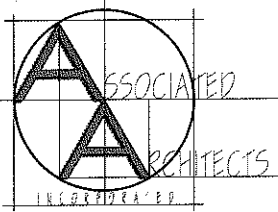



Table of Contents

1	<p>Proposal Documentation No-Debt Affidavit</p>
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2	 <p>318 Lee Street W. Suite 200 Charleston, WV 25302 p.304.345.1811 f.3404.345.1813</p>
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3	 <p>7012 MacCorkle Avenue, SE Charleston, WV 25304 p.304.342.1400 f.3404.343.9031</p>
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4	 <p>411 1/2 D Street S. Charleston, WV 25303 p.304.744.3017 f.3404.744.3196</p>
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5	 <p>P.O. Box 874 110 3rd Avenue St. Albans, WV 25177 p.304.722.3602 f.3404.722.3603</p>
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RECEIVED

2010 MAR 10 PM 12:40

WV PURCHASING
DIVISION



Proposal Documentation
No-Debt Affidavit



March 9, 2010

Dear Review Committee:

Our design team is pleased to have the opportunity to submit this proposal for providing architectural/engineering services for the proposed new group dining hall to be located at Cabwaylingo. We feel confident our design team is uniquely qualified to provide design services for this project and feel a team approach between the West Virginia Department of Natural Resources officials and its architects/engineers is the key to the successful completion of your project.

Associated Architects is pleased to present our proposal outlining our technical expertise, management, staff capabilities and experience for providing high quality architectural services. Our approach will offer advantages in methodologies and delivery, which will guarantee the success of your project both now and for years to come. The offices of Associated Architects are located at 318 Lee Street W. Suite 200 in Charleston, WV. The firm is capable of providing full architectural design services and has a long list of subconsultants that provide civil, structural, mechanical, electrical and plumbing engineering services to complete the design package. Associated Architects has provided full architectural design services to multiple state and county agencies throughout West Virginia. During that time, they have had the opportunity to complete many building designs as well as building evaluations. The firm has done work for many county governments, including Kanawha, Putnam, Lincoln, Wayne, Marshall, Wetzel, Mingo and Mason. Work has included Courthouse renovations, Family Court additions, Day-Report offices, Sherriff's offices, storage facilities, planning departments and 911 Command Centers.

As with many architectural firms in West Virginia, Associated Architects has teamed with consultants for the required various trades to provide the State of West Virginia with a complete turn-key building design. These consultants were selected based on past performance and design expertise. Potesta and Associates, Inc. was selected to provide civil engineering and geotechnical work for the design team. Potesta has been practicing in the state for over 12 years and many of its staff members have experience far exceeding this. To provide structural engineering for the project, we have teamed with Ham Engineering. Jud Ham has been practicing throughout the State of West Virginia for over 30 years. To assist in the areas of HVAC, plumbing, fire protection and electrical engineering, we have teamed with Harper Engineering. Their staff brings more than 20 years of experience of providing services on numerous projects of varying size and complexity.

Recently we utilized Harper Engineering and Ham Engineering expertise in the renovation project for the Kanawha County Commission's 301 Virginia Street property. This project contained 75,000 sq. ft of building space which required full renovation of the entire facility. This project was designed and bid with a very demanding schedule and completed with a final bid which was over \$1 million under estimated budget.

March 9, 2010
Page 2

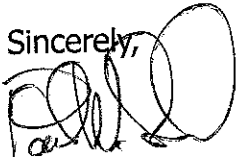
Associated Architects and its consultants have had a working relationship for many years and we take great pride in our ever-growing list of repeat clients. This team is currently engaged in many ongoing projects together and with our well-rounded team experience and proven communications skills, we are ready to add your project to our list of successful projects. Our team strives at meeting demanding deadlines and very limited budgets while maintaining the highest level of quality possible. Through the group's continued local presence, we have had many opportunities to gain vast experience with all local, state and federal building codes and believe that life safety and human comfort comes first in a building design.

You will see that teamwork is the spirit and foundation of our organizations. We acknowledge the importance of a quick turn-around and excellent quality services which our administrative procedures, overall organization and depth of experience provides you. As you will see from our resumes and company experience, we are uniquely qualified to offer the professional services required and to ensure that your project becomes a reality.

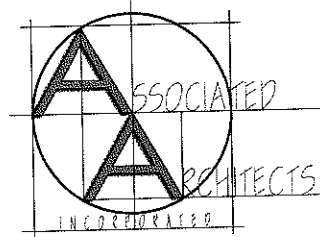
We want to emphasize that your project is very important to our design team. We look forward to personally discussing our qualifications to complete this project on time, within budget and exceeding the standards of any firm you may have worked with previously.

Should you have any questions regarding this proposal, please do not hesitate to contact us.

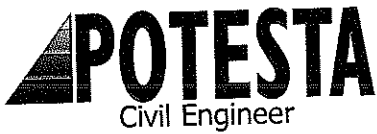
Sincerely,



Paul W. Tennant
President
Associated Architects, Inc.
318 Lee Street W. Suite 200
Charleston, WV 25302
p.304.345.1811
f.304.345.1813



Project Architect
Paul W. Tennant, AIA - President
318 Lee Street W. Suite 200
Charleston, WV 25302
p.304.345.1811
f.304.345.1813



Dana Burns, Vice President
7012 MacCorkle Avenue, SE
Charleston, WV 25304
p.304.342.1400
f.304.343.9031



MEP Engineer
Jason Harper, PE
P.O. Box 874
110 3rd Avenue
St. Albans, WV 25177
p.304.722.3602
f.304.722.3603



Structural Engineer
Jud Ham, PE
411 1/2 D Street
S. Charleston, WV 25303
p.304.744.3017
f.3404.744.3196

Associated Architects has the ability to provide a complete turnkey project for all of its clients. Add to this speed and accuracy, and the client is provided with best product possible.

