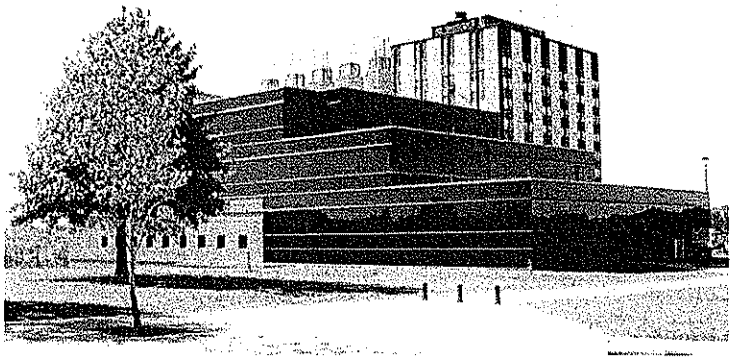
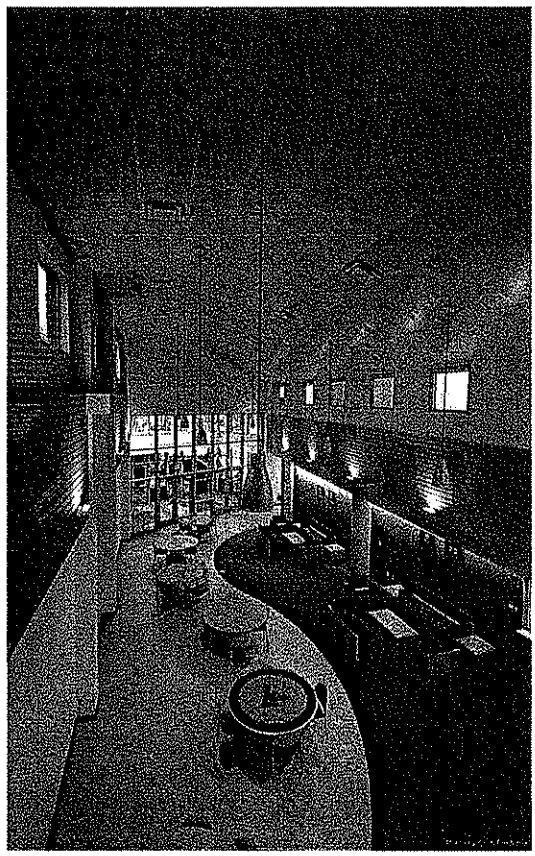
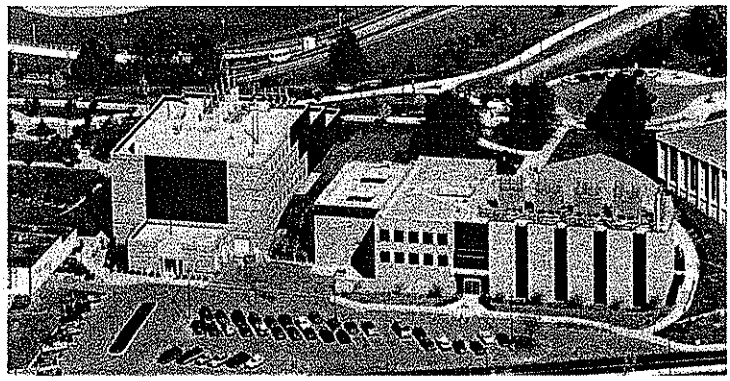
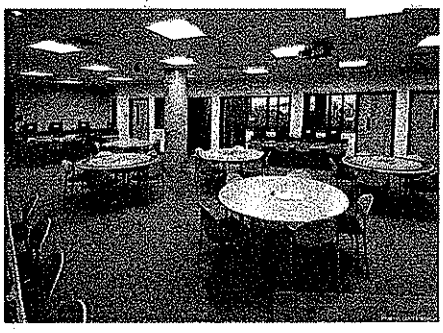
WV Schools for the Deaf and Blind
DBSM91057
ARCHITECTURAL/ENGINEERING SERVICES
April 16, 2009

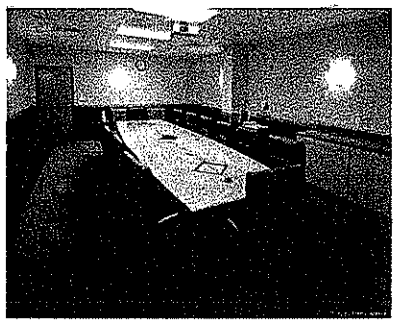
EXPRESSION OF INTEREST











ALPHA ASSOCIATES, INCORPORATED

ARCHITECTS • ENGINEERS • SURVEYORS

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

Request for Quotation

RFQ NUMBER	PAGE
DBSM91057	1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
SHELLY MURRAY
304-558-8801

VENDOR
RFQ COPY
TYPE NAME/ADDRESS HERE

SHIP TO
SCHOOL FOR THE DEAF & BLIND
RECEIVING DEPARTMENT

301 EAST MAIN STREET
ROMNEY, WV
26757-1894 304-822-4810

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B	FREIGHT TERMS
04/02/2009				

BID OPENING DATE: 04/16/2009 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		906-00-00-001		

EXPRESSION OF INTEREST

THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA SCHOOLS FOR THE DEAF AND BLIND, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ARCHITECTURAL/ENGINEERING SERVICES FOR A BUILDING EVALUATION STUDY ON THE ADMINISTRATION BUILDING AND THE CENTRAL BOILER BUILDING PER THE ATTACHED.

ARCHITECT/ENGINEERING SERVICES, PROFESSIONAL

CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM TO THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN.

BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THIS CONTRACT IS AUTOMATICALLY NULL AND VOID, AND IS TERMINATED WITHOUT FURTHER ORDER.

NOTICE

A SIGNED BID MUST BE SUBMITTED TO:

DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
BUILDING 15

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
	304-296-8216	April 15, 2009

TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE
Vice President	55-0516286	

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

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

Request for Quotation

RFQ NUMBER	PAGE
DBSM91057	2

ADDRESS CORRESPONDENCE TO ATTENTION OF:
SHELLY MURRAY
304-558-8801

VENDOR
RFQ COPY
TYPE NAME/ADDRESS HERE

SHIP TO
SCHOOL FOR THE DEAF & BLIND
RECEIVING DEPARTMENT

301 EAST MAIN STREET
ROMNEY, WV
26757-1894 304-822-4810

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B	FREIGHT TERMS
04/02/2009				

BID OPENING DATE: 04/16/2009 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT

2019 WASHINGTON STREET, EAST
CHARLESTON, WV 25305-0130

THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:

SEALED BID

BUYER: SHELLY MURRAY

RFQ. NO.: DBSM91057

BID OPENING DATE: 04/16/2009

BID OPENING TIME: 1:30 PM

PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:
304-296-8216

CONTACT PERSON (PLEASE PRINT CLEARLY):
James A. Davison, AIA

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
	304-296-8216	April 15, 2009

TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE
Vice President	55-0516286	

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

RFQ No. DBSM91057

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

VENDOR OWING A DEBT TO THE STATE:
West Virginia Code §5A-3-10a provides that: 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 the debt owed is an amount greater than one thousand dollars in the aggregate.

PUBLIC IMPROVEMENT CONTRACTS & DRUG-FREE WORKPLACE ACT:
If this is a solicitation for a public improvement construction contract, the vendor, by its signature below, affirms that it has a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the ***West Virginia Code***. The vendor **must** make said affirmation with its bid submission. Further, public improvement construction contract may not be awarded to a vendor who does not have a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the ***West Virginia Code*** and who has not submitted that plan to the appropriate contracting authority in timely fashion. For a vendor who is a subcontractor, compliance with Section 5, Article 1D, Chapter 21 of the ***West Virginia Code*** may take place before their work on the public improvement is begun.

ANTITRUST:
In submitting a bid to any agency for the state of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the state of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the state of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the state of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership or person or entity submitting a bid for the same materials, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

LICENSING:
Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

CONFIDENTIALITY:
The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf.

Under penalty of law for false swearing (***West Virginia Code*** §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

Vendor's Name: Alpha Associates, Incorporated

Authorized Signature: _____ Date: April 15, 2009

ALPHA
ASSOCIATES, INCORPORATED

ARCHITECTS • ENGINEERS • SURVEYORS

April 16, 2009

Purchasing Division
2019 Washington Street, East
PO Box 50130
Charleston, WV 25305-0130

Attn: Ms. Shelly Murray

Re: Expression of Interest – RFQ# DBSM91057

Dear Ms. Murray,

Alpha Associates, Incorporated is pleased to submit this Expression of Interest to the West Virginia Schools for the Deaf and Blind to provide architectural and engineering services for the building evaluation studies of the Administration Building and the Central Boiler Building.

HISTORY/EXPERIENCE

Alpha has provided architectural and engineering services throughout the state of West Virginia since 1969. Over the past 40 years we have performed multiple building evaluations and feasibility studies, as well as new construction and renovation projects. For example, a project similar in nature to yours, Alpha performed evaluations of ten buildings on the campus of Salem International University in Salem, WV and gave recommendations regarding structural remediation or repairs, cost estimates, observations and recommendations for all mechanical and electrical systems and components, and a conclusion report. This is just one of the many relevant projects Alpha has completed. More project information is included in this Expression of Interest.

TEAM

ALPHA
ASSOCIATES, INCORPORATED

Alpha provides services in architectural design, civil and structural engineering, surveying, interior design, landscape design, and construction administration. We have a dedicated staff of 35 professionals and support staff that will make your project a priority. Alpha will be the lead firm and your single point of contact throughout the project.

209 PRAIRIE AVENUE • MORGANTOWN, WV 26501
PHONE: 304 • 296 • 8216 • FAX: 304 • 296 • 8216 • TOLL FREE: 800 • 640 • 8216 • email: alpha@alphaaec.com • www.alphaaec.com

Miller Engineering Incorporated will provide services to evaluate the mechanical, electrical and plumbing systems and components in the two buildings. Alpha and MEI have worked on several projects together and work well as a team.

Apex Companies, LLC will provide services to determine hazardous materials or other contamination that may exist in the two buildings. Apex has worked with Alpha on many occasions to provide hazardous materials consulting services.

SUMMARY

Alpha's team has the experience, knowledge, and capacity to complete all aspects of both the building evaluation phase and the design and construction phase of your project. We are confident that we are the right team for your project. We look forward to sharing our ideas with you.

Sincerely,

ALPHA ASSOCIATES, INCORPORATED

James A. Davison, AIA
Vice President
jdavison@alphaaec.com

Firm Profile

Alpha Associates, Incorporated

Firm Name: **Alpha Associates, Incorporated**

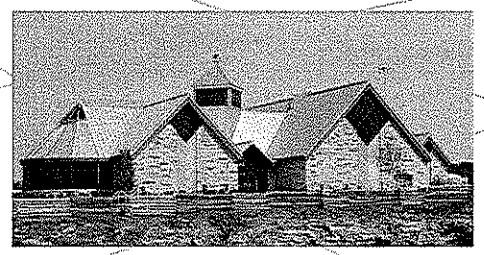
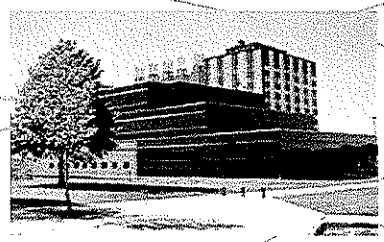
Corporate Office: 209 Prairie Avenue
Morgantown, West Virginia 26501

Eastern Regional Office: 535 West King Street
Martinsburg, West Virginia 25401

Incorporated: 1969; Morgantown, West Virginia

Firm Principals: Richard A. Colebank, PE, PS; President and COO
Richard W. Klein, PE, PS; Chairman and CEO
William A. Atwell, Jr., PE; Senior Vice President
James A. Davison, AIA; Vice President
Charles B. Luttrell, PE; Principal
Steven V. Buchanan, PE, PS; Principal
Matthew S. Breakey, AIA; Principal
Charles B. Branch, PE; Principal

Number of Employees: 35 Employees

Alpha Associates, Incorporated was established in 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 located in Martinsburg.

MILLER ENGINEERING, INC.

SUMMARY

Miller Engineering, Inc. (MEI) provides professional services to facility owners and operators, architects, and contractors throughout West Virginia, Pennsylvania and Western Maryland. MEI services range through all facets of mechanical, electrical, and plumbing design as well as construction administration and project management. We utilize the abilities of designers with many years experience in their area of expertise, teamed with younger designers on a "best resource for the project approach". We also provide project management services at levels ranging from general oversight to complete project delivery through all phases of design and construction. Our personnel have worked in both the private and public sector and are familiar with many methods of project delivery from classic design/bid/build to full design/build with partnering.

MEI has developed the following philosophy to guide the performance of its services:

- Provide superlative design services to our clients in new construction, renovations, and daily operations.
- Perform work in a timely, accurate, and professional manner.
- Present multiple alternative and solutions whenever possible.
- Work with our clients to control first and life cycle costs.
- Be a technical "sounding board" for our clients in all situations.
- Strive to maintain professional competency through continuing education and training.

MEI utilizes a "practical application" approach to all projects throughout the design process to provide a "well rounded" result. This methodology emphasizes the best overall solution, meeting all the client's needs, instead of just the best technical solution. We believe our small size provides a distinct advantage to our clients and affords us the freedom to easily team with the clients to achieve the overall best possible result.

