**

Designed approximately 2,800 feet of 8" water line and sanitary facilities to serve the Sawmill Village development project in Snowshoe, WV.

**Cabell County Water Main Extension Project**

Worked on design and layout of approximately 46,000 feet of water main for the Salt Rock PSD/WVAW. Responsible for bidding, contract award, and project management.

**Putnam County Water Main Extensions**

Worked on design and layout of approximately 63,000 feet of water main and a booster pumping station for the Putnam County Commission/WVAW. Responsible for bidding, contract award, and project management.

**Manila Ridge Water Main Extension Project**

Worked on design and layout of approximately 38,000 feet of water main for the Putnam County Commission/WVAW. Project has not received funding yet. However, will be responsible for bidding, contract award, and project management.

**The Summit Bechtel Family National Scout Reserve, Fayette County, WV**

Provided engineering for the 10,600+ acre site in Fayette County, WV. Responsible for site prioritization and selection criteria, feasibility studies, cost analysis, site grading, construction drawings, NPDES design and coordination for all project sub-consultants for NPDES permitting with WVDEP.

**Advanced Technology Centers, WV**

Provided site engineering for two West Virginia Higher Education Policy commission Advanced Technology Centers located in Fairmont, WV and South Charleston, WV. Responsibilities included site identification, prioritization, evaluation, ranking matrix's, site record data, feasibility studies, and final site suggestions. Additionally provided grading, erosion and sediment control and utility design.

**Sheetz, WV**

Provided engineering services for Sheetz Service Centers at Scott Depot, Cross Lanes and Green Acres, WV. The projects consisted of site layout and design, utility design, hardscapes and landscape architecture.

With more than 35 years of experience in a wide range of surveying projects, Robert Thaw serves as head of TERRADON's Survey and Mapping department. He organizes and supervises survey crews, reviews project plans, and creates base mapping for various projects including noise barriers, interchanges, connectors, bypasses, sidewalks, bike paths, and bridges. Thaw oversees all TERRADON survey activities, including: preparation of Right-Of-Way plans; the development of GPS static networks for aerial mapping in the design of roadways; identification of existing utilities and property lines; base image development and control placement for construction projects; and drafting of legal descriptions for ROW parcels.

### **Project Experience**

#### **The Summit Bechtel Family National Scout Reserve, Fayette County, WV**

Thaw delivered more than 14,000 acres of LiDAR, which was flown during full summer canopy. TERRADON provided the horizontal and vertical control utilizing GNSS receives, and least square static network adjustment. A subsequent control network, utilizing GNSS receivers and least square network adjustment was established by TERRADON for construction staking. Concrete monuments, and aluminum disks were used for the control points. The entire 14,000 acres was mapped at 2' contour interval, will accuracy's better than 1' contour specifications.

#### **City of Huntington Marina, Huntington, WV**

Thaw provided services which included: aerial photogrammetry control, aerial photography, LiDAR, engineering design survey, data computation, CADD, digital terrain modeling, boundary survey, civil information model (CIM), and hydrographic surveys. Utilizing VRS and GNSS, TERRADON provided the photo control to develop base mapping for the City of Huntington Marina. After receiving the aerial mapping, TERRADON performed field edits to confirm critical areas with the LEICA TS 15 P-1, and VRs GNSS.

#### **FMC Lagoon Decommission, Nitro, WV**

Working with a team member Tuck Mapping Solution, TERRADON has been involved with the AC&S Inc. site for approximately 10 years. Originally involved with developing photogrammetric mapping for the 61 acre site industrial site, TERRADON has provided topographic surveys; storm water system investigation utilizing robotic video and closed space entry; as-built surveys of processing facilities; boundary surveys, boundary subdivision; and utility easements. Most recently TERRADON was responsible for developing a plan to survey the toxic sludge in one of the on-site lagoons. TERRADON coordinated with the project's environmental scientist and client, to agree on a sludge density to survey.

#### **Laurel Fork Campground Bridge**

TERRADON provided surveying and design engineering on a USDA Forest Service project in Randolph County, West Virginia. Surveyors led by Thaw provided Right-Of-Way services, including courthouse research, construction easements, and location of alignments. Additionally, provided topographic mapping, project control for construction, hydraulic cross sections, and stream profiles.

### **Education**

A.S. Survey  
Technology,  
West  
Virginia Institute  
of Technology

B.S. Surveying,  
West Virginia  
Institute of  
Technology

### **Certifications**

Professional  
Surveyor: WV

**Total Years  
Experience**  
+35

## Corporate Profile



**FOUNDED:** 1989

**EMPLOYEES:** 95

**LOCATIONS:**

Poca, WV  
Lewisburg, WV  
Fayetteville, WV  
Clarksburg, WV

**SERVICES:**

Civil Engineering  
Environmental Engineering  
Environmental Inspection  
Testing & Inspection  
Construction Monitoring  
Construction Administration  
Geotechnical Engineering  
Transportation Engineering  
Structural Engineering  
Cultural Resources  
Archaeological Assessment  
Geotechnical Engineering  
Land Planning & Design  
Survey & Mapping  
Water & Utility Design

TERRADON Corporation offers a multi-faceted approach to design engineering and consulting services. For more than 30 years TERRADON staff has provided a wealth of engineering solutions blanketing West Virginia and surrounding states with successful projects. The company built its reputation on expert personnel and quality, time-sensitive service. Those same founding principles hold true today.

The firm has been recognized through numerous awards from professional organizations and agencies including the American Society of Civil Engineers, State Highway Departments, the Department of Environmental Protection and the American Institute of Architects.

TERRADON's diverse team of professionals work together on projects to offer a wide range of services in house to keep project centrally focused. By providing this range of services, TERRADON is able to work completely as a team to offer clients the most rewarding design.

TERRADON maintains professionally registered engineers, landscape architects, and surveyors as well as a competitive team of highly certified inspectors and environmental specialists.

TERRADON has experience working on projects funded by various agencies. Because of the variety of funding options for projects, TERRADON offers client support to help make funding projects easier.

TERRADON's corporate culture promotes innovation and progressive thinking. Project leaders strive to sustain customers through a wide-range of engineering offerings. TERRADON employees understand the purpose behind their services and work to cultivate lasting relationships with clients through honest, hard work.



*TERRADON is the largest, woman-owned engineering firm in West Virginia and is a certified Women's Business Enterprise.*



TERRADON's Land Planning and Development department offers creative and innovative site design plans that have been brought to life throughout the region. Land Planning and Development engineers, landscape architects and CAD designers work closely with other TERRADON departments to deliver the most efficient design for each project.

TERRADON's Land Development department works with public and private entities and has remained a strong presence in the commercial, educational and, parks and recreational development sectors.

The Land Planning and Development group is focused on retaining lasting relationships with it's customers and prides itself on repeat clientele and referrals.

The Land Planning and Development department provides all services in-house from schematic design through construction drawings.

TERRADON maintains LEED accredited professionals in the Land Planning and Development department who remain on the forefront of sustainable design initiatives that aid clients in reducing significant energy costs on projects. TERRADON's Land Development department has more than 25 years experience working on industrial, commercial, parks and recreational, and other projects.

TERRADON has performed engineering and landscape design services for various monuments and plazas throughout the state. TERRADON has ample experience incorporating thematic design elements to achieve honorable memorial and monument plaza sites.

TERRADON has also worked on various renovation and addition projects ranging in sizes from small commercial gas stations, to large industrial sites. TERRADON has specialty staff that have worked on building renovation and additions comparable in size to the proposed project.

### Services



*TERRADON maintains LEED  
accredited  
professionals on staff.*

- Site Civil Engineering
- Master Planning
- Site Feasibility Studies
- Schematic Design
- Layout Plans
- Grading Plans
- Utilities Design
- Preliminary Designs
- Storm Water Management Plans
- Erosion Control
- Presentation Drawings
- Renderings
- Graphic Design
- Construction Observation
- Bidding
- Construction Review
- Building Renovations & Additions Design
- Cost Estimating
- Project Management
- Site Assessments



TERRADON offers some of the most experienced staff in the region for local geotechnical expertise. This team of experts brings a distinctive, specialized understanding of the difficult soil and groundwater conditions found in the Ohio Valley and Appalachian Regions of the United States. The Geotechnical group has provided investigations associated with earthen dams, mining, waste disposal, new building construction, landslides analysis and remedial design, cell and high mast towers, landfill permitting and cap design, flexible/rigid pavement design, and environmental remediation.