In-house capabilities in planning, architecture and construction administration services are supplemented by qualified consultants, with whom we have established a continuing association in the fields of structural, mechanical, electrical, and civil engineering, as well as acoustical design, cost estimating and scheduling. Our consultants are selected for each project based on their qualifications and experience with that particular building type. Listed below are some of the areas in which Associated Architects, with the help of highly qualified consultants, is able to serve its clients:

Planning

- Long Range Master Planning
- Feasibility Studies
- Functional Programming
- Site Analysis

Administration of Construction

- Construction Contract Negotiation
- Bidding Review and Analysis
- Contract Administration
- Project Management
- Accelerated Design/Construct

Architecture

- Program Review and Analysis
- Schematic Design
- Design Development
- Construction Documents
- Graphic Design/Website Design
- Computer Visualization/Walk-through
- Video Presentations
- Specifications

Interior Design

- Programming (Data Collection)
- Equipment Inventory
- Space Planning and Design
- Color/Finish Planning and Coordination
- Furniture/Fixture Design and Selection
- Contract Documents
- Production Services
- Furnishings/Equipment Specifications
- Contract Administration



Associated Builders and Contractors, Inc. - First Place
- "Excellence in Construction Award: Specialty - Residential" - 1996

Charleston Renaissance Corporation - "Development Project Special Recognition Award"
- 1996 Historic Restoration of Capitol Street Storefronts

American Institute of Architects - "West Virginia Merit Award"
- 1995 Charleston Catholic High School

Austin Palmer Award - South Charleston Community Center

Home Builders Association of Greater Charleston - "1996 Best Single Family Home - Class VII"

Charleston Renaissance Corporation - "Best Development Project of the Year Award - 1997"
- Bowles, Rice, McDavid, Graff & Love Law Firm

Charleston Renaissance Corporation - 1999 - Woodrums Building

Charleston Renaissance Corporation - "Development Project Special Recognition Award 1999"
- Immigration and Naturalization Services Building

Home Builders Association - "Renovation Project of the Year 1999" - Quarry Manor

Charleston Renaissance Corporation - "Development Project Special Recognition Award 2000"
- West Virginia Health Right

Charleston Renaissance Corporation - "Development Project Special Recognition Award 2001"
Bell & Bands 30-32 Capitol Street

Charleston Renaissance Corporation - "Best Redevelopment/Expansion - 2003"
- Sacred Heart Co-Cathedral - Gathering Space Addition

ABC - Excellence in Construction Award - 2004 Metal Building - Industrial Over \$1 Million
- Joe Holland Parts and Service Center - South Charleston

ABC - Excellence in Construction Award - 2004 Institutional Over \$2 Million
- Sacred Heart Co-Cathedral - Gathering Space Addition

ABC - Excellence in Construction Award - 2004 Specialty - Residential
- Eight Sixteen on the Boulevard

American Institute of Architects - 2004 West Virginia Honor Award for Excellence in Architecture
- Sacred Heart Co-Cathedral - Gathering Space Addition

American Institute of Architects - 2008 West Virginia Honor Award for Excellence in
Architecture - Brickstreet Insurance Agency

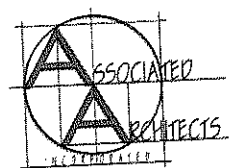


Associated Architects, Inc. has full Computer-Aided Design and Drafting capabilities provided through the Apple Macintosh platform. To assure compatibility with U.S. Government projects and various consultants, we are also able to directly read and write PC-compatible AutoCAD Release 2006 (or earlier) drawing files onto Windows formatted media. We maintain a Dual Pentium 4 Xeon PC running a robust set of programs allowing us to create our graphical and video presentations, web-based designs and creation of web pages. In addition to all of these programs, our design team is wired with a direct connection to the internet to allow project management using every means possible.

For complex projects where the client requires a realistic view of the completed project before construction begins, we can employ virtual reality techniques to walk the client through the building design, which can also be easily output to videotape or DVD for presentation to other parties. We are able to do this by using ArchiCAD software, which in addition to virtual walkthroughs allows us to generate multiple 3-D views from any angle and create a full set of working drawings, all from the same data. Also enhancing our CAD capabilities is the powerful 2-dimensional drafting package, PowerCADD. With all media created in our office, through the use of Adobe Acrobat, we have the ability to create and provide PDF's (Portable Document Format) for use by our clients.

In addition to videotape/DVD output, our office also has a large format (up to 42" x 108" size) Hewlett-Packard DesignJet 5500 42" PS color inkjet printer located in-house for presentations and color working drawings. For standard black and white working drawings, our large format Océ 7055 copier is used for in-house duplication. For smaller presentations, we employ a Xerox Phaser 7400 DX Color Laser Printer, which outputs prints up to 12" x 18" on all types of media. We also utilize a 36" roll scanner and several Canon High Speed color scanners in order to advance our reproduction and archiving abilities. We also utilize a group of CD-RW/DVD+/-RW burners for quick and easy data transferring. We also have three Olympus digital cameras along with a Sony Digital SLR in the firm for site/building pictures.

Through the computerized American Institute of Architects MASTERSPEC Architectural/Structural/Civil Reference Libraries we can create a set of individualized specifications for each project especially tailored to each project and client needs. Also through the use of the computerized American Institute of Architects Contract Documents library, our firm can create and print AIA Contract Documents with the ease of using a word processor. Rounding out our computer capabilities is the Norton Anti-Virus Solutions to keep the computers free of infections, and various file translators for ease of data transfer between the MAC and PC computers.



Paul W. Tennant
Principal

Education

West Virginia State College, 1961-1963
Engineering

Virginia Polytechnic Institute and State University, 1963-1968
Bachelor of Architecture

Professional Registrations

Registered Architect:
West Virginia, Florida

Professional Associations

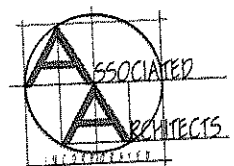
American Institute of Architects
West Virginia Society of Architects

Professional, Public and Community Service

Landmark Historical Commission - Board Member
Carleton Varney School of Interior Design - Advisory Board
City of Charleston - BOCA Arbitration Board (Chairman)
Capitol Building Commission - Past Member

Professional Experience

Mr. Tennant, a West Virginia native, has over 30 years experience in the design of office buildings and retail, recreational, educational, health care and industrial facilities and complexes. He is actively involved in the direction and execution of all the firm's projects. Mr. Tennant has a substantial record of repeat clients for the firm due to successful project completions within the limits of schedule and budget. His close involvement from the conception to the conclusion of the project assures continuity of design intentions. Mr. Tennant also has extensive experience as an expert witness.



Mark N. Spencer
Senior Architect

Education

University of Cincinnati, 1982-1988
Bachelor of Architecture

Professional Registrations

Registered Architect:
West Virginia, Virginia, Kentucky,
New York
National Council of Architectural
Registration Boards - Member

Professional Associations

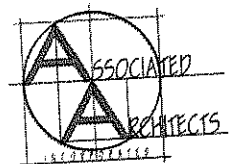
American Institute of Architects
West Virginia Society of Architects

Professional Experience

In college, Mr. Spencer, a Charleston native, had the unique opportunity to participate in the Co-operative Education Program, which allowed him to work in top architectural firms around the U.S. such as Skidmore, Owings & Merrill in Chicago and RTKL Associates in Dallas. During his co-op session at Associated Architects, Inc., Mark used the knowledge gained from working in these large firms to benefit the practice here.