WHO IS APEX

Apex Companies, LLC is one of the largest environmental services firms headquartered in the Washington, DC area. With division offices nationwide, the current staff encompasses over 300 employees.

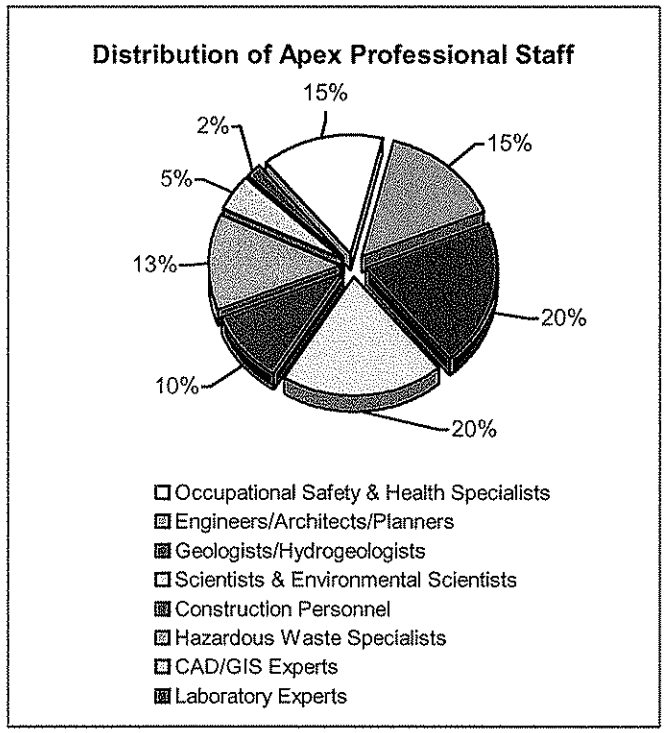
Apex offers comprehensive environmental assessment and remediation services and health and safety support to both government and private sector clients. Apex has performed environmental and health and safety services at over 50 federal facilities nationwide and in over 100 foreign countries. Health and safety services include asbestos and lead abatement management, compliance assessments and training, CAA Title V permitting, site health and safety plans, decommissioning and decontamination support, and hazardous waste management.

Apex's environmental services range from due diligence assessments and litigation support to Phase II and Phase III investigations. In addition, remediation construction services support underground storage tank removal and installation, as well as design and installation of various remediation systems. Apex also provides program management services, including energy program assessment and environmental data management support.

PERSONNEL CREDENTIALS

Apex recognizes the importance of obtaining professional certifications and registrations where they exist as evidence of technical excellence. Such credentials, summarized below, together with a solid and diversified experience base, are important qualifications to consider when selecting a firm for environmental services.

- Certified Industrial Hygienists
- Professional Engineers
- Certified Hazardous Waste Site Investigators and Supervisors
- Certified Energy Managers
- Certified Professional Geologists
- Certified Safety Professionals
- Certified Hazardous Materials Managers
- Registered Environmental Site Assessors
- Certified Bacteria and Lead-in-Water Sampling Technicians
- Radon Measurement Proficiency Technicians
- Accredited Asbestos Inspectors, Management Planners, and Abatement Designers
- Manufacturer-Certified Underground Storage Tank Installers
- Certified Lead Inspectors and Supervisors
- Construction Managers
- Registered Landscape Architects



Corporate Office - 15850 Crabbs Branch Way, Suite 200, Rockville, MD 20855 (301) 417-0200 / (301) 975-0169 Fax
Visit our web site at http://www.apexcos.com

Transportation Case Studies

Project Description

Department of Highways District One Headquarters Feasibility Study Charleston, WV

Alpha Associates, Incorporated completed a feasibility study for the Division of Highways at their District 1 Headquarters. The study investigated four potential options for rehabilitating the 4.48 acre location along Smith Street.

Option 1 - Proposed the renovation of the existing office building, the removal of various satellite or accessory structures and the equipment shed. The Red Brick Building and Shawnee/Ruffner Building would remain in place in their existing condition. This option also proposed parking and a new Equipment Building.

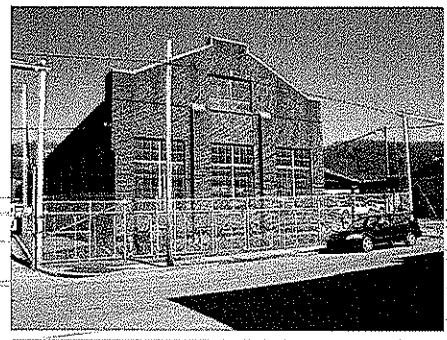
Option 2 – This option proposes the removal of the existing office building, the removal of various satellite or accessory structures and the equipment shed. The Red Brick Building is to be renovated and Shawnee/Ruffner Building is to remain the same. Included is more parking and new equipment building.

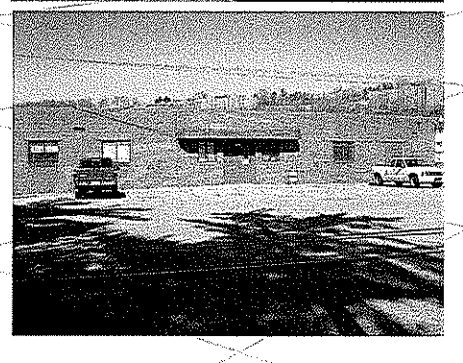
Option 3 – This option is the demolition plan that removes all existing buildings except for the Shawnee/Ruffner Building which will be renovated. Addition parking and a new equipment building was included in this plan. This scheme approaches near complete maximum use of the site.

Option 4 – Proposed was the demolition and removal of all the existing buildings except for the Red Brick Building which would be renovated. This option also proposed parking and a new Equipment Building.

At A Glance...

1. *Client*: West Virginia Division of Highways
2. *Location*: Charleston, WV
3. *Completion Date*: 2006





Higher Education Case Studies

Project Description

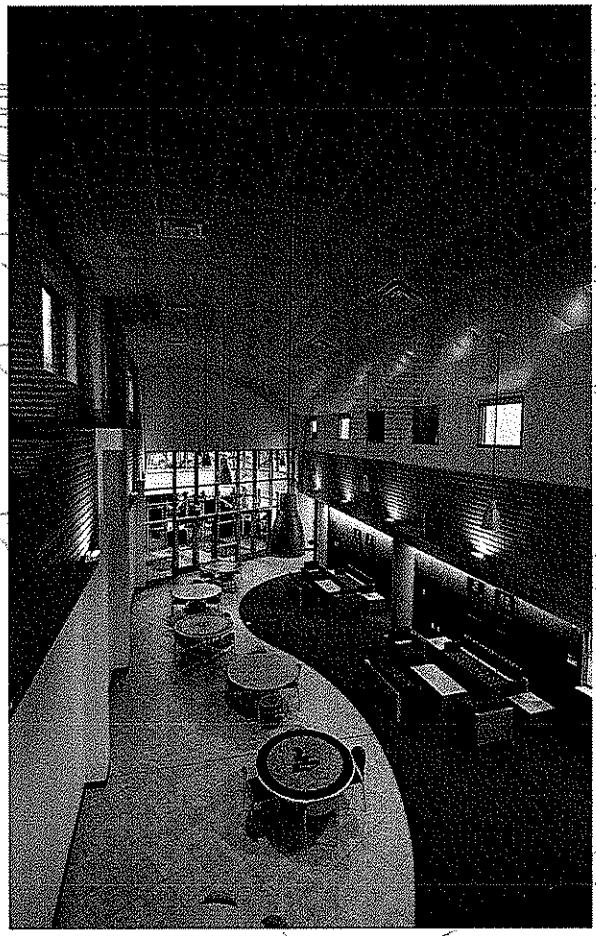
West Virginia University - East Wing Addition/Renovation
Morgantown, WV

The first phase of this project was a feasibility study that evaluated the building to determine the nature and scope of the addition.

The WVU Engineering Science Building East Wing Addition /Renovation project was conceived to create a new primary entrance to the existing 228,000 square foot building on the Evansdale campus. It consists of a 4-story addition as well as the conversion of an abandoned 3 ½ story boiler room into usable program space. This 3 ½ story boiler space was subdivided into 3 floors supporting chemical-research labs and a tiered lecture hall.

At A Glance...

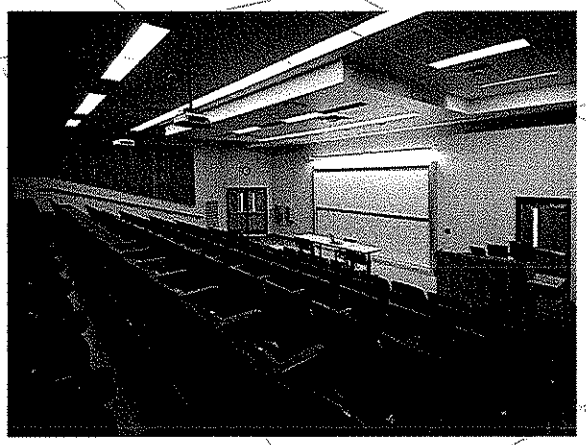
1. *Client*: West Virginia University
2. *Location*: Morgantown, WV
3. *Completion Date*: 2008
4. *Size*: 32,600 sq. ft. Addition
   6,500 sq. ft Renovation
5. *Construction Cost*: $11 Million



ALPHA ASSOCIATES, INCORPORATED

ARCHITECTS • ENGINEERS • SURVEYORS

West Virginia University - East Wing Addition/Renovation
Morgantown, WV



At A Glance...

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3. *Completion Date:* 2008
4. *Size:* 32,600 sq. ft. Addition
   6,500 sq. ft Renovation
5. *Construction Cost:* $11 Million

ALPHA ASSOCIATES, INCORPORATED

ARCHITECTS • ENGINEERS • SURVEYORS

Higher Education Case Studies

Project Description

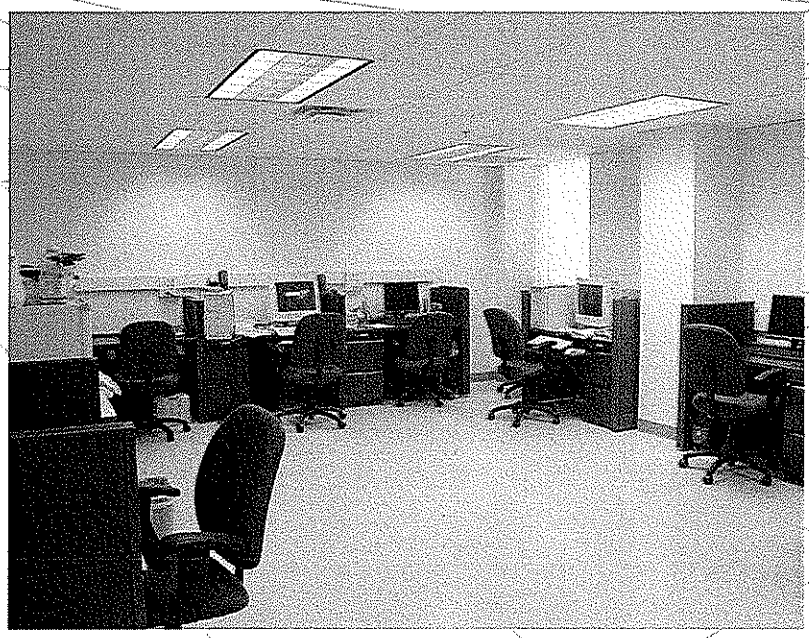
West Virginia University—Engineering Sciences Building 10th Floor Renovation Morgantown, WV

The first phase of this project was a feasibility study that evaluated building and fire code issues related to the conversion of unfinished storage space into graduate student office and computer laboratory space.

The Feasibility Study concluded that the gross area of renovation was 5,455 square feet in area and 3,780 square feet of usable program space that could be obtained.

At A Glance...

1. *Client*: West Virginia University
2. *Location*: Morgantown, WV
3. *Completion Date*: 2005
4. *Size*: 5,455 SF
5. *Construction Cost*: $585,000



ALPHA ASSOCIATES, INCORPORATED

ARCHITECTS • ENGINEERS • SURVEYORS

Higher Education Case Studies

Project Description

At A Glance...

1. *Client:* The Palmer Group
2. *Location:* Salem, WV
3. *Completion Date:* 2005
4. *Size:* Multiple Buildings
5. *Construction Cost:* N/A

Salem International University – Buildings Evaluation
Salem, WV

Alpha Associates, Incorporated was hired by the Palmer Group, of Philadelphia, PA to do evaluations of selected buildings on the campus of Salem International University, located in Salem, WV.

The first phase of the project involved the evaluation of the T. Edwards Davis sports venue, the Hoffheimer Hall women's dormitory and the Montgomery Hall men's dormitory.

The second phase of the project involved the evaluation of the Randolph Campus Center administration building, the Benedum Library building, the Carlson Hall of Science and Randolph Hall, and another dormitory.

The third phase of the project involved the evaluation of three currently vacant dormitories: Birch Hall, Maple Hall and Oak Hall.

Alpha's services included observations of all structural elements, mechanical and electrical systems and components, and evaluations of ADA accessibility standards. Alpha then provided a report with conclusions and recommendations regarding the general structural condition, mechanical and electrical conditions, and cost estimates for repair.