### Services

- Test Borings
- Test Pit Excavations
- Monitoring Well and Piezometer Installation
- Soil and Rock Logging, Sampling & Testing
- Landslide Analysis and Remedial Design
- Stability Analysis
- Retaining Structure Design
- Earthen Dams
- Foundation Design
- Municipal and Industrial Landfills
- Flexible and Rigid Pavement Design
- Complete Removal for Landslide Repair
- Buttressing and Regrading
- Subsurface Drainage
- Structural Corrections
- Retaining Walls
- MSE Walls and Other Gravity Walls
- H-Piles and Lagging
- Anchors (Rock or Soil Nailing)
- Geotechnical Design

TERRADON Corporation has provided design, analysis, and construction inspection on more than 300 slip repair projects across the Appalachian Region. TERRADON is well versed in providing test boring services to slip projects and also provides other methods of slip analysis and design.

TERRADON is qualified to provide Ground Penetrating Radar (GPR) and Resistivity testing to evaluate landslides and ascertain information such as: potential failure surface, mapping bedrock, locating subsurface voids, determining the amount of displacement, subsurface anomalies, locating groundwater, and determining stratigraphy layering.

TERRADON personnel are also experienced in various hand sampling techniques such as hand auguring, dynamic and static cone penetrometer tests, and hand dug test holes. These sampling and testing techniques are beneficial for determining subsurface stratigraphy, locating groundwater, collecting soil samples for laboratory analysis, locating failure surface, and determining the landslides boundary.



Constantly changing federal and state environmental requirements are difficult to track and can have a serious impact on businesses and other organizations. TERRADON offers a strong environmental services team to manage issues in a complex environment. Staff is well-versed on environmental permitting processes and regulations as well as site assessment and reporting.

TERRADON closely follows environmental activities on the local, state and federal levels. TERRADON has a thorough understanding of state and federal environmental permitting processes and regulations. This expertise applies to both the initial permit preparations, as well as subsequent negotiations affecting the permit. The firm's strength in addressing environmental issues is built on the diversity of its staff with credentials in chemistry, civil engineering, geotechnical engineering and geology.

### SERVICES

- Environmental Inspections
- Phase I ESA
- Phase II ESA
- Phase III ESA
- Hazardous Waste Management
- Wastewater Management
- Storm Water Planning
- Air Permitting
- Risk Management Plans
- Wetland Delineation
- Tier II Reporting
- Emergency Response Plans
- Environmental Audits
- Environmental Remediation
- NEPA Compliance
- Asbestos and Lead Inspection
- Underground Storage Tanks
- Above Ground Storage Tanks
- Impoundment Stabilization & Closure
- SPCC Planning
- BMP Planning

TERRADON's experienced environmental staff routinely performs Environmental Site Inspections during construction, as well as post rainfall events to ensure compliance with current WVDPE construction stormwater NPDES Permits. TERRADON provides Waters of the US determinations, wetland delineations, Nationwide Permits as well as Individual 404/401 Permits with the Army Corps of Engineers and West Virginia Department of Environmental Protection (WVDEP). TERRADON has performed hundreds of wetland delineations using the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region* (Corps, 2012).



TERRADON offers materials testing and construction monitoring services to document compliance with project design specifications and regulatory requirements. The firm provides construction monitoring for utility, highway, and commercial construction projects. TERRADON also provides laboratory and field testing of construction materials. Engineers and technicians at TERRADON are West Virginia Department of Highways certified in Portland Cement Concrete, Hot-mixed Asphalt, Compaction and Aggregates.

Additionally, TERRADON provides Construction Management services including construction oversight, documentation, and safety procedure implementation. TERRADON has more than 35 qualified and certified construction inspectors and more than 5 qualified construction management representatives. TERRADON's team also includes environmental field inspectors, geotechnical inspectors, and geological field inspectors.

TERRADON Corporation Construction Testing and Inspection Department maintains a full service laboratory testing facility on site at the Poca, WV office. The laboratory is and staffed by qualified and certified construction inspection technicians.

### Services

- Slump of Portland Cement Concrete (AASHTO-T119)
- Air Content of Freshly Mixed Concrete (AASHTO-T196 and T152)
- Unit Weight and Yield (AASHTO-T121)
- Making and Curing of Concrete Test Specimens (AASHTO-T23)
- Compressive Strength of Concrete Specimens (AASHTO-T22)
- Fine and Course Aggregate Gradations (AASHTO-T11 and T27)
- Specific Gravity of Aggregates (AASHTO-T84 and T85)
- Atterberg Limits (AASHTO-T89 and T90)
- Moisture Content of Soil (ASTM-D2216)
- Nuclear Compaction Testing of Soil, Stone, and Hot Mixed Asphalt
- Preparation of Certification Forms and Construction Reports
- Welder Certification
- Agency Compliance
- Floor Flatness Testing
- Fireproofing
- Masonry Testing
- Structural Steel Inspection Certified
- Welding Inspection
- Dye Penetrant Testing
- Bolt Testing
- Project Safety Monitoring
- FAA Eastern Regional Laboratories
- Steel Institute AST Inspections



TERRADON has been a leader in West Virginia and the surrounding region for the land surveying industry since 1989. The team has developed an extensive resume of successful surveying and mapping projects performed for a diverse group of repeat private and public sector clients. TERRADON's experienced staff of licensed professional surveyors and mappers bring expertise and proficiency to every project task.

The company is committed to staying ahead of the industry's pace by investing in state-of-the-art equipment and technology. That commitment enables TERRADON to overcome unique and challenging project conditions or obstacles, and efficiently provide the most accurate and complete information available to clients.

TERRADON has a long history of providing design and construction survey services for numerous transportation projects. Efficient and accurate results are ensured by prioritizing the use of modern technology, including state of the art GPS and robotic total stations, with the latest design software.

TERRADON maintains full-time Professional Surveyors on staff. The firm services projects through the use of in-house field survey crews who are backed by corporate staff members, including an experienced team of CAD designers. TERRADON's transportation survey group is experienced in

### Services

- Mapping
- Construction Layout
- ALTA survey
- Topographic Survey
- GPS Network Control Surveys
- Aerial Mapping
- LiDAR Mapping
- Ground Penetrating Radar
- 3D Mapping

## ... references ...

We feel that the best way to demonstrate our strengths and leadership in design is by referring to our past and present clients. We have an ever-growing list of repeat clients, which include having multiple renovation projects, living quarters, energy savings, and much more. We are able to respond to their needs, and we are certain that we are able to respond to all of your needs as well. So that you don't only have to take our word for it; here is a list of references that we encourage you to call:



*Holiday Inn Express Hotels & Suites*  
*(on-call consultant, 5 hotels in 4 States)*  
*and Candlewood Suites Hotels*  
*(on-call consultant, 2 hotels)*

Gerry Hamerski  
Wheeling Hospitality, LLC  
250 Scott Avenue - Suite 2  
Morgantown, WV 26508  
304 / 284-9989

*Building 55: WV State Office Complex*  
*(LEED Certified)*  
Mr. Gregory L. Melton  
WV General Services Division  
1900 Kanawha Boulevard East  
Charleston, WV 25305  
304 / 558-1808

*Wheeling Island Hotel • Casino • Racetrack*  
*(Open-End A/E Services Contract)*  
Jeff Sellers  
Delaware North Companies, Inc.  
40 Fountain Plaza  
Buffalo, NY 14201  
716 / 858-5518

*Orrick's Global Operations Center*  
Will Turani  
Orrick, Herrington & Sutcliffe LLP  
2121 Main Street  
Wheeling, WV 26003  
304 / 231-2629



WVARNG  
Robert D. Davis, CPT, OD, WVARNG  
CSMS Superintendent  
304 / 541-6539

*Sleep Inn & Suites*  
Angela Harding  
15 Goff Crossing Drive  
Cross Lanes, WV 25313  
304 / 776-7711  
Angela@SleepInnWV.com

