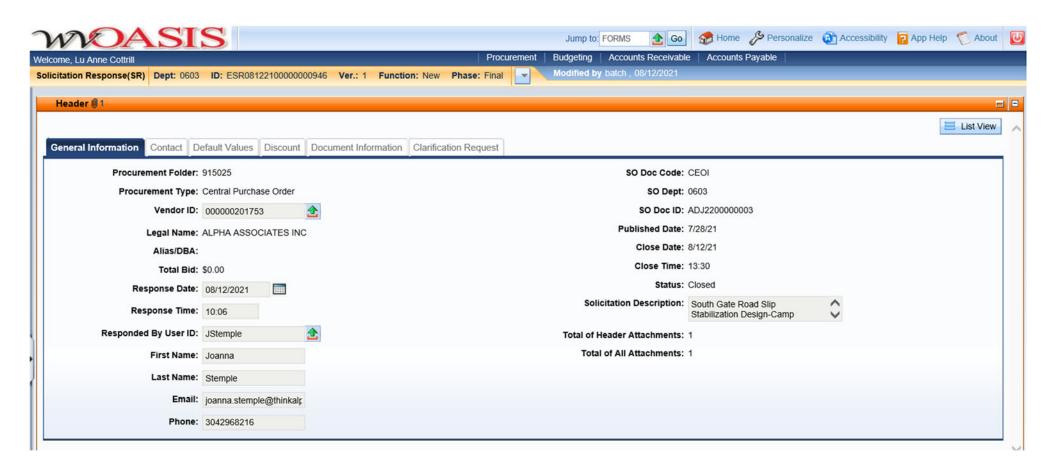
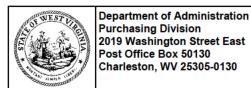


2019 Washington Street, East Charleston, WV 25305 Telephone: 304-558-2306 General Fax: 304-558-6026

Bid Fax: 304-558-3970

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





### State of West Virginia Solicitation Response

Proc Folder: 915025

Solicitation Description: South Gate Road Slip Stabilization Design-Camp Dawson

Proc Type: Central Purchase Order

 Solicitation Closes
 Solicitation Response
 Version

 2021-08-12 13:30
 SR 0603 ESR08122100000000946
 1

**VENDOR** 

000000201753

ALPHA ASSOCIATES INC

Solicitation Number: CEOI 0603 ADJ2200000003

Total Bid: 0 Response Date: 2021-08-12 Response Time: 10:06:23

Comments:

FOR INFORMATION CONTACT THE BUYER

David H Pauline 304-558-0067 david.h.pauline@wv.gov

Vendor
Signature X

FEIN#

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

Date Printed: Aug 12, 2021 Page: 1 FORM ID: WV-PRC-SR-001 2020/05

DATE

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	South Gate Road Slip Stabilization Design-				0.00
	Camp Dawson				

Comm Code	Manufacturer	Specification	Model #	
81101508				

#### **Commodity Line Comments:**

#### **Extended Description:**

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

Date Printed: Aug 12, 2021 Page: 2 FORM ID: WV-PRC-SR-001 2020/05





# SOUTH GATE ROAD SLIP STABILIZATION DESIGN CAMP DAWSON CEOI 0603 ADJ220000003

Architecture/Engineering Services

Public Notice Date: July 28, 2021 Submission Date: August 12, 2021

EXPRESSION OF INTEREST









CONTACT

Address

Richard Colebank, President & COO Alpha Associates, Incorporated 209 Prairie Ave. Morgantown, WV 26501 Phone & Fax

Phone: 304-296-8216 Fax: 304-296-8216 Online

Email: rick.colebank@thinkALPHAfirst.com

Website: www.thinkALPHAfirst.com



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

#### State of West Virginia Centralized Expression of Interest Architect/Engr

Proc Folder:

915025

Reason for Modification:

Central Purchase Order

Doc Description: South Gate Road Slip Stabilization Design-Camp Dawson

Proc Type: Date Issued

Solicitation Closes

Version

2021-07-28

2021-08-12 13:30

Solicitation No

CEOI 0603 ADJ2200000003

**BID RECEIVING LOCATION** 

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON WV 25305

US

#### VENDOR

**Vendor Customer Code:** 

Vendor Name: Alpha Associates, Incorporated

Address: 209 Prairie Avenue

Street:

City:

Morgantown

State:

West Virginia

Country: USA

**Zip:** 26501

Principal Contact: Richard A. Colebank

Vendor Contact Phone: 304-296-8216

Extension:

102

FOR INFORMATION CONTACT THE BUYER

David H Pauline 304-558-0067

david.h.pauline@wv.gov

Vendor

Signature X

550516286

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

Date Printed: Jul 28, 2021

Page: 1

FORM ID: WV-PRC-CEOI-002 2020/05

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.

Richard A. Colebank, President & COO	
(Name Title)	
(Printed Name and Title)	· · · · · · · · · · · · · · · · · · ·
209 Prairie Avenue. Morgantown, WV 26501	
(Address)	
(304) 296-8216/ (304) 296-8245	
(Phone Number) / (Fax Number)	
rick.colebank@thinkalphafirst.com	
(E-mail 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.

Alpha Associates, Inc.	
(Company)	
(Authorized Signature) (Representative Name, Title)	
Richard A. Colebank, President & COO	
(Printed Name and Title of Authorized Representative)	_
8/11/21	
(Date)	
(304) 296-8216/ (304) 296-8245	
(Phone Number) (Fax Number)	Т

#### 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 exceed 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: Alpha Associates, Inc. Authorized Signature: Alpha Associates, Inc. State of West Virginia County of Monongalia , to-wit: Taken, subscribed, and sworn to before me this 11 day of August , 2021. My Commission expires September 22 , 2025. AFFIX SEAL HERE NOTARY PUBLIC James 5 Stamps

Purchasing Affidavit (Revised 01/19/2018)

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
JOANNA BRITTANY STEMPLE
Alpha Associates, Inc.
200 Prairie Ave, Morganioni West Verginia 26501
My Commission Expires September 22, 2025

# West Virginia Ethics Commission Disclosure of Interested Parties to Contracts

(Required by W. Va. Code § 6D-1-2)

Name of Contracting Business Entity: Alpha Associates, Inc Address: 209 Prairie Avenue
Morgantown, WV 26501
Name of Authorized Agent: Richard A. Colebank Address:
Contract Number: CEOI 0603 ADJ220000003 Contract Description: South Gate Road Slip Stabilization Design Camp Dawson
Governmental agency awarding contract: WV Army National Guard
□ Check here if this is a Supplemental Disclosure
List the Names of Interested Parties to the contract which are known or reasonably anticipated by the contracting business entity for each category below (attach additional pages if necessary):
<ol> <li>Subcontractors or other entities performing work or service under the Contract</li> <li>□ Check here if none, otherwise list entity/individual names below.</li> </ol>
Tetra Tech
2. Any person or entity who owns 25% or more of contracting entity (not applicable to publicly traded entities)
☐ Check here if none, otherwise list entity/individual names below.
Richard Colebank, President, COO
Richard Klein, Chairman, CEO  3. Any person or entity that facilitated, or negotiated the terms of, the applicable contract (excluding legal services related to the negotiation or drafting of the applicable contract)
☑ Check here if none, otherwise list entity/individual names below.
Signature: Line Signed: 8/11/21
Notary Verification
State of West Virginia , County of Monongalia :
I, Richard A. Colebank , the authorized agent of the contracting business
entity listed above, being duly sworn, acknowledge that the Disclosure herein is being made under oath and under the penalty of perjury.
Taken, sworn to and subscribed before me this 11 day of August , 21
Jounna J Stemple
Notary Public's Signature  To be completed by State Agency:  Date Received by State Agency:  Date submitted to Ethics Commission:  Governmental agency submitting Disclosure:  Notary Public's Signature  OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA JOANNA BRITTANY STEMPLE  Agric Agency Section No. Morganism West Virginia 26501  My Commission Explay 50 20 20 20 20 20 20 20 20 20 20 20 20 20

# TABLE OF CONTENTS.

SECTION A	
GENERAL FIRM INFORMATION  A.1 LETTER OF INTEREST  A.2 FIRM PROFILES  A.3 STATEMENT OF QUALIFICATIONS	1-2 3-4 05
SECTION B	
PROJECT MANAGEMENT B.1 STAFFING PLAN B.2 TEAM ORGANIZATION B.3 SCHEDULE & BUDGET B.4 CAPACITY & SOFTWARE	06 07 08 09
SECTION C	
KEY PERSONNEL	10-23
SECTION D	
PROJECT EXPERIENCE	24-30
APPENDIX	
LICENSES & CERTIFICATIONS REFERENCES	31-36 37



August 12, 2021

Department of Administration Purchasing Division 2019 Washington St. E. Charleston, WV 25305

RE: Engineering Design Services for South Gate Road Slip at Camp Dawson

Dear Mr. Pauline,

Alpha Associates, Incorporated is pleased to submit this Proposal to provide engineering services to address the second South Gate Road Slip Stabilization at Camp Dawson, WV. We have performed numerous similar type projects for the WVDOH over the years. Alpha's successful history with the WVARNG and our experienced team, combined with our convenient location within 45 minutes of the project makes us the perfect partnering firm for the WVARNG.