Mark spent the summer months following his graduation traveling throughout Western Europe, and joined Associated Architects, Inc. as a full-time employee in the autumn of 1988. He passed the Architect Registration Examination upon becoming eligible in 1991, and thereafter received NCARB certification, which allows easy application for licensure in virtually every state.

Upon becoming a Project Architect, he designed the Science Addition to Charleston Catholic High School, which was honored with an award from the local AIA chapter. Since then, he has continued the tradition of award-winning designs.



Charles T. Keefer

Project Architect

Education

Virginia Polytechnic Institute and State University, 1997-2002
Bachelor of Architecture

Professional Registrations

Registered Architect:
West Virginia, Florida
National Council of Architectural
Registration Boards - Member
NCARB: Intern Development Program

Professional Associations

American Institute of Architects
West Virginia Society of Architects

Professional, Public and Community Service

Habitat for Humanity

Professional Experience

Mr. Keefer is a recent college graduate who has been employed as an intern by this office since 2000. In addition to his architectural training, he has a strong computer background with a complete understanding of all operating systems on the market. Charles has taken over the complex and difficult responsible of maintaining the office's computer network and equipment. Charles runs both a Apple Computer and the firms only PC in his office for compatibility issues and more complex projects that require two computers to complete the project on time. Among his many other jobs and responsibilities, he also fronts our graphical design sector, producing all of our graphical presentations. Along with his knowledge of operating systems, Charles also brings a complete understanding and ability to design and maintain web-based design projects, and is also responsible for creating and outputting most of the firm's video presentations.

Charles recently passed the Architect Registration Examination upon becoming eligible in 2005, and thereafter received NCARB certification, which allows easy application for licensure in virtually every state.



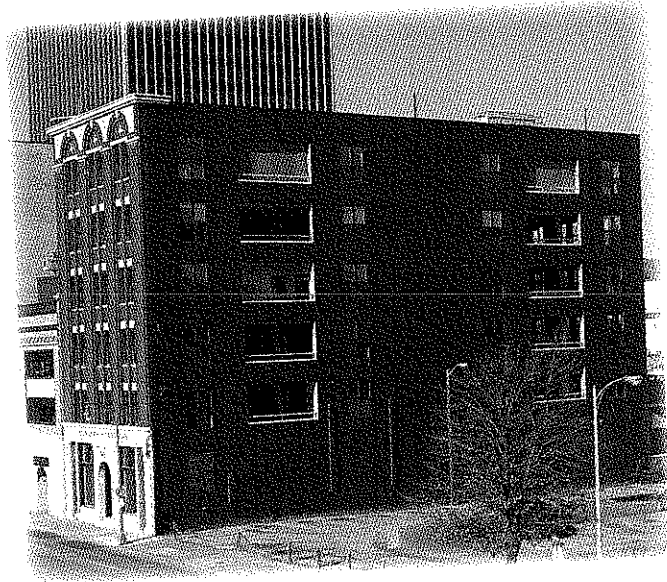
Eight Sixteen on the Boulevard

Project Location: Charleston, WV

Construction Cost: \$2 million Shell Development

Firm's involvement:
Project Architects -
Design/Build Contract

Project Representative:
Paula Butterfield
Eight Sixteen LLC
16 Kanawha Blvd.
Charleston, WV 25070
(304) 343.8621



Project Description:
This project developed an aging warehouse building into high-end lofts. The building provided parking on the first and basement levels and tenants had the option of a full floor or half floor design. Each unit contained at least one balcony. This building design won an Excellence in Construction award in 2004 from the ABC.

Cabwaylingo State Forest Dormitories

Project Location: South Charleston, WV

Construction Cost: \$1 million approx.

Firm's involvement:
Project Architects

Project Representative:
WV DNR - Parks And Recreation
Capitol Complex, Bldg 3, Rm 722
900 Kanawha Blvd. E
Charleston, WV 25305
(304) 558.2764



Project Description:
This project's design included two new dormitories on the existing campus. Both dormitories provided 25 beds for both men and women as well as four counselor beds and restroom facilities.



Associated Architects, Inc.

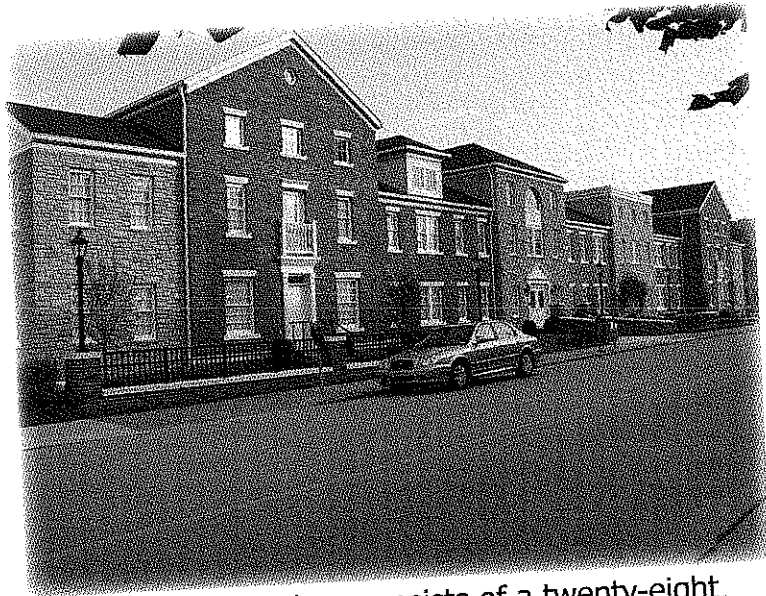
CMC Housing - Jefferson Place

Project Location: Charleston, WV

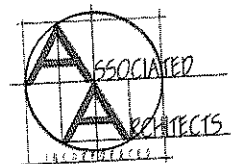
Construction Cost: \$4.2 million

Firm's involvement:
Project Architects -
Design/Build Contract

Project Representative:
CMC Housing Corporation
10 29th Street
Charleston, WV 25304
304.343.8621



Project Description:
Designed to house doctors in a local residency program, Jefferson Place consists of a twenty-eight thousand square foot apartment building, styled to mimic a dense Brownstone townhouse environment. The interior of the building consists of twenty-four apartments with a majority being two bedroom units, with the remaining few one and three bedroom units dispersed throughout the building.



South Charleston Community Recreational Center

Project Location: South Charleston, WV

Construction Cost: \$6 million approx.

Firm's involvement:
Project Architects

Project Representative:
City of South Charleston
101 D Street
South Charleston, WV 25303
304.744.5301



Project Description:
This community recreational center was the first fabric structure design in West Virginia. Under the two large domes, this building houses an indoor olympic swimming pool, performance gym, handball courts, workout rooms, and office facility.