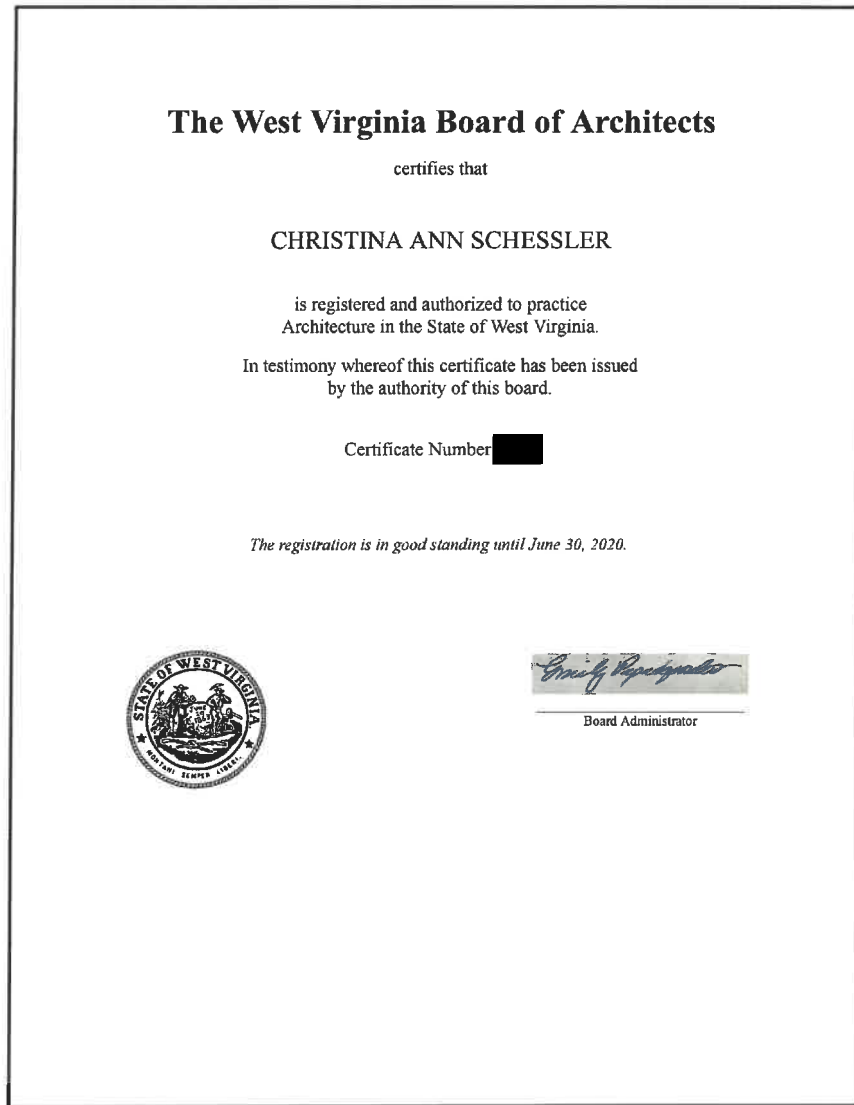
*Four S Development*  
T.J. Summers, CCIM, RPA  
P.O. Box 2388  
Charleston, WV 25328  
304 / 345-8700 x102  
tsummers@summcos.com

*West Virginia State University*  
José U. Toledo, Ph.D.  
Associate Vice President for Administration  
Research and Public Service  
131 Ferrell Hall  
P.O. Box 1000  
Institute, WV 25112  
304 / 766-4290  
toledoju@wvstateu.edu

*WV Higher Education Policy Commission*  
Richard Donovan  
1018 Kanawha Boulevard, East, Suite 700  
Charleston, WV 25301  
304 / 558-0281 Ext. 212  
Rich.Donovan@wvhepc.edu

**... copies of any staff certifications or degrees applicable to this project ...**

Christina Schessler, AIA, LEED AP BD+C (*your Project Manager*) has a Bachelor of Architecture from The Pennsylvania State University (1988), as well as a Masters Degree in Historic Preservation from Savannah College of Art & Design (2012). She is a Registered Architect in West Virginia, Ohio, Pennsylvania, and Virginia. Her West Virginia Board of Architects' Registration & Authorization to provide Architectural Services in West Virginia certificate number is 3810. She is a member of the American Institute of Architects, and is NCARB Certified. She is also a LEED Accredited Professional specializing in Building Design & Construction, and an AIA Safety Assessment Program (SAP) Evaluator. Included is a copy of her 2019-20 certification from the West Virginia Board of Architects:



We can also provide more copies of certifications/degrees/licenses of other Professionals if you wish to see them.

In addition, copies of our firm's various licenses are found on the following pages:



GREEN BUSINESS CERTIFICATION INC. CERTIFIES THAT

**Christina Schessler**

HAS ATTAINED THE DESIGNATION OF

**LEED AP® Building Design + Construction**

by demonstrating the knowledge and understanding of green building practices and principles needed to support the use of the LEED green building program.

CREDENTIAL ID

06 APR 2010

ISSUED

05 APR 2018

VALID THROUGH

A handwritten signature in dark ink, appearing to read "Gail Vitton".

GAIL VITTON, GBCI CHAIRPERSON

A handwritten signature in dark ink, appearing to read "Mahesh Ramanujan".

MAHESH RAMANUJAM, GBCI PRESIDENT



## CERTIFICATE

*I, Ken Hechler, Secretary of State of the  
State of West Virginia, hereby certify that*

by the provisions of Chapter 31, Article 1, Sections 27 and 28 of the West Virginia  
Code, the Articles of Incorporation of

McKINLEY & ASSOCIATES, INC.

conform to law and are filed in my office. I therefore declare the organization to  
be a Corporation for the purposes set forth in its Articles, with the right of perpetual  
existence, and I issue this

### CERTIFICATE OF INCORPORATION

to which I have attached a duplicate original of the Articles of Incorporation.

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

FIFTEENTH day of

DECEMBER 19 89

*Ken Hechler*

*Secretary of State.*



# State of West Virginia



## Certificate

*I, Natalie E. Tennant, Secretary of State of the  
State of West Virginia, hereby certify that*

**MCKINLEY & ASSOCIATES, INC.**

was incorporated under the laws of West Virginia and a Certificate of Incorporation was issued by the West Virginia Secretary of State's Office on December 15, 1989.

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

Accordingly, I hereby issue this

## CERTIFICATE OF EXISTENCE

Validation ID:0WV3W\_CQTDH



*Given under my hand and the  
Great Seal of the State of  
West Virginia on this day of  
October 27, 2015*

*Natalie E. Tennant*

*Secretary of State*

Notice: A certificate issued electronically from the West Virginia Secretary of State's Web site is fully and immediately valid and effective. However, as an option, the issuance and validity of a certificate obtained electronically may be established by visiting the Certificate Validation Page of the Secretary of State's Web site, <https://apps.wv.gov/sos/businessentitysearch/validate.aspx> entering the validation ID displayed on the certificate, and following the instructions displayed. Confirming the issuance of a certificate is merely optional and is not necessary to the valid and effective issuance of a certificate.

**WEST VIRGINIA  
STATE TAX DEPARTMENT  
BUSINESS REGISTRATION  
CERTIFICATE**

ISSUED TO:  
**MCKINLEY & ASSOCIATES INC  
32 20TH ST  
WHEELING, WV 26003-3750**

BUSINESS REGISTRATION ACCOUNT NUMBER: **1040-9524**

This certificate is issued on: **06/28/2011**

*This certificate is issued by  
the West Virginia State Tax Commissioner  
in accordance with Chapter 11, Article 12, of the West Virginia Code*

*The person or organization identified on this certificate is registered  
to conduct business in the State of West Virginia at the location above.*

**This certificate is not transferrable and must be displayed at the location for which issued.**

This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them.  
CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

atl006 v.4  
L0539442304

# CERTIFICATE OF *Authorization*

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

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

**MCKINLEY & ASSOCIATES, INC.**

**C00366-00**

**Engineer in Responsible Charge: TIM E. MIZER - WV PE 013169**

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

**January 1, 2020 - December 31, 2021**

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

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



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

BOARD PRESIDENT

## ... proposed staffing plan ...

First and foremost we can state that the McKinley/TERRADON Teams' large professional staffs will devote whatever time is necessary to provide the West Virginia Army National Guard with a successful project. If our project team is chosen for this project; they are available to start immediately upon our being selected, and will provide the necessary hours to complete your project on time. The work to be performed by your design team is very clear; **to evaluate, prioritize and design within budget and schedule to meet your 4 project goals and objectives.**

We believe our strength lies in the **quality of the people we employ**. Our seasoned staff has an unsurpassed knowledge of the business and the dedication it takes to make each project a success. All of our project managers, Architects and Engineers, write their own specifications for a project. By doing so, the specifications are written for - and pertinent to - only your project.

The most important element of the entire process becomes **communication** from you to our professionals. We use and welcome your input throughout the project. We continually achieve success in projects by maintaining **time and cost management, quality control and excellent communication** amongst the client, consultants, and contractors.

