

08/31/17 09:47:10 MV Purchasina Division

# **TABLE OF CONTENTS**

SECTION ONE	<u> </u>
RFQ REQUIRED DOCUMENTS  1.A CEOI COVER SHEET  1.B DESIGNATED CONTACT/CERTIFICATION  1.CADDENDUM KNOWLEDGE  1.D PURCHASING AFFIDAVIT	1-4 1 2 3 4
SECTION TWO	
GENERAL INFORMATION  2.A LETTER OF INTEREST  2.B FIRM PROFILE  2.C STATEMENT OF QUALIFICATIONS	<b>5-8</b> 5-6 7 8
SECTION THREE	
PROJECT MANAGEMENT  3.A PLANNING CONSIDERATIONS  3.B DESIGNATED CONTACT/CERTIFICATION  3.C COST & BUDGET	<b>9-14</b> 9-11 12-13 14
SECTION FOUR	<u>_</u>
KEY PERSONNEL	15-26
SECTION FIVE	
RELATED EXPERIENCE	<b>27-4</b> 1



**Purchasing Divison** 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: 364242 Doc Description: CAMP DAWSON MASTER PLAN EOI DESIGN Proc Type: Central Purchase Order Solicitation Closes Date Issued Solicitation No Version 2017-08-10 2017-08-31 CEOI 0603 ADJ18000000002 13:30:00

**BID RECEIVING LOCATION** 

**BID CLERK** 

**DEPARTMENT OF ADMINISTRATION** 

**PURCHASING DIVISION** 

2019 WASHINGTON ST E

CHARLESTON

w

25305

US

VENDOR
Vandor Name, Address and Telephone Number:
Ajona Associates Inc. 2001 Projirie Avenue
2001 Projerie Avenue
Morgantium, WV 26501
JOY \$ 2916 - 8216

FOR INFORMATION CONTACT THE BUYER

Crystal Rink (304) 558-2402 crystal.g.rink@wv.gov

Signature X

5-0516286 DATE

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

Page: 1

FORM ID: WV-PRC-CEOI-001

<b>DESIGNATED CONTACT:</b> Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.	
hul lelu	
(Name, Title)  Richard Colebank Presydent & Coo  (Printed Name and Title)	
2001 Prairie Adenue morgan tulun UV 2	?650
(Address) - 2916 - 8216 1304-796-8216	
(Phone Number) / (Fax Number)	
(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contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the	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.	
registration.	
HIONA HISSOCIOTUS Inc.	
(company)	
(Authorized Signeture) (Barren et in N. (2011)	
(Authorized Signature) (Representative Name, Title)	
(Printed Name and Title of Authorized Representative)	
(Frinted Name and Title of Authorized Representative)	
Hugust 30, 2019	
304-296-8216/304-296-8216 (Phone Number) (Fax Number)	

# ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: CEOI ADJ1800000002

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

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

Addendum Numbers Received: (Check the box next to each addendum r	received)
☐ Addendum No. 1 ☐ Addendum No. 2 ☐ Addendum No. 3 ☐ Addendum No. 4 ☐ Addendum No. 5	☐ Addendum No. 6 ☐ Addendum No. 7 ☐ Addendum No. 8 ☐ Addendum No. 9 ☐ Addendum No. 10
discussion held between Vendor's repres	eceipt of addenda may be cause for rejection of this bid esentation made or assumed to be made during any oral centatives and any state personnel is not binding. Only led to the specifications by an official addendum is
Company Authorized Signature	Page & co
8-30-17 Date	
NOTE: This addendum acknowledgement	t should be submitted with the bid to expedite

document processing.

RFQ No. ADJ 18000002

# STATE OF WEST VIRGINIA Purchasing Division

# **PURCHASING AFFIDAVIT**

MANDATE: 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:**

WITNESS THE FOLLOWING SIGNATURE:

Alpha Associates, Inc. State of West Virginia My Commission Expires August 04, 2019 209 Prairie Avenue Margantown, WV 26501

"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 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.

Vendor's Name: April Associates The
Authorized Signature: Muldelle Process Date: 8-30-17
State of West Mylna
County of Months to-wit:
Taken, subscribed, and sworn to before me this? day of
My Commission expires UUCLUDE 4 , 2019
AFFIX SEAL HERE NOTARY PUBLIC DOWN (Clark
NOTARY PUBLIC OFFICIAL SEAL Diann C. Clark  Purchasing Affidavit (Revised 07/01/2012)



August 30, 2017

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

RE: Camp Dawson Master Plan EOI Design CEO 0603 ADJ 1800000002

Dear Selection Committee,

Alpha Associates, Incorporated is pleased to submit this Expression of Interest to provide the necessary architectural, engineering, and related services for the Camp Dawson Master Plan. Our history with Camp Dawson, combined with our related experience makes us the perfect partnering firm for the Army National Guard Construction and Facilities Management Office one this project.

Since 1969, Alpha has partnered with numerous Federal, State, and local governments to provide architectural and engineering services for projects around the state, including several at Camp Dawson. We are familiar with the current facilities and have had the opportunity to visit and utilize them. Alpha was the architect and engineer of record for three of the barracks buildings, two mess halls, and the medical building. The buildings are in use today as the barracks for the Challenge Academy and the current medical clinic.