Donnally Street Recreational Facility

Project Location: Charleston, WV

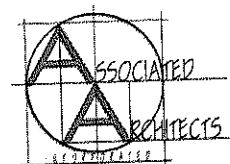
Construction Cost: \$1 million approx.

Firm's involvement:
Project Architects

Project Representative:
Private Owner



Project Description:
This one-story complex features an indoor gym with classrooms, an outdoor pool area and tennis court facilities.



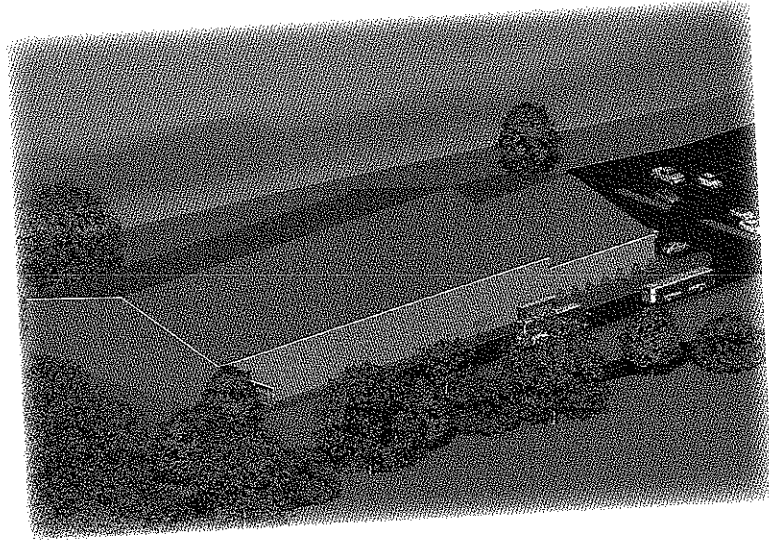
Chief Logan State Park and Conference Center Recreational Complex

Project Location: Logan, WV

Construction Cost: \$5 million approx.

Firm's involvement:
Project Architects

Project Representative:
WV DNR - Parks And Recreation
Capitol Complex, Bldg 3, Rm 722
900 Kanawha Blvd. E
Martinsburg, WV 25305
304.558.2764



Project Description:
This community recreational center houses three regulation size tennis courts, indoor walking track, exercise equipment room, and 25 meter 8-lane swimming pool. It is designed to add additional function to the current lodge and conference center located beyond the building, as well as provide local schools with facilities to host sporting events.

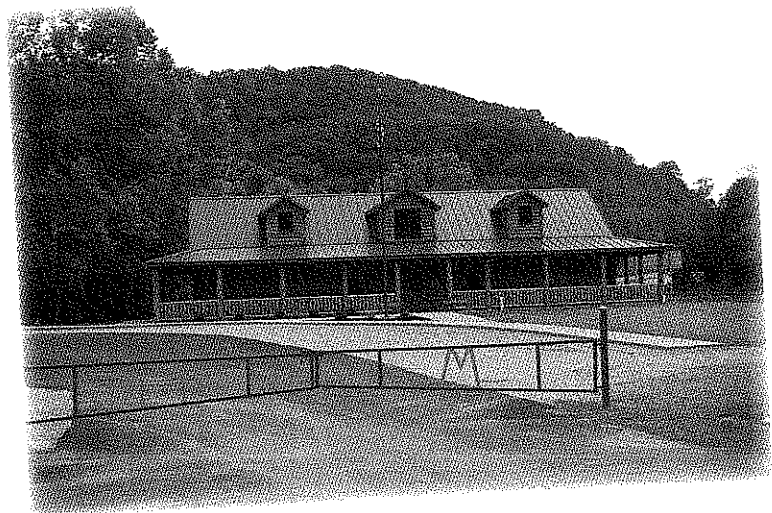
Hatfield - McCoy Trailhead Recreational Facility

Project Location: Boone County, WV

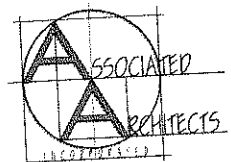
Construction Cost: \$1 million approx.

Firm's involvement:
Project Architects

Project Representative:
Private Owner



Project Description:
This building was designed to provide trail riders with a central location to purchase trail permits, restroom facilities and parking. This building is the showpiece for all south-bound trail riders.



University of Charleston - Middle Hall

Project Location: Charleston, WV

Construction Cost: \$8 million approx.

Firm's involvement:
Project Architects -
Design/Build Contract

Project Representative:
Debra Harless
University Of Charleston
P. - Administration & Finance
300 MacCorkle Ave. SE
Charleston, WV 25304
304.357.4736



Project Description:
This project's layout was designed to allow for the center core and one wing to be designed and built while waiting to attach the additional wing at a later date. As the college grew, the second wing was added only a year later with no disruptions to the current residents.

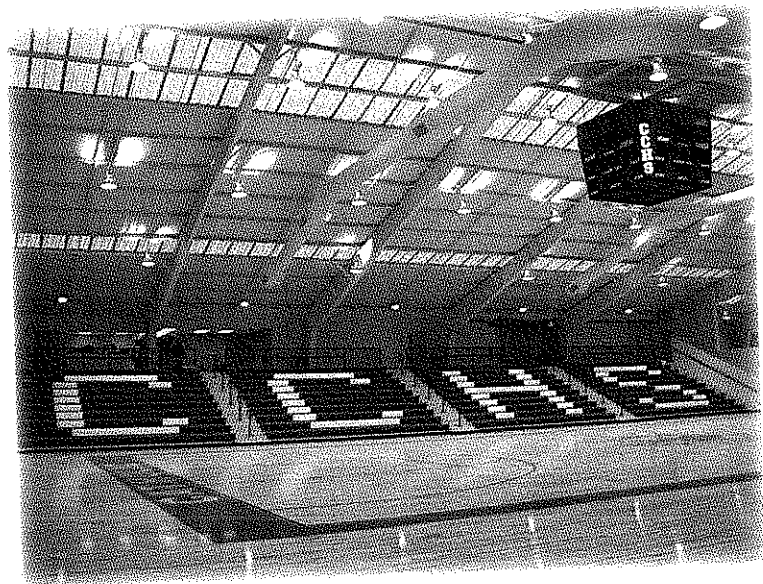
Charleston Catholic High School Gymnasium

Project Location: Charleston, WV

Construction Cost: \$2.0 million approx.