For a proposed plan, a **kick-off meeting** will start the process, where interviews will take place to learn what you, the Owner, want in the Barracks Building 245 renovations. This is a very important step as it sets up the remainder of the project. Armed with this information, the McKinley/TERRADON professionals start the process of **schematic drawings (SDs)**. This is the first time thoughts are put on paper. At the end of this phase the product is a first look at what the plans might look like, as well as a preliminary cost estimate. **You will have a chance to review these plans.** During the **design development (DDs) drawings** phase, plans start to take shape and changes are made. **You will have a chance to review these plans as well.** Next is the time that the McKinley/TERRADON professionals take all of the information gained from the meetings and the SD and DD drawing phases and produce the **construction drawings (CDs)** and specifications for the project. The CDs provide the tool needed for the contractors to bid the project and information and details necessary to construct the building. Changes become difficult at this point. **Copies of the final documents will be distributed to you for final review and approval.** Afterwards is the actual **bidding** of the project. We will conduct a pre-bid meeting to handle all bidding information as well as conduct the bid opening and reporting. Finally, the **Construction Administration** phase involves the construction of the project. Our professionals now act as your agent and watch over the project. We will work with the contractors to make sure they are building what we designed and specified and are doing it correctly. We handle all paperwork from the contractor and provide the owner with approved pay requests. This phase is very important to ensure that you get what you are paying for.

McKinley Architecture and Engineering is on the forefront of **innovative and energy savings designs**. We approach ecological design from a business perspective, offering proactive solutions to complex problems such as **indoor air quality, energy efficiency, sustainability, and water quality**. We recently designed a \$30 million student housing apartment complex, which is **one of the first buildings in WV designed for all LED interior and exterior lighting - and the bids came in for the same cost as conventional florescent lighting**. Function, economics and versatility, in addition to the development of **strong aesthetic appeal**, are crucial elements in our design process.

We know the McKinley/TERRADON Team possesses the required expertise to address all facets of your included project, and we will provide you with all the disciplines and services needed to make this project a success!

**... Descriptions of past projects completed entailing the location of the project, project manager name and contact information, type of project, and what the project goals and objectives and how they were met."**

### Park Drive Development

**Location:** Weirton, West Virginia

**Contact:** Mr. Mark Miller

City of Weirton

200 Municipal Plaza

Weirton, West Virginia 26062

304 / 797-8500 x 1029

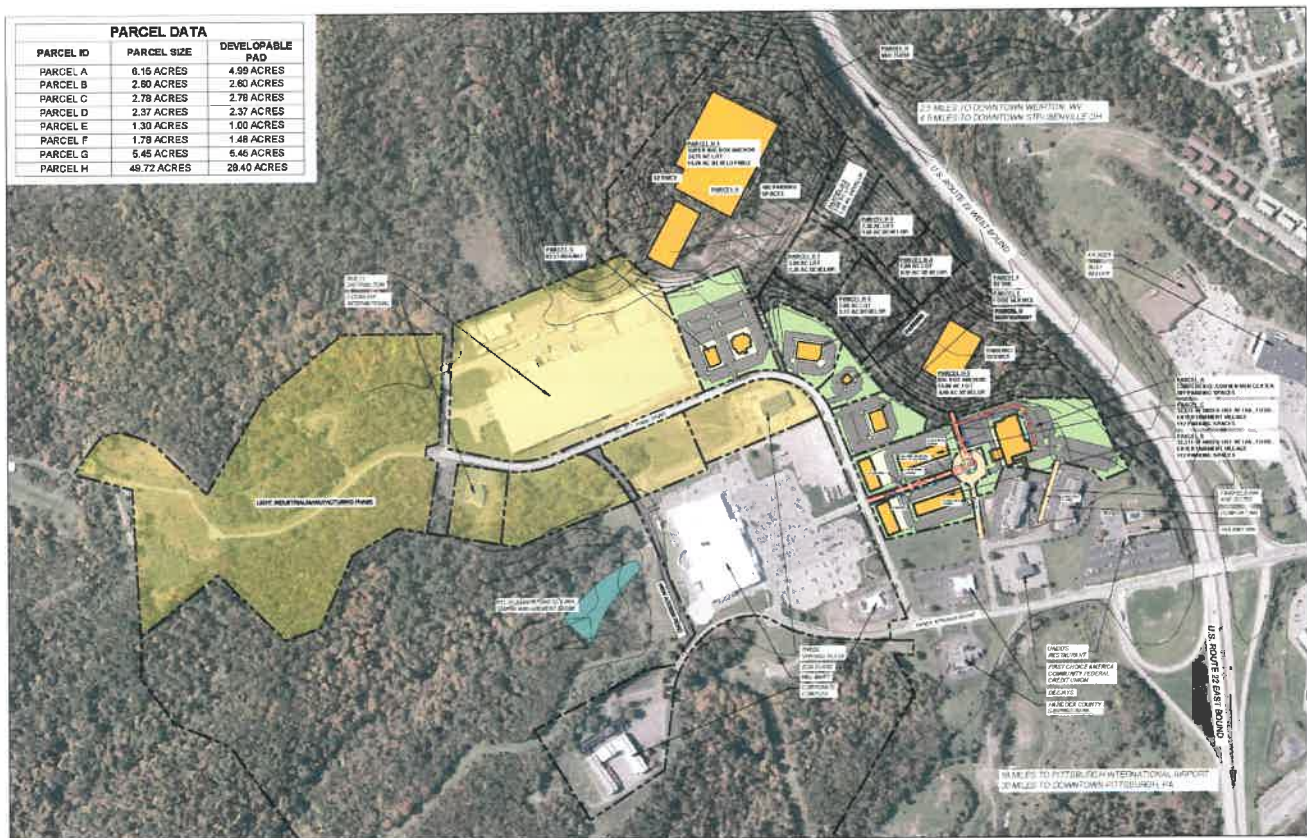
**Type of Project:** Land Assessment & Development - New Construction - Full A/E Services

**Project Description, Goals, and Objectives:** McKinley Architecture and Engineering and TERRADON Corporation are currently working together, along with the with the City of Weirton, for their Park Drive / Three Springs Drive development. This project will adhere to TIF & USDA Grant Funds regulations. There are 8 parcels, involving approximately 48 acres of land to be developed. There are 3 Tasks for this project:

**TASK #1** - 8,000 feet of ADA accessible sidewalks, with 3 options on lighting (approx. 75 poles) adhering to City of Weirton's Unified Development Ordinance (Section 11.6) and the WVDOT Transportation Alternatives program.

**TASK #2** - Site Preparation and infrastructure upgrades to access approximately 20 acres for immediate development and future development of an additional 29 acres along Park Drive. Scope to include site grading, permits, stormwater management, construction of a two lane road, sidewalks and street lighting, and additional segments of access roads and appurtenances.

**TASK #3** - Developing a master plan for the 20 acres to include retail, residential, restaurant, hotel/ conference center, and public spaces.

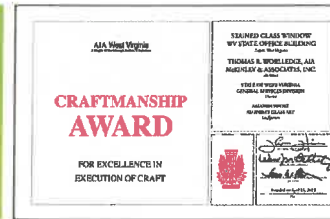


## **Building 55: West Virginia State Office Complex**

**Location:** Logan, West Virginia

**Contact:** Mr. Robert P. Krause, PE, AIA

State of West Virginia  
General Services Division  
1900 Kanawha Boulevard East  
Charleston, WV 25305  
304 / 558-9018



**Type of Project:** Governmental Building - New Construction - Full A/E Services

**Project Description, Goals, and Objectives:** City leaders were searching for a catalyst to stimulate community efforts to revitalize downtown Logan, West Virginia. This office building - dedicated on August 16, 2013 - has become that inspiration. **In March 2014, this project became LEED Certified.** This new 5-story building underscores its major role in the development and revitalization of downtown Logan by uniting office space for 127 employees for 6 State agencies (Department of Health and Human Resources, Division of Rehabilitation Services, the Offices of the Insurance Commissioner, State Tax Department, WorkForce West Virginia, and Workforce Investment Board) under one roof, whom were once scattered throughout the city.