### The Project Team

Alpha's staff includes Registered Architects and Professional Engineers, as well as architectural designers, technicians, surveyors, landscape designers, and support staff that is available to assist with all project needs. Alpha's Office in Morgantown is approximately 45 minutes from the site. This allows us to offer the WV National Guard and Camp Dawson a cohesive design team for a seamlessly completed project.

The Key Personnel for your Projects will include the following:

Rick Colebank, PE, PS, - Principal-In-Charge Rebecca Key, AIA, LEED-AP, - Project Architect Chuck Branch, PE, - Principal



Charlie Luttrell, PE, - Principal Casey Smith, Assoc. AIA – Architectural Designer Brad Casdorph, PE, PS, - Civil Engineer

Resumes for each of the team members along with related experience are included in this Statement of Qualifications.

### Summary

The Alpha Team is excited for the opportunity to work with the WV Army National Guard and the State of West Virginia on another project. Our dedicated team of professionals will make your project a priority. Please contact me at 304-296-8216 extension 102 if you have any questions or require additional information.

Thank you for your consideration.

Sincerely,

ALPHA ASSOCIATES, INCORPORATED

Richard A. Colebank, PE, PS

President and COO

rick.colebank@thinkalphafirst.com















### FIRM NAME Alpha Associates, Incorporated

#### OFFICE LOCATIONS

209 Prairie Avenue Morgantown, West Virginia 26501

535 West King Street Martinsburg, West Virginia 25401



1969; Morgantown, WV

#### FIRM PRINCIPALS

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

#### NUMBER OF EMPLOYEES

22 Employees

#### **SERVICES**

Architectural Design Structural Engineering Surveying Interior Design located in Martinsburg. Landscape Architecture Construction Administration



Alpha Associates, Incorporated was established in Civil Engineering 1969 and since that time has completed hundreds of projects throughout Morgantown and the state of West Virginia. Alpha's Corporate Office is located in Morgantown with our Eastern Regional Office





# 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 technical tools, dedicated principals and highly skilled staff members.

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 whatever is 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, works 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 provide frequent updates on the project by using effective communication tools to manage the projects and all the involved parties. Our skilled staff of 22 architects, engineers, surveyors and administrative personnel all work diligently towards producing the drawings and specifications that will deliver our clients successful projects, completed on time and within budget.

Alpha has thrived for 48 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.







# **Planning Considerations**

- 1. Determine overall goals and objectives with all stakeholders
  - a. Meetings
  - b. Design Charrettes
- 2. Development of growth trends and operational requirements
  - a. What areas of training?
  - b. What areas of facilities?
- 3. Evaluation of Existing Facilities and land utilization
  - a. How does it meet goals and objectives
  - b. Do they have room for growth and meet operational requirements.
  - c. Do existing facilities meet all levels of health, safety, and welfare?
    - i. Compliant with current building/fire and/or accessibility codes and guidelines
- 4. Determination of "buildable" parcels of land
  - a. Lot Orientation
  - b. Parking Consolidation
  - c. Parking/Walking Distance
  - d. Structural Hardening
  - e. Circulation
- 5. Phasing of goals and objectives
  - a. Phasing of buildable projects?
  - b. Phasing of construction
  - c. Phasing of renovation
- 6. Establishment of 5 year short-term goals/budget
- 7. Establishment of 20-25 year long-term goals/budget





### All of the above should be examined in the context of:

- 1. Force Protection
  - a. Where and how to visit site facilities
    - i. Vulnerability assessment
    - ii. Alternative force protection measures
    - iii. Determine minimum detail standards
- 2. Environmental Requirements
  - a. Purpose/goals and objectives
  - b. Alternatives/Analysis
  - c. Issues/mitigations
  - d. Preferred alternative solutions/decisions
  - e. Monitoring/feedback
- 3. Land Use Controls
  - a. Reutilization of contaminated property
    - i. Suitable for maneuvers?
    - ii. Suitable for new construction?
    - iii. Mitigation hazards?

# **Conceptual Plan Development**

- 1. Updating of current site conditions
  - a. Existing conditions
  - b. Statement of goals and objectives
  - c. Site Plan in pre-established contour level
  - d. Location of facilities, parking, training areas and maneuver areas
- 2. Submission of proposed utilization of site
  - a. Conceptual ideas, images, graphics, plans





- b. Conceptual Land Utilization impact
- c. Conceptual Phasing of improvements and modifications to site and facilities
- 3. Evaluation and examination of submitted drafts for compliance
  - a. Stated goals
  - b. Stated growth trends
- 4. Modification of proposed Master Plan
- 5. Submission of final plan





SCHEDULE CONTROL

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. Most recently, Alpha 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.







Alpha Associate, Incorporated has an excellent record of budget control. Our inhouse cost estimators, combined with an excellent relationship with contractors throughout the area allow us to develop accurate estimates early in the design process. The Alpha estimators begin at the schematic design phase of the project and develop a line item estimate of probable construction costs that can be carried through each of the project phases. At each phase the project estimate is updated to include a more detailed estimate in order that the accuracy can be enhanced. During these updated estimates, specific increases or decreasing can be identified allowing the owner to make informed decisions moving forward on the important budget issues for the project.

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

Below you find several examples where Alpha was able to execute projects successfully within a reasonable budget.