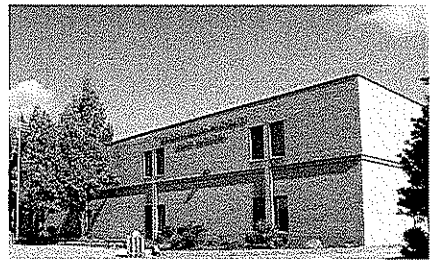
Education Case Studies

Project Description

Comprehensive Educational Facilities Plan (CEFP)

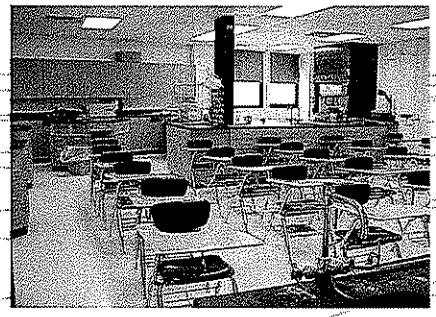
Alpha Associates, Incorporated has provided architectural and engineering services to prepare a ten year CEFP for the following Boards of Education:

- Taylor County Schools
- Grant County Schools
- Monongalia County Schools
- Wyoming County Schools

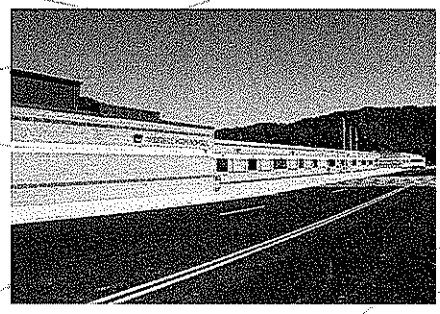


Each CEFP includes the following:

A. Goals and objectives
B. Community Analysis
C. Population and enrollment study
D. Education Plan
E. Evaluation and inventory of existing facilities
F. Major improvement plan for existing facilities
G. Inter-county facility feasibility study
H. Translating educational needs into facility needs
I. Financing Plan
J. Synopsis of comments from the public hearings
K. Evaluation and objective of implementation



Alpha provides a complete building evaluation and analysis of each school in the county, and then makes recommendations for renovations or upgrades that need to be made. Alpha works with the Boards of Education to gain community support by establishing building committees and holding public meetings. Once a decision to renovate or upgrade is made, Alpha provides complete design services and construction administration services.



Town of Ridgeley Community Center NEW CONSTRUCTION 2009	1

Architectural Case Studies

Project Description

Town of Ridgeley Community Center
Ridgeley, West Virginia

Alpha began the relationship with the Town of Ridgeley through a building evaluation for a potential adaptive reuse of an elementary school as a community center as part of a federal grant. The building evaluation aided the Town in determining construction cost for reuse that exceeded current funding.

As an alternative, a new building was proposed as a separate structure. The new project consists of a large multi-purpose room with support facilities including restrooms and an office. The center will provide practice space for youth basketball teams and open space that can be used for Town gatherings such as craft fairs. The design team strove to provide a quality structure that met the needs of the Town and the budget available.

At A Glance…

1. *Client*: Town of Ridgeley
2. *Location*: Ridgeley, WV
3. *Completion Date*: 2009
4. *Size*: 5,200 SF
5. *Construction Cost*: Est. $440,000

Architectural Case Studies

Project Description

Upshur County Senior Opportunity Center
Buckhannon, WV

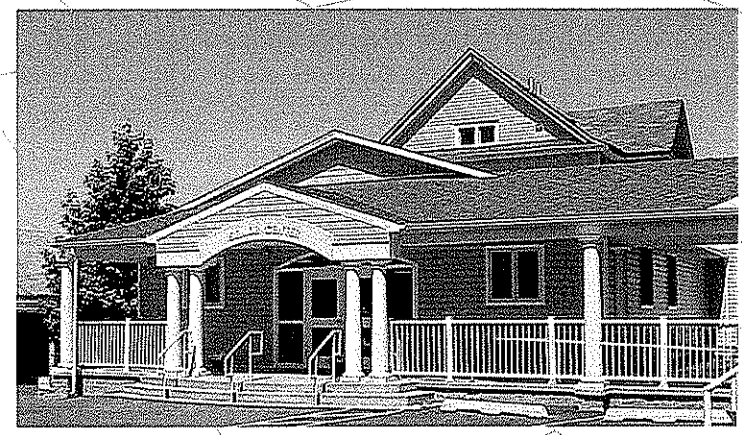
Alpha Associates, Incorporated has provided a two-phase project for the Upshur County Senior Opportunity Center. Phase one included a feasibility study to determine the necessary adjustments. Phase I consisted of the renovation of the 3300 sq. ft. Annex. The project included an interior selective demolition, wood framing, ramp & stair construction, wood & steel railings, H.M. & wood doors & frames, window installation/replacement, gypsum board, acoustical ceilings, flooring & base, painting, plumbing, fire sprinkler and fire service lines, HVAC and electrical & lighting work. The addition of a canopy was also necessary and included limited earthwork, concrete footings & slabs-on-grade, CMU foundations, steel railings, wood roof framing, molded FRP columns & trim, metal soffits and fascias, vinyl siding, shingles, caulking & sealing, and lighting work.

Phase II was the design of an indoor ramped walkway, which connected the Dessie Graves Building to the Annex. Also included in this renovation was new finishes in the Dessie Graves Center.

At A Glance...

1. *Client:* Upshur County Senior Opportunity Center
2. *Location:* Buckhannon, WV
3. *Completion Date:* Multi Phase Project
4. *Size:* Multiple Spaces
5. *Construction Cost:* Private Client
6. *Project Relevance:*
   - Architectural Design
   - ADA Compliant
   - Administrative Areas
   - Multi-Purpose Rooms

Before



Historic Case Studies

Project Description

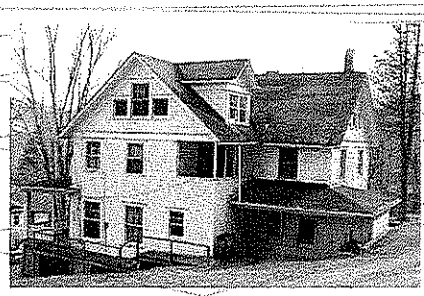
Cass Scenic Railroad – Clubhouse Renovation
Cass, WV

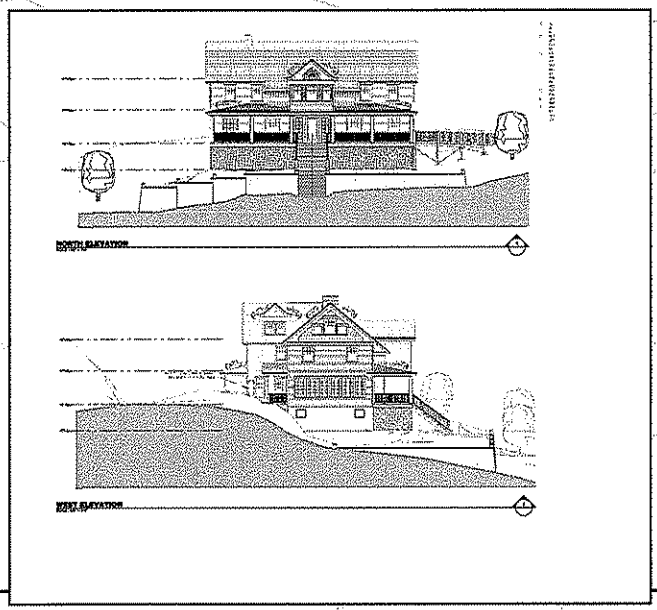
Alpha Associates, Incorporated performed an evaluation of the building condition, structural foundation, and mechanical and electrical systems of the Clubhouse at Cass Scenic Railroad to document the historic structure and utilize the information to determine what the best use of the building would be for the Division of Natural Resources. Alpha then designed the renovation of this historic landmark originally built in 1916.

Renovation of the Cass Clubhouse was first developed as a lodge concept. When that was deemed too costly, the renovation/restoration design was confined to the exterior building shell and first floor. This will stabilize the building and "fix" major problems while allowing the first floor to be operated as a museum. The upper floor will be "moth-balled" until another use and/or funding is available. The project is anticipated to be completed in late spring 2009.

At A Glance...

1. *Client:* Division of Natural Resources
2. *Location:* Cass, WV
3. *Completion Date:* Spring 2009
4. *Size:* 5,163 SF
5. *Construction Cost:* $505,000





Education Case Studies

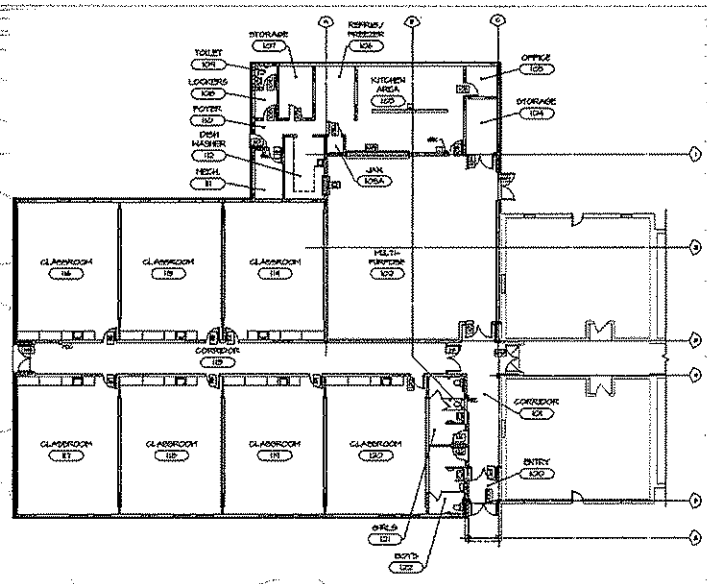
Project Description

Slanesville Elementary School Addition
Hampshire County, WV

Alpha Associates, Incorporated designed the addition for this elementary school. In cooperation with the Hampshire County Board of Education we designed a functional addition that included seven new classrooms and a multi purpose room with full kitchen/food preparation facilities. The construction phase of this project was completed in September 2001.

At A Glance...

1. *Client*: Hampshire County Board of Education
2. *Location*: Hampshire County, WV
3. *Completion Date*: 2001
4. *Size*: 9,914 SF
5. *Construction Cost*: $1,230,000



ALPHA ASSOCIATES, INCORPORATED

ARCHITECTS • ENGINEERS • SURVEYORS

Education Case Studies

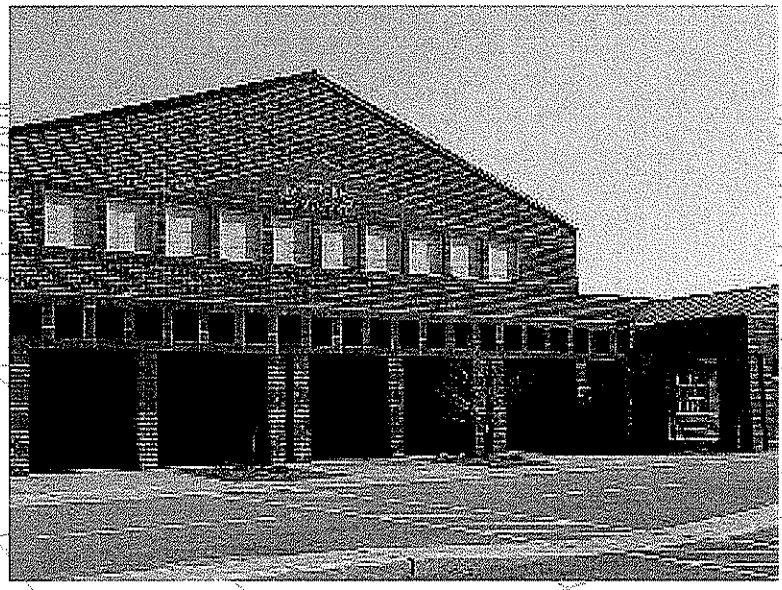
Project Description

Capon Bridge Elementary School Addition
Hampshire County, WV

Alpha Associates, Incorporated designed the addition for this elementary school in cooperation with the Hampshire County Board of Education. The addition was designed in a manner such that they could be constructed during the spring school term. The construction phase of this was completed in September 2001.

At A Glance…

1. *Client:* Hampshire County Board of Education
2. *Location:* Hampshire County, WV
3. *Completion Date:* 2001
4. *Size:* 3,525 SF
5. *Construction Cost:* $330,000
6. *Project Relevance:* Classroom Addition



Engineering Case Studies

Project Description

Women's Club of Fairmont
Fairmont, WV

This two-story residence was built on a bluff overlooking the Monongahela River in the early 1900s. On the National Register of Historic Buildings, the Women's Club of Fairmont has owned the building since the 1930s. Alpha Associates, Incorporated performed a complete building evaluation and provided engineering services for the stucco home including roof and downspouts, fireplace and chimney, windows,

At A Glance...