The 53,200 SF building provides current technology, flexibility for future growth, and security features for existing and future tenants. At the request of the Owner, the building was designed to be energy efficient "green" and meet sustainable design goals. To help achieve this, the HVAC system is high efficiency, there is a rooftop energy recovery ventilator, a tight building envelope was created with closed cell foam insulation and thermal efficient windows. One of the unique features of the building is the natural daylight system where we added "light louvers" which redirect daylight to the ceiling and diffuse natural light throughout the space. The open offices were placed around the exterior of the building and the enclosed offices along the interior wall so more of the tenants receive quality light. In addition, interior windows allow the daylight to pass to the center offices. After the project was completed, the firm *alliantgroup* completed an **Energy Efficient Commercial Building Tax Deduction study** regarding the energy efficient features of the building (seen on the following pages), and they projected the building's total energy costs and power costs to have savings of \$34,231 annually!





September 5, 2014

**Sent Via CMRRR: 7013 2630 0000 2069 4021**

Mr. David J. Hildreth  
West Virginia Department of Administration  
900 Pennsylvania Ave., Ste. 500  
Charleston, WV 25302

**Re: Logan State Office Bldg. – Energy Efficient Commercial Building Deduction**

Mr. Hildreth:

alliantgroup has completed an Energy Efficient Commercial Building Tax Deduction study for Logan State Office Bldg. for Massaro Corporation. As required by U.S. Tax Code § 179D, notification must be given to the building owner regarding the energy efficient features of the building and the building's projected annual energy costs.

Below is a list of the energy efficient features of the building which were installed on or in the building as part of a plan designed to reduce the total annual energy and power costs in comparison to a reference building which meets the minimum requirements of ASHRAE (American Society of Heating and Refrigeration, and Air-Conditioning Engineers) Standard 90.1-2001.

**Heating, Ventilation, and Air Conditioning Systems:**

- Boilers
- Unit Heaters
- Chillers
- Energy Recovery Ventilation

**Interior Lighting Systems:**

- Fluorescent Bulbs
- LEDs
- Occupancy Sensors

**Building Envelope System:**

- Pre-Cast Panels
- Rigid Polyisocyanurate
- Gypsum Board

3009 POST OAK BOULEVARD, SUITE 2000 | HOUSTON, TEXAS 77056

[www.alliantgroup.com](http://www.alliantgroup.com) | 800.564.4540

## **Building 55: West Virginia State Office Complex**

The projected annual energy cost for Logan State Office Bldg. was calculated to be \$34,231. Please note that the projected annual energy costs may vary from the building's actual energy costs due to the exclusion of process loads, exterior lighting, variations in occupancy, and variations in usage schedules among other variables.

Please be advised that the amount of the deduction that has been allocated to Massaro Corporation is \$98,658 for the building envelope, HVAC and hot water, and lighting systems in the building. For more information on the allocation of the section 179D deduction, please refer to the U.S. Tax Code § 179D and IRS Notice 2008-40. A copy of the notice can be found at [www.irs.gov](http://www.irs.gov)

If you have any questions, please do not hesitate to contact me.

Very truly yours,



Rizwan Virani  
Managing Director



[www.alliangroup.com](http://www.alliangroup.com) | 800.564.4540



## West Virginia Army National Guard projects

**Location:** State-Wide, West Virginia

**Contact:** Mr. Phillip Emmerth  
Environmental Compliance Manager  
Wheeling AASF # 2  
538 Girtys Point Road  
Wheeling, WV 26003  
304 / 201-3529



**Type of Project:** Governmental - Full A/E Services - Multiple Projects

**Project Description, Goals, and Objectives:** McKinley Architecture and Engineering has completed multiple projects for you, the West Virginia Army National Guard, all around the State, including full A/E design services and construction administration. We have won several contracts over the years, where we were selected to provide Professional Engineer certifications of dozens of SPCC (Spill Prevention, Control, and Countermeasure) Plans and Amendments and Environmental Equivalence Certifications at multiple facilities across West Virginia, such as Eleanor Maintenance Facility, Glen Jean Readiness Center, Wheeling AASF #2, and many more.

For one example, McKinley reviewed and amended the 5 year SPCC Plan at Camp Dawson in Kingwood, Preston County, WV, in both 2012 and 2016. We reviewed the plan to certify that the facility was still in compliance.

### Five (5) Year Review to the Spill Prevention Control and Countermeasure Plan – Camp Dawson

I have completed the review and evaluation of the SPCC Plan for Camp Dawson on 27 September 2016 and will amend the Plan as a result.

The following 5 Year Review is certified per 40 CFR 112.54(b)

Engineer: *Tim E. Mize*

Signature: *Tim E. Mize*

Registration Number: 18109

State: State of West Virginia

Date: 10 Nov 2016



In addition to the SPCC Plan at Camp Dawson, we have also teamed with Assemblage Architects to create these 2 new buildings at the campus; our involvement in these 2 projects includes HVAC/mechanical, electrical, plumbing, and fire protection engineering, as well as construction administration services:

The new Mountaineer Challenge Academy building program includes classrooms, an exercise area/gymnasium, offices, support staff areas, conference, recruiting, and a full service kitchen with dining facility; these spaces will accommodate the 160 young adults/student residents living at Camp Dawson. The gymnasium accommodates physical activity, weight training, and serves as the central hub of the complex. Drill exercises and formations, as well as graduation ceremonies are held here. The U-shaped building creates a large, central courtyard which includes a long shed-roof

covered pavilion, along with a circular, concrete amphitheater. This courtyard is a multi-purpose outdoor events area for student functions, training activities, drills and formations, educational purposes, receptions, and more. This project won a 2011 WV AIA Merit Award.



The mission of the new Multi-Purpose Building is a permanent masonry steel-framed structure that serves as the primary physical training and event space for the Camp Dawson residents. This project won a 2014 West Virginia AIA Honor Award. The facility houses a large gymnasium, a physical fitness area, locker rooms, shower facilities, offices, security lighting and fencing, and a unique entry. This project was designed with energy recovery systems, as well as daylight harvesting in the gym. The gymnasium was based on occupancy of 200 exercising, or 3,500 at rest for events/assembly.

## West Virginia State Police - Open-End Contracts

**Location:** State-Wide, West Virginia

**Contact:** Major William Scott  
West Virginia State Police  
725 Jefferson Road  
South Charleston, WV 25309  
304 / 746-2124



**Type of Project:** Governmental - Full A/E Services - Multiple Projects

**Project Description, Goals, and Objectives:** For over 20 years, McKinley Architecture and Engineering has been **honored** to have been selected for **multiple consecutive West Virginia State Police open-ended contracts** for all **architectural and engineering services** throughout West Virginia.

We have completed numerous **renovations/repairs** as well as **additions** on police detachments throughout WV, such as in Clarksburg, Franklin, Lewisburg, Martinsburg, and Romney to name a few. The upgrades have included **HVAC, roofs, floor tile to replace asbestos tile, electrical, site lighting, generators, doors, windows, interior finishes, furniture, building skin/facades, fire alarm and sprinkler systems, ADA compliance, and security systems**, to name a few.

Moreover, we also have completed design services on multiple **new detachments** in Berkeley, Logan, Morgantown, Rainelle, and Wheeling to name a few.

Various buildings include garages for their various-sized vehicles (some have multiple bays), **many have barracks/living/sleeping quarters**, some detachments have E911 Centers.

Our projects are built with **energy efficiency** in mind with the use of natural daylighting (such as daylight clearstories and self-supporting translucent skylights), occupancy sensors, photo sensors, kalwalls, and much more. Projects include **building safety and security, compliance with codes, as well as force, bullet, and blast protection, and much more.**



## **West Virginia State Police Academy - 3 Dormitory Renovations**

**Location:** Dunbar, West Virginia

**Contact:** Major William Scott  
West Virginia State Police  
725 Jefferson Road  
South Charleston, WV 25309  
304 / 746-2124

**Type of Project:** Governmental - Renovations - Full A/E Services

**Project Description, Goals, and Objectives:** The \$4.5 million campus-wide improvement projects included 5 buildings: the **renovation of 3 existing barracks/dormitory buildings** (*seen below*), the demo of a shooting range and replacing that building with a brand new upgraded shooting range and control center, and the new training & assembly multi-purpose building. This project was completed in **phases, on a building-by-building basis.**

The 27,708 SF **Building A** is a 2-story **dormitory** (for 160 cadets) with classrooms that was built in 1968. This **renovation** project included **interior finishes, new built-in furniture, signage, floor tile to replace asbestos tile, upgraded HVAC, new boiler & chiller, replacing the WVSP shield at the entry, repairing the sauna and steam room, new fire alarm and sprinkler system, security system, network computers, electrical, windows & doors, building skin/facade, elevator, site lighting, ADA compliance and more.**