## Jefferson County Emergency Services Agency

Estimate: \$1,230,651.26 Bid Amount: \$1,219,000.00 Change Order: \$4,354.52 Final Budget: \$1,223,354.52

# Berkeley County Emergency Ambulance Authority

Estimate: \$345,463.30 Bid Amount: \$399,400.00 Change Order: \$23,859.91 Final Budget: \$423,259.91

#### Clear Mountain Bank - Oakland

Estimate: \$1,922,615.80 Bid Amount: \$1,925,948.00 Change Order: -\$37,405.00 Final Budget: \$1,888,543.00







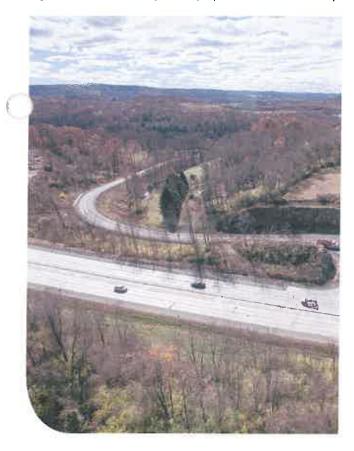
**ALPHA RESUMES** 



#### SUMMARY

Richard A. Colebank, PE, PS President and COO

Mr. Colebank is President and Chief Operating Officer of Alpha. He has been with Alpha Associates, Incorporated since 1985, starting as a staff engineer and progressing 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 at 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.



#### PPOEII E

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 Manager:

- NETL B-3 Area 150 North Labs Renovation, Morgantown; WV
- WVU Research Park; Morgantown, WV
- WVU Reedsville Farm Redevelopment; Morgantown, WV
- West Virginia State Office Building; Clarksburg, WV
- Jane Lew Truck Stop; Jane Lew, WV
- Grant County Bank Renovation; Petersburg, WV
- South Berkeley Fire Station; Inwood, WV
- Monongalia General Hospital Expansion; Morgantown, WV
- Monongalia General Hospital Access Road; Morgantown, WV
- Morgantown Municipal Airport Access Road; Morgantown, WV
- WVU College of Physical Education and Sports Science/Student Health Center; Morgantown, WV
- WVDOH Arnettsville Bridge Replacement; Monongalia County, WV

#### Indefinite Delivery/Indefinite Quantity Contracts:

- Morgantown Municipal Airport Open End Contract
- West Virginia Division of Highways Open End Contract
- National Energy Technology Laboratories Open End Contract
- West Virginia University Open End Contract
- United States Postal Service Open End Contract









Richard A. Colebank, PE, PS | President and COO

#### **EMPLOYMENT HISTORY**

1985 - Current Alpha Associates, Incorporated 1983-1985 Charles Townes and 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 Certified Remote Pilot

#### **AFFILIATIONS**

- Former NSPE/PEPP Governor of WV
- American Red Cross Regional Chairman
- 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



Contact

Richard A. Colebank 304.296.8216 800.640.8216

rick.colebank@thinkalphafirst.com





**ALPHA RESUMES** 



Charles Branch, PE Principal, Civil Engineer

#### SUMMARY

As Chief Engineer for site development and planning projects, Mr. Branch is a vital part of the design process at Alpha. His involvement spans from 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.



Broad-based responsibilities in the following areas:

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

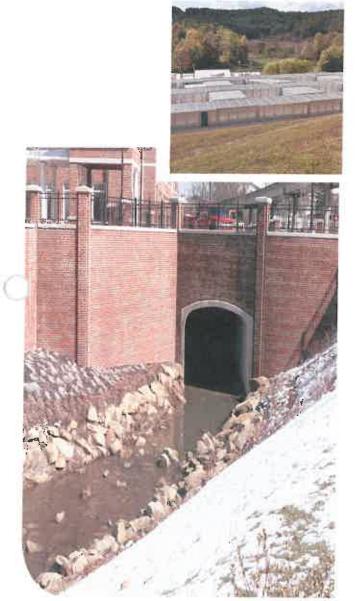
#### **PROFESSIONAL HIGHLIGHTS**

#### 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 Evansdale Redevelopment; Morgantown, WV
- WVU Health Sciences Center Eastern Division; Martinsburg, WV
- Blackshere Bridge; Mannington, WV
- WVDOH I-77 Welcome Center; Williamstown, WV
- WV Medal of Honor Recipients Plaza; Hazelton, WV
- Lewis County High School Bridge; Weston, WV
- Wyoming County Route 10 Relocation; Wyoming County, WV
- Fairmont Federal Credit Union; Bridgeport, WV









Charles Branch, PE

Principal, Civil Engineer

#### **EMPLOYMENT HISTORY**

1992 - Current Alpha Associates, Incorporated 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



Contact

Charles B. Branch 304.296.8216 800.640.8216 chuck.branch@thinkalphafirst.com









Charles B. Luttrell, PE | Principal, Structural Engineer

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 the 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.