Firm's involvement:
Project Architects -
Design-Bid-Build Contract

Project Representative:
Debra Sullivan
Charleston Catholic High School
1033 Virginia Street, East
Charleston, WV 25301
304.342.9096



Project Description:
Completed in September 2004, the renovation/construction of the Charleston Catholic High School Gymnasium provided the school with a full size basketball court, two half size practice courts, five outdoor tennis courts, running track, weight room, locker facilities, office and meeting rooms, and concessions complete with a school store".



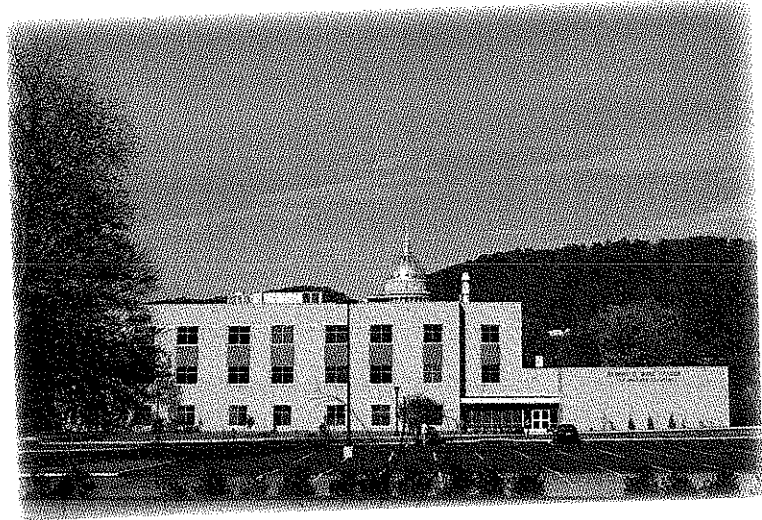
University of Charleston - Pharmacy School

Project Location: Charleston, WV

Construction Cost: \$4 million approx.

Firm's involvement:
Project Architects -
Design/Build Contract

Project Representative:
Beta Harless
University Of Charleston
P. - Administration & Finance
300 MacCorkle Ave. SE
Charleston, WV 25304
(304)357.4736



Project Description:
This facility was designed to house the newest addition to the University of Charleston, its Pharmacy School. This three story building is positioned to allow easy access for the main campus of the University of Charleston.

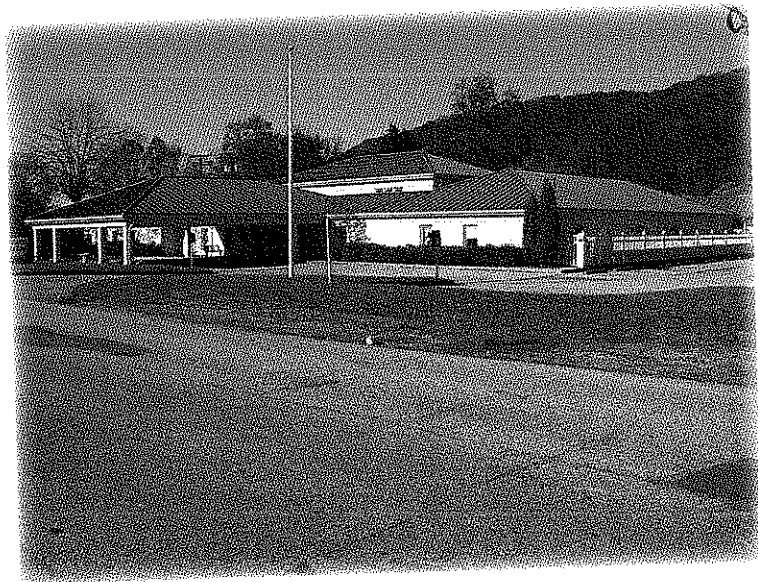
Lighthouse Daycare Facility - Charleston Area Medical Center

Project Location: Charleston, WV

Construction Cost: \$1.2 million approx.

Firm's involvement:
Project Architects -
Design-Bid-Build Contract

Project Representative:
Jim Lowe
Director - CAMC Property Management
410 Staunton Avenue
Charleston, WV 25304
(304)388.4930



Project Description:
This daycare facility was designed for CAMC to provide daycare services as a part of the extended services that CAMC provides to its employees.



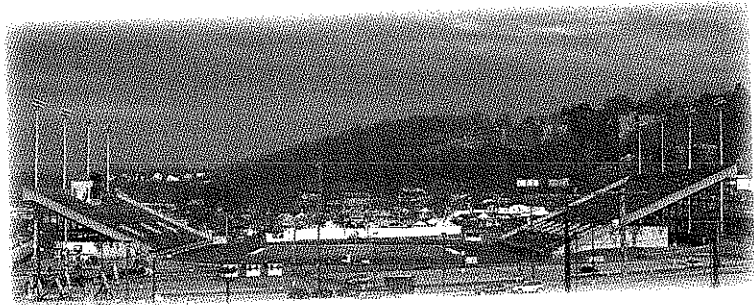
University of Charleston Stadium - Laidley Field

Project Location: Charleston, WV

Construction Cost: \$3 million approx.

Firm's involvement:
Project Architects -
Design/Build Contract

Project Representative:
Debra Harless
University Of Charleston
P. - Administration & Finance
300 MacCorkle Ave. SE
Charleston, WV 25304
304.357.4736



Project Description:
The stadium contains a regulation size football field and metric track. The bleachers provide seating for 19,000+ fans. Renovations in 2005 included new locker rooms and new enclosed guest box.

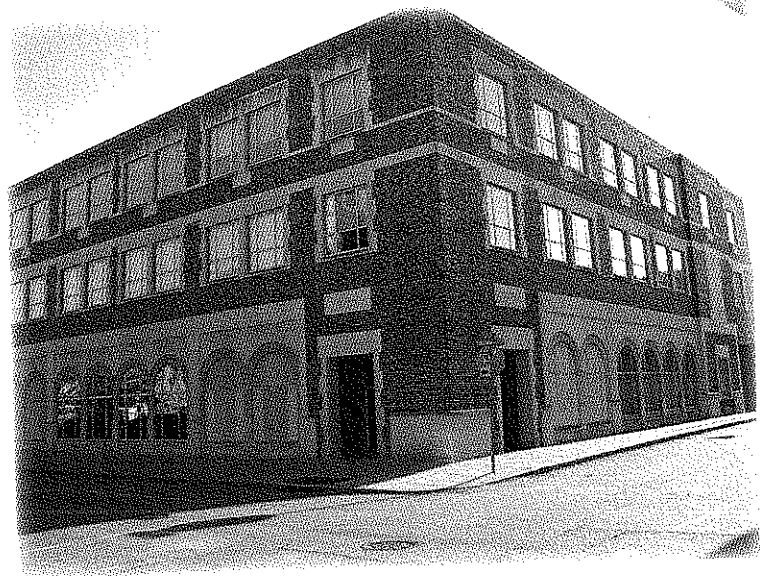
Charleston Catholic High School Science Addition

Project Location: Charleston, WV

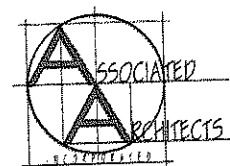
Construction Cost: \$3 million approx.