The 8,985 SF **Building B** is a 2-story **dorm** (for 10 female cadets) with classroom (for 100+ cadets) that was built in 1949. This **renovation** project included **interior finishes, flooring, walls, ceiling tile, building skin/facade, windows & doors, ADA compliance and more.**

The 21,966 SF **Building C** is a 2-story **dormitory** (for 48 cadets) with classroom (for 100 cadets) and cafeteria that was built in the 1970s. This **renovation** project included **interior finishes, HVAC, vestibule, security system, fire alarm, floors, sprinkler system, lighting, data, signage, elevator, building skin, windows & doors, ADA compliance, sidewalks and more.**



## **"University Terrace" College Student Apartments Housing Complex**

**Location:** Fairmont, West Virginia

**Type of Project:** New Construction - Full A/E Services

**Project Description, Goals, and Objectives:** McKinley Architecture and Engineering led the team that designed the 3 building, \$30 million "University Terrace" College Student Apartments Housing Complex. Since the conditions and availability of student housing was of high importance to the University, this project was a high priority. This project kicked off with programming meetings, where we got the Owner's input to develop a priority list that was used as a guideline throughout the entire design phase. Defining this from the start was important, for it set a tone for the project, where every entity was on board from the beginning, and we helped transform FSU's ideas into realities. The project includes construction of a new housing complex on an existing parking lot, followed by the demolition of 4 current wood frame three-story apartment buildings which were beyond their lifespan, and new parking lots will be built on the site of the former apartment buildings. The demolition and construction was well-planned so that there was as little downtime as possible for available student housing accommodations. There were 216 beds in the existing college apartments; **we increased the number of beds to 345**. The ground-breaking was in April 2015 and the 3 buildings were all completed between July-October 2016. The structures consist of metal and steel frame buildings with CMU stair and elevators towers; two of these buildings are linked with a glass enclosed connector. With this new **105,706 SF** complex, the hope is that potential students will see this facility and will want to come to this University. The Apartments were designed to provide a welcoming, comfortable and home-like environment that will be conducive to the achievement of individual goals while also establishing a sense of community for student growth and interaction.

University Terrace provides **fully furnished living space to students; consisting of both apartment and suite-style living**. There are **103 units**, including 41 quads and 35 semi suites, 14 doubles, and 13 singles. These all have their own **bedroom, living, kitchen, and bathroom spaces** (but semi-suites have a shared bathroom). There are multiple lobbies, lounges, multi-purpose spaces, study halls, laundry rooms, elevators and stairwells, and more. There are staff spaces, a Residence Director office, and RD double apartment. The support spaces include rooms for plumbing/fire protection, electrical, data/telecom, housekeeping and maintenance storage. The buildings are located on the west, north and east sides of the site; creating a large courtyard for student functions, which includes landscaping and hardscaping along with a small amphitheater. The goal was to incorporate a space for students to congregate; to create a gathering space that creates a sense of community. There are many **energy-efficient design elements** throughout the apartments. For example, **we designed for this to be one of the first buildings in West Virginia with all LED interior and exterior lighting, and the bid came in for the same cost as conventional florescent lighting**. For **interior design & FF&E**; specific color and texture selections on the floors, walls, ceilings, and furnishings will enhance the lighting in the space,

will create a comfortable home-like atmosphere, and were made with a focus on incorporating a neutral toned color palette and fresh accents to offer interest and contrast while establishing a timeless base that will avoid becoming tired or dated. While LEED certification is not a project requirement, **all material and finish selections, in addition to meeting practical criteria, also consider sustainability aspects**.



## **Maclin Hall Dormitory**

**Location:** Montgomery, WV

**Contact:** Mr. James Darling

West Virginia University's Institute of Technology

405 Fayette Pike

Montgomery, WV 25136

304 / 442-3104

**Type of Project:** Total Renovations - Full A/E Services

**Project Description, Goals, and Objectives:** McKinley was selected to design

a comprehensive renovation to the historic Maclin Hall dormitory and bring it up to current standards. The \$6 million project included redesigning the 142 dorm rooms and RA bedrooms in this 4-story building, including new finishes and furnishings, paint, flooring, lighting, data, and much more. In this 53,900 SF building, we also brought it up to current codes and ADA compliance,

replaced the entire HVAC, lighting, fire protection, plumbing, data systems, shared areas, new roof, and restoration of the exterior, added a theater room, exercise area, laundry room, studies, computer rooms, TV rooms for video games, student commons areas, and lounges. Also included in this project was the replacement of the elevator, which had to be added to the inside of the building to meet the current accessibility law and to facilitate the movement of furniture and equipment throughout the building. We also completely regutted and renovated all 35 restrooms, provided new shower facilities, and brought them up to ADA compliance. On the ground floor, there were 5 restroom/shower renovations; on the upper floors there was 2 communal restrooms/showers per floor, and the 8 suites per floor each had their own separate restroom. There was water damage throughout the building, and the Owner even used tarps and buckets in the attic to catch the leaks in the roof.

There was wall, ceiling, and floor damage in most rooms, and mildew damage in some rooms as well.

This project had two fast-tracked aspects to it; there was a design time of only 6 weeks, along with a construction time of only 6 months. This project was fast-tracked throughout the summer of 2007, so the building could be occupied by students for the start of the 2007-2008 school year. Even with this extremely short timeline, we were still able to bring the project in under budget.

By careful planning we were able to meet all of the ADA requirements, save the client the cost of reroofing, and bring the building up to the standards required for a modern dormitory.



## Orrick's Global Operations Center

**Location:** Wheeling, West Virginia

**Contact:** Mr. Will Turani

Orrick, Herrington & Sutcliffe LLP  
2121 Main Street  
Wheeling, WV 26003  
304 / 231-2629

**Type of Project:** Total Renovations - Full A/E Services

**Project Description, Goals, and Objectives:** This 100 year old warehouse was adaptive reused and **renovated** to create some of the most creative office space in the State. This **four-story, 88,000 SF** former historic warehouse is now a high tech "back office" for a major multinational company. The building is found in the **Wheeling Warehouse Historic District**, in the **National Register of Historic Places**. The greatest challenge was to convert the 100 year old once very industrial wood-framed building into a modern "Class A" office facility while retaining the historical heritage of the structure and district itself.

**This \$8 million dollar project won a West Virginia AIA Merit Award.**

Extensive restoration of the **exterior** was needed first. The entire exterior shell was designed and constructed in 6 months to attract a new tenant (it quickly became the home to the international law firm Orrick. This building soon became the company's Global Operations Center; no other firm has a 24/7 facility that rivals it. It provides the firm and its clients with a central business infrastructure that delivers comprehensive and reliable support services around the world, and around the clock). The exterior renovations included **reconstructing 120 dilapidated steel windows and glazing, extensive brick repointing, roof, a new public entrance, and parking lot.**

**The building was partially occupied while renovations continued.** Architecture & engineering design was completed in-house and included a completely new mechanical/HVAC system, structural, civil, electrical and fire suppression systems. On the **interior**, the original facility was almost void of the vertical circulation needed a modern day, team oriented work environment. An exposed steel atrium/elevator/stair core connects the four floors while introducing the industrial metals into the interior. Perforated columns, beams, and wire meshes allow **daylight** to filter in through usually solid steel construction. Two exposed, glass backed passenger elevators with stainless steel interior finishes now traverse the four floors allowing passengers a dynamic view through the atrium and walkways out to Main Street. The stainless steel and galvanized finishes of the exposed spiral **ductwork, electrical** conduits and cable trays, **sprinkler** piping, and perforated metal **light fixtures** further enhance the industrial concept of the design.