SUMMARY

Broad-based responsibilities in the following areas:

- Bridge Structural Design and Analysis
- Innovative Bridge Materials Applications
- Building Structural Design and Analysis
- Historical Restoration and Evaluations

#### PROFESSIONAL HIGHLIGHTS

#### 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; Morgantown, 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
- West Buckeye Bridge; Core, WV
- Washington High School; Charles Town, WV
- WVU Coliseum Structural Inspection; Morgantown, WV
- WVU Coliseum Scoreboard Hoist Project; Morgantown, WV
- Alderson Broaddus College, Rex Pyles Arena Deck; Philippi, WV
- Mountaineer Middle School Renovation; Morgantown, WV
- Salem International Building Inspections; Salem, WV
- Monongalia County Sheriff's Building; Morgantown, WV
- South High Street Bridge, Morgantown, WV
- Ices Ferry Bridge, Morgantown, WV









Charles B. Luttrell, PE | Principal, Structural Engineer

#### **EMPLOYMENT HISTORY**

1996 - Current Alpha Associates, Incorporated

1995-1996 Larry D. Luttrell, PE, Ph D West Virginia University 1991-1994

WVU Constructed Facilities Center 1990-1991



West Virginia University

Masters - Structural Engineering; 1995 Bachelor - Civil Engineering; 1993

#### **QUALIFICATIONS**

License: Professional Engineer: West Virginia, Pennsylvania

#### **AFFILIATIONS**

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

#### Research Experience

- Cold Formed Steel Deck Research
  - ✓ Fastener Failures
  - Edge conditions/failures
  - Buttoned overlap sheer failures
- Composite Cold Formed Steel and Concrete Deck Research
  - Line load behavior/failures
  - Concentrated load behavior/failures
  - Web crippling
  - Punch failures



Contact

Charles B. Luttrell 304.296.8216 800.640.8216 charlie.luttrell@thinkalphafirst.com



**SUMMARY** 





Rebecca Key, AIA, LEED-AP

Architect, Associate

Ms. Key has worked in the architectural field for over 35 years. She serves as Project Architect/Project Manager for numerous architectural designs at Alpha Associates, Incorporated. 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 evergrowing 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
- Interior Space Planning
- Historic Renovation
- Project Management

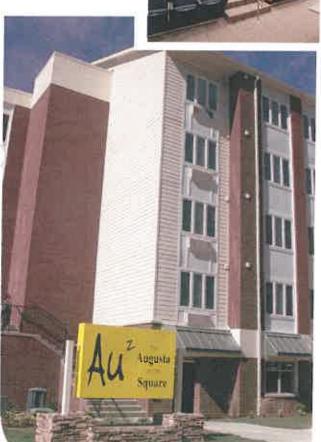
#### **PROFESSIONAL HIGHLIGHTS**

- Mountaineer Middle School Renovation; Morgantown, WV
- Pineville Elementary School; Pineville, WV
- West Virginia State Office Building; Clarksburg, WV
- Monongalia County Sheriff's Department; Morgantown, WV
- WV Regional Technology Park Building 770 Renovation; Charleston, WV
- Jane Lew Truck Stop; Jane Lew, WV
- FMW Composites Rubber Autoclave; Bridgeport, WV
- FMW Composites Clean Room Renovation; Bridgeport, WV
- FMW Composites Processing Facility Shell Building; Bridgeport, WV
- FMW Composites Processing Facility Plant; Hazelton, WV
- National Energy & Technology Labs Process Gases Feasibility Study;
   Morgantown, WV
- National Energy & Technology Code Analysis; Morgantown, WV
- WV DNR Spring Run Fish Hatchery Roof Replacement; Petersburg, WV
- WVDOH District 2 Headquarters Roof Replacement; Huntington, WV
- WVDOH District 2 Moisture Investigation; Huntington, WV
- Monongalia County Family Court Renovation; Morgantown, WV
- White Hall Municipal Building; White Hall, WV
- West Virginia State Office Building; Parkersburg, WV
- Clear Mountain Bank; Morgantown, WV
- 57 Middleway Pike Commercial Building; Inwood, WV
- Chestnut Ridge Research Building 5th & 7th Floors; Morgantown, WV
- Camden Family Health; Weston, WV
- Hoods Pharmacy; Follansbee, WV











Rebecca Key, AIA, LEED-AP

Architect, Associate

#### **EMPLOYMENT HISTORY**

2000 - Current Alpha Associates, Incorporated 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: West Virginia, Maryland, Washington DC, New York, Virginia, Pennsylvania
- NCIDQ Certified
- Leadership In Energy and Environmental Design Accredited **Professional**

#### **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



Contact

Rebecca Key 304.296.8216 800.640.8216 rebecca.key@thinkalphafirst.com









Bradley Casdorph, PE, PS | Civil Engineer

#### SUMMARY

Mr. Casdorph joined the Alpha Associates, Incorporated 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

#### **PROFESSIONAL HIGHLIGHTS**

#### Civil Engineering:

- Platinum Properties Waterfront Conference Center; Morgantown, WV
- Hart Field Runway Safety Area; Morgantown, WV
- Hart Field Ramp Renovation and Deicing Facility; Morgantown, WV
- Hart Field Signage and Lighting; Morgantown, WV
- Hart Field Airport Certification Manual; Morgantown, WV
- Hart Field Air Rescue and Fire Fighting Vehicle Procurement, WV
- WVU Lot 81 Parking Area Improvements; Morgantown, WV
- WVU Animal Facilities Annex, Engineering Retrofit; Morgantown, WV
- McKee Crossing 120 Acre Subdivision; Martinsburg, WV
- Morgantown Municipal Airport Access Road; Morgantown, WV
- Davisson Estates 60 Acre Subdivision; Morgantown, WV
- Mon General Hospital East Parking Area; Morgantown, WV
- Applebee's Restaurant, Site Plan; Morgantown, WV
- WVU CPASS/Student Health; Morgantown, WV
- WVU Research Park- 100 Acre ALTA/ACSM Survey; Morgantown, WV
- WVU Museum; Morgantown, WV