#### **Project Understanding**

The WVARNG is looking to partner up with an Engineering firm to design and develop construction documents to repair and slip and stabilize the slope of approximately 200 linear feet of road embankment on the South Gate access road. The design will stabilize the road embankment and rebuild the road, while protecting the steam below the site. The design for the South Gate Access Road must also accommodate the loads and sizes of heavy and large military vehicles. The selected consultant must also provide all geotechnical work, including any necessary borings, and is responsible for all utility and road infrastructure as needed.

#### Project Team

Our staff includes structural and civil engineers, construction administrators, and support staff. From the President to the support staff, the Alpha team is committed to providing you with a quality completed project in a timely manner. Alpha has the knowledge and understanding in design and construction to complete this project seamlessly from the initial project inspections to the development of plans and the selections of cost effective options. Any geotechnical work required will be performed by Tetra Tech, Inc. The Alpha team will be your expert for this project.

#### Summary

Thank you for the opportunity to submit this proposal. Alpha is committed to providing the WVARNG with a dedicated team of highly qualified personnel to 304.296.8216 / 800.640.8216 / 304.296.8216 fax

successfully complete a project that is on time and within budget once again. Please contact me at (304)296-8216 extension 102 if you have any questions or wish to further discuss our qualifications.

Sincerely,

ALPHA ASSOCIATES, INCORPORATED

Richard A. Colebank, PE, PS

President and COO

rick.colebank@thinkalphafirst.com

# WELCOME TO ALPHA ASSOCIATES, INC.

# FIRM PROFILE

**Contract Role: Prime** 

Architect & Engineer

#### Address

209 Prairie Ave Morgantown, West Virginia 26501

535 West King Street Martinsburg, West Virginia 25401

Number of Employees

22

#### **Principals**

Richard A. Colebank, PE, PS; President & COO Richard W. Klein, PE, PS; Chairman & CEO Charles B. Luttrell, PE; Senior Principal Charles B. Branch, PE; Senior Principal Matthew T. Echard, PE; Principal

#### Services

Architectural Design
Civil Engineering
Structural Engineering
Surveying
Interior Design
Landscape Architecture



### ENGINEERING SERVICES: GEOTECHNICAL

Tetra Tech 102 Leeway Street Morgantown, WV 26505

P:304.599.0771 F:304.212.2396 www.TetraTech.com

#### **Overview**

Tetra Tech is a full-service consulting and engineering firm with a substantial global presence. We help our clients conceptualize and execute innovative solutions to their most difficult problems. Tetra Tech is well positioned to meet the evolving challenges of our clients by moving with the speed of a 20-person office with the resources of a billion dollar company.

From front-end science and planning to design. construction management, and operations, Tetra Tech's service network is facilitated by our Initiatives program. In addition to coordinating resources for specific Initiative program provides best-in-class experts with worldwide project experience. They deliver a high level of integrated services for the full project lifesix service areas: water, environment, infrastructure. resource management, energy, and international development.

Our Services Government Group (GSG) consulting and engineering services worldwide for a broad range of U.S. government clients (federal, state, and local) and all activities with development agencies. Services include water and waste management, environmental international restoration. development. sustainable infrastructure design, and broad range of civil а design for facilities, transportation, infrastructure regional and local development. ENR magazine ranks Tetra national Tech and international leader а several markets.

#### **Geographic Reach**

Tetra Tech has offices and operational infrastructure throughout the United States, Canada, and With 20,000 associates in more than 450 offices abroad. in more than 120 countries on seven continents. Tetra Tech's technical knowledge and hands-on site work is broad and deep. Our staff is supported by a uniform administrative and management system that project teams can access immediately to ensure work is completed effectively.

# STATEMENT OF QUALIFICATIONS.

Alpha Associates, Incorporated is a West Virginia-based architectural and engineering design firm that provides services in the areas of architectural design, interior design, construction administration, civil engineering, structural engineering, landscape design, project management, and surveying. Our clients benefit from our unique combination of extensive design and construction experience, advanced technological tools, dedicated principals and highly skilled staff members.

Since 1969, Alpha has provided architectural and engineering design services for numerous roadway projects, including hill and road slip projects, for various clients. We are knowledgeable in the requirements and procedures for any size project. In this proposal, you will find examples that showcase the Alpha Team's exceptional project experience.

Alpha has a successful relationship with Camp Dawson that has developed over a decade and has included more than 8 projects. This history allows us to provide the State and the West Virginia Army National Guard with a cohesive team on this project. The Alpha team will be your expert for this project.

Alpha's philosophy has always been to provide exemplary services for fair fees. We have always believed that the best way to succeed as a business is to go above and beyond the basic requirements of our contracts and do everything necessary to successfully complete the given project. What is best for the client is inevitably best for us too.

Everyone at Alpha, from the President to the administrative staff, all work towards the goal of completing successful projects. Our principals are involved with projects from the earliest stages right through final completion and beyond. They will consistently update you on your project by using effective communication tools to manage the projects and all the involved parties. Our skilled staff of twenty two (22) architects, engineers, surveyors and administrative personnel all work diligently towards producing drawings and specifications that will deliver our clients successful projects, completed on time and within budget.

Alpha has thrived for over 51 years because we are a professional organization dedicated to providing superior architectural and engineering design services to our clients. While our staff is large enough to handle any size project, we are also small enough to give each and every one of our projects the individual attention to detail that will make them successful projects for our clients.

# <u>STAFF PLANNING</u>

#### TO BE ASSIGNED TO YOUR PROJECT.

All work to be performed for the Camp Dawson South Gate Road Slip Stabilization Design Project will be managed out of Alpha's Morgantown office. In addition to your dedicated Project Team, Alpha's staff of 22 includes engineers, architects, architectural designers, technicians, and support staff that are available to assist with any potential project need. Included in the Alpha team will be Tetra Tech who will provide any environmental and geotechnical services required.



Richard A. Colebank PE, PS President & COO



Charles Branch
PE
Project Manager, Civil Engineer



Brad Casdorph PE, PS Civil Engineer



Charles Luttrell
PE
Senior Principal, Structural Engineer



Matthew Ridgway
PE
Project Manager,
Geotechnical Engineer
Tetra Tech

# MEET ALPHA'S TEAM.

#### **MANAGERS**

Richard W. Klein PE , PS Chairman & CEO Richard A. Colebank PE , PS President & COO

#### ARCHITECTURE

Rebecca Key AIA-LEEP-AP Director of Architecture Casey Smith AIA Assoc. Architectural Designer

Todd Lewis AIA Assoc. Architectural Technician Gabrielle Dixon Architectural Technician

Alex Haill Construction Administration

#### CIVIL ENGINEERING

Charles Branch PE; Senior Principal Senior Civil Engineer Bradley Casdorph PE, PS Civil Engineer Tom Simpson PE Civil Engineer David Costello Jr. PS Manager of Surveying

Julie Frazee Engineering Technician Terry Higgins Field Representative Kevin McClung Engineering Technician Barbara Kerns Survey Crew

Tyler Collins Survey Crew

#### STRUCTURAL ENGINEERING

Charles Luttrell PE, Senior Principal Senior Structural Engineer Matthew Echard PE, Principal Structural Engineer

Cody Antoon Engineering Technician

#### OFFICE ADMINISTRATION

Heather Fox Business Manager Joanna Stemple Marketing Coordinator Kim Coomler Administrative Assistant

#### GEOTECHNICAL/ENVIRONMENTAL ENGINEERING

Matthew Ridgway

Jeremy Dierking PE Chris Lewis

Jack Wright

Geotechnical Design (

QĀ

Geotechnical Design Lead

Geotechnical Design

# SCHEDULE AND BUDGET.

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

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

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

The Alpha Team has an excellent track record of meeting project design deadlines. Alpha recently completed construction on a project in Morgantown that went from design to completion in just over 12 months. This project was completed for a private developer and had a construction cost in excess of \$20 million.

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

Developing an overall project schedule is a critical task that must take into account many factors: building type, owner's desire for occupancy, scope of work and level of documentation, whether contract(s) is bid or negotiated, available fee, and prior experiences on similar projects. Characteristic of the client, its organization, or the involvement of a construction manager and his responsibility for document review must also be considered.

This starts with a kick-off meeting which establishes ground rules, responsibilities, and line of communication. We have found that a team visioning session is a great way to get everyone started off on the right track. Determining a project schedule is a task that must be done with all parties involved in the process. Once the design process begins, a very detailed, realistic project schedule can be developed and communicated to all involved.

In a world where "time is money", the schedule of a project is almost as important as controlling the cost. Alpha also works diligently to control the budget of a project. The best way to control the cost of a project is to avoid the "scope creep" that can occur.

Alpha's in house cost estimators, combined with an excellent relationship with contractors throughout the area, will provide the client with the most accurate estimates of probable construction cost.

# **CAPACITY & SOFTWARE.**

#### OUR CAPABILITIES

Alpha Associates, Incorporated is prepared to commit staff and resources to the South Gate Road Slip Stabilization Design Project at Camp Dawson. Alpha has the qualified and experienced personnel, administrative support, along with the production equipment and resources to ensure the successful completion of this project. We are confident in our ability to provide the WVARNG with a committed and dependable design team. Our multidisciplinary design team is prepared to meet and exceed the expectations of the WVARNG by committing any resources necessary to meet the project schedule.