Firm's involvement:
Project Architects -
Design-Bid-Build Contract

Project Representative:
Debra Sullivan
Charleston Catholic High School
1033 Virginia Street, East
Charleston, WV 25301
304.342.9096



Project Description:
This 32,000 sq. ft. addition was designed to house the Science department as well as additional classrooms and gathering areas. This building was the winner of the AIA West Virginia Merit Award in 1995.



ociated Architects, Inc.

Forbes Center

Project Location: Northgate Business Park -
Charleston, WV

Construction Cost: \$4 million approx.

Firm's involvement:
Project Architects -
Design/Build Contract

Project Representative:
Kit Wellford
Forbes Group, LLC
100 Association Drive - Suite 200
Charleston, WV 25311
304.556.4800



Project Description:
Completed in 2003 at a finished 25,000 sq. ft., the two-story Forbes Center Building was designed to contain office spaces, a large conference room and lease space on the first floor. The design of this building provided an excellent focal point where the main entry and large conference rooms are located.

Ayash Professional Building

Project Location: St. Albans, WV

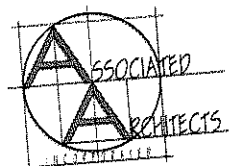
Construction Cost: \$3 million approx.

Firm's involvement:
Project Architects -
Design/Build Contract

Project Representative:
Patricia Ayash
Federal Coal Company
101 6th Avenue
St. Albans, WV 25177
304.722.9323



Project Description:
Completed in 1999 at a finished 13,996 sq. ft., the two-story Ayash Professional Building was designed to contain office spaces, an upscale restaurant and bar, and a large conference room. The design of this building is a blend of modern and classical architecture.



Associated Architects, Inc.

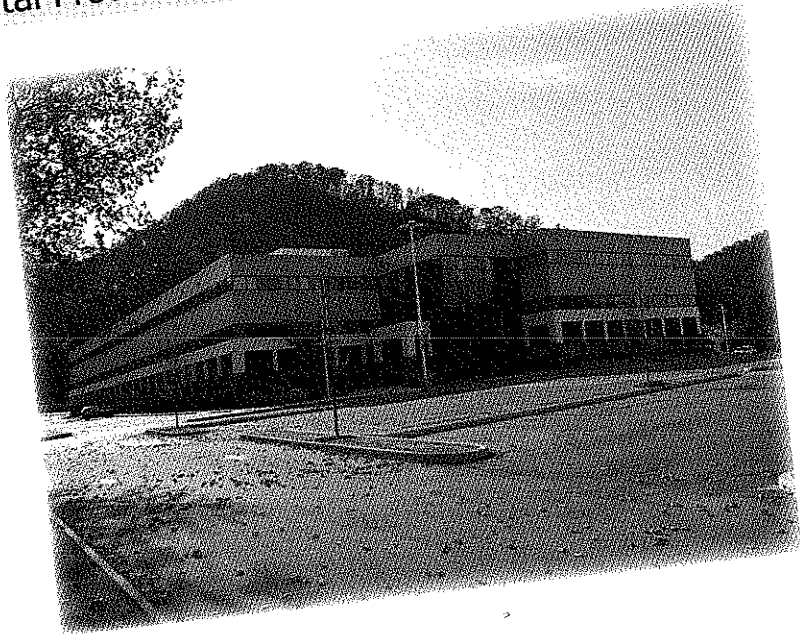
Department of Environmental Protection Agency Building

Project Location: Kanawha City -
Charleston, WV

Construction Cost: \$23 million approx.

Firm's involvement:
Project Architects -
Design/Build Contract

Project Representative:
J. F. Smith
Dept. of Environmental Protection
101 57th Street
Charleston, WV 25304
304.926.0499



Project Description:
Completed in 2004 at a finished 178,020 sq. ft., the three story Department of Environmental Protection Agency Building was designed to contain office spaces, large conference rooms and file storage areas. This building was the first LEED project for the State of West Virginia and received a silver certification.

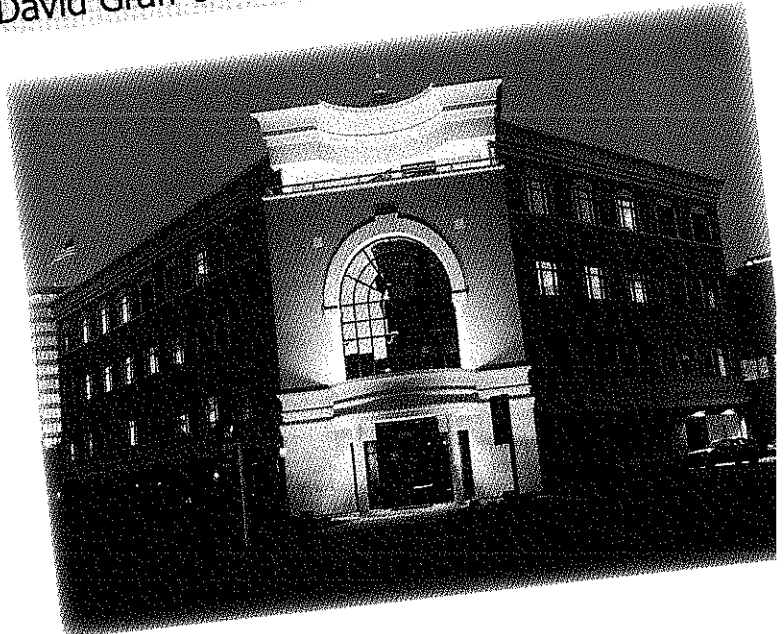
Bowles Rice McDavid Graff & Love

Project Location: Charleston, WV

Construction Cost: \$4 million approx.

Firm's involvement:
Project Architects -
Design/Build Contract

Project Representative:
Marc Monteleone
Bowles Rice McDavid Graff & Love
100 Quarrier Street
Charleston, WV 25325
304.347.1111



Project Description:
This 47,300 sq. ft. law office building was winner of the Best Development Project of the Year award for 1997. The dramatic corner entry element houses conference rooms and an outdoor patio and the lower level is reserved for employee parking.



Associated Architects, Inc.