Bradley Casdorph, PE, PS | Civil Engineer



2004 - Current Alpha Associates, Incorporated 1979-2004 Triad Engineering, Incorporated

#### **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

#### **AFFILIATIONS**

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





Contact

**Bradley Casdorph** 304.296.8216 800.640.8216 brad.casdorph@thinkalphafirst.com



**ALPHA RESUMES** 

Casey Smith, Assoc. AIA Architectural Designer

#### SUMMARY

Mr. Smith has been employed with Alpha Associates since 2016. He has worked on several architectural projects including multi-million dollar projects for private and public sector clients. Mr. Smith came to Alpha with an impressive background in educational, commercial, and local government facilities. He has offered assistance in project management, using his background to further improve the quality of each project he is involved with. Mr. Smith has been an incredible asset to Alpha Associates and proves to be an asset on each of his projects.



#### **PROFILE**

Broad-based responsibilities in the following areas:

- Architectural/Structural Construction Drawings
- Construction Administration
- Project Management Assistance

#### **PROFESSIONAL HIGHLIGHTS**

#### **Construction Administration Projects**

- Cacapon State Park Lodge Renovation
- Los Mariachis New Restaurant; Morgantown, WV
- \* Freedom Ford Automotive Dealerships, Granville, WV
- Elkins Fordland; Elkins, WV
- Federal Group GSA VA Tenant Improvement Project;
- Point Marion ADA Deck; Point Marion, PA
- Los Mariachi Renovation; Morgantown, WV
- WVU Hazel Ruby McQuain Equine Education &

Resource Center: Reedsville, WV

#### **EMPLOYMENT HISTORY**

2016- Current Alpha Associates, Incorporated

2014-2016 MSES Architects

2011-2014 **Blackwood Associates** 

2007-2009 Vandalia Heritage Foundation

#### Education

2014 Boston Architectural College, Master of

Architecture

2009 Fairmont State University; BS Architecture



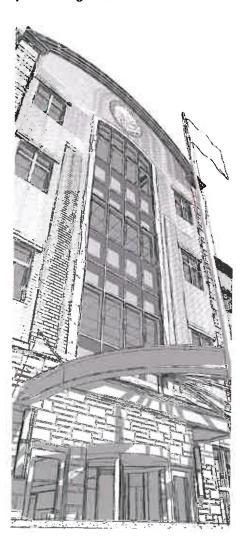


ALPHA RESUMES

Luke Cunningham | Architectural Technician

#### **SUMMARY**

Mr. Cunningham has been employed by Alpha Associates since 2010. He has worked on numerous architectural and civil projects which include Clarksburg State Office Building, WV Regional Tech Park Building 770, Mon General Access Road, & Freedom Automotive Dealerships as construction administrator, architectural technician, project inspector, and assistance in project management.



#### **PROFILE**

Broad-based responsibilities in the following areas:

- Architectural/Structural Construction Drawings
- Construction Administration
- Construction Inspector

#### **PROFESSIONAL HIGHLIGHTS**

#### **Construction Administration Projects**

- Clarksburg State Office Building; Clarksburg, WV
- WV Regional Tech Park Building 770; Charleston, WV
- Freedom Ford Automotive Dealerships, Granville, WV
- Pineville Elementary School; Pineville, WV
- Huff Consolidated Elementary/Middle School; Hanover, WV
- Morgantown Municipal Airport Maintenance Building; Morgantown, WV
- Mon General Access Road, Morgantown, WV
- Point Marion Water Line Addition, Point Marion, PA
- Harry Green Chevrolet, Clarksburg, WV
- West Virginia Building 25, Parkersburg, WV
- WVU CPASS & Student Health Center, Morgantown, WV
- Bavarian Inn Hotel Infinity Pool & Bar, Shepherdstown, WV
- Glenville University Skybox, Glenville, WV
- WVU Center for Alternate Fuels Engines & Emissions, Morgantown, WV

#### **EMPLOYMENT HISTORY**

2010 - Current Alpha Associates, Incorporated 2006 - 2010 Buchart Horn, Incorporated













State Office Building | 2016

# **Architectural Case Study**

West Virginia State Office Building Clarksburg, WV

Alpha Associates, Incorporated provided architectural design, civil and structural engineering and surveying services for a new State Office Building in Clarksburg, WV. The building is designed as an 88,491 square foot; four story office building that will hold State agencies.

The structure is brick, and structure glazed brick, and concrete frame. The project incorporated traditional and non-traditional interior partitions for offices. The building faces East/West to provide maximum passive solar benefit for energy savings, through the design of the mechanical systems. The project will be applying for Silver Certification under LEED standards.