#### USING THE LATEST SOFTWARE

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

- AutoCAD 22
- REVIT (Editions up to 2022)
- Civil 3D
- RISA 3D
- RISA Floor
- RISA Foundation
- MathCAD
- DJI Phantom 4 RTK Drone

- Autodesk Suite
- Enercalc
- AutoTURN
- TopCon GR5 GPS System
- TopCon Total Station with Reflectorless Capabilities
- Carlson Surveyor & Data Collector



1985-Current | Alpha Associates, Inc. 1983-1985 | Charles Townes & Associates, P.C.

1983 | US Army Corps of Engineers

#### **EDUCATION**

West Virginia University Masters of Business Administration; 1999 Bachelor- Civil Engineering; 1982

#### **QUALIFICATIONS**

License: Professional Engineer: West Virginia, Maryland, Pennsylvania, Virginia

Professional Surveyor: West Virginia

Certified Private Pilot

#### AFFILIATIONS

Former NSPE/PEPP Governor of WV

American Red Cross- State Board

University High School Foundation; Charter Member; President

Morgantown Area Chamber of Commerce; Past Chairman

WVU College of Civil and Environmental Engineering Visiting Committee

WVU College of Business and Economics MBA Advisory Committee

# RICHARD A. COLEBANK

### PE,PS; PRESIDENT & COO

23 304-296-8216 | 800-640-8216

rick.colebank@thinkalphafirst.com

#### SUMMARY

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

#### **PROFILE**

Broad-based responsibilities in the following areas:

Project Management

**Business Operations and Financial Management** 

Quality Assurance/Quality Control

Civil Engineering Project Management and Design

New Business Development

Expert Testimony and Investigation

#### PROFESSIONAL HIGHLIGHTS

Project Principal:

Morgantown Municipal Airport Access Road; Morgantown, WV

Mon General Access Road; Morgantown, WV

WVU Reedsville Farm Redevelopment: Reedsville, WV

Monongalia General Hospital Access Road; Morgantown, WV

WVDOH Martinsburg Train Station Corridor Streetscape; Martinsburg, WV

WV State Office Building; Parkersburg, WV

College of Physical Activity & Sports Science; Morgantown, WV

WVDOH Open End Engineering Contract; WV

WVDOH Deckers Creek Pedestrian Bridge; Morgantown, WV

Clarksburg State Office Building; Clarksburg, WV

Jane Lew Truck Stop; Jane Lew, WV

Grant County Bank Addition & Renovation; Petersburg, WV

South Berkeley Fire Station; Inwood, WV



1992-Current | Alpha Associates, Inc.

1988-1992 | Reimer, Muegge, & Associates, Inc.

#### **EDUCATION**

West Virginia University Bachelor- Civil Engineering; 2000

Fairmont State College Bachelor- Architectural Engineering Technology; 1988

#### QUALIFICATIONS

License: Professional Engineer; West Virginia

#### AFFILIATIONS

WV Society of Professional Engineers National Society of Professional Engineers

# **CHARLES B. BRANCH**

#### PE; SENIOR PRINCIPAL & CIVIL ENGINEER

304-296-8216 | 800-640-8216

chuck.branch@thinkalphafirst.com

#### SUMMARY

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

#### **PROFILE**

Broad-based responsibilities in the following areas:

Highway Design

Municipal Engineering

Wastewater Collection

Storm Sewer System Design

Storm Water Management

Site Engineering

Project Management

#### PROFESSIONAL HIGHLIGHTS

Civil Engineer/Project Manager:

Jane Lew Truck Stop; Jane Lew, WV

Clarksburg State Office Building; Clarksburg, WV

WVU Reedsville Farm Redevelopment; Morgantown, WV

Freedom Automotive Group Dealerships; Morgantown, WV

Freedom Kia; Clarksburg, WV

WVU Parking Lot 81 Renovations; Morgantown, WV

WVU Doll's Run Burn Room; Morgantown, WV

WVU Alumni Center Parking Lot; Morgantown, WV

WVU Alumni Center Storm Water Management; Morgantown, WV

WVU Health Sciences Center Eastern Division; Martinsburg, WV

WVDOH Martinsburg Train Station Corridor Streetscape; Martinsburg, WV

WVDOH I-77 Welcome Center; Williamstown, WV

WV Medal of Honor Recipients Plaza: Hazleton, WV

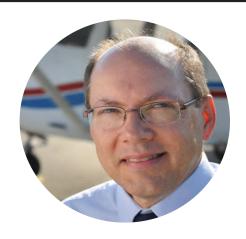
Lewis County High School Bridge; Weston, WV

Wyoming County Route 10 Relocation; Wyoming County, WV

Fairmont Federal Credit Union; Bridgeport, WV

Queen St Underpass; Martinsburg, WV

Martinsburg Little League Fields; Martinsburg, WV



2004-Current | Alpha Associates, Inc. 1979-2004 | Triad Engineering, Inc.

#### **EDUCATION**

West Virginia University Masters- Soil Conditions and Foundation Design; 1982 Bachelor- Civil Engineering; 1979

#### **QUALIFICATIONS**

License: Professional Engineer: West Virginia Professional Surveyor: West Virginia Certified Private Pilot Certified FAA Part 107 Remote Pilot

#### **AFFILIATIONS**

WV Society of Professional Engineers National Society of Professional Engineers WVSPS- Mountain Regional Chapter; President Aircraft Owners and Pilots Association; Member

### **BRADLEY CASDORPH**

#### PE,PS; CIVIL ENGINEER

304-296-8216 | 800-640-8216

brad.casdorph@thinkalphafirst.com

#### SUMMARY

Mr. Casdorph joined the Alpha Associates, Inc. team in 2004 and currently works as a project engineer in the Morgantown office. He has 36 years of professional experience with roadway design, storm sewer design, airport airside renovation and design, storm water management including conveyance and detention, environmental permitting, project administration supervision and inspection, as well as boundary and construction surveying.

#### **PROFILE**

Broad-based responsibilities in the following areas:
Airport Planning and Design
Highway Design
Hydraulic and Hydrology Studies
Site Plan Development
Land Surveying, including the use of Aerial Drone Technology

#### PROFESSIONAL HIGHLIGHTS

#### Civil Engineering:

WVDOH Arnettsville Bridge Replacement; Monongalia County, WV WV DOH Open Engineering Open End Contract; WV WVDOH Deckers Creek Pedestrian Bridge; Morgantown, WV Freedom Automotive Three Dealerships; Morgantown, WV Freedom Kia Clarksburg; Clarksburg, WV Morgantown Municipal Airport Access Road; Morgantown, WV Mon General Hospital Access Road; Morgantown, WV WVU - Lot 81 Parking Area Improvements: Morgantown, WV McKee Crossing - 120 Acre Subdivision; Martinsburg, WV WVU Reedsville Farm Redevelopment; Reedsville, WV Mon General Hospital - East Parking Area; Morgantown, WV Jane Lew Truck Stop; Jane Lew, WV Point Marion Borough; Point Marion, PA Clarksburg State Office Building; Clarksburg, WV WVU College of Physical Activity & Sports Sciences; Morgantown, WV VA Parking Lot SWM; Shepherdstown, WV Arcland RV Parking Lot SWM; Charles Town. WV

#### Surveying:

WVDOH Arnettsville Bridge Replacement; Monongalia County, WV Morgantown Municipal Airport Access Road; Morgantown, WV Mon General Hospital Access Road; Morgantown, WV Freedom Automotive Three Dealerships; Morgantown, WV Freedom Kia Clarksburg; Clarksburg, WV



2000-Current | Alpha Associates, Inc.

1983-1999 | Alexander Key and Associates

1978-1983 | Webster Clothes; Director of Store Planning

#### **EDUCATION**

University of Maryland Bachelor of Architecture, 1977

Maryland Institute College of Art Coursework in Furniture Design; 1986-1987

#### QUALIFICATIONS

License: Registered Architect: Maryland, New York, Pennsylvania, Virginia, Washington DC, West Virginia

NCIDQ Certified (Interior Design)

Leadership in Energy and Environmental Design Accredited Professional

Meet Standards of Secretary of the Interior for Historic Architecture

#### **AFFILIATIONS**

American Institute of Architects West Virginia Society of Architects Fairmont, WV ICC Board of Appeal; Board Member

U.S. Green Building Council

AIA Liveable Communities Marion County Chamber of Commerce Leadership Kanawha Valley Class of 2014

### REBECCA KEY

#### AIA, LEED-AP; DIRECTOR OF ARCHITECTURE

2 304-296-8216 | 800-640-8216

rebecca.key@thinkalphafirst.com

#### **SUMMARY**

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

#### **PROFILE**

Broad-based responsibilities in the following areas:

Architectural Design

Interior Design and Space Planning

Feasibility Studies

Water Infiltration Analysis

Historic Renovation

Project Management

#### PROFESSIONAL HIGHLIGHTS

WVU Boreman Hall; Morgantown, WV

Ruby Memorial Hospital Emergency Room; Morgantown, WV

Lewis County H.S. Medical Facility; Weston, WV

Camden-On-Gauley Medical Center; Camden-On-Gauley, WV

Camden Dental/Medical Arts Grant; Camden-On-Gauley, WV

Camden Family Health Dental Suite; Camden-On-Gauley, WV

WV Office of Miners Health Safety and Training Facility; Oak Hill, WV

WV State Office Building; Clarksburg, WV

WV State Office Building; Parkersburg, WV

WV DOH District 7 Lab & Multi-purpose Building,; Weston, WV

West Virginia Regional Technology Park Renovation to Building 770; South Charleston, WV

Mon County Family Court Renovation; Morgantown, WV

Mon County Sheriff's Department; Morgantown, WV

Fairmont State University Prichard Hall Renovation: Fairmont, WV

Augusta Apartment Building, Morgantown, WV

Ridgedale Elementary, Morgantown, WV

Mountaineer Middle: Morgantown, WV

Washington High School; Charles Town, WV

Ruby McQuain Amphitheater Roof; Morgantown, WV

North Fork Hughes River Sate Park: Ritchie County, WV



2016-Current | Alpha Associates, Inc. 2010-2015 | Echard ingenieurBüro 2006-2009 | Buro Happold Consulting Engineers 2003-2006 | RISA Technologies, Inc. 2000-2003 | Zaldastani Associates, Inc.