**BEFORE**

**and AFTER**



**BEFORE and AFTER**



**McKINLEY**  
ARCHITECTURE + ENGINEERING

## Charleston Enterprise Center - Suite 406

*Besides the paint, what makes this office "green"?*



McKinley Architecture and Engineering has been practicing "green" for years and has won awards for converting unused warehouse space into striking modern office buildings. We won a **West Virginia Chapter of the American Institute of Architects 2009 Merit Award** for the newly renovated Suite 406 within the Charleston Enterprise Center. **One of the best ways to build green is to adapt an existing building; twenty percent of a building's energy consumption is embodied in the building's physical structure itself.** The first thing you will notice is we left most of the existing structure exposed; this minimizes the amount of new materials required to define the space and allowed us to utilize some special features. The centrally located conference room "Lantern" glows all day long from natural sunlight from above; this room's ceiling acts as a reflector, bouncing natural light throughout the space. In addition to reusing the space, we also reused doors to make all of the desks, workstations and conference table. The top of the dividers is made from "Homosote", a board made from 100% recycled newspapers and covered with a fabric made from 100% recycled polyester. An office full of unique, durable office furniture for less than 1/10th of the cost of standard modular furniture is another advantage. The office chairs are new, but the "Zody" chair by Haworth is the first chair to be **Cradle to Cradle Gold Certified**. This certification means that the manufacturer will take back the chair at the end of its useful life to disassemble and make a new chair, completing the cycle. Yes, the paint on the walls is green, but it also has very low volatile organic compounds (VOC's) which keeps the air we breathe cleaner, and contains an anti-microbial which inhibits the growth of mold and mildew. Most of the floor is cleaned and sealed with water based polyurethane, leaving the natural distressed state of the floor. The remainder used a carpet tile by LEES which minimizes waste, has 35% recycled content and is **Green Label Certified**, meaning it **meets stringent indoor air quality requirements**. The window blinds allow the control of glare while maintaining the view and minimizing heat gain. The direct/indirect lights are controllable so the tenant can adjust the amount of electric lighting dependant on the amount of natural light coming in from the windows and the skylight. Even the bowl on the conference room table is recycled from the original fire bell that used to be on the exterior of the building.



& AFTER





TERRADON Corporation completed site planning and site civil engineering for the 83,900 Square Feet Armed Forces Readiness Reserve Center in Eleanor, WV.

The site is home to stationed units: 111th Engineer Brigade (WVARNG) (the largest brigade in the WVARNG), Troop B, 1st Squadron, 150th Cavalry Regiment (WVARNG), 3664th Ordnance Company (WVARNG), and Detachment 3, Company D, 230th Brigade Support Battalion (WVARNG).

The WVARNG negotiated with the US Army Corps of Engineers for the site (with the maintenance center) totaling 43 acres at the base of the Winfield Locks and Dam site in Eleanor, WV. The building is located adjacent to the new Maintenance Facility on the site, with the main entrance facing east toward the main access to the site. The orientation of the building takes advantage of views of the wetland area and the Kanawha River. The Armory houses units of the state Army National Guard and one unit of the Navy.

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**Project Owner**

WVARNG



TERRADON Corporation provided full service site civil engineering services for the design and completion of the WVARNG Eleanor WV Maintenance Center.

The Eleanor Maintenance Complex, in Eleanor, WV, is a 132,000 square foot state-of-the-art repair and maintenance facility for the West Virginia Army National Guard (WVARNG). The specially designed Army "Combined Logistic Support Facility" will house the Combined Support Maintenance Shop (DSMS), an Organizational Maintenance Shop (OMS) and United States Property and Fiscal Office (USPFO) parts and storage warehouse.

The facility provides a full range of maintenance support for all WVARNG military vehicles throughout the state. It includes 28 maintenance work bays with overhead bridge cranes, an engine rebuild shop, a body shop with blast and paint booths, a carpentry shop, a machine shop, a canvas shop, a small arms repair shop and an electrical communications repair shop. The facility also has specialized testing capabilities in the form of an engine transmission dynamometer.

Additionally, TERRADON provided services for the WVARNG Gate House and Tank Road at the Eleanor, WV site.

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#### **Project Owner**

WVARNG



TERRADON issued site evaluation studies and site engineering phases of two Advanced Technology Center projects in the Cabell, Putnam, and Kanawha County region and in the Harrison, Marion and Mon County region. The intent of the site selection process was to identify multiple suitable site candidates where the Advanced Technology Centers could be located.

The Advanced Technology Centers were considered the main component of these projects. However, the sites were also evaluated on the opportunity they could provide for the possible future expansion of a Community and Technical College. The most suitable sites were selected out of the expansive pool of possible sites within the area. The candidate sites that were chosen were studied in detail and an intensive inventory and analysis phase was conducted to determine the most appropriate site location for the projects.

The inventory process consisted of gathering necessary information needed to evaluate each site based on a list of established criteria developed for this site selection process including visibility, site readiness, site size, and more. The list of possible sites was narrowed down to the ten best sites with the most potential for development.

TERRADON used prior knowledge of similar site selections to determine the criteria to develop for these site selections. The criteria database was compiled for each site by using various resources and implementing individual site visits with intensive data gathering.

### Project Owner

WV Higher Education Policy  
Commission



TERRADON Corporation provided Environmental, Geotechnical and Survey services to the West Virginia Department of Administration for the State Office Building located in Fairmont, West Virginia.

TERRADON's Environmental team provided phase 1 and phase 2 Environmental site assessments (ESA) for the site. Phase 2 ESA consisted of soil and ground water sampling and pesticide wipe sampling. The team also conducted asbestos survey and lead-paint survey. For the project, TERRADON prepared quantities for bid documents and provided over sight for demolition and abandonment. TERRADON's Geotechnical experts conducted investigation of existing filled basements and foundation investigation and design of the Fairmont building site.

### **Project Owner**

WV Department of  
Administration



TERRADON Corporation provided engineering design services for the Arthur Weisberg Family Applied Engineering Complex (AEC), a 152,000 sqFt facility, located on Third Avenue. The state of the art facility houses six different academic and research programs and is one of Marshall University's newest facilities.

Marshall boasts the four story facility to be organized to promote collaboration between the university's colleges and research corporations. A central four-story atrium serves as a window into the building. The complex's scale and the materials of brick and cast stone are consistent with adjacent campus architecture.

TERRADON's site civil engineering team provided LEED expertise for the project. The project is pursuing LEED Silver certification via sustainable features as teaching tools. Stormwater collected from roofs will be used for teaching and research projects and will also be recycled for one of the restrooms in the building. A Green Roof above the Advanced Material and Testing laboratory will reduce the amount of stormwater discharged while providing an opportunity to study the ecological effects of stormwater and associated plantings.

The AEC facility is the first LEED building in the city of Huntington. The AEC facility was built with the intention of it being open and accessible to the public to demonstrate its concepts of sustainability that were incorporated early in the design of the project. The following are the concepts that Marshall University viewed as priority for achieving LEED Silver certification:

- Sustainable Sites
- Water Efficiency – Green Roof
- Energy and Atmosphere
- Materials and Resources
- Indoor Environmental Quality
- Innovation and Design Process
- Regional Priority Credits

### Project Owner

Marshall University



TERRADON Corporation provided services for the development of Tanyard Station, a 50-acre retail development in Barboursville, WV. The project allowed for 33 acres of 'pad ready' retail space. Currently 6 acres of retail space is built out and operational with brands such as Sheetz, Verizon, Aspen Dental, Longhorn and Aldi serving as anchors.

TERRADON provided services from the inception of the project including environmental assessments, survey, permitting, mitigation design and oversight, erosion and sediment control design, quality assurance and quality control, testing and engineering consulting. Upon completion, TERRADON provided as-built surveys of the site and elevation and geotechnical certification for each individual pad. TERRADON's services included typical and specialty inspections such as compaction, concrete placement, steel, utility installation and box culvert installation.

TERRADON designed a 958 linear foot box culvert to allow for Tanyard Branch to be filled and create retail space and parking above. The culvert was designed to pass the 100 year flood elevation of Tanyard Branch and provided capacity of the Mud River to surcharge back into the culvert and alleviate flooding within the village. The culvert can withstand 35 feet of fill material placed on top of it. The closure of Tanyard Branch brought opportunity for mitigation which was performed offsite. The mitigation not only fulfilled permit requirements, but allowed for improvements to the local park where it was performed.

The development of the project was required to mitigate for threatened and endangered species onsite. TERRADON utilized a subconsultant, Copperhead Environmental, to perform an acoustic bat survey and TERRADON performed a habitat assessment of the subject property. Both assessments were utilized to develop a plan to mitigate potential impacts to the habitats which included the planting of vegetation onsite to promote onsite habitat as well as the placement of bat houses offsite.

## **PROJECT OWNER**

Interstate Development

## The Summit Bechtel Family National Scout Reserve

Fayette County, West Virginia



TERRADON



The Summit is a 10,600+ acre outdoor adventure center owned by the Boy Scouts of America. TERRADON performed site selection and site evaluation services. Additionally, the firm provided geotechnical investigations, design, survey, planning, and infrastructure design and inspection. Working under tight specifications and time restrictions, TERRADON spearheaded the delivery of the world class facility.