#### **Project Contact:**

**Robert Krause** 1900 Kanawha Blvd, East Charleston, WV 25305 304-558-2317



At a Glance

CLIENT: State of West Virginia

LOCATION: Clarksburg, WV

COMPLETION DATE: 2016

SIZE: 88,491 sq. ft.

CONSTRUCTION COST: \$24.9 Million







Hazel Ruby McQuain Equine Education & Research Center est. 2017

# **Engineering Case Study**

**WVU Reedsville Farm Redevelopment** Reedsville, **WV** 

The West Virginia University Reedsville Farm is operated by the WVU Davis College partnered with WVU Extension Services and is home to the Extension Service Equine Arena. Alpha is the lead architect and project engineer for this project, partnering with POPULOUS, world-renowned in equine facilities to assist with design. The goal of this project was to redevelop the farm as the Hazel Ruby McQuain Equine Education & Research Center with state-of-theart facilities to increase student and stakeholder opportunities, enabling the equine studies program to flourish.

The project included:

- Design of a new gateway to improve appearance and identity along main road
- Addressing site and infrastructure issues
- Elevate and improve existing outdoor arena
- Design a new 11,500 sq. ft. Multipurpose Building
- Design a new 8,200 sq ft. Education & Research Center with dormitory rooms and facilities', offices, and classrooms
- Construct new Welcome/Honor/Gathering Plaza with vertical tower element incorporating donor plaques
- Master Planning which includes future horse barn, expanded multipurpose building, pasture improvements, RV Hookups, maintenance facilities, and further renovation of existing facilities

### **Project Contact:**

Scott Owen 979 Rawley Lane PO Box 6572 Morgantown, WV 26506 304-290-6613



At a Glance

CLIENT: WVU

LOCATION: Morgantown, WV

COMPLETION DATE: 2017

SIZE: 8.5 acres

CONSTRUCTION COST: \$6.5 Million











West Virginia University- Master Plan | 1996

# **Higher Education Case Study**

**WVU Master Plan** Morgantown, WV

Alpha Associates, Incorporated was a consultant to the firm of Sizemore-Floyd to produce a master plan completed for West Virginia University. Our work included Civil, Structural and Architectural Evaluations of all buildings campus, evaluations infrastructure for the campus and general guidance to the consultant regarding local issues. As a team member we attended the majority of the meetings held regarding the project and provided input throughout. Our work also included providing cost estimates for all work with which we were associated.



**Project Contact:** 

At a Glance

CLIENT: West Virginia University

LOCATION: Morgantown, WV

COMPLETION DATE: 1996

SIZE: N/A

CONSTRUCTION COST: N/A













U.S. Coast Guard Operations Center | 1999

# **Engineering Case Study**

**U.S. Coast Guard Operations** Systems Center Martinsburg, WV

Working with DMJM Architects, Alpha Associates, Incorporated provided site and civil engineering services for this 75,000-square foot building. Services included parking lot design, grading, site mapping, surveying, drainage design, sewer and water connections and storm water management. Alpha's staff also provided all necessary paperwork for the County's Planned Unit Development process.

# **Project Contact:**

Mr. Ken Lowe Panhandle Venture II 233 Lowe Drive Shepherdstown, WV 25443 304-870-7001



At a Glance

CLIENT: U.S. Coast Guard

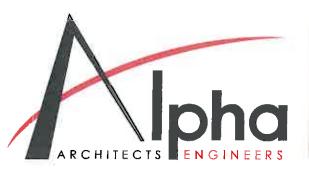
Operations Systems

LOCATION: Martinsburg, WV

COMPLETION DATE: 1999

SIZE: 75,000 sq. ff.

CONSTRUCTION COST: Portion of Larger Project











Parkersburg Armory | 2009

# **Architectural Case Study**

Parkersburg Armory Renovation and **Addition** 

Parkersburg, WV

Alpha continues their relationship with the West Virginia Army National Guard with the renovation of a space originally designated as a rifle range at the Parkersburg Armory.

New offices, conference room, and break room provide new work space for officers. A secondary entrance was included in the design to serve the department that will occupy this space.

A fire alarm upgrade for the entire building was also included in the project scope as well as an alternate for an access control system and mass notification system.

### At a Glance

CLIENT: WV Army National

Guard

LOCATION: Parkersburg, WV

COMPLETION DATE: 2009

SIZE: 2600 sq. ft.

CONSTRUCTION COST: \$400,000









#### **ALPHA EXPERIENCE**



R.E. Michel Building 2006

# **Architectural Case Study**

**R.E. Michel Building**Morgantown, **W**V

Alpha Associates, Incorporated provided Civil/Site Design, Structural Design, Surveying, and Stormwater Management for the new R.E. Michel Building to replace the building vacated the in Research Park Construction. Alpha also completed architectural drawings to be submitted for permit approval. This 11,000 square foot metal building was completed in 2006.



# **Project Contact:**

WVU Research Corporation 888 Chestnut Ridge Road Morgantown, WV 26506 304-293-3449



### At a Glance

**CLIENT: WVU Research Center** 

LOCATION: Morgantown, WV

COMPLETION DATE: 2006

SIZE: 11,000 sq. ft.

CONSTRUCTION COST: \$1 Million











Sheriff's Building | 2011

# **Architectural Case Study**

Monongalia County Sheriff's Building Morgantown, WV

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

Site constraints and adjacent overhead structures made the development and construction of the project very challenging.