#### **EDUCATION**

Massachusetts Institute of Technology Masters- Engineering & Environmental Mechanics, 2002

West Virginia University Bachelors of Science- Civil Engineering, 2000

#### **OUALIFICATIONS**

License: Professional Engineer: West Virginia, California

California OES SAP Evaluator

#### **AFFILIATIONS**

American Concrete Institute (ACI)
American Institute of Steel Construction (AISC)
American Society of Civil Engineers (ASCE)
American Wood Council (AWC)

#### **PUBLICATIONS**

Echard, M. and Tonis, D. Convergent Design Methodology for Bio-Science Labs: Architectonic and Performative Structural Considerations Using the Geilinger Composite Column Solution. Proceedings of ICSA2010-First International Conference on Structures and Architecture Guimaraes, Portugal, July 2010, Taylor & Francis.

Echard, M. Structural Analysis and Design Within a BIM Framework. EASEC 10- East Asia Structural Conference, Bangkok, Thailand, August 2006.

### **MATTHEW T. ECHARD**

#### PE: PRINCIPAL & STRUCTURAL ENGINEER

23 304-296-8216 | 800-640-8216

matthew.echard@thinkalphafirst.com

#### SUMMARY

Mr. Echard joined Alpha Associates, Inc. in early 2016 with a strong belief that his clients deserve intelligent, performance-based and value-oriented solutions. Drawing on experience working across in the United States, Europe, and the Middle-East, Mr. Echard returned to West Virginia to provide world-class service in a historically undeserved region while making positive contributions to the future growth of his home state. Mr. Echard places a large value on the collaborative work process. Believing that a building's form and function are derived from many contexts, Mr. Echard's office is located in the corporate office in Morgantown, WV. Mr. Echard also volunteers as the Chairman of the Gilmer County Unsafe Buildings and Lands Enforcement Authority.

#### **PROFILE**

Broad-based responsibilities in the following areas:

Structural Engineering Structural Forensics

Project Management

#### PROFESSIONAL HIGHLIGHTS

Project Manager & Structural Engineer:

WVU Creative Arts Center Performance Access; Morgantown, WV

WVU Aero/Combustion Lab Mezzanine; Morgantown, WV

WVU Athletics Tennis Scoreboard; Morgantown. WV

WVU Athletics Coliseum Scoreboard & Speakers; Morgantown, WV

WVU CAFEE Building Addition; Morgantown, WV

WVU Colson Hall, Admission & Records Access; Morgantown, WV

WVU ESB Chiller Lines; Morgantown, WV

WVU ESB Roof Fall Protection; Morgantown, WV

WVU Health Sciences Center - Phase 1B HVAC; Morgantown, WV

WVU Hodges Hall Renovation; Morgantown, WV

WVU J.W. Ruby Research Farm; Reedsville, WV

WVU Law School Precast Evaluation; Morgantown, WV

WVU Mountainlair Façade Water Infiltration; Morgantown, WV

WVU Mountainlair Gridiron Assessment; Morgantown, WV

WVU Mountainlair Plaza Structural Assessment; Morgantown, WV

WVU Stewart Hall MEP Upgrades; Morgantown, WV

Westover Goodwill Structural Design; Morgantown, WV

Weyerhaeuser Roof Evaluation; Heaters, WV

Martinsburg Oueen Street Underpass; Martinsburg, WV

City Hall Façade Rehab; Morgantown, WV

Metropolitan Theatre Roof; Morgantown, WV



#### EMPLOYMENT HISTORY 1996-Current | Alpha Associates, Inc. 1995-1996 | Larry D. Luttrell, PE, PhD 1991-1994 | West Virginia University

1990-1991 | WVU Constructed Facilities Center

#### EDUCATION

West Virginia University Masters- Structural Engineering: 1995 Bachelor- Civil Engineering: 1993

#### **OUALIFICATIONS**

License: Professional Engineer: West Virginia, Pennsylvania

#### AFFILIATIONS

WV Society of Professional Engineers National Society of Professional Engineers Chi Epsilon; Member

American Concrete Institute; Member

#### RESEARCH EXPERIENCE

Cold Formed Steel Deck Research Fastener Failures Edge Conditions/Failures **Buttoned Overlap Sheer Failures** 

Composite Cold Formed Steel and Concrete Deck

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

### CHARLES B. LUTTRELL

#### PE: SR. PRINCIPAL & STRUCTURAL ENGINEER

22 304-296-8216 | 800-640-8216

charlie.luttrell@thinkalphafirst.com

#### SUMMARY

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

#### **PROFILE**

Broad-based responsibilities in the following areas:

Project Management

Business Operations and Financial Management

Quality Assurance/Quality Control

Civil Engineering Project Management and Design

**New Business Development** 

**Expert Testimony and Investigation** 

#### PROFESSIONAL HIGHLIGHTS

Martinsburg WWTP; Martinsburg, WV Queen St. Underpass; Martinsburg, WV

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

Winchester & Western RR Rt. 11 Bridge: Martinsburg, WV



#### Matthew T. Ridgway, PE Geotechnical Engineer V

#### **EXPERIENCE SUMMARY**

Mr. Ridgway has diverse experience assisting clients with management, project management, engineering and managing the design and construction of complex projects. He has a proven history as a geotechnical engineer performing and overseeing tasks including preliminary site investigations, engineering analysis and design and construction oversight while maintaining cost-savings initiatives. Mr. Ridgway is an effective communicator and has effectively overseen and managed several projects with multiple stakeholders who share different interest. He successfully deals with complex issues in a highly stressful and ever-changing environments. Mr. Ridgway has worked in a wide variety of both public and private sector projects and is able to use this diversity of experience to provide new and creative solutions to complex problems. Mr. Ridgway will ensure that project teams have the resources and support needed to not only meet but exceed expectations

#### RELEVANT EXPERIENCE

#### SITE DEVELOPMENT

Geotechnical Engineer; Multiple Clients, New York. Prepared site investigation plans and conducted engineering analysis and calculations for the support system of multiple solar array sites ranging in size up to 40 acres. Sites included access roads, generation equipment, battery pads and solar panels.

**Project Manager; Confidential Client, West Virginia.** Managed the geotechnical aspects of the development of over 1000 acres for a private client in West Virginia. This project consisted of substantial field investigation, the exploration of underground mines for potential subsidence, preparation of recommendations for the remediation of surface mines, reinforced steeped slopes and several fill slopes in excess of 200 feet.

Project Manager; Multiple Clients, Multiple Locations. Managed the creation of geotechnical recommendations for the site construction of single and multi-level buildings for over 30 projects in West Virginia, Ohio and Pennsylvania. Mostly in the retail and healthcare business, the buildings ranged from 3,000 to 120,000 square feet. Work included the creation and oversight of geotechnical investigation, laboratory testing, and preparation of recommendations and reporting. Specific projects required the remediation of different difficulties such as expansive clays, pyrites, karst, in-tact coal, and mine spoils.

**Project Manager; Confidential Client, West Virginia.** Managed the geotechnical aspects of the development of a 20 acres site for the creation of a competitive track and aquatic facility West Virginia. This project consisted of field investigation, remediation of deep mine spoils in excess of 80' and deep fills. This project also had restrictive settlement tolerances of ½".

#### **GEOSTRUCTURES AND DEEP FOUNDATIONS**

Project Manager; Building Foundation Design; U.S. Department of Energy; West Virginia. Managed the geotechnical investigation and deep foundation design for this site to support a multistory structure in Morgantown, WV. This project consisted of designing foundations to transfer abnormally high columns loads over 40 feet of soft clays.

Project Manager; Dock Piling Design; U.S. Coast Guard; Pennsylvania. Managed the geotechnical investigation and design for this site in Sewickley, PA. This project consisted of the design of a 35 foot cantilevered support for a floating dock.

Project Manager; Retaining Wall Design; Allegheny County; Maryland. Managed the geotechnical investigation and design for this site along in Allegheny County, Maryland. Investigation included locating borings on an active slip of coal refuse for the purposes of designing a retaining wall of approximately 15 feet in height and 176 feet in length. Calculated forces on the wall and analyzed for design and selection of beams

#### **EDUCATION**

BS, Civil Engineering, West Virginia University, 2013

BS, Mining Engineering, West Virginia University, 2013

#### **AREA OF EXPERTISE**

Geotechnical/Mining Engineering

Instrumentation

Mine Site Reclamation

Slope Stability

**Deep Foundation** 

Land/Site Development

Forensic Investigation

Geostructures

#### LICENSE

Professional Engineer: (CO, KY MD,MO,NC,NJ, PA,SC,UT VA, WV and WY)

#### **OFFICE**

Morgantown, WV

#### YEARS OF EXPERIENCE

9

#### YEARS WITHIN FIRM

2

#### CONTACT

matthew.ridgway@tetratech.com

Résumé Matthew T. Ridgway, PE

for a pile and lagging wall using LPILE. Complete stability analysis using Slope/W and RocScience Slide software

Project Manager – Retaining Wall Design; City of Morgantown; West Virginia. Managed the geotechnical investigation and design for this site along in the city of Morgantown, West Virginia. Investigation included locating borings on an active slip for the purposes of designing a retaining wall of approximately 20 feet in height and 155 feet in length. Calculated forces on the wall and analyzed for design and selection of beams for a pile and lagging wall using LPILE. Complete stability analysis using Slope/W and RocScience Slide software.