1. Client: Women's Club of Fairmont
2. Location: Fairmont, WV
3. Completion Date: 2002
4. Size: Approx, 6000 SF
5. Construction Cost: $120,727.59

ALPHA ASSOCIATES, INCORPORATED

Historic Structural Case Studies

Project Description

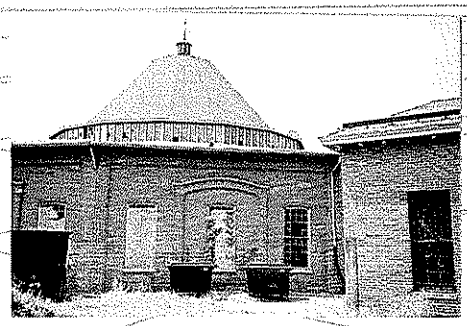
The Martinsburg West Roundhouse
Martinsburg, WV

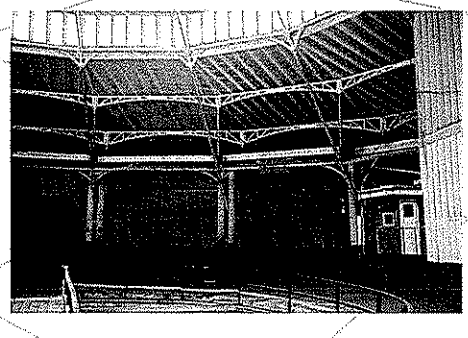
The Martinsburg West Roundhouse construction began in 1866. The structure was modified throughout the years to accommodate the changing needs of the B&O Railroad.

Charlie Luttrell, Alpha Associates, Incorporated Senior Structural Engineer performed an evaluation to determine the structural stability and issues of the Martinsburg West Roundhouse as related to an ongoing restoration project. Mr. Luttrell completed a report with his findings and recommendations for the building.

At A Glance...

1. Client:
   Berkeley County Roundhouse Authority
2. Location:
   Martinsburg, WV
3. Completion Date:
   2003
4. Size:
   25,000 square feet
5. Construction Cost:
   N/A





ALPHA ASSOCIATES, INCORPORATED

ARCHITECTS • ENGINEERS • SURVEYORS

JAMES A. DAVISON, AIA
VICE PRESIDENT
ARCHITECT
jdavison@alphaaec.com

SUMMARY

Mr. Davison is the Vice President of Alpha Associates, Inc. Mr. Davison joined the firm in November of 1977. He became a principal of the firm and Vice President in 1980. He has designed numerous structures, including research facilities, post offices, religious facilities, commercial and office buildings, and educational and medical facilities. The West Virginia Society of Architects has recognized Mr. Davison for his excellence in architecture with design awards for the Engineering Research Building at West Virginia University in Morgantown, WV, Wheeling College Chapel in Wheeling, WV, Morgantown High School Addition in Morgantown, WV and the KCAD Professional Office Building located in Martinsburg, WV.

PROFILE

Broad-based responsibilities in the following areas:

- Educational Architecture
- Medical Architecture
- Religious Architecture
- Quality Control
- Client Development
- New Business Development

PROFESSIONAL HIGHLIGHTS

Higher Educational Facilities:

- Agricultural Sciences Building Addition, West Virginia University; Morgantown, WV
- Prichard Hall Renovation, Fairmont State University; Fairmont, WV
- Engineering Science Building, East Wing Addition; Morgantown, WV
- Engineering Research Building; Morgantown, WV
- National Research Center for Coal and Energy, West Virginia University; Morgantown, WV
- Student Leader Housing, West Virginia University; Morgantown, WV
- Galli Laboratory, West Virginia University; Morgantown, WV

K-12 Educational Facilities:

- Washington High School, Charles Town, WV
- Westside High School; Clearfork, WV
- Wyoming East High School; New Richmond, WV
- Lewis County High School; Weston, WV
- Morgantown High School Addition/Renovation; Morgantown, WV
- Ridgedale Elementary School Addition; Morgantown, WV

Medical Facilities:

- Ruby Memorial Hospital Emergency Addition; Morgantown, WV
- Sundale Nursing Home Renovation/Addition; Morgantown, WV

JAMES A. DAVISON, AIA
VICE PRESIDENT
ARCHITECT
jdavison@alphaaec.com

Miscellaneous Architectural Design:

- Upshur County Senior Opportunity Center; Buckhannon, WV
- West Virginia Medal of Honor Recipients Memorial Plaza; Hazelton, WV
- Cumberland Valley Railroad Depot (KCAD Properties Professional Office); Martinsburg, WV
- Ronald McDonald House; Morgantown, WV
- Jenkins Ford; Buckhannon, WV

EMPLOYMENT HISTORY

PRIVATE INDUSTRY:	1977 – Current	Alpha Associates, Incorporated
	1976 – 1977	Carl G. Baker, Architects
	1974 – 1976	Architectural Firm of Laurie and Green
	1966 – 1974	Michael S. Molnar Associates

EDUCATION

UNDERGRADUATE: Pennsylvania State University
Bachelor of Architecture; 1973

QUALIFICATIONS

LICENSE: Registered Architect:
West Virginia, Pennsylvania, Maryland, Virginia, Ohio
NCARB Certified

AFFILIATIONS

PROFESSIONAL: American Institute of Architects
West Virginia Society of Architects
Council of Educational Facility Planners International
American Arbitration Association
Interfaith Forum on Religion, Art and Architecture

CIVIC: Main Street Morgantown

AWARDS

DESIGN AWARDS: West Virginia Society of Architects Design Awards:
KCAD Professional Office Building
Morgantown High School
Engineering Research Building
Wheeling College Chapel

RICHARD A. COLEBANK, PE, PS
PRESIDENT AND COO
CIVIL ENGINEER
rcolebank@alphaaec.com

SUMMARY

Mr. Colebank is President and Chief Operating Officer of the firm. Mr. Colebank has been with Alpha Associates, Incorporated 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 West Virginia University, City of Morgantown, The West Virginia Division of Highways, WVU Foundation and the Morgantown Municipal Airport, as well as numerous private clients. Since 1988, Mr. Colebank has been the Principal-In-Charge of many 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 Civil Engineering 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

PROFESSIONAL HIGHLIGHTS

PRINCIPAL-IN-CHARGE

Transportation Projects:

- Morgantown Municipal Airport-IDIQ Contract; Morgantown, WV
- Route 10 Relocation; Wyoming County, WV
- South High Street Bridge Replacement; Morgantown, WV
- Blackshere Bridge Replacement; Mannington, WV
- Lewis County High School Access Road and Bridge; Weston, WV
- University Avenue/Stadium Loop; Morgantown, WV
- West Buckeye Bridge; Blacksville, WV

Civil Engineering Projects:

- Monongalia General Hospital; Morgantown, WV
- WVU Research Park; Morgantown, WV
- West Virginia Medal of Honor Recipients Plaza; Hazelton, WV
- West Virginia Division of Highways I-77 Welcome Center; Williamstown, WV
- West Virginia High Technology Consortium Site Work; Fairmont, WV
- Greystone on the Cheat through Phase II; Morgantown, WV

Indefinite Delivery/Indefinite Quantity Contracts:

- Morgantown Municipal Airport Open End Contract; Morgantown, WV
- West Virginia Division of Highways Open End Contract; State of WV
- National Energy Technology Laboratories; Morgantown, WV
- West Virginia University Open End Contract; State of WV

RICHARD A. COLEBANK, PE, PS
PRESIDENT AND COO
CIVIL ENGINEER
rcolebank@alphaaec.com

EMPLOYMENT HISTORY

PRIVATE INDUSTRY:	1985 – Present	Alpha Associates, Incorporated
	1983 – 1985	Charles Townes and Associates, P.C.
CORPS OF ENGINEERS:	1983	US Army Corps of Engineers

EDUCATION

GRADUATE: West Virginia University
Masters – Business Administration; 1999

UNDERGRADUATE: West Virginia University
BS – Civil Engineering; 1982

QUALIFICATIONS

LICENSE:
Professional Engineer:
West Virginia, Pennsylvania, Maryland, Virginia, Ohio
Professional Surveyor:
West Virginia
Certified Private Pilot

AFFILIATIONS

PROFESSIONAL:
West Virginia Society of Professional Engineers; Member
American Society of Civil Engineers; Member
National Society of Professional Engineers; Member
Former NSPE/PEPP Governor of WV
ACEC/WV; President

CIVIC:
University High School Foundation; Charter Member; Current President
Morgantown Area Chamber of Commerce; Past Chairman
Arts Monongalia Board; Member
Monongalia County MPO Technical Advisory Committee; Member
Morgantown Area Economic Partnership; Member
University High School Athletic Booster; Member
Aircraft Owners and Pilots Association (AOPA)
University High School Athletic Field Committee

CHARLES B. LUTTRELL, PE, SECB
PRINCIPAL
PROFESSIONAL ENGINEER
STRUCTURES
cluttrell@alphaaec.com

EMPLOYMENT HISTORY

PRIVATE INDUSTRY:	1996 – Current	Alpha Associates, Incorporated
	1995 – 1996	Larry D. Luttrell, PE, Ph D
	1991 – 1994	West Virginia University
	1990 – 1991	WVU Constructed Facilities Center

EDUCATION

GRADUATE: West Virginia University
MS – Structural Engineering; 1995

UNDERGRADUATE: West Virginia University
BS – Civil Engineering; 1993

QUALIFICATIONS

LICENSE: Professional Engineer:
West Virginia, Maryland, Pennsylvania

AFFILIATIONS

PROFESSIONAL:
West Virginia Society of Professional Engineers
National Society of Professional Engineers
Chi Epsilon; Member
American Concrete Institute; Member
Structural Engineering Certification Board

RESEARCH EXPERIENCE

STRUCTURAL:

Cold Formed Steel Deck Research
- Fastener failures
- Edge conditions/failures
- Buttoned overlap shear failures

Composite Cold Formed Steel and Concrete Deck Research
- Line load behavior/failures
- Concentrated load behavior/failures
- Web crippling
- Punch failures

MATTHEW S. BREAKEY, AIA
PRINCIPAL
ARCHITECT
mbreakey@alphaaec.com

SUMMARY

Mr. Breakey has gained experience through working as a Project Manager on major capital construction projects throughout West Virginia. As a key player in the Open End Contract with West Virginia University, Mr. Breakey deals with projects from schematic design to project close out.

PROFILE

Broad-based responsibilities in the following areas:

- Architectural Design
- Construction Administration
- Contract Negotiations

PROFESSIONAL HIGHLIGHTS

PROJECT MANAGER:

Higher Education Projects:

- WVU Engineering East Wing Renovation/Addition; Morgantown, WV
- WVU Engineering Sciences Building 10th Floor Renovation; Morgantown, WV
- WVU Engineering Science Building Nano/Microtechnology Lab; Morgantown, WV
- WVU Alfred F. Galli Laboratory Renovations; Morgantown, WV

K-12 Education Projects:

- South Jefferson High School, Charles Town, WV
- Pocahontas County High School Science Wing Renovation/Addition; Marlinton, WV
- Buckhannon Upshur Middle School Roof Replacement; Buckhannon, WV
- Buckhannon Upshur Middle School HVAC Upgrades; Buckhannon, WV
- Slanesville Elementary School Addition; Hampshire County, WV
- Petersburg High School Science Lab Renovation; Petersburg, WV

ARCHITECTURAL DESIGN:

- Clear Mountain Bank, Oakland Branch; Oakland, MD
- Fairmont Federal Credit Union, Charles Pointe Branch; Bridgeport, WV
- WVU Engineering Sciences Building East Wing Addition; Morgantown, WV
- Robert C. Byrd Health Sciences Center SRP Lab Renovation; Morgantown, WV
- Upshur County Senior Opportunity Center Renovation and Addition; Buckhannon, WV
- Summersville Municipal Building; Summersville, WV
- Hart Field Air Rescue Fire Fighting Building; Morgantown, WV
- Bruceton Bank, Sabraton Branch; Morgantown, WV
- Camp Dawson Billeting Facilities; Kingwood, WV

MATTHEW S. BREAKEY, AIA
PRINCIPAL
ARCHITECT
mbreakey@alphaaec.com

EMPLOYMENT HISTORY

PRIVATE INDUSTRY:

1998 – Current	Alpha Associates, Incorporated
1994 – 1998	West Virginia University Physical Plant Engineering and Construction
1992 – 1994	West Virginia University Facilities Planning Management

EDUCATION

UNDERGRADUATE: Pennsylvania State University
Bachelor of Architecture; 1992
Bachelor of Science in Architecture; 1991

QUALIFICATIONS

LICENSE: Registered Architect:
West Virginia
Maryland
NCARB Certified

AFFILIATIONS

PROFESSIONAL: American Institute of Architects
West Virginia Society of Architects
The Council of Educational Facility Planner International

CIVIC: Main Street Morgantown Board of Directors; Member
Main Street Morgantown Design Committee; Chairman
Chestnut Ridge Park Board; President

REBECCA J. KEY, AIA, NCIDQ
ASSOCIATE
rkey@alphaaec.com

SUMMARY

Ms. Key has worked in the architectural field for 30 years. Ms. Key is Project Architect/Manager for numerous architectural designs at Alpha Associates, Inc. She is involved from the programmatic stages and schematic designs all the way through construction documents to construction administration.

Prior to joining Alpha, Ms. Key initiated and developed her own architectural and interior design business. The 16 years she devoted to her own firm resulted in projects ranging in size from 450 to over 40,000 square feet of space and located in 20 states across the country.