The ground floor includes the sheriff's department, evidence room and several bailiff rooms. The remaining floors are designed to house flexible office space.

Restricted access, combined with a high level of security, both passive and active systems were part of the design program.

# **Project Contacts:**

Sheriff Al Kisner 116 Walnut St. Morgantown, WV 304-291-7290

Robert Doyle 243 High St. Morgantown, WV 304-291-7268

MORDAGAGA



At a Glance

CLIENT: Mon County

Commission

LOCATION: Morgantown, WV

COMPLETION DATE: 2011

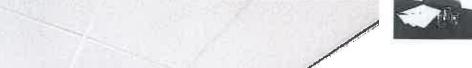
SIZE: 31,655 sq. ff.

CONSTRUCTION COST: \$7.9 Million













Interior Design | Education

### **Casework & Furniture**

**Washington High School** Charles Town, WV

(Left) The FACS (Family and Consumer Science) classroom provided built-in casework and free-standing furnishings. Working with teachers for this space, it was determined to include areas for sewing, cooking, cleaning, and others "hands on" instruction. These areas were designed to be part of the general building contract. Consideration was given to areas that would receive "extreme" use, along with flexibility of the height of tables and equipment.

(Upper Left) The science rooms included wood casework along with a chemical resistant countertop. They were designed with careful consideration of teaching and storage needs.

(Upper Right) The cafeteria furniture was chosen specifically so that it could easily be disassembled and moved out of the way or reassembled in a new configuration.

# **Project Contact:**

Susan Wall 110 Mordington Avenue Charles Town, WV 25414 304-728-9225



#### At a Glance

CLIENT: Jefferson County

Schools

LOCATION: Charles Town, WV

COMPLETION DATE: 2008

SIZE: 210,000 SF

CONSTRUCTION COST: \$35 Million











Interior Design | Administrative

### **Executive Finishes**

Monongalia County Sheriff Building Morgantown, WV

(Left) For the elevator lobby, linear cove lighting was chosen to illuminate the space. The soft lighting pairs with the "rug-like" pattern created by different sized, twotoned porcelain tile. While creating a welcoming space, the porcelain tile provides durability the space requires.

(Top right) A waiting area near the elevator lobby continues the patterned porcelain tile. It provides a small seating area with windows that overlook the entrance. The benches help to provide a clean and open area.

(Top left) The conference room employs cove lighting in two bulkheads to provide uniqueness to the room. Paneling was used for the wainscot and chair rail. The covering was stained in the field to match the other casework in the building. This provides a cohesive look while keeping the material affordable.

At a Glance

CLIENT: Mon County

Commission

LOCATION: Morgantown, WV

COMPLETION DATE: 2011

SIZE: 31,655 SF

CONSTRUCTION COST: \$7.9 Million



#### **Project Contact:**

Sheriff Al Kisner 116 Walnut St Morgantown, WV 304-291-7290













**Interior Design** 

Lobbies

# Case Study

Clarksburg State Office Building & The Augusta

Washington High School houses grades 9-12 and is capable of holding 1200 students initially. The school, located in a high growth area was designed for future expansion with core facilities to accommodate an ultimate capacity of 1500 students.

The two-story structure is designed with science and technology as a key education component. Unique spaces, such as a print technology lab, high tech science classrooms and laboratories, create a high school to be a partner in the economic growth of the area.

The project also includes the design and construction of a new sports stadium, athletic fields and all support facilities.

# **Project Contact:**

Susan Wall 110 Mordington Avenue Charles Town, WV 25414 304-728-9225



### At a Glance

CLIENT: Jefferson County

Schools

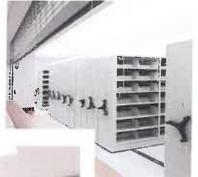
LOCATION: Charles Town, WV

COMPLETION DATE: 2008

SIZE: 210,000 SF

CONSTRUCTION COST: \$35 Million











Interior Design | Government

# **Furnishings Case Study**

West Virginia State Office Building Clarksburg, WV

(Left) Private offices were provided with a variety of types of storage. This included hanging storage and portable file storage. The case good furnishings were coordinated to match with other hardwoods in the building.

(Upper Left) A pre-manufactured rolling file system was placed on the second floor for one of the government agencies. This filing system allowed for efficient use of the space and gave the agency more filing space to fulfill their needs. Due to the weight, the floor guide rails were installed with other supportive steel structure during construction.

(Upper Right) In the 4th floor large conference room, tables and chairs on casters were provided. This allowed for additional functionality of the space depending on the needs of the user. In addition, the table tops matched other hardwoods in the building, and the legs of the furniture coordinated with the color palette of the room.

# **Project Contact:**

**Robert Krause** 1900 Kanawha Blvd, East Charleston, WV 20305 30-558-2317



At a Glance

CLIENT: State of West Virginia

LOCATION: Clarksburg, WV

COMPLETION DATE: 2016

SIZE: 88,491 Sq. Ft.