Project Manager; Retaining Wall Design; West Virginia Department of Highways; West Virginia. Managed the geotechnical investigation and design for multiple sites in West Virginia. Investigation included locating borings on an active slip for the purposes of designing a retaining wall. Calculated forces on the wall and analyzed for design and selection of beams for a pile and lagging wall using LPILE. Complete stability analysis using Slope/W and RocScience Slide software.

Project Engineer; Abutment Wall Design; West Virginia Department of Highways; West Virginia. Performed calculations and design for bridge abutments walls and pier foundations.

Project Manager; Caisson Foundation; West Virginia Univ. Hospitals; West Virginia. Managed geotechnical investigation, laboratory testing and performed design and reporting for caissons to support an air-handler unit adjacent to an existing building.

**Project Manager; Micropile Foundation; Confidential; West Virginia.** Managed geotechnical investigation, laboratory testing and performed design and reporting for a micropile group. Micropiles were needed to support a sensitive area of a structure that had undergone differential settlement.

#### SLOPE STABILITY, SLIDE INVESTIGATION AND MITIGATION

Project Engineer; Slide Mitigation; Confidential Client; West Virginia. Performed investigation on an active slide along an active railway. Completed stability analyses and repair recommendations.

**Project Manager; Slip Repair; Confidential Client; Pennsylvania.** Conducted the field investigation into the location and cause of an 80-foot tall slope failure adjacent to a stream in north-central Pennsylvania. Performed stability analyses and prepared construction drawings for mitigation and repair.

Project Manager; Slip Repair; Confidential Client; Pennsylvania. Completed field investigation and prepared permits, conducted stability analysis and prepared construction drawings for a 70-foot high slope failure adjacent to a stream in northeastern Pennsylvania

Project Engineer; Pipeline Slope Failure Remediation; Confidential Clients; Pennsylvania and West Virginia. Conducted over 30 field evaluations and investigations of slope failures along pipeline right of ways and on well pad sites. On selected sites conducted stability analysis and oversaw field repairs.

Project Engineer; Reinforced Steepened Slope; West Virginia Department of Highways; West Virginia. Performed design and stability analysis for a fifty-foot-tall 1500-foot-long reinforced steepened slope.

**Project Manager; Slip Repair; Confidential Client; Pennsylvania.** Completed field investigation and prepared permits, conducted stability analysis and prepared construction drawings for a 20-foot-high slope failure caused by stream erosion of the toe in northeastern Pennsylvania.

Project Manager; High Wall Stability; Confidential Client; Pennsylvania. Performed field investigation of existing bedrock to create a 50-foot-tall highwall adjacent to a property boundary in Williamsport, Pennsylvania. Design plans included a falling rock retention system.

Project Manager; Slip Repair; Confidential Client; Pennsylvania. Conducted the field investigation into the location and cause of a 40 foot tall slope failure in Washington Pennsylvania. Performed stability analyses and prepared construction drawings for mitigation and repair.

Project Manager; Retaining Wall Design; West Virginia Department of Highways; West Virginia. Managed the geotechnical investigation and design for this site along in Harrison County, West Virginia. Investigation included locating borings on an active slip for the purposes of designing a retaining wall of approximately 25 feet in height and 30 feet in length. Calculated forces on the wall and analyzed for design and selection of beams for a pile and lagging wall using LPILE. Complete stability analysis using Slope/W and RocScience Slide software.

#### OIL AND GAS

Project Engineer; Well Pad Complex; Confidential Client; Marshall County, West Virginia. Managed the geotechnical aspect of a well pad complex that included five well pads, two impoundments and several ancillary sites. The project consisted of several fill slopes in excess of 70 feet in height, Reinforced steepened slope design and soil-improvement.

**Project Engineer; Impoundment; Confidential Client; Ohio**. Assisted with the design recommendations and oversaw field inspection of Ohio's first frac waste impoundment. This project developed approximately 30 acres into an impoundment with a fill slope of a fill slope in excess of 60 feet.

Project Engineer; Compressor Station; Confidential Client; West Virginia. Managed and performed all work related to the geotechnical aspects of the development of an approximately 20-acre compressor station site in West Virginia. This site included several fill slopes in excess of 110 feet and contained multiple reinforced steepened slopes. Performed both bearing capacity and settlement analysis for this project.





#### Jeremy Dierking, PE Senior Geotechnical Engineer / Operations Manager

#### EXPERIENCE SUMMARY

Mr. Dierking has over 17 years of geotechnical engineering experience conducting field investigations and foundation analysis and design for public and private projects. His duties at Tetra Tech include operations management. project management, proposal preparation, coordinating field investigations, and preparing geotechnical reports. Mr. Dierking has completed extensive slope stability analyses for a wide variety of projects, including cut slopes and embankments, existing landslide mitigation, landfill seismic stability, and geohazard programs. He has also performed downhole inclinometer surveys and slope stability inspections at numerous sites. He has worked on numerous federal and state infrastructure projects, providing geotechnical analysis and design recommendations for bridge and building foundations, retaining walls. cut slopes, fill sections, asphalt and concrete pavement sections, settlement estimates, axial and lateral pile and shaft analysis, and foundation stabilization recommendations. Mr. Dierking has completed many geophysical surveys, geological field-mapping, and is proficient with many geotechnical modeling and analysis software packages. Mr. Dierking has also provided geotechnical and construction materials laboratory testing, construction materials testing and inspection services, and engineering inspection and observation during construction phases.

#### RELEVANT EXPERIENCE

#### DAMS AND IMPOUNDMENTS (MINING)

Black Butte Mine Project, Meagher County, Montana. As Project Geotechnical Engineer, performed geotechnical analysis as part of this mine development project for Sandfire Resources America. Performed slope stability analysis for portal pad design and the lined brine and contact water ponds, providing recommendations for slope construction and instrumentation. Included seismic refraction surveys to determine depth to bedrock and estimate rippability. (2018)

Pacificorp, CCR Rule Surface Impoundment Structural Criteria Assessments, Wyoming. As Geotechnical Engineer, performed structural stability and safety factor assessments for compliance with the EPA's CCR Rule Design Criteria §257.73 for applicable CCR impoundment structures at Pacificorp's Dave Johnston and Jim Bridger Power Plants in Wyoming. Included evaluating site specific seismic conditions, liquefaction analysis, steady-state seepage, and slope stability. (2016)

Lucky Friday Mine Pond #4 Tailings Impoundment, Mullan, Idaho. As Resident Geotechnical Engineer, provided full-time project construction engineering oversight and quality assurance during the construction of a one million cubic-yard, multi-zoned earthen embankment constructed to impound a tailings capacity of twenty years of mine production. Responsibilities included working in tandem with the project construction manager and design engineer for oversight of all engineering aspects of the project, and coordinating and directing a small staff of field engineers and technicians to maintain complete coverage of project construction quality assurance, which included;

#### **EDUCATION**

BS, Geological Engineering, Montana Tech, 2002

#### REGISTRATIONS



#### CONTINUING EDUCATION

40-hour OSHA HAZWOPER, 2003

Radiological Safety/ Nuclear Densometer Gauge Operation, 2004

Cone Penetration Testing for Geotechnical Investigations (short course), 2005

GRLWEAP Web Workshop (8 hr short course), May 2010

Project Management Level 2 Training, July 2012

OSHA 30-hour Outreach Training for the Construction Industry, September 2013

Soil and Rock Slope Stability, ASCE short course, November 2015

Ground Modification Methods, FHWA short course, November 2017

#### **OFFICE**

Missoula, Montana

#### YEARS OF EXPERIENCE

17

#### YEARS WITH FIRM

17

Résumé Jeremy Dierking, PE

- Reviewing contractor material submittals, work plans, schedules, and change orders.
- Materials testing of construction materials, including; soils, aggregate, concrete, liner, and observation and compaction testing of all fill placement.
- Layout, observation and inspection of foundation drain and underdrain systems.
- Observation and inspection of HDPE pipe welding and installation, LLDPE liner installation (over 1,300,000 sf), steel decant system installation.
- Preparing daily reports documenting daily construction activities, observations, inspections, meetings, and developing design modifications as field conditions warranted.

Tetra Tech also provided on-going design and construction oversight services through the subsequent Stage 2 expansion of the impoundment. Mr. Dierking served as Engineer-of-Record and project manager for construction engineering oversight. (2008-2013)

Preparation of the Operations and Maintenance Manual, and the As-Built construction report for the Pond 4 Facility, Stages 1 and 2. Coordinated with project engineer and mine personnel to develop and edit the Operations and Maintenance Manual for the facility. Assisted in development and preparation of As-Built construction report, including documentation of design variances, construction variances, quality assurance activities, and development of as-built drawings; gathering and organizing all construction documents.