PROFILE

Broad-based responsibilities in the following areas:

- Architecture
- Interior Design
- Medical Design
- Interior Space Planning
- Historic Renovation

PROFESSIONAL HIGHLIGHTS

ALPHA ASSOCIATES

Educational Facilities:

- WVU South Agricultural Sciences; Morgantown, WV
- Prichard Hall Renovation; Fairmont State College; Fairmont, WV
- Washington High School; Jefferson County, WV
- WVU CRRB Renovation, 5th and 7th Floors; Morgantown, WV
- WVU Boreman Hall, Boreman Bistro; Morgantown, WV

Financial Institutions:

- Bruceton Bank; Glenmark Centre; Morgantown, WV
- Bruceton Bank Renovation; Bruceton Mills, WV
- Centra Bank; Wharf District; Morgantown, WV

Industrial Facilities:

- Hart Field Airport Maintenance; Morgantown, WV
- Norwood Fire Station; Morgantown, WV
- FMW Composites, Inc.; Bridgeport, WV
- Hart Field Airport Terminal Renovation; Morgantown, WV

Medical Facilities:

- Ruby Memorial Hospital Emergency Addition; Morgantown, WV
- Fairmont Clinic Feasibility Study; Fairmont, WV

REBECCA J. KEY, AIA, NCIDQ
ASSOCIATE
rkey@alphaaec.com

Residential Architectural Design:

- Augusta Apartments; Morgantown, WV

Historic Renovations:

- Cass Club House; Cass, WV
- Berkeley Springs Bath House; Berkeley Springs, WV

Miscellaneous Architectural Design:

- West Virginia Medal of Honor Recipients Plaza; Hazelton, WV
- Hazel Ruby McQuain Riverfront Park Amphitheater Roof; Morgantown, WV
- Municipal Building; Whitehall, WV
- Monongalia County Family Court; Morgantown, WV

EMPLOYMENT HISTORY

PRIVATE INDUSTRY:	2000 - Current	Alpha Associates, Incorporated
	1983 – 1999	Environmental Planners and Associates, LTD; President
	1978 – 1983	Webster Clothes; Director of Store Planning

EDUCATION

UNDERGRADUATE: University of Maryland
Bachelor of Architecture; 1977

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

QUALIFICATIONS

LICENSE: Registered Architect
West Virginia, Maryland, Washington DC, New York, Virginia, Pennsylvania
National Council of Interior Design Qualifications Certificate Holder

AFFILIATIONS

PROFESSIONAL: American Institute of Architects; Member
AIA Liveable Communities; Board Member

CIVIC: Fairmont, WV IBC Board of Appeal; Board Member

Noah Accord, PE
STAFF ENGINEER
naccord@alphaaec.com

SUMMARY

Mr. Accord is a staff structural engineer in the Morgantown office. He obtained his Masters Degree in Structural Engineering from the University of Pittsburgh, where he graduated Summa Cum Laude. He has experience in performing structural design and civil engineering. Prior to his employment at Alpha Associates, Incorporated, he gained valuable experience working for Nicholson Construction.

PROFILE

Broad-based responsibilities in the following areas:

- Industrial Structural Inspections
- Building Design
- Bridge Design
- Site Engineering

PROFESSIONAL HIGHLIGHTS

Engineering Projects:

- WVU Alumni Center: Structural Framing and Foundation Design
- Washington High School: Structural Framing and Foundation Design
- Chemtura: Structural Steel Design
- FFCU: Structural Design
- Cass Scenic Railroad: Clubhouse Renovation
- WVU Engineering Sciences Building: Structural Design
- The Augusta Apartments: Structural Design

EMPLOYMENT HISTORY

PRIVATE INDUSTRY:	2005 – Present	Alpha Associates, Incorporated
	2003 – 2004	Nicholson Construction
	2002 – 2003	Covey Engineering
	1999 – 2001	AB Construction

EDUCATION

GRADUATE: University of Pittsburgh
Masters of Structural Engineering; 2005

UNDERGRADUATE: University of Pittsburgh
BS – Civil Engineering; 2004

QUALIFICATIONS

LICENSE: Professional Engineer
West Virginia

PROJECT: CANAAN STATE PARK LODGE
BOILER EVALUATION
LOCATION: CANAAN VALLEY, WV

MILLER ENGINEERING, INC.

MEP TECHNICAL HIGHLIGHTS:

Total Project Budget:
$195K (est)

MEP Budget:
$195K (est)

Facility Area:
Approx 20,000 ft²

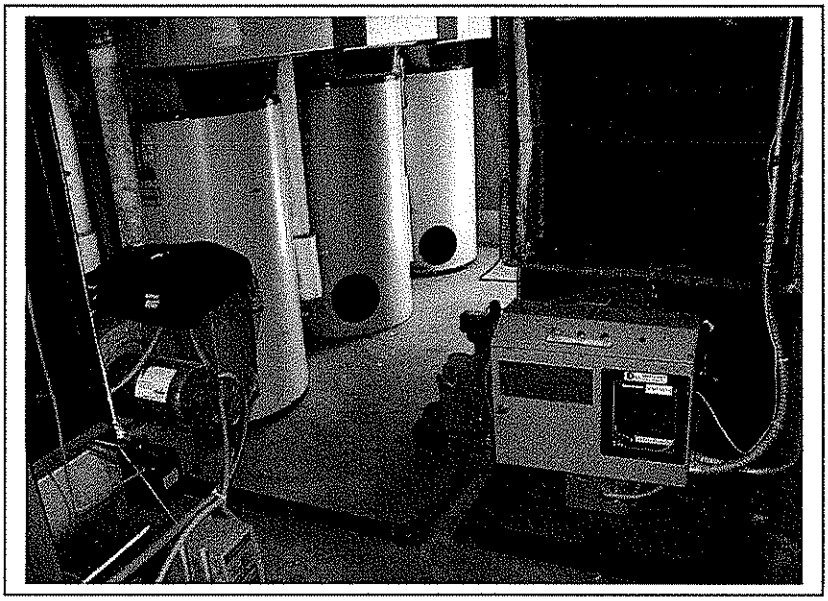
Services Provided:
Mechanical Evaluation

Project Status:
Bidding

Project Completion Date:
N/A

At the Owner's request, Miller Engineering assessed the gas fired hot water boiler system at the Canaan Valley Lodge. One of the existing boilers reportedly had developed a crack in the rear tube sheet and was leaking. Additionally, the annual insurance inspectors report flagged the boilers as a potential concern.

The boilers were installed in 1994 and re-tubed 2 – 3 years ago due to "excessive corrosion". It is highly unusual for a boiler of this age to need re-tubed so quickly. Miller evaluated the boiler repairs based ASME standards and best industry practices and made recommendations to the Owner regarding whether repair or replacement was the best course of action. Both a short term and long term recommendation were made, which permitted the Owner to continue to operate the facility safely.



PROJECT DESCRIPTION:

The Canaan Valley State Park Lodge was originally constructed around 1970 with large electric boilers which were later replaced with gas-fired boilers. The Park is located in the Canaan Valley, one of the most popular recreation sites in the state. MEI performed a detailed survey of the system and made recommendations to the Owner.

REFERENCE:
Brad Leslie PE, WV Department of Natural Resources
State Capital Complex Building #3
Charleston, WV
304-558-2775

PROJECT: DETAILED FACILITY EVALUATION
OWNER: SALEM INTERNATIONAL UNIVERSITY, SALEM,

MILLER ENGINEERING, INC.

MEP TECHNICAL HIGHLIGHTS:

Total Project Budget:
Still estimated cost of recommendations

MEP Budget:
Still estimated cost of recommendations

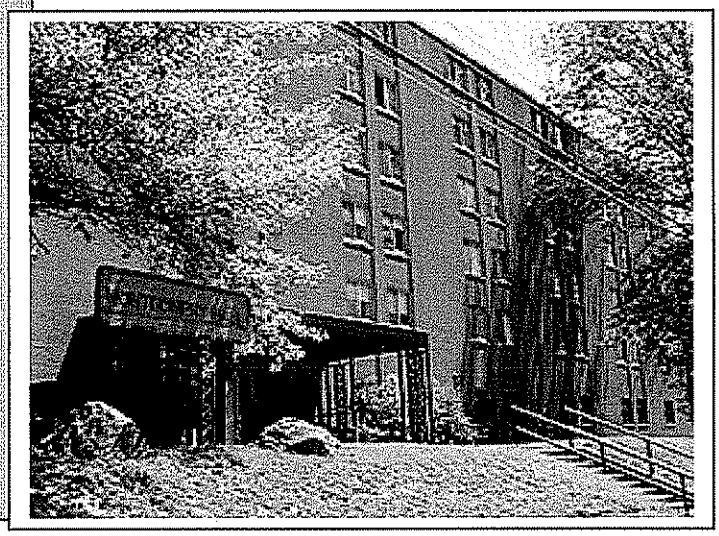
Facility Area Evaluated:
[illegible]

Services Provided:
Evaluation of Mechanical, Electrical, Plumbing, Elevators, Fire Protection

Project Status:
Design Documents 100% Complete

Project Completion Date:
Phase I: May2005
Phase II: To be

The Project includes a highly detailed evaluation of the condition, maintenance status, and the remaining life cycle of MEP systems serving the University. In two of the dormitory buildings, a serious electrical over-current condition was discovered dating back to an apparent original design/drafting error in 1970.



PROJECT DESCRIPTION:

The Phase I evaluation was a detailed look at the overall condition of 3 building's systems, code or standard violations, energy efficiency, and recommendations to repair or replace the systems. An estimate of the cost to repair or replace each system was prepared. The scope included review of all mechanical, electrical, plumbing, HVAC control, elevators, and life safety systems in two dormitories and the athletic facility on the Campus. MEI performed intensive reviews of the existing systems, discussions with maintenance personnel and administrators, reviews of utility bills, and a room by room review of each facility. The resulting report detailed recommendations in three areas: immediate correction code & life safety concerns), short term (2-3 years, impending equipment failure, energy savings) and long term (3 + years, long term concerns). Phase II will complete the evaluation of the rest of the campus.

REFERENCE:
Deb Yoder, Dir. Facilities
Salem International University
Salem, WV 26426
304-782-5341

PROJECT: MUNICIPAL BLDG BOILER
OWNER: CITY OF MORGANTOWN, WV

MILLER
ENGINEERING, INC.

MEP TECHNICAL HIGHLIGHTS:

Total Project Budget:
$150,000

M.E.P. Budget:
$150,000

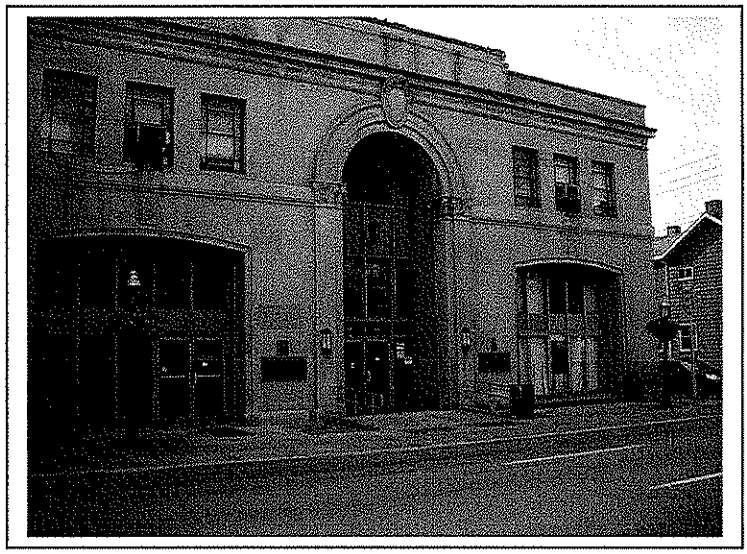
Facility Area:
9,600ft²

Services Provided:
Mechanical

Project Status:
Complete

Project Completion Date:
January 2008

The Morgantown Municipal Building is heated by low pressure steam with a combination of radiators and fan-coil units. The existing naturally aspirated boiler developed leak in a short period of time which necessitated replacement. Additionally the steam piping, condensate piping and gas piping all had issues that needed resolved.



PROJECT DESCRIPTION:

MEI's services were requested by the contractor retained to perform the replacement under a design-build contract. MEI teamed with the Owner and Contractor to evaluate the existing installation for deficiencies, calculate the actual heating demand, and verify the sizing of the equipment, headers, and piping for installation. MEI worked on site with the contractor through the New Year's Holiday weekend to observe and help with the project by offering real time advice and answers during the installation. The contractor had a short time frame in which to perform the demolition and installation prior to the building being damaged due to cold weather. The project was successfully achieved in the necessary timeline.

REFERENCE:
TOM TURNER
SUBURBAN PLUMBING HEATING & COOLING
240 Scott Ave
Morgantown, WV 304-291-2377

MILLER
ENGINEERING, INC.