TERRADON worked with project owners to find the most feasible and economically beneficial site for the boy scout adventure site. The site selection in Fayette County, WV was chosen to compete with site selections across the United States. The competition was one of 28 site across 11 states.

TERRADON provided site prioritization and analysis to help project owners see the beneficial exponents to developing the outdoor adventure park in the mountains of West Virginia. TERRADON worked closely with state agencies during the site selection process to determine the best site development plans to economically benefit both the Boy Scouts of America as well as the state of West Virginia. The final design site was selected from scouring multi-acreage sites in different counties with specific elements considered including site feasibility, site readiness, budgeting exponents, and economic development. Prior to final selection, TERRADON's site was in the short list of three sites with two others in Virginia and Arkansas. The client was impressed with the quality and depth of our work that they hired TERRADON to do the bulk of the design work on site.

### Project Owner

Boy Scouts of America



TERRADON

Per your request in "General Terms and Conditions" Part 8, here you will find copies of our various Insurance Coverages:

**ACORD**<sup>TM</sup>

## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
01/02/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> <b>Paul Associates</b> 1311 Chapline Street P. O. Box 990 Wheeling, WV 26003-0123	<b>CONTACT NAME:</b> <b>PHONE (A/C, No, Ext):</b> 304.233.3303 <b>FAX (A/C, No):</b> 304.233.3333 <b>E-MAIL ADDRESS:</b> <b>PRODUCER CUSTOMER ID #:</b>																					
<b>INSURED</b> <b>McKinley &amp; Associates Inc</b> See Below Additional Named Insured 32 - 20th Street Ste 100 Wheeling, WV 26003	<table border="1"> <thead> <tr> <th colspan="2">INSURER(S) AFFORDING COVERAGE</th> <th>NAC #</th> </tr> </thead> <tbody> <tr> <td>INSURER A:</td> <td>Cincinnati Insurance Co.</td> <td>10677</td> </tr> <tr> <td>INSURER B:</td> <td>Brickstreet Ins</td> <td>Brick</td> </tr> <tr> <td>INSURER C:</td> <td></td> <td></td> </tr> <tr> <td>INSURER D:</td> <td></td> <td></td> </tr> <tr> <td>INSURER E:</td> <td></td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> <td></td> </tr> </tbody> </table>	INSURER(S) AFFORDING COVERAGE		NAC #	INSURER A:	Cincinnati Insurance Co.	10677	INSURER B:	Brickstreet Ins	Brick	INSURER C:			INSURER D:			INSURER E:			INSURER F:		
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INSURER C:																						
INSURER D:																						
INSURER E:																						
INSURER F:																						

**COVERAGES** **CERTIFICATE NUMBER: 2019-2020 CERTIFICATES** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDITIONAL SUBROGATION	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY		EPP/EBA0146335	06/15/2019	06/15/2020	EACH OCCURRENCE \$ 1,000,000
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY					DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 500,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR					MED EXP (Any one person) \$ 10,000
	<input checked="" type="checkbox"/> CONTRACTUAL LIAB					PERSONAL & ADV INJURY \$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:					GENERAL AGGREGATE \$ 2,000,000
	<input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC					PRODUCTS - COMP/OP AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY		EPP/EBA0146335	06/15/2019	06/15/2020	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<input type="checkbox"/> ANY AUTO					BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS					BODILY INJURY (Per accident) \$
	<input checked="" type="checkbox"/> SCHEDULED AUTOS					PROPERTY DAMAGE (Per accident) \$
	<input checked="" type="checkbox"/> HIRED AUTOS					\$
	<input checked="" type="checkbox"/> NON-OWNED AUTOS					\$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR		EPP/EBA0146335	06/15/2019	06/15/2020	EACH OCCURRENCE \$ 1,000,000
	<input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE					AGGREGATE \$ 1,000,000
	<input type="checkbox"/> DEDUCTIBLE					\$
	<input type="checkbox"/> RETENTION \$					\$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	Y/N	WCB1018014	12/30/2019	12/30/2020	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTH-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	N/A	PA EL INCLUDED WV BROAD FROM EL			E.L. EACH ACCIDENT \$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
						E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	BLANKET WAIVER OF SUBROGATION		WCB1018014	12/30/2019	12/30/2020	INCLUDED

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE ISSUED AS PROOF OF INSURANCE  
 MCKINLEY ARCHITECTURE AND ENGINEERING, MCKINLEY ARCHITECTURE AND ENGINEERING LLC  
 MCKINLEY ARCHITECTURAL SERVICES, INC.  
 WILLOW GLEN CAPITAL  
 FORT HENRY LLC

<b>CERTIFICATE HOLDER</b>  MCKINLEY & ASSOCIATES, INC. ATTN: LISA DICARLO 32 - 20TH STREET STE 100 WHEELING, WV 26003	<b>CANCELLATION</b>  SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE <i>Lee C. Paul Jr 1/2/20 Jm</i>
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ACORD 25 (2009/09)

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## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

10/3/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION** IS **WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> The James B. Oswald Company 1100 Superior Avenue, Suite 1500 Cleveland OH 44114	<b>CONTACT NAME:</b> Noelle Boyd <b>PHONE</b> (A/C, No, Ext): 216-367-4954 <b>FAX</b> (A/C, No): 216-839-2815 <b>E-MAIL</b> : nmboyd@oswaldcompanies.com <b>ADDRESS</b> : nmboyd@oswaldcompanies.com
<b>INSURED</b> McKinley Architecture and Engineering 32 20th Street #100 Wheeling WV 26003	<b>INSURER(S) AFFORDING COVERAGE</b> INSURER A: Continental Insurance Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:

**COVERAGES**

CERTIFICATE NUMBER: 1331148277

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	<b>COMMERCIAL GENERAL LIABILITY</b> CLAIMS-MADE <input type="checkbox"/> OCCUR <input type="checkbox"/>  GEN'L AGGREGATE LIMIT APPLIES PER: POLICY <input type="checkbox"/> PRO. JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:					EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$
	<b>AUTOMOBILE LIABILITY</b> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY <input type="checkbox"/>					COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <input type="checkbox"/> <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$ <input type="checkbox"/>					EACH OCCURRENCE \$ AGGREGATE \$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input type="checkbox"/>	N/A			PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Professional Liability Claims Made Retro Date: 9/10/1981	N Y	AEH691893924	10/10/2019	10/10/2020	Each Claim Aggregate \$1,000,000 \$2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)  
Waiver of Subrogation as designated above is provided when required of the Named Insured by written contract or agreement.

**CERTIFICATE HOLDER****CANCELLATION**

Specimen For Purposes of Evidencing Coverage Only	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE 
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Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

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

Proc Folder: 694286

Doc Description: Barracks Building 245 Renovation Design Camp Dawson

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2020-02-26	2020-03-17 13:30:00	CEOI 0603 ADJ2000000005	1

#### BID RECEIVING LOCATION

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

#### VENDOR

Vendor Name, Address and Telephone Number:

\*000000206862  
McKinley Architecture and Engineering  
32 20th Street - Suite 100  
Wheeling, WV 26003  
(304) 233-0140

#### FOR INFORMATION CONTACT THE BUYER

Tara Lyle  
(304) 558-2544  
tara.l.yle@wv.gov


Signature X

FEIN # 55-0696478

DATE 11 March 2020

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

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.



(Name, Title)

Ernest Dellatorre, President

(Printed Name and Title)

32 20th Street - Suite 100, Wheeling, WV 26003

(Address)

(304) 233-0140 | (304) 233-4613

(Phone Number) / (Fax Number)

edellatorre@mckinleydelivers.com

(email address)

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

McKinley Architecture and Engineering

(Company)



(Authorized Signature) (Representative Name, Title)

Ernest Dellatorre, President

(Printed Name and Title of Authorized Representative)

11 March 2020

(Date)

(304) 233-0140 | (304) 233-4613

(Phone Number) (Fax Number)

STATE OF WEST VIRGINIA  
Purchasing Division  
**PURCHASING AFFIDAVIT**

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

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

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

**DEFINITIONS:**

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

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

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

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: McKinley Architecture and Engineering

Authorized Signature: [Signature] Date: 11 March 2020

State of West Virginia

County of Ohio, to-wit:

Taken, subscribed, and sworn to before me this 11 day of March, 2020.

My Commission expires 16 August, 2020.



NOTARY PUBLIC

[Signature]

Purchasing Affidavit (Revised 01/19/2018)