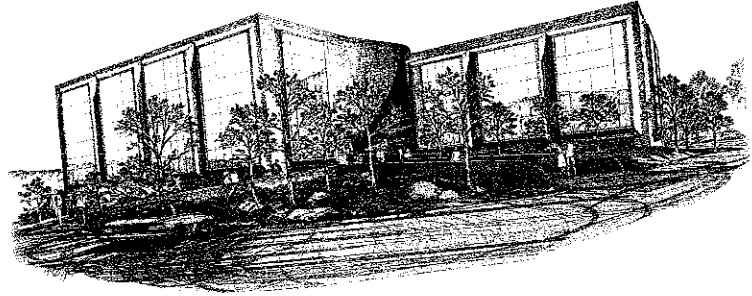
Hansford Properties

Project Location: Charleston, WV

Construction Cost: \$18 million approx.

Firm's involvement:
Project Architects -
Design-Bid-Build Contract

Project Representative:
Hansford Properties



Project Description:
This proposed 150,000 sq. ft. office complex was designed into pods to allow for simple division of offices and ease of future expansion. Each pod can become its own independent office with a shared central core.

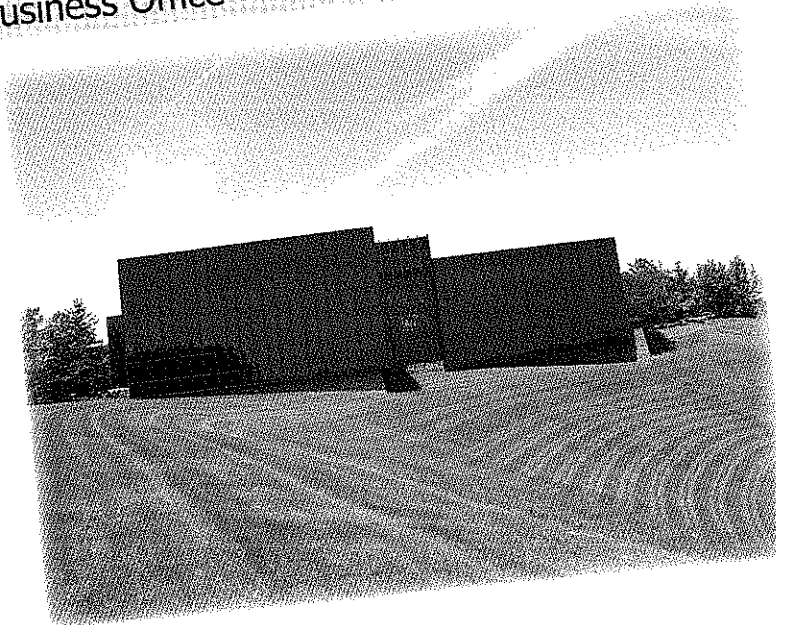
McJunkin Business Office

Project Location: Charleston, WV

Construction Cost: \$12 million approx.

Firm's involvement:
Project Architects -
Design-Bid-Build Contract

Project Representative:
McJunkin Corporation
Hansford Properties
Charleston, WV 25311



Project Description:
This 80,000 sq. ft. corporate office facility is nestled on property next to Hillcrest office park overlooking the downtown area of Charleston. The building offers workers in-house food service along with excellent picturesque views.



Associated Architects, Inc.

City Holding Company Building

Project Location: Cross Lanes, WV
Construction Cost: \$10 million approx.

Firm's involvement:
Project Architects -
Design/Build Contract

Project Representative:
City Holding Company
108 Goff Mountain Road
Cross Lanes, WV 25313
304.776.7900



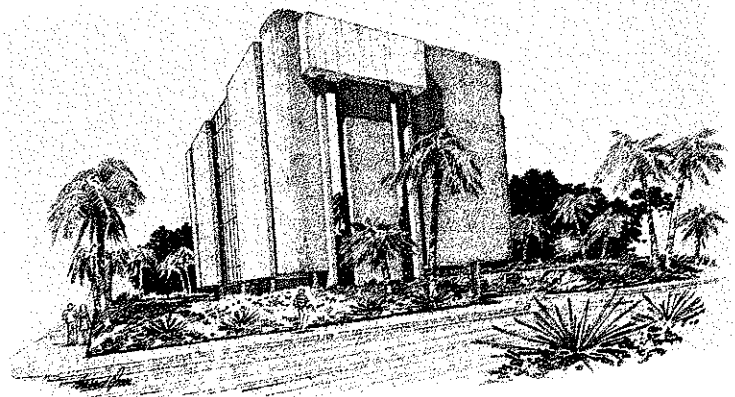
Project Description:
This 31,128 sq. ft. office building was designed as the corporate office for City Holding Company. The design included office spaces, conference rooms, workstations and file storage. The contemporary facade allows for an efficient interior layout.

Fountain Lake

Project Location: Sarasota, FL
Construction Cost: \$9 million approx.

Firm's involvement:
Project Architects -
Design-Bid-Build Contract

Project Representative:
Private Ownership



Project Description:
This proposed 80,000 sq. ft. office facility was designed to maximize a limited site. The building houses office spaces, conference rooms and storage space. The building is elevated to provide parking under the building footprint.



Associated Architects, Inc.

Wells Fargo Office Building

Project Location: Charleston, WV

Construction Cost: \$6 million approx.

Firm's involvement:
Project Architects -
Design-Bid-Build Contract

Project Representative:
Private Ownership



Project Description:
This office building was designed to maximize the views of the valley below and to allow for light to penetrate throughout the building. This building has multiple floors of offices, workstations and conference areas.

Woodrum's Properties

Project Location: Charleston, WV

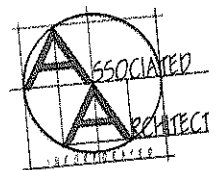
Construction Cost: \$7 million approx.

Firm's involvement:
Project Architects -
Design-Bid-Build Contract

Project Representative:
William E. Board
Board Woodrum Inc., LP
102 Virginia St. E - Suite 301
Charleston, WV 25301
304.344.1355



Project Description:
The historical renovation of this 110,000 sq. ft. office complex is located downtown Charleston. The interior houses multiple floors of office space and retail space located on the ground floor.



Associated Architects, Inc.

#2 Hillcrest Office Park

Project Location: Charleston, WV

Construction Cost: \$2 million approx.

Firm's involvement:
Project Architects -
Design-Bid-Build Contract

Project Representative:
Neil Angel
Industrial Leasing
11 Dee Drive
Charleston, WV 25311
304.345.3273



Project Description:
This 20,000 sq. ft. office complex is designed for multi-use tenants and includes an exterior pool. The complex consists of four buildings encompassing business, residential and recreational spaces.