B. CRAIG MILLER, PE

PRESIDENT
ENGINEER IN RESPONSIBLE CHARGE

EDUCATION	Bachelor of Science in Mechanical Engineering, West Virginia University - 1995 Bachelor of Arts in Mass Communication, University of Charleston (WV) - 1988
REGISTRATIONS	Professional Engineer, West Virginia Professional Engineer, Pennsylvania Professional Engineer, Maryland
QUALIFICATIONS	Craig has more than 10 years' experience in the design, specification, and construction/ project management of mechanical, electrical, and plumbing systems and 10 years experience in facilities operations, maintenance, and management. He specializes in retrofits and upgrades to existing systems and what he terms "operational engineering" or implementing changes to, while maintaining the operational requirements of, a facility or system. He has worked extensively in the educational/ institutional environment including spending several years as a systems mechanic performing various trades work prior to obtaining his engineering education. His trades work gives him a distinctive "hands on" approach to engineering application and design. Prior to founding MEI, Craig worked as a staff engineer for Casto Technical Service (Trane) performing engineering evaluation and design on various mechanical system upgrades including: Marion County Courthouse, Davis & Elkins Student Union, Charleston Area Medical Center, Women's and Children's Hospital, and Wetzel County Hospital. Preceding his time with Casto Technical, Craig spent two years at Uniontown Hospital as Assistant Director of Engineering. He managed the day-to-day operations of maintenance personnel, managed projects and performed operational engineering service to the facility mechanical, electrical, and plumbing systems. His principal operational engineering foci were the hospitals' steam, chilled water, air handling infrastructure and their associated control systems. He managed real-time upgrade projects to the hospital facilities and the full

accreditation review of hospital systems operation and maintenance.

Craig worked as a staff engineer at West Virginia University Physical Plant for six years. During that time he managed multiple facility and infrastructure upgrade projects, performed engineering design, assisted maintenance personnel with operational issues, and managed the University's Energy Program. Additionally, he served as the Owner's design review engineer on approximately $130 million in new capital construction. Craig's WVU projects included mechanical, electrical, plumbing, infrastructure, control, and energy systems repair and maintenance totaling approximately $20 million.

Prior to his position at WVU, Craig worked in operations and facility maintenance for the Morgantown Board of Parks and Recreation while attending the WVU School of Engineering. He performed mechanical and electrical systems maintenance duties and associated engineering design work while helping to maintain and upgrade the park systems' facilities. Craig started his mechanical systems career as an apprentice and then as a maintenance systems mechanic in the Physical Plant at the University of Charleston.

Miller Engineering Inc.
Professional Design Services
MEI

BRANDON MERRIMAN FE
MECHANICAL DESIGNER

EDUCATION	Bachelor of Science in Mechanical Engineering West Virginia University – May 2006
QUALIFICATIONS	Brandon is a graduate of the West Virginia University College of Engineering. Brandon assisted in the design and construction administration of multiple projects as an Engineering Intern during the summer of 2005 and his senior year at WVU. His work has proven invaluable and he possesses a keen ability to grasp and apply new information. Brandon has come to MEI with an excellent academic record and a willingness to learn that seen him grow to be a highly valuable member of our team in a short period of time. His experience in the Engineering Projects with Industry while at WVU significantly increased his professional experience. Brandon's long term goal is to obtain his Professional Engineer's license and continue consulting.
REGISTRATIONS	Fundamentals of Engineering, West Virginias PE Board – April 2006

Apex Companies, LLC
"Where Excellence Meets Value"

CLIENT NAME: *American University*
PROJECT NAME: *Comprehensive Environmental Health and Safety Support*

DESCRIPTION OF WORK

Apex is providing comprehensive environmental, health and safety support to The American University. The following tasks have been completed to date:

Asbestos Survey, Design, and Monitoring Services. Apex has completed a comprehensive survey for asbestos containing materials and lead based paint for all buildings at The American University. Over 4 million square feet of building space was surveyed during a single summer session. During the survey, the condition and potential for disturbance was evaluated for each identified positive material. This information was compiled and a management plan developed to detail recommended response actions and Operations and Maintenance procedures. The final deliverable consisted of an electronic management system that is currently being used to manage the material in place and plan appropriate abatement actions. For response actions, Apex performs both design and monitoring services. During the renovation of the main dormitory, Apex provided industrial hygiene support to monitor the contractor performance, collect and analyze air samples and to document site activities. Work often involves covering phases of work that occurred 24 hours a day.

Title V Air Permitting: In an effort to complete the Clean Air Act Title V permit, Apex began by developing an emissions inventory for the university. The source types included boilers, emergency generators, laboratory fume hoods, photographs developing operations, and art department activities. A regulatory review and compliance audit for D.C. and Federal air regulations was completed to identify and correct any non-compliance issues. Apex then entered the data for the permit into the AIR IV software program for electronic submissions to DCRA. Apex currently provides annual emission inventories, opacity testing, and Title V renewals.

Cassell Hall Ground Water Remediation. Apex conducted a subsurface investigation in the former location of a 6,000-gallon heating oil underground storage tank (UST) in accordance with D.C. site assessment requirements. During this investigation, soil and groundwater samples indicated the presence of petroleum contamination resulting from a release from the UST. Three groundwater monitoring wells were installed and monitored on a monthly basis. Based on the accumulation of free phase petroleum product in one of the monitoring wells, Apex prepared and implemented a Corrective Action Plan (CAP) proposing the installation of a total fluids pump & treat groundwater remediation system. The remediation system consisted of a pneumatic, 2-inch submersible pump installed in the well with free product, an oil/water separator, a low profile multi-stage diffuser (air stripper), a transfer tank, and a liquid phase granular activated carbon canister. Treated effluent was discharged to a local sanitary sewer. Apex operated the system until no free product was present in the recovery well. Operation and maintenance was conducted on a monthly basis and included a system inspection, influent and effluent water sampling, and monthly reporting to D.C. Quarterly well sampling was also performed to monitor the effects of the remedial action on the aquifer. After quarterly sampling indicated that the recovery well was free of significant petroleum contamination, the system was operated intermittently to recover and treat the influx of product and dissolved phase

contamination between operating events. Apex later obtained approval from the D.C. Department of Health, UST Division to deactivate and demobilize the treatment system pending redevelopment of the site. Under an approved modified CAP prepared by Apex, residual petroleum contamination in soil and groundwater will be remediated by mass excavation and treatment of dewatered groundwater during site redevelopment. Apex will provide oversight during soil excavation to delineate residual petroleum contaminated soils, install of a water treatment system (if necessary) to reduce petroleum concentrations to acceptable levels prior to discharge during excavation dewatering, and collect post-excavation soil samples to demonstrate successful site remediation. Upon completion, Apex will obtain regulatory closure for the site.

Emergency Response/Chemical Disposal Pit Removal Action. During exterior improvements at the University's President's house in Spring Valley, workers were overcome by strong odors emitting from an excavation. Apex mobilized within one hour to evaluate the situation. Broken and intact laboratory glassware was found in the excavation. Apex immediately secured the site and established contaminated and clean zones. A site health and safety plan and work plan was prepared which called for level A personal protection due to the unknown nature of the chemicals. Concurrently, Apex began research into past activities to determine the contaminates of concern and proper handling and disposal. In addition to arsenic and acids, various other chemicals and UXO were considered during this remediation. The site was then remediated during a three night, compressed scheduled by a removal action and labpack of waste chemicals and excavation and offsite treatment of contaminated soil. The site was restored and closed with District of Columbia's Hazardous Waste Branch.

Hydraulic Oil Release Investigation. Over 50 gallons of hydraulic oil was released from the main elevator casing at Bender Library. Apex responded to site, determined the extent of the release, consulted the regulatory officials, and performed an evaluation of the site. Apex was able to prove that the oil was contained and recovered and no further action was required.

SPCC Planning/ Storage Tank Upgrades.: Apex prepared the Spill Prevention, Control and Countermeasure (SPCC) Plan for the entire university that consisted of over 30 oil storage vessels. To address compliance issues with various storage tanks, Apex performed turn-key design build services to construct secondary containment, remove abandoned USTs, construct security measures, and install overfill devices.

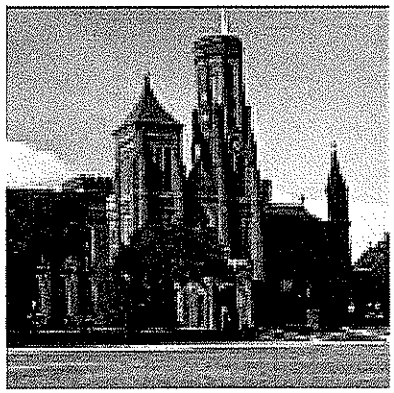
Health and Safety Consulting. Apex is currently assisting the university with addressing various OSHA and EPA compliance issues. Programs have been developed for Chemical Hygiene, Hearing Protection, Confined Space, and Asbestos Management. Apex has provided training to university staff in the programs.

Ambient Air Carbon Monoxide and Ozone Modeling. Prior to obtaining a construction permits for the Katzan Arts Center, Apex has modeled the impact the project will have ambient air concentrations to show that levels of ozone and carbon monoxide don't exceed the National Ambient Air Quality Standards (NAAQS). Apex used regulatory models such as Mobile 5b, CALQCHR, and Screen to model the impact. AU was then able to present the data to DC regulators and proceed with construction.

Contaminated Soil Removal Construction Monitoring. During the construction of the Katzan Arts Center, petroleum impacted soil from a former UST site was removed during excavation. Apex provided field screening and delineation of contaminated soil. An environmental scientist equipped with a PID performed delineation during the excavation activities.

Apex Companies, LLC
"Where Excellence Meets Value"

CLIENT NAME: *Smithsonian Institution*
PROJECT NAME: *Smithsonian Institution, Washington , DC*



DESCRIPTION OF WORK

Apex provides industrial hygiene, occupational health and safety, and environmental services for Smithsonian Institution facilities in New York City, Washington, DC, San Francisco, other U.S. locations, and Panama. Services include industrial hygiene surveys and exposure monitoring programs, exposure assessment programs, indoor air quality studies, ventilation studies, asbestos program support, water quality testing (e.g., lead-in-water), training program support, and others. Operations include museums, shops, laboratories, preservation facilities, painting facilities, asbestos abatement projects, research facilities, and many others. Under this contract, Apex personnel provide services at virtually every Smithsonian Institution facility. Services include:

- Asbestos surveys of four large museums
- Cost estimates for recommended response action.
- Installation of ***HAZcad®*** asbestos management software
- Design and specifications for asbestos abatement
- Asbestos abatement project management and air monitoring
- AutoCAD drawings

Apex conducted comprehensive asbestos surveys using ***HAZcad®*** an Environmental Management System. The surveys served as the basis for asbestos abatement specification. Apex also prepared an abatement specification, conducted contractor pre-bid meetings, and provided Industrial Hygiene oversight during asbestos abatement.

In fulfillment of ordered tasks, Apex provided comprehensive asbestos management services in support of Smithsonian Institution facilities. Using AHERA survey protocols, Apex characterized asbestos in four large museum facilities. Apex's ***HAZcad®*** software was utilized to provide space-by-space descriptions and quantities of encountered asbestos-containing building materials (ACBM), updateable database printouts of assessment results, and AutoCAD plots showing asbestos locations on single line drawings.

Apex also provided asbestos abatement monitoring for projects such as the removal of insulation from the boiler room at the National Museum of the American Indian in New York. Apex also performed a contamination study of several thousand artifacts stored in Smithsonian attic storage areas that were covered with spray-on asbestos fireproofing materials. As a follow-up, Apex prepared a decontamination plan and provided associated air monitoring.

Other industrial hygiene services provided included health and safety surveys and monitoring programs, lead-in-paint facility inspections, indoor air quality studies, ventilation studies, and water quality testing (e.g., lead). Several studies of worker exposures conducted for the Smithsonian Institution included laboratory hood evaluations such as glutaraldehyde monitoring during tissue preparation prior to electron microscopy and hydrocarbon monitoring during degreasing of bone specimens in the osteopreparation laboratory.

IH Survey of Pesticide Applications Operations. Apex conducted an industrial hygiene survey to characterize exposures of applicators to pesticides during and after application for the Office of

Horticulture's greenhouse facilities. Based on a hazard assessment, diazinon and orthene were selected from the greenhouse's list of commonly used pesticides for sampling. Personal monitoring was conducted under various conditions during mixing, application and re-entry, engineering and work practice controls, and personal protective equipment. The survey spanned three seasons to evaluate the effect of temperature, humidity, etc. on exposure.

Environmental Monitoring During Vulcan Formula 72 Fumigation. Apex provided oversight during the mass fumigation of the Wing Bird and Mammal Divisions of the National Museum of Natural History's Department of Vertebrae Zoology. The fumigant (liquid Vulcan 72) was dispensed in small cups mounted on the interior of specimen storage cases. Apex monitored workers and environmental exposure levels, determined that OSHA protection factors were in use, and assured proper application procedures were followed.

Evaluation of Residual Preservations. In a study to evaluate exposures to residual preservatives on selected natural history collections during handling, inventory operations, cleaning, and storing and moving, Apex developed field test methods to identify residual chemicals on representative object surfaces and characterized exposure. Apex conducted ambient monitoring, characterized potential dermal and inhalation exposure hazards, and recommended safe work practices to be used by the staff. Apex determined the extent of hazardous waste generated from "worst case" contamination of material vacuumed from surfaces. Materials were analyzed for arsenic, mercury, carbon tetrachloride, and ethylene dichloride by EPA TCLP procedures.

IH Oversight and Monitoring During Microbial Decontamination. Apex industrial hygienists, under subcontract, provided oversight and monitoring while a contractor decontaminated a storage tank at the Smithsonian Museum. They collected mold and fungi samples and directed safe work practices such as determination of personal protection equipment and engineering controls during abatement.

Asbestos Survey, Design & Oversight: Apex was awarded a second contract with the Smithsonian in 2000 for performance of asbestos surveys, designs of abatement projects, and oversight of contractor activities. Apex works with the Construction Management Division at a wide range of facilities including the National Zoo, Museum of Natural History, National Gallery of Art, and others. The contract period of performance is through 2004.