#### **LANDFILLS**

Seismic Stability Evaluation, Gallatin County Landfill Phase 4, Logan, Montana. As Geotechnical Engineer, performed static and pseudo-static stability analysis to evaluate stability for proposed slope/liner geometries for compliance with Montana DEQ's administration of municipal solid waste landfills. The containment structure was evaluated using several displacement analysis methods for estimates of permanent deformation of the refuse mass, including the Newmark, Bray-Rathje and Makdisi-Seed methods. Developed material interface testing specifications for bid documents. (2016)

Preliminary Stability Evaluation, Pickles Butte Sanitary Landfill, Canyon County, Idaho. As Geotechnical Engineer, performed static and pseudo-static slope stability analysis to evaluate stability for the proposed Conceptual Fill Plan for compliance with Idaho DEQ's administration of municipal solid waste landfills. A conceptual veneer cover slope stability evaluation was performed using the Koerner and Soong methodology. (2015)

Seismic Evaluation Analysis, Bonneville County Landfill Phase 3 Expansion, Idaho Falls, Idaho. As Geotechnical Engineer, performed static and pseudo-static stability analysis using slope stability software SLIDE and GSTABL7 to evaluate stability for the proposed slope/liner geometries to comply with Idaho DEQ. The containment structure was evaluated using several displacement analysis methods for estimates of permanent deformation of the refuse mass, including the Newmark, Bray-Rathje and Makdisi-Seed methods. Developed material interface testing specifications for bid documents. (2013)

Seismic Evaluation Analysis, Lewis and Clark County Landfill, Phase 2 through 6 Expansions, Helena, Montana. (2008-2009). Valley View Landfill Master Plan Update, City-County Sanitation, Helena, Montana. (2011, 2015). As Geotechnical Engineer, utilized static and pseudo-static stability analysis methods using slope stability software GSTABL7 and SLIDE to evaluate stability for the proposed slope/liner geometries. The evaluation of the landfill was completed to comply with Montana DEQ. The containment structure was evaluated using several displacement analysis methods for estimates of permanent deformation of the refuse mass, including the Newmark, Bray-Rathje and Makdisi-Seed methods. Developed material interface testing specifications for bid documents.

#### **OIL AND GAS**

CenturyLink Segment 2, Reading to Allentown, Pennsylvania. As Project Manager and Senior Geotechnical Engineer, performed geotechnical investigations for four Horizontal Directional Drill (HDD) crossing locations within varying geologic conditions of known karstic terrain, consisting of 4-inch diameter High Density Polyethylene (HDPE) conduit. Crossing depths will vary by location but are anticipated to be on the order of 20 to 25 feet at their deepest segment. Tetra Tech completed geotechnical borings and hydraulic fracturing and inadvertent returns analysis. Developed geotechnical recommendations and prepared geotechnical report with recommendations for HDD pipeline installation. (2020)

Trinity River HDD Crossing, Buckeye Development & Logistics LLC, Liberty County, Texas. As Project Geotechnical Engineer, performed geotechnical investigation for proposed HDD crossing. The Trinity River crossing



# Christopher Lewis, P.E. Sr. Geotechnical Specialist

#### **EXPERIENCE SUMMARY**

Mr. Lewis has a multi-disciplined background in geotechnical & structural engineering, engineering mechanics and mining. He leads and executes complex, multi-disciplined projects for specialty & heavy construction contractors, partner A/E firms, industrial clients, and energy & mining clients. He is recognized for:

- accomplishments remedying problem ground conditions, unstable soil & rock slopes, and other geo-hazards;
- engineering & design of earth dams, waste disposal impoundments, specialty & traditional geo-structures, and deeply buried plastic pipes;
- meeting challenges on major inland waterway projects (navigational locks & dams, bridge crossings, flood protection structures); and
- contributions to engineering manuals of practice, valueengineering assessments, specialized technical review, and forensic investigations.

A sampling of Mr. Lewis's experience follows.

#### RELEVANT EXPERIENCE

Technical PM for Geotechnical Aspects of Access Roads, Compressor Stations, and Interconnect Station – Select Segments of MVP Project, WV.

- Geotechnical Site Investigations, Testing Programs; and Reports
- Alternatives evaluations for Access Rd and Station Pad development
- Recommendations for Civil site development and Geotechnical design
- Final design of Mechanically-Reinforced Soil Slopes (RSS up to 57-feet high), Soil Nailed & Rock Bolted cut slopes, and cantilevered and anchored Post & Panel Retaining Walls
- Estimates of construction costs, preparation of construction/bid documents, and bid-phase assistance

Lead Geotechnical Engineer - Specialty Geotechnical Services for Bridge Pier Cofferdams, Construction Causeways, and Deep Foundations – KY, OH, PA, WV.

- New SR 0173 Bridge French Creek, PA
- New Ironton-Russell Bridge Ohio River, KY, OH
- New Hulton Bridge Allegheny River, PA
- WV Route 20, Lilly Bridge Replacement Project Bluestone River, WV

#### **EDUCATION**

M.S., Civil Engineering Virginia Tech, 1985

B.S., Civil Engineering, Clarkson University, 1983

Specialized Studies in Structural Geology & Soil Mechanics - City University of London, UK, Aug - Dec 1981

#### REGISTRATIONS/ AFFILIATIONS

Professional Engineer: AL FL GA KY LA MA MD MI NC NJ OH PA TN WV

American Society of Civil Engineers (ASCE)

Association of State Dam Safety Officials (ASDSO)

U.S. Society on Dams (USSD)

#### PROFESSIONAL PRACTICE

Tetra Tech, Inc.

Lewis Consulting Group, LLC D'Appolonia Engineering, Inc.

#### YEARS OF EXPERIENCE

#### 30+ years

Geo-Hazards: Expansive Soils, Metastable Deposits, Pyritic Rock, Karst, Landslides, Mine Subsidence

Earth-Structure Interaction

Earth & Waste Disposal Dams

Specialty Geotech Construction, Ground Improvement

Specialized Technical Review, Value-Engineering, RCAs, Expert Services

Inland Waterway Structures (Dams, Lock & Guide Walls, Cofferdams)

Upstream Construction Over CCR & Tailings Impoundments

Seismic Evaluations and Liquefaction Assessments

Flood Routing, Hydrodynamic Modeling, Scour



#### Jack T. Wright, P.E., M.E.

Geotechnical Engineer III -

#### EXPERIENCE SUMMARY

Mr. Wright specializes in exploratory drill inspection, geotechnical engineering design, foundation construction monitoring, and pressure injection grouting. During his career, he has inspected exploratory drilling projects and logged samples in Kentucky, Maryland, New Mexico, Ohio, Pennsylvania, Texas, Virginia, and West Virginia. Mr. Wright has experience inspecting earthwork construction including natural gas well pad builds, earthen embankments, access roads, and slope remediation. Additionally, he is experienced with foundation pressure grouting of both low and high mobility grouts. Mr. Wright has supported with the installation of pile foundation systems and has performed compression, tension, and lateral load tests on piles of various diameters and lengths. Mr. Wright has monitored the installation and stressing of approximately 100 rock anchors for slide remediation and foundation uplift resistance applications.

#### RELEVANT EXPERIENCE

#### PILE FOUNDATIONS

#### United State Army Core of Engineers (USACE)

- Kentucky Lock Downstream Excavation (June 2021 to July 2021)
  - Drill inspector for 40-pipe piles that were installed to provide sliding/shear resistance for dewatering on the land side of the cellular cofferedam.

#### Penn State University

- PSU West Parking Garage (February 2020)
  - Project support for the foundation of a multi-level parking garage which consisted of the installation of 740 micro-piles varying in depth and diameter.

#### **Amtrak**

- Harrisburg, PA Amtrak Station (June 2019 to July 2019)
  - Project support for the installation of 185 micro-piles for the foundation of a new train platform.

#### Mylan Park/West Virginia University

- WVU Aquatic Center (March 2018 to April 2018)
  - Inspector for the installation of 88 micro-piles for the diving well of the competition pool.

#### Education (Linked Style) [Tt Callout Heading]

ME, Geotechnics, Missouri University of Science and Technology, 2020

BS, Civil Engineering, West Virginia University, 2017

#### **Area of Expertise**

Geotechnical Engineering

**Deep Foundations** 

Geostructures

**Pressure Injection Grouting** 

**Load Testing** 

Soil and Rock Sampling

#### Registrations/ Affiliations

Professional Engineer: KY

#### **Training/Certifications**

PennDOT Drill Inspector: #431-18

OSHA 10 HR

#### Office

Morgantown, WV

#### **Years of Experience**

4

#### Years within firm

1

#### Contact

 ${\tt Jack.Wright@TetraTech.com}$ 



# Eric A. DiFatta, P.E. Project Engineer

#### EXPERIENCE SUMMARY

Mr. DiFatta has design experience in traditional & specialty geotechnical structures, including retaining walls (RC, MSEW, S&L/P&P), reinforced earth (RSS, soil nailing, ground anchors), river causeways, cofferdams and deep foundations. His experience also encompasses subsurface exploration and investigation, structural design applied to geo-structures, seepage and stability analyses, erosion and sediment control design, and periodical dam safety compliance inspections. Additionally, Mr. DiFatta has experience in the design of earth & coal refuse dams and impoundments.