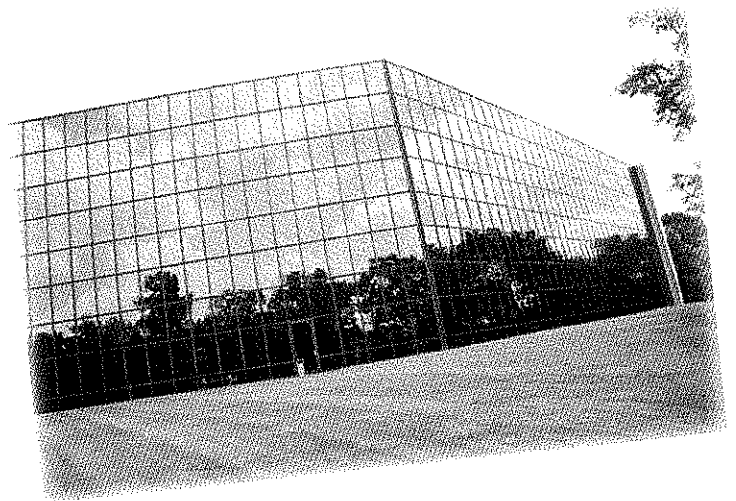
McDonough-Caperton Insurance (now Acordia) Building

Project Location: Charleston, WV

Construction Cost: \$4 million approx.

Firm's involvement:
Project Architects -
Design-Bid-Build Contract

Project Representative:
Private Owner



Project Description:
Finished at 45,000 sq. ft., the four-story Acordia Building was designed to contain office spaces, large work rooms and a large conference room. The design of this building provides an excellent view overlooking the Kanawha River and State Capital Complex.



Associated Architects, Inc.

CAMC Administration Building

Project Location: Northgate Business Park -
Charleston, WV

Construction Cost: \$10 million approx.

Firm's involvement:
Project Architects -
Design/Build Contract

Project Representative:
John Lowe
CAMC Property Management
110 Staunton Avenue
Charleston, WV 25304
304.388.4930



Project Description:
This 82,000 sq. ft. four-story office building was purchased to house CAMC Administration Offices. This building was originally constructed with below-grade fiber optics for the complex demands of today's computer networks.

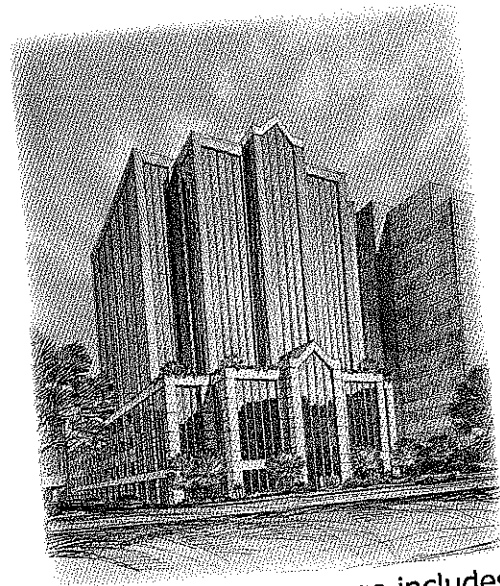
Cordis Center Office Complex

Project Location: Charleston, WV

Construction Cost: \$20 million approx.

Firm's involvement:
Project Architects

Project Representative:
Private Ownership



Project Description:
This proposed 100,000 sq. ft. high rise office building with attached parking garage includes office spaces, conference rooms and lobby space. Majestically rising vertical glass takes advantage of the riverfront view. The building design also allows for a large rooftop conference room and terraces with views of the river and downtown.



Associated Architects, Inc.

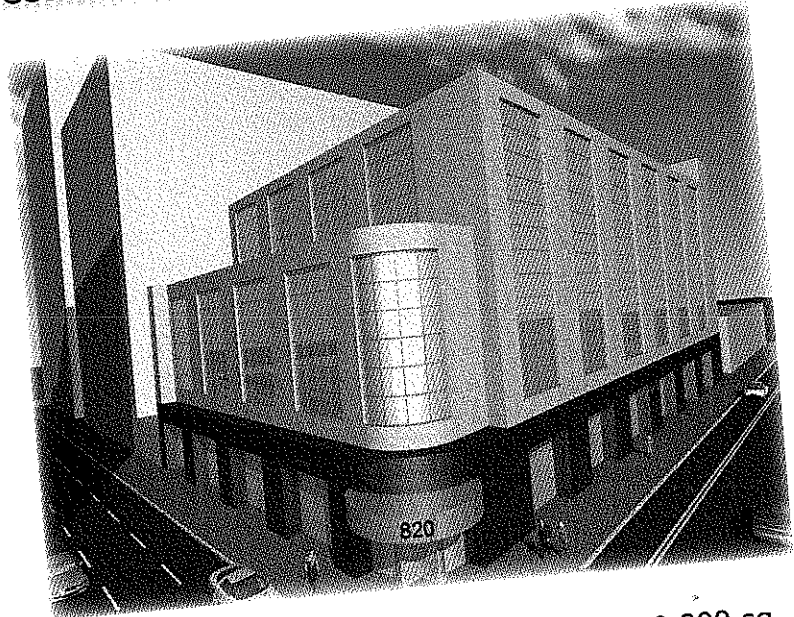
820 Lee Street Office Park

Project Location: Charleston, WV

Construction Cost: Under Review

Firm's involvement:
Project Architects -
Design/Build Contract

Project Representative:
Bill Ellis
100 Pinnacle Center, LLC
106 Kanawha Blvd. E. - Suite 108
Charleston, WV 25311
304.345.5000



Project Description:
Plans for renovation of this 130,000 sq. ft. art deco style former department store include 80,000 sq. ft. of office space plus eateries, a gourmet coffee shop, and an internet lounge. The first floor will maintain its grand look by preserving the existing opening to the mezzanine, which will have banquet halls, meeting and conference rooms.

BrickStreet Insurance Offices

Project Location: Charleston, WV

Construction Cost: \$10 million

Firm's involvement:
Project Architects -
Design/Build Contract

Project Representative:
Bill Brotherton
BrickStreet Insurance
100 Quarrier Street
Charleston, WV 25301
304.941.1000



Project Description:
This was an adaptive re-use of an existing 112,500 sq. ft. "big box" retail shell into a light-filled office building with simple detailing that is clear, elegant, and expressive of the existing structure. The space provides 400 workers a new open plan office with the added benefit of a centralized location in the Charleston area. An effort was made to bring perimeter daylighting deep into the interior workstations and offices. This building is the winner of a Merit Award from AIA West Virginia in 2008.



Associated Architects, Inc.