Apex Companies, LLC
"Where Excellence Meets Value"

CLIENT NAME: *West Virginia University*
PROJECT NAME: *Asbestos Design*

DESCRIPTION OF WORK

Apex provided programming, design and construction management services for the removal of asbestos from the WVU Coliseum. The Coliseum is a domed concrete structure completed in 1970 and primarily used as a sports arena, administrative offices, and classroom facility for Department of Athletics, Physical Education, and Ancillary Services. Over 130,000 sq. ft. of sprayed acoustical/thermal asbestos-containing insulation was present throughout the domed ceiling over the playing level and seating areas. Since the surface was exhibiting areas of physical damage, delamination, and was developing fissures on its surface, Apex was chosen to design and manage the removal of the asbestos-containing insulation.

During the programming stage, Apex performed a feasibility study to determine what type of corrective action would be necessary at the Coliseum. Six major options were evaluated including removal by various technologies, encapsulation, enclosure, operations and maintenance, treatment, and building replacement. Preliminary cost estimates were prepared along with recommendations for abatement technologies and operations and maintenance procedures.

Apex was then selected to prepare design documents for the abatement of the asbestos and various other capital improvement projects. Design elements included an elaborate 150' high scaffolding system, replacement of the basketball floor to NCAA standards, asbestos abatement of the dome and other areas, decontamination of mechanical rooms, renovation of concourse and office spaces, evaluation and replacement of lighting with energy efficient products, replacement of cables supporting lights and scoreboard and replacement of mechanical systems. The complete design package consisted of over 70 drawings from all major engineering disciplines. Prior to bidding, Apex pre-qualified seven bidders based on bonding capacity, insurance, prior experience, and other factors. Bids were received within 2% of Apex's cost estimate. The successful bid of approximately $7.8 million was approved and awarded by West Virginia University.

During the performance of the abatement/construction contract, Apex provided industrial hygiene and construction administration services. The project had an extremely tight schedule from March to October 2000, to coincide with the college basketball season. Apex collected over 2,500 air samples during the project, and managed all aspects of the project. The project was completed on time and under budget. Change orders, not relating to newly requested scope items were practically non-existent. Although this project received high scrutiny from EPA, local regulators, and the media, no citations or warnings were issued. The project received high praise for the level of professionalism that was exhibited during the project.

Matthew R. Van Patten, PE, CHMM, CEM
Project Director

Mr. Van Patten is a Professional Engineer knowledgeable in all aspects of facilities engineering with an emphasis on environmental issues. He has first hand experience in all phases of design and construction from conceptual submissions through final punch list. His specialty is environmental projects and regulations that impact facility owners including underground storage tanks (USTs), storm water and waste water discharge, asbestos, lead paint, indoor air quality, hazardous waste management, spill response, and other concerns. Currently, he manages the Consulting Service Group at Apex's Headquarters office.

EDUCATION

- B.S., Civil Engineering, Oregon State University, 1986

PROFESSIONAL REGISTRATIONS/ CERTIFICATION/ TRAINING

- Professional Engineer VA #022490 (6-25-1991)
- Professional Engineer MD #2147291 (7-7-1996)
- Professional Engineer KY #23946 (12-6-2004)
- Professional Engineer WV #014669 (11-6-2000)
- National Council of Examiners for Engineering and Surveying #26795
- Certified Hazardous Materials Manager #7824
- Certified Energy Manager #007084/1999
- 40-Hr. HAZWOPER (9/27/98)
- Land Surveyor-in-Training, Oregon
- 8-Hr. HAZWOPER Refresher (2005)
- Working Over or Near Water (OSHA 29 CFR 1926.1006) 2005
- CPR /First Air (2004)

GENERAL EXPERIENCE

1994 to Present **Director, Apex Environmental, Inc., Rockville, Maryland.** Provides Environmental Engineering expertise in environmental site investigations and remediation, conceptual design remediation strategies, and management of remediation programs. Responsible for management and technical aspects associated with various health and safety projects including: Asbestos abatement monitoring, asbestos surveys, and health and safety audits.

1990 to 1994 **Civil Engineer, Georgetown University.** Responsible for environmental regulations compliance, project management, and consulting civil engineering services for the Division of Facilities.

1986 to 1990 **Advanced Technology Inc.** Provided facilities engineering and management consulting services to government clients.

PROJECT EXPERIENCE

West Virginia University, Charlestown, WV. Project Manager and engineer for the design of the abatement of 125,000 sf of acoustical asbestos material from the dome of WVY Coliseum. The project in this 14,000 seat facility included the design of scaffolding and abatement procedures to remove the

material. In addition to the design, prequalification bidding, construction administration, and abatement monitoring services were performed. The overall budget on this project exceeded $12 million.

Goucher College, Baltimore, MD. Provides hazardous material abatement construction management services to Goucher Colleges. Services include initial surveys, project design, coordination with construction manager, and monitoring of abatement activities. Projects have involved over 200,000 sf of asbestos and lead paint abatement, hazardous materials removal from science buildings and removal and decontamination of PCB containing transformers.

George Washington University, Washington, DC. Provides ongoing environmental health and safety consulting services to the Division of Facilities on a wide range of issues. Projects have included preparation of SPCC Plans, Hazardous Material Surveys, Clean Air Act Title V permit application, and ambient air modeling for ozone impact.

Stormwater Basin Assessment and Routine Maintenance for Multiple Locations Wal-Mart, Nationwide, Chief Engineer. Responsible for the inspections and engineering of corrective measures for BMPs in over 8 states. Developed inspection protocols and procedures for performing both initial and regular inspections using handheld computers to record field observations. When inspections discover problems with original designs, Mr. Van Patten is responsible for overseeing the design of corrective action. Engineering projects have included dam repairs, installation of new spillways, reconfiguring ponds, and altering risers. Engineering is being completed by Apex's in-house engineering staff.

Emergency Response, American University, Washington, DC, Project Manager. Managed the emergency response, investigation, and remediation of arsenic contaminated soil at a local university. The site was formerly used as a munitions test facility during World War I. Activities took place under a Health and Safety plan that accounted for the contaminates and unexploded ordinance. Over 40 tons of contaminated soil was removed from the site as part of the remediation.

Asbestos Support, Private University, New York, Project Manager. Managed the surveying and asbestos program development for a major university. Over 8 million s.f. of building were surveyed and input into ***HAZcad®***. An overall program is being developed to manage the asbestos in place, including coordination with planners, surveyors and maintenance activities.

Environmental Engineering Support, U.S. Postal Service, D.C. Capitol Area. Overall Program Management for IQC for Environmental Services with the USPS – Eastern Facilities Office. For USPS facilities in MD, DC, WV and VA, Apex has performed and completed environmental compliance audits, indoor air quality assessments including mold evaluations, subsurface contamination assessments, underground storage tank evaluations, removals, and upgrades, asbestos and lead based paint surveys, abatement designs, and third party monitoring, SWPPP Plans, and corrective action plans.

- Preparation of an environmental assessment required under 39 CFR, Part 112. The assessment resulted in on "Finding of No Significant Impact (FONSI)" which allowed the USPS to proceed with planned construction.
- Performed over 200 asbestos containing material/lead-based paint/radon surveys for the Baltimore District in support of the National Information System Upgrade. Provided reports and training to maintenance personnel. Facilities included the one million sf Baltimore Plant.
- Performed over 50 asbestos and lead based paint surveys for the Capital District. Provided electronic version of reports that were compatible with the USPS environmental management system. Provide asbestos design and monitoring services for numerous projects.
- Performance of Phase I environmental assessments on numerous properties that were acquired by the USPS.

- Performed indoor air quality investigations and dust evaluations at Baltimore Plant and Distribution Center.
- Responded to release of automatic transmission fluid at the Suburban VMF.
- Prepared SPCC Plans and SWP3 Plans for the Merrified Plant and VMF.
- Performance of UST compliance audits for the Baltimore and Capitol Districts.
- Performance of 34 Environmental Quality Assurance reviews for facilities in the Capitol District.
- Managed 15 energy audits at main facilities within the Northern Virginia District.
- Provided UST consulting services for USPS facilities in Denton, Chestertown, and Centerville, MD.

Environmental Engineering Support, U.S. Postal Service, Mid-Atlantic Area. U.S. Postal Service, Mid-Atlantic Area. Provided environmental engineering services to the U.S. Postal Service Mid-Atlantic Area Environmental Compliance Program for four years through a contract with the Greensboro Purchasing and Materials Service Center. Specific project include:

- Developed an underground storage tank inventory protocol and management system that allowed the mid-Atlantic area to determine compliance with UST regulations. This program was recognized by USPS headquarters as a cost-effective efficient program to determine compliance issues. Over 4,500 facilities were involved.
- After Hurricane Floyd, Apex responded to flood devastated areas in Franklin, VA and Rocky Mount, NC to addressed mail contaminated with mold and contaminated water. Work with USPS to develop a plan for decontaminating the mail prior to delivering to customers. Over 20,000 pieces of mail were decontaminated.
- Performed over 300 asbestos and lead-based paint surveys for USPS facilities in the Appalachian District.
- Performed Environmental Quality Assurance Reviews (EQARs) at numerous facilities in the area.
- Developed/revised USPS Standard Design Criteria to incorporate "Greening" guidelines.
- Assisted in development of USPS Environmental Management Information System (EMIS).
- Performed water use assessments at larger plants to determine potential for reducing water consumption.
- Managed the comprehensive audit of air compressor systems at 19 major USPS facilities.
- Developed a database containing energy usage, utility provider, account number and facility information for all facilities within the Mid-Atlantic Area
- Prepared quarterly environmental newsletter.

Value Engineering Support, PMSI, Environmental/Civil Engineer. Participates in Value Engineer workshops for a variety of projects on a task order basis. The following projects have been completed:

- Renovation of the New EPA Headquarters in the District of Columbia. Value engineering was performed at the conceptual and tentative phases for this $130 million renovation project. Over $5 million in value engineering recommendations were made and accepted by GSA with respect to environmental issues. Overall, $15 million in value engineering recommendations were made by the value engineering team and implemented by GSA.
- Environmental Restoration of the J-Field at the Aberdeen Proving Grounds. The project involved the delineation and removal of selective contamination and the placement of a soil CAP. Overall, $3 million in value engineering recommendations were made by the team.
- Record of Decision Implementation, Southern Maryland Wood Treatment Facility - The project involved thermal desorption of PAH contaminated soil, ultraviolet treatment of

contaminated groundwater and overall site restoration. Overall, $5 million in value engineering recommendations were made by the team.

- New US Embassy, Belmopan, Belize – The project was a completely new complex involving multiple buildings. Provided Civil engineering evaluations of site work, stormwater control and LEEDs evaluation.

Program Manager Support, U.S. Postal Service, Metropolitan Area. Providing overall program management and quality assurance for numerous industrial hygiene projects in the metropolitan area. Ensure consisting with other USPS areas and the National electronic submission requirements.

Computer Training, ITC, Environmental Compliance Expert. Provided environmental expertise in the development of an interactive computer training course on environmental awareness. The course is a PC-based program which combines video, audio, graphics, and text media into a single platform for training purposes. Course material included an overview of the RCRA, CERCLA, TOSCA, EPCRA, Clean Air Act and Clean Water Act.

Environmental Program Management, Georgetown University, Washington, D.C., Environmental Engineer. Established and oversaw Georgetown University's environmental program at Georgetown University in the District of Columbia. Was responsible for all hazardous waste management issues for the design and construction department. Performed hazardous waste investigations prior to the construction of all projects which included the investigation of PCBs, VOCs, and heavy metals. Designed remediation systems to address various concerns including PCBs, mercury, and other hazardous materials.

- **Developed Asbestos Management Program.** Managed an annual asbestos abatement and Operations and Maintenance program of approximately $1,000,000. Projects varied in size and complexity and were completed in the Hospital, dormitories, classroom facilities, and research labs. The majority of the projects were completed while the buildings remained occupied and operational. This program has maintained a high level of performance and safety record while always completing the projects within the tight constraints given.
- **Developed University's Underground Storage Tank Program.** Managed approximately 16 tanks under this program including eight (8) tank closures, four (4) tank installations, and three (3) remediation sites.
- Wrote the original **Conceptual Corrective Action Plan for Georgetown University** which was approved by the District of Columbia for remediation of soil and ground water contaminated with VOCs and PAHs. Designed and managed construction of the system. Oversaw the installation of utilities through the site to ensure health and safety and operation of the bioremediation system.
- **Managed Georgetown University's wastewater and storm water discharge permitting system.** This includes annual testing and reporting, and the design and construction of storm water quality structures.
- **Managed Bioremediation Project.** Managed the investigation, design and installation of the first successful bioventing system in the District of Columbia. The system used a hybrid process of soil vapor extraction to remediate a petroleum-impacted site to level acceptable for closure. Responsibilities included air and construction permitting, design of well installation, and bioventing system, management of construction and operation of system.
- **Performed as Technical Manager for a Screening Analysis** for a proposed 1,000 car parking facility. Analysis used computer modeling to forecast emissions levels of facility.
- **Managed University's UST Construction Projects.** Technical Manager for numerous underground storage tank removals, replacements and remediations for various clients. Projects include:

- Installation of two 30,000-gallon USTs in conjunction with ongoing bioremediation of fuel oil contaminated ground water and soil.
- Replacement of six USTs at a local university including site investigation and remedial services.
- Design and replacement of two 12,000-gallon USTs in the basement of a downtown retail building.