#### RELEVANT EXPERIENCE

#### ENGINEERING AND DESIGN

Geotechnical Design of Earth Retaining Systems for Development of Compressor Stations, Interconnect Station, Access Roads and Pipeline Corridors – Segments of the Mountain Valley Pipeline (MVP) Project, WV.

- Soil Nailing and Rock bolting systems
- Mechanically-Reinforced Soil Slope (RSS up to 57-feet high)
- Cantilevered Post & Panel Retaining Walls
- Characterization of Material Properties
- Slope Stability Analyses
- Estimate of construction costs, preparation of construction/bid documents, and bod-phase assistance
- Project and Certifying Engineer for all five (5) compressor and interconnect stations

#### Geohazard Assessments for Major Pipeline Projects - OH, PA, WV

- Reconnaissance for Problem Ground Conditions Along Development Corridors -Landslides, Karst Features, Mine Subsidence, Surface Water and Groundwater Control Issues, Expansive Soils & Rock, etc.
- Construction Phase Investigation of Encountered Hazards (e.g., landslides, UG mines, highwalls, karst sinkholes, groundwater control issues), and Directional Drilling Challenges in Problem Ground
- Field Assessment of Probable Causes
- Engineering & Design of Corrective Actions

Reinforced Concrete (RC) Cantilever spillway walls, Muleshoe Reservoir Dam-Hollidaysburg, PA. Performed the analyses and design for right and left RC spillway walls and also, assisted in the writing of the MathCAD program utilized to more optimally design the spillway walls. Also, performed calculations to evaluate a hydraulic valve house with a single door opening and concrete slab-style roof to be constructed with 8-inch concrete block, reinforced grout-filled (CMU).

Wisecarver Reservoir Dam – Jefferson, PA. Assisted with the engineering & design of the planned Roller Compacted Concrete (RCC) downstream slope buttress and overflow protection system for the Wisecarver Reservoir Dam. Also, performed inspections of the RC emergency spillway channel, sill, and associated retaining walls to determine necessary scope of concrete repairs and improvements, and identify possible voids beneath the spillway slab, and assisted with other field investigations

Emsworth BC Left and Right Abutment Wall Stabilization, Ohio River – USACE, Pittsburgh District. Developed loading diagrams and performed the structural design for stabilization plans encompassing new wall alternatives (reinforced concrete cantilever, concrete gravity, and master pile/combination walls) and hybrid stabilization systems (mechanically stabilized earth, micropiles, rock anchors) for the Emsworth

#### **EDUCATION**

B.S. Civil Engineering, University of South Carolina, 2008

AST in CADD, Triangle Tech, 2001

#### AREA OF EXPERTISE

Geotechnical

#### REGISTRATIONS/ AFFILIATIONS

Professional Engineer: AL, KY, NJ. OH. PA. TN. VA. WV

American Society of Civil Engineers – Pittsburgh Section

#### TRAINING/CERTIFICATIONS

MSHA Impoundment Inspection Certification, 2011

Certified ACI Concrete Field Testing Technician, Grade I, Expires 3/2020

MSHA Part 48 Surface Miner Safety Training (24-Hour), 2009

Troxler Certified Nuclear Gauge Operator, 2009

Confined Space Entry, 2003

#### **OFFICE**

Monroeville, PA

#### YEARS OF EXPERIENCE

12

#### YEARS WITHIN FIRM

5

#### CONTACT

eric.difatta@tetratech.com

Résumé Eric A. DiFatta, P.E.

Back Channel Dam left and right abutment walls. Applied graphical and numerical analysis techniques to define the loading diagrams for the existing abutment walls and the alternative stabilization plans.

Prairie State Power Plant – Marissa, Illinois. Performed the geotechnical analyses and structural design for a soil nail wall excavation support system for an Unloading Pit. The temporary soil nail wall was to be for a period of approximately two (2) months. A proposed load (crane) was considered as a dead load and was analyzed to be placed 15 feet away from edge of excavation and located directly at edge of excavation. The primary software used for the geotechnical analyses was SLIDE.

Mine Complex, Greene County – PA. Performed the geotechnical analyses and structural design for an approximate 15-foot high Reinforced Concrete (RC) Cantilever wall for containment of a raw coal stockpile adjacent to a stream. The wall was designed for a D10 dozer surcharge loading. Also, performed slope stability analyses to evaluate the positioning of the retaining wall near the top of the stream bank. MathCAD and SLIDE software and structural analysis spreadsheets were employed for the design.

Bridge Pier Cofferdams & Construction Causeway – Brayman Construction Corp. – Various Projects Designed and Evaluated temporary shoring river causeways and cofferdams that where subject to scour and base seepage for bridge pier and abutment replacements. Provided contractor with design and construction plans for shoring systems and coordinated with the contractor to use salvaged material.

**Mine Complex, Greene County - PA** Designed and evaluated a Post & Panel Retaining Wall with rock anchors, below an existing coal bin to allow for the construction of a new plant surge bin. The wall had to be designed to allow little to no movement due to the vibration of the existing bin located directly above the proposed wall. The wall heights analyzed ranged from 10-feet to 55-feet, with and without anchors.

**FirstEnergy Corp**, **Hatfield's Ferry CCB Landfill**, **Greene County - PA** Designed and evaluated a reinforced concrete vault to be placed in the existing landfill slope to facilitate cleaning of the leachate conveyance piping system. The vaults were designed to contain a sump area, where the pipes were through. The wall heights analyzed on the vault ranged from 12-feet to 15-feet, with a sloped backfill.

#### DAM SAFETY INSPECTIONS

Periodic Dam Safety Inspection – Bailey Central Mine Complex; CONSOL Pennsylvania Coal Company, LLC Greene County, PA; 2011 to Present Performed periodic safety inspections on high hazard dams associated with a large mining operation. Evaluated instrumentation data and prepared, sign and seal reports for State and Federal documents regarding current conditions and necessary remediation of deficient conditions for fourteen (14) dams. Coordinated with owner and contractor to remedy deficient conditions maintain safety compliance.

Periodic Dam Safety Inspection – Various Ponds in Alabama; 2020 to Present Performed periodic safety inspections on dams associated with mining operations in Alabama. Evaluated the structures and prepared, sign and seal reports for State and Federal documents regarding current conditions and necessary remediation of deficient conditions for up to eight (8) dams. Coordinated with owner and contractor to remedy deficient conditions maintain safety compliance.

#### SUBSURFACE EXPLORATION & INSTRUMENTATION

Geotechnical Investigations, Various Clients, Various Locations

- · Developed drilling plans, depth of drilling and sampling procedures.
- Assisted in the supervision of exploratory subsurface drilling, pressure testing and test pitting investigation.
- Collected and logged soil and rock samples to be prepared for testing.
- Analyzed laboratory data reports to develop site soil and rock design parameters and assisted in the preparation for geotechnical recommendations for foundation designs.
- Supervised the installation of standpipe piezometers in coal refuse and earthen dam. Performed construction monitoring and quality control duties during the piezometer installation.

#### MINE REFUSE DISPOSAL/TAILING IMPOUNDMENTS

IP Harmar Holding, LLC – Harmar Slurry Impoundment; Allegheny County, PA; 2018 to Present Certifying Engineer, Performed H&H calculation for of an existing slurry impoundment to obtain a low hazard classification for post-abandonment structure. The abandonment plan consisted of leaving a remnant pond in place with a contributory area of approximately 103 acres with a low-flow outlet system.

FirstEnergy Generation, LLC – Hatfield CCB Landfill Property Ash Slide Remediation; Greene Count, Pennsylvania 2019. Project Engineer responsible for remediation and restoration associated with cleanup and stabilization of an Ash Slide with coordination with PADEP Bureaus of Residual Waste, Water Quality Management, and Waterway and Wetlands. Responsibilities included designing an engineered slope design and performing slope stability analysis, sampling and analysis of the ash for property characterization, construction support and Construction Certification Report. Was certificating engineer



# HILL AND ROAD SLIP EXPERIENCE.

- Route 33, Upshur County
- Hillcrest Road. Marion County
- Sycamore Road, Marion County
- Brink Road, Marion County
- Deckers Creek Rail Trail, Monongalia County
- Fort Martin, Monongalia County
- US 340, Jefferson County
- Rockley Road, Monongalia County
- CR 21, Monongalia County



#### **CAMP DAWSON PAVING**

#### Kingwood, WV; 2021

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

This project consisted of the planning, design and construction of new paved surfaces for the MCA Road and the ASP Road on the base at Camp Dawson. The 0.6 mile long MCA Road was a gravel road heavily used by large military vehicles and showed signs of significant wear and damage. Alpha provided a design using a combination of asphalt and concrete pavement that provided a smooth, robust surface that can be easily maintained and last for decades.

The ASP Road was a 0.5 mile long gravel road that served as the only access to ammunition supplies. The steep slope and uneven surface made large deliveries and forklift access impossible. Alpha provided an engineered asphalt road that will provide years of service and accessibility to the facility. The paving design, and drainage improvements made this a successful project for the WV Army National Guard.