CONSTRUCTION COST: \$24.9 Million











Interior Design | Government

# Finishes Case Study

West Virginia State Office Building Clarksburg, WV

(Left) Patterned terrazzo flooring provided a decorative path in the main hall of the lower level. The three colors are continued in the polished granite wall cladding and other finishes, such as the aluminum finish on the column covers. The column covers in this area had black reveals to add interest. (Upper Left) Off the building's main lobby is the entrance to different agencies. These entrances are framed with the granite clad walls, terrazzo flooring, and brushed aluminum column covers. The finishes allow for the glass storefront entrances to be easily noticeable, directing people to their doors. In this grea, the column covers do not have the black reveals, but have 3-dimensional black rings. (Upper Right) Durable materials of porcelain tile and quartz countertops were used at the teller stations of the Dept. of Motor Vehicles. Porcelain tiles were used at the front of the teller stations within the "kick zone", while rubber flooring was used in the walk ways. The rubber flooring mimicked the look of the terrazzo flooring that was used in the building's main lobby and the acoustical properties of the space. The porcelain tile not only provided durability, but the clean look that was needed for this public agency.

### **Project Contact:**

**Robert Krause** 1900 Kanawha Bivd, East Charleston, WV 25305 304-558-2317



At a Glance

CLIENT: State of West Virginia

LOCATION: Clarksburg, WV

COMPLETION DATE: 2016

SIZE: 88,491 sq. ff.

CONSTRUCTION COST: \$24.9 Million











Erosion and Sediment Control

# **Engineering Case Study**

Washington High School Erosion and Sediment Control

Charles Town, WV

The construction of a new Washington High School began with an early site package to install all erosion and sediment control devices. Alpha designed an erosion and sediment control package for the 59 acre site which included three temporary sediment traps and one permanent sediment pond which would be converted to a permanent stormwater management pond at the completion of the project. The design also included other E&S devices such as silt fence, check dams and earthen diversion dikes to obtain a General Stormwater/Construction Permit from the WVDEP under the NPDES.



Susan Wall 110 Mordinton Avenue Charles Town, WV 25414 304-728-9225



At a Glance

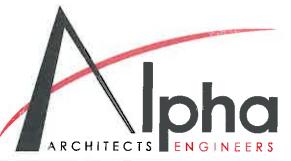
CLIENT: Jefferson County BOE

LOCATION: Charles Town, WV

COMPLETION DATE: 2005

SIZE: 59 Acres

CONSTRUCTION COST: \$500,000







**ALPHA EXPERIENCE** 



WVU Research Park

2007

# **Engineering Case Study**

**West Virginia University Research Park**Morgantown, WV

With the findings from a Traffic Impact Study and the original master plan, Alpha's Design Team began the design of a 90 plus acre Research Park with two intersections, traffic control systems and 5250 feet of roadway. Multiple bid packages were utilized to more efficiently construct, as well as meet funding availability. Phase 1 of construction included a mass earthwork package that moved nearly 233,000 cy of earth to prepare for the roadway bases and future building pads. Phase 2 of construction included all utilities for the Research Park and related traffic control systems as well as storm water management of the park and roadways.

With more than 3000 additional vehicles projected in the area, traffic concerns were a priority for the Research Corporation and the design team. Prior to the development of the WVU Research Park, the intersection of Maple Drive and Route 705 was virtually unusable during peak traffic hours with severe site distance problems. Alpha's work included modifying the existing Master Plan for changing conditions and coordination with surrounding properties.

At a Glance

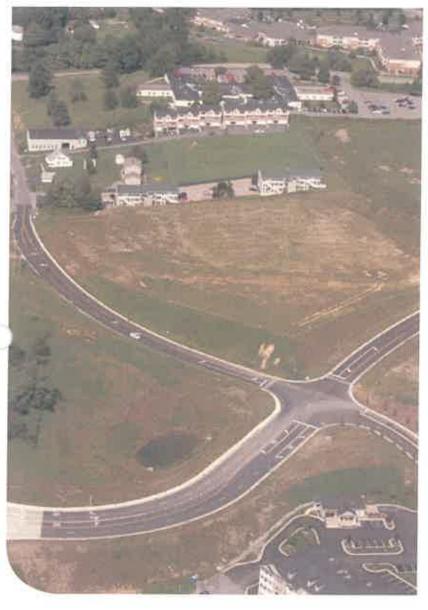
CLIENT: WVU Research Corp.

LOCATION: Morgantown, WV

COMPLETION DATE: 2007

SIZE: 75 Acres

CONSTRUCTION COST: \$2.4 Million



### **Project Contact:**

Russ Lorince P.O. Box 6216 Morgantown, WV 26506 304-293-4806













Freedom Automotive Group 2017

# **Architectural Case Study**

Freedom Ford, Freedom Kia, & Freedom Volkswagen
Morgantown, WV

Alpha Associates, Incorporated provided architectural and engineering design services for three new automobile dealerships in Morgantown, WV at the University Town Center. All three dealerships are to be completed by spring 2017. Portions of the building structural frame, roofing and siding are custom designed pre-engineered metal building components.

Each dealership contains services bays, varying lift systems, showrooms, and offices.

# Project Contact:

Michael Wood 696 Fairmont Road Westover, WV 26501 304.291.5090

FREEDOM



# At a Glance

CLIENT: Freedom Automotive

Group

LOCATION: Morgantown, WV

COMPLETION DATE: EST. 2017

SIZE: 55,200 Ford 24,700 Kia

20,500 Volkswagen