AFFILIATIONS

- American Society of Civil Engineers
- APPA: The Association of Higher Education Facilities Officers
- Association of Energy Engineers
- Institute of Hazardous Materials Management

Thomas Wambach
Project Manager

Mr. Wambach has over fifteen years' experience in the environmental consulting business focusing on industrial health and safety pertaining primarily to asbestos and lead related projects. He has conducted and supervised well over 1,000 comprehensive asbestos surveys for hundreds of clients in both the government and private sector. Mr. Wambach has led inspection teams at U.S. Government owned facilities all over the world since 1991. He is responsible for managing all aspects of asbestos related work including proposals, site inspections, computer generated data and drawings, report writing, abatement specification design, cost estimating, and construction management services. Other significant responsibilities have included training new inspectors, providing asbestos awareness training, reviewing existing asbestos management plans, inspection reports, interpreting renovation project plans with regards to impacts on asbestos or other hazardous materials and providing recommendations based on findings. He has provided continuous construction management services on numerous large–scale (multi-million dollar) renovation/abatement projects for both the government and private sector. He has performed a wide variety of Phase I Environmental Site Assessments (ESAs). Additionally, he has assisted with various Phase II ESAs, remediation sites, and participated in numerous hazard evaluations involving lead-in-water, lead-in-paint, polychlorinated biphenyls (PCBs), radon, and other hazardous materials.

EDUCATION

- B.S., Earth Sciences, Frostburg State University, 1989

PROFESSIONAL REGISTRATIONS/ CERTIFICATION/ TRAINING

- RMD's LPA-1 Lead Paint Inspection System
- Asbestos Project Designer, (Refresher)
- Lead-in-Paint Inspector and Risk Assessor
- Radiation Worker II Training
- New York Department of Labor - Asbestos Inspector
- 40-hour OSHA HAZMAT, (Refresher)
- 8-Hr EPA AHERA Inspector/Management Planner Recertification, MD-067850, Expires 06/24/04
- West Virginia Certified Asbestos Project Designer, (Current)
- West Virginia Certified Asbestos Inspector /Management Planner, (Current)
- Pennsylvania Certified Asbestos Inspector
- Maryland Certified for the Collection of Drinking Water Samples (Refresher)
- Virginia Certified Asbestos Inspector, (Current)
- U.S. (EPA) Accredited Asbestos Inspector and Management Planner, (Refresher)
- National Institute of Occupational Safety and Health (NIOSH)/Proficiency Analytical Testing (PAT) Proficient for Asbestos-In-Air Analyses by Phase Contrast Microscopy (PCM)
- NIOSH 582 Equivalent Training for Asbestos-in-Air using PCM
- Asbestos Hazard Emergency Response Act (AHERA)-Accredited Asbestos Worker and Supervisor
- Maryland Certified Asbestos Training for Contractors

GENERAL EXPERIENCE

1990 to Present **Project Manager and Senior Industrial Hygienist, Apex Environmental, Inc., Rockville, Maryland.** Manages and performs numerous asbestos related projects and other hazardous building materials related projects. Performs comprehensive asbestos and lead paint building surveys, and writes asbestos inspection reports, management plans, abatement specifications, and abatement closeout reports for hundreds of different projects annually. Designs asbestos abatement project specifications and reviews contractors abatement plan submittals. Maintains Quality Check of field work and Quality Assurance of project reporting and abatement design submittals. Markets current and potential clientele. Tracks all costs of projects relating to inspections, abatement design, industrial hygiene oversight, and abatement. Manages and initiates environmental contracting projects including bid solicitation from qualified abatement contractors, and subcontracting agreements. Prepares bids and proposals for inspections, abatement specification designs, industrial hygiene monitoring, and abatement projects. Coordinates and schedules work for a staff of four to six Environmental Scientists. Other responsibilities include providing Asbestos Awareness Training, performing Phase I Environmental Site Assessments (ESAs), reviewing existing asbestos management plans and reports, interpreting renovation project plans with regards to impacts on asbestos or other hazardous materials and providing recommendations based on findings. Participates in industrial hygiene studies, evaluations, and monitoring programs involving asbestos and lead paint abatement activities, polychlorinated biphenyl (PCB) remedial actions, drinking water sampling, radon testing, avian excreta, and other hazard evaluations. Proficient asbestos microscopist by PCM.

PROJECT EXPERIENCE

U.S. Department of State. Project Manager for comprehensive asbestos surveys at U.S. Embassies in, Norway, Finland, United Kingdom, Burundi, Central African Republic, and Peru. Also provided project management and reporting for various asbestos abatement projects at U.S. embassies in Japan, Uruguay, Mexico, Germany, China, and Korea. Responsible for staffing, scheduling, and reporting for all projects including electronic updating of the asbestos database and drawings for each abatement project. Trained all new personnel using Apex's HAZcad® Environmental Management System. Performs senior level inspections and emergency response abatement oversight on an as needed basis and provides Quality Assurance for all project reporting for contract. Responsible for invoicing the projects and tracking all job-related costs.

Project Supervisor for comprehensive asbestos surveys at U.S. Embassies and Consulates in Japan, Germany, Romania, Costa Rica, Nepal, Barbados, Lithuania, Estonia, Latvia, Canada, Cuba, Jordan, Ethiopia, Trinidad, Brazil, Mexico, Zambia, Cape Verde, The Gambia, Burkina Faso, Burma, Thailand, France, and Italy. Responsible for scheduling and inspecting dozens of buildings at each site, collecting field data for computerized database reporting system, writing all reports and operations and maintenance (O&M) Plans.

U.S.P.S. – Baltimore District. Project Manager for development of scope-of-work for asbestos abatement for large-scale mechanical renovation at the Postal and Distribution Center (P&DC) in Baltimore, Maryland. Provided a specific scope-of-work for asbestos abatement to the term abatement contractor, held pre-bid and pre-construction meetings, and provided an asbestos awareness

training/meeting on site with U.S.P.S. representatives, coordinated abatement work schedule with all parties involved with project and provided construction phase management services throughout the project including all necessary industrial hygiene oversight. Also reviewed abatement contractor's applications for payment.

U.S.P.S. – Baltimore District. Project Supervisor for comprehensive surveys for asbestos, lead-in-paint, radon, and PCBs at over fifty post offices in the Baltimore District. Responsible for leading inspectors during field work, reporting, quality assurance/quality check (QA/QC) of all facets of project including field work and reporting. Responsible to identify any areas representing imminent health hazards and recommend response actions to abate hazards including abatement specification designs per USPS and applicable state requirements.

Creative Arts Center – Mathes Brierre Architects, West Virginia University. Project Manager as a subcontractor to Mathes Brierre Architects, provided inspection, design, and construction management services for the removal of asbestos-containing materials required by a large-scale (multi-million dollar) renovation project at West Virginia University's Creative Art Center (CAC) in Morgantown, West Virginia. The abatement work alone was estimated to be approximately 1.5 million dollars. Apex prepared a bid package including detailed abatement specifications and full size CAD drawings (in color w/photographs) to identify the location of all materials that would require abatement to facilitate the project SOW. Apex assisted client with coordination of pre-bid conference including responding to all requests for information (RFI). Submittals from the successful contractor were reviewed for completeness and conformance with the project specifications. Apex provided construction phase services including attendance of weekly progress meetings and provided third party industrial hygiene oversight for the full duration of abatement activities.

Correct Westside Hangers and Replace Westside Underground Deluge Piping, Andrews AFB, Maryland. As Project Manager, provided asbestos inspection and design services as a subcontractor to CETROM, Inc. The projects involved repairs and improvements to the fire protection system for west side portions of the base. Inspected all affected areas and prepared performance based specifications using the Unified Facilities Guide Specifications and SpecsIntact software program. Apex provided specifications, drawings, and cost estimates for each scheduled submission and participated in the design meetings as required. Construction phase services included review of contractor submittals and responding to any information requests. Contract value was less than 50K for both projects.

Modernization of I.R.S. Headquarters – Swanke, Hayden, Connell, Washington, D.C. As a subcontractor to Swanke, Hayden, Connell, Apex provided inspection, design, and construction phase services for the removal of asbestos-containing materials, lead-based paint, and PCBs required by the Modernization of the Internal Revenue Service Headquarters building in Washington, D.C. Apex prepared detailed specifications using the GSA format. Apex also prepared detailed CAD drawings to identify the location of all the hazardous materials that would require removal. Submittals from the successful contractor were reviewed for completeness and conformance with the project specifications. The entire construction project (including abatement) was valued in excess of 50 million dollars. Apex is providing ongoing construction management services on an as needed basis until 2006.

Mechanical System Restoration – Building 21, NASA, Greenbelt, Maryland. As a subcontractor to CETROM, Apex provided inspection and design services for the removal of asbestos-containing materials required by the restoration of mechanical systems in Building 21 at the National Aeronautics and Space Administration facility in Greenbelt, Maryland. CAD drawings were prepared to identify the location of samples collected and the materials that would require removal. Specifications were prepared using the GSA format and submittals from the successful contractor were reviewed for completeness and conformance with the project specifications.

Private University, New York State. Team Leader of a four-person team that performed asbestos surveys at a prominent east coast university. Supervised and performed surveys of all facilities on the campus comprising over 8,000,000 square feet of building space (including laboratories, dormitories, academic buildings, administrative buildings, sports arena) for asbestos-containing materials. Project spanned a period of three months. All information was gathered using hand-held computers and entered into Apex's HAZcad® Environmental Management System for retrieval by the facility engineers.

Patuxent River Naval Air Station, Lexington Park, Maryland. Project Supervisor for comprehensive asbestos surveys of 85 buildings. Supervised up to four inspectors daily for an six month period. Responsible for all survey documentation and field data collection for computerized database reporting system. Primary involvement with development of a facility-wide O&M Plan.

National Institutes of Health (NIH), Bethesda, Maryland. Project Supervisor for a comprehensive asbestos survey of a major research facility (approximately two million square feet). Supervised up to eight inspectors daily for an eight month period. Responsible for all field documentation and database management of field data for computerized database reporting system.

Sears Roebuck, East Coast. Project Supervisor for comprehensive asbestos surveys at twenty-five department stores for a nationwide renovation project.

Veteran's Administration Hospitals in Allen Park, Michigan, and Washington, D.C. Project Leader for comprehensive asbestos surveys throughout main hospital building.

U.S. Department of State. Asbestos abatement monitoring and project oversight at new U.S. Embassies in Lithuania, Latvia, Estonia, Belarus, and Paraguay.

Montgomery County Public Schools, Maryland; Charles E. Smith Companies, Virginia; and NIH. Asbestos abatement monitoring/oversight for hundreds of projects of various size and complexity.

Kaempfer Associates. Radon monitoring for properties throughout the District of Columbia.

Howard County, Maryland. Identified all sources which did not comply with EPAs Safe Drinking Water Act, and performed lead-in-water sampling and surveys for over thirty.schools.

General Services Administration (GSA). PCB sampling for transformer replacement throughout major federal facilities.

Naval Surface Warfare Center, Annapolis, Maryland. Confined space work using LEL/02 during asbestos surveys.

Numerous Phase I ESAs performed for a wide range of property transactions throughout the Mid-Atlantic region. (Clients included banks, developers, and law firms).

Participated in numerous Phase II projects involving soil borings, well water sampling, UST replacement. Used PID to help characterize potential soil contamination at various sites.

Numerous lead-in-paint surveys for renovation projects and for due diligence as part of Phase 1 ESAs .

Key team involvement with architects on numerous large renovation projects with regard to project design. Responsible to review plans (scope-of-work), coordinate inspections (asbestos, lead-in-paint, PCBs), interpret results, develop specific abatement designs, provide recommendations, cost analysis, and attend project team meetings as needed.

PROFESSIONAL AFFILIATIONS

- ·AIHA Full Member, (Current)

Client References

Recently Constructed Projects

Dirar Ahmad
West Virginia Division of Highways
1900 Kanawha Blvd., East
Charleston, WV 25305-0430
304-558-2830

McDonald Smith
WV Parks and Recreation, Division of Natural Resources
1200 Harrison Avenue
Elkins, WV 26241
304-637-0300

Kevin Critchfield
Upshur County Senior Center
28 N. Kanawha Street
Buckhannon, WV 26201
304-472-0528

Dr. Richard Lechliter, Mayor
Town of Ridgeley
P.O. Box 1290
Ridgeley, WV 26753
304-738-9400

John Sommers, Senior Construction Projects Manager
West Virginia University
PO Box 6572
Morgantown, WV 26505
304-293-2856

MILLER
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Mr. Isaac Blair
O: 202/687-7490

Goucher College
Mr. Harold Tinsely
O: 410/337-6170

Combined Properties
Mr. Alex Iszard
O: 202/293-4506

USPS-Eastern FSO
Mr. Gardner Jones
O: 336/665-2885

John F. Kennedy Performing Arts Center
Mr. George Forrest
O: 202/416-7942

Ms. B.J. Hicks
Wal-Mart Stores, Inc.
O: 479-204-8391

Smithsonian Institution
Mr. Derek Ross
O: 202/757-0459