#### At a Glance:

CLIENT: WV Army National Guard LOCATION: Kingwood, WV COMPLETION DATE: 2021 CONSTRUCTION COST: \$1.2 Million

#### Project Contact:

Kenneth Goodson CSM Deputy Branch Chief of Facilities Facilities Operation Manager CFMO, WVARNG





# SYCAMORE ROAD ROAD SLIP

Clarksburg, WV; 2018

Alpha Associates, Inc provide design services for a slip on Sycamore Road located in Clarksburg, West Virginia. While repairing this road, Alpha was able to provide traffic control allowing the road to still be in function. This project consisted of:

- Surveying
- Slip Repairs
- Culverts
- Guardrails
- Paving

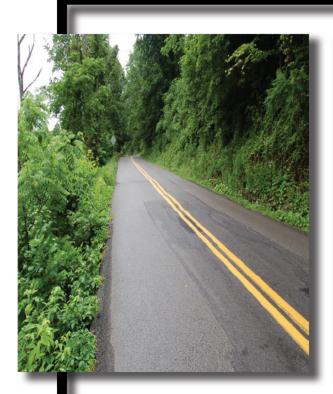
#### At a Glance:

CLIENT: District 4 LOCATION: Clarksburg, WV COMPLETION DATE: 2018

SIZE: 5.77 Miles

#### Project Contact:

2460 Murphys Run Rd Clarksburg, WV 26330 301-842-1500





### ROUTE 33/ROUTE 50 REPAIRS

Clarksburg, WV; 2018

Alpha provided the design, and preparation of contract plans and related documents for the paving and slip repair project in Harrison County, West Virginia. This project begins at the intersection of US 19 and Route 33 and continues approximately 5.77 miles on Route 33 to US Route 50.

The project will include paving along the entire route described above and will include the repair of two slips. Slip one is approximately 130 feet in length and slip two is approximately 60 feet in length. It is anticipated both slips will be repaired utilizing pile and lagging retaining walls.

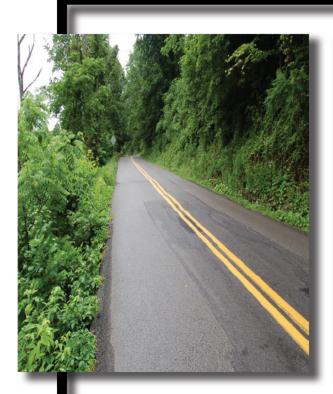
#### At a Glance:

CLIENT: WVDOH District 4 LOCATION: Clarksburg, WV COMPLETION DATE: 2018

SIZE: 5.77 Miles COST: \$118,000

#### Project Contact:

Donald Williams, PE 2460 Murphys Run Rd Clarksburg, WV 26330 301-842-1500





#### **DECKERS CREEK RAIL TRAIL**

Sabraton, WV; 2015

Alpha Associates, Inc provide design services for a slip on the Deckers Creek Rail Trail located in Sabraton, West Virginia. The construction phase of this project is anticipated to start in Spring of 2020.

This project involves the construction of a

- Gabion retaining wall
- Replacement of the affected portion of the Deckers Creek Trail
- Improving site drainage conditions

#### At a Glance:

CLIENT: Monongahela Conservation District

LOCATION: Sabraton, WV

COMPLETION DATE: Summer 2020

SIZE: TBD

COST: \$162,000

#### Project Contact:

Don Headley

201 Scott Ave.

Morgantown, WV 26508

304-876-3322



# **CR 21 SLIP REPAIRS**

Blacksville, WV; 2018

This project consisted of surveying and core boring for a slip repair project in Monongalia County, West Virginia. This project included the repair of two slips on CR 21.

Slip one is approximately 48 feet in length and slip two is approximately 320 feet in length. The scope of work on this project is limited to providing a site survey for the slip areas and core boring.

#### At a Glance:

CLIENT: WVDOH District 4 LOCATION: Blacksville, WV COMPLETION DATE: 2018 SIZE: 368 ft (combined)

COST: \$27,000

#### Project Contact:

Donald Williams, PE 2460 Murphys Run Rd Clarksburg, WV 26330 301-842-1500



# FAIRMONT STATE UNIVERSITY— MERCHANT STREET RETAINING WALL

Fairmont, WV; 2014

Fairmont State University asked Alpha to design a replacement for an existing retaining wall on its Merchant Street campus. The existing poured in place concrete wall, which supported the building's parking lot, was failing; becoming unsafe, and unsightly. About 200 feet long and as much as 20 feet tall, the wall was a problem that needed a well-engineered solution. Alpha investigated alternative retaining wall designs ranging from poured in place concrete, precast tilt-up concrete panels, and segmental walls. After Alpha provided cost-benefit analyses, the University chose the Redi-Rock alternative, a large scale segmental retaining wall system. Addressing safety, drainage, and the replacement of the wall, Alpha was able to design the wall system, and produce construction documents for contractor bidding. Working with the contractor through construction, the final product is a cost efficient, aesthetically pleasing solution that will serve the University for decades.

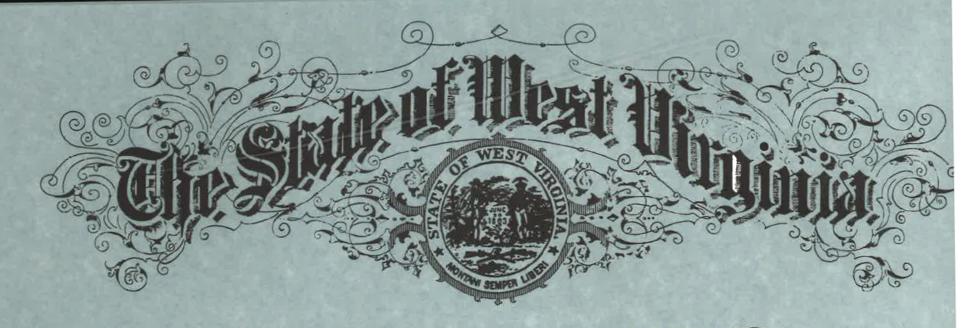
#### At a Glance:

CLIENT: Fairmont State University LOCATION: Fairmont, WV COMPLETION DATE: 2014 SIZE: 200' x 20' Retaining Wall CONSTRUCTION COST: \$309.000

#### Project Contact:

Lenora Montgomery 1201 Locust Avenue Fairmont, WV 26554 304-367-4657





STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

# Coall to whom these presents shall come, Greeting

The State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

# Charles B. Branch

Does, in Pursuance of Avalhorance Submitted

by law, hereby certify that he, having submitted

satisfactory, evidence of his ability, and experience, is a

# REGISTERED PROFESSIONAL ENGINEER

Registration Number

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



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

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

By Frank & Goddy

Ly Gramo, Ja Light

Le Ruckley.



# To all to whom these presents shall come Greeting

"Know Je That Upe State Board of Registration for Professional Engineers

of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

# Bradley H. Casdorph

RSUANCE OF AUTHORITY

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

# GISTERED PROFESSIONAL ENGINEER

Registration Number

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



Bitter under the hand of the Seal of the Board at the Capitol in the City of Charleston, This 29th day of December in the year of our Lord 2005 and of the State the One Hundred Forty-Second

Members of the Board

Lemand Timms J. Richar Ellynas

Bhopm s. Shipa William E. Vierson



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

Coall to whom these presents shall come, breeting

That the State State Stand of Registration for Holeseional Engineers, of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

Richard A. Colebank

Does, In Punsuance of Augunoparis Vested In 13

by law, hereby certify that he, having submitted

satisfactory, evidence of his ability and experience, is a

# REGISTERED PROFESSIONAL ENGINEER

Registration Mumber

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



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

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

SETTEN Frank Haddy

Shoretary Moner of Jichen Gresident.
Kenneth H. Means Robert Seatt



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

# to all to whom these presents shall come Greeting

"Know Le That The State Board of Registration for Professional Engineers

of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

Matthew T. Kchard

IN PURSUANCE OF AUTHORITY VESTED IN

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

# REGISTERED PROFESSIONAL ENGINEER

Registration Number

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



Gitten under the hand of the Seal of the Board at the Capitol in the City of Charleston, This 17th day of August in the year of our Lord 2012 and of the State the One Hundred Forty-Ninth

Members of the Board

Leman J. Timms J. Richar Ellynal

Bhapan S. Salaja William E. Vierson ?



of Messt Vinginital

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



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

1/01 50100	
Will E yoke )	Presidon
E This I	CP.
Le free 1, course	Secretary

# 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

# ALPHA ASSOCIATES, INC. C00012-00

Engineer in Responsible Charge: RICHARD A. COLEBANK - WV PE 010346

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 COAUNDER ITS SEAL, AND SIGNED BY THE PRESIDENT OF SAID BOARD.

BOARD PRESIDENT

# **HEAR FROM** OUR CLIENTS.



### J. Paul Walden **West Virginia University**

Alpha Associates have a proven record of customer satisfaction and sucessful client delivery with our organization. We would be confident in our recommendation in support of Alpha.



#### **Robert Hammel** Former Director **Morgantown Municipal Airport**

Every aspect and detail of [Alpha's] planning, coordination, and completed projects have been exceptional and outstanding in every regard.

#### References

#### Brad Leslie WV Parks and Recreation **Division of Natural Resources**

324 4th Avenue South Charleston, WV 25303 304-558-2764

#### Bill Clark, Executive Director

**Region 9 Planning & Development Council** 400 West Stephen St Suite 301 Martinsburg, WV 25401 (304)-263-1743

#### **David Hildreth** State of West Virginia

1409 Greenbrier Street Charleston, WV 25305

#### **Dirar Ahmad West Virginia Division of Highways**

Building 5 1900 Kanawha Blvd.. East Charleston, WV 25305-0430 304-558-2830

#### **Damien Davis, City Engineer** City of Morgantown

389 Spruce Street Morgantown, WV 26505 304-284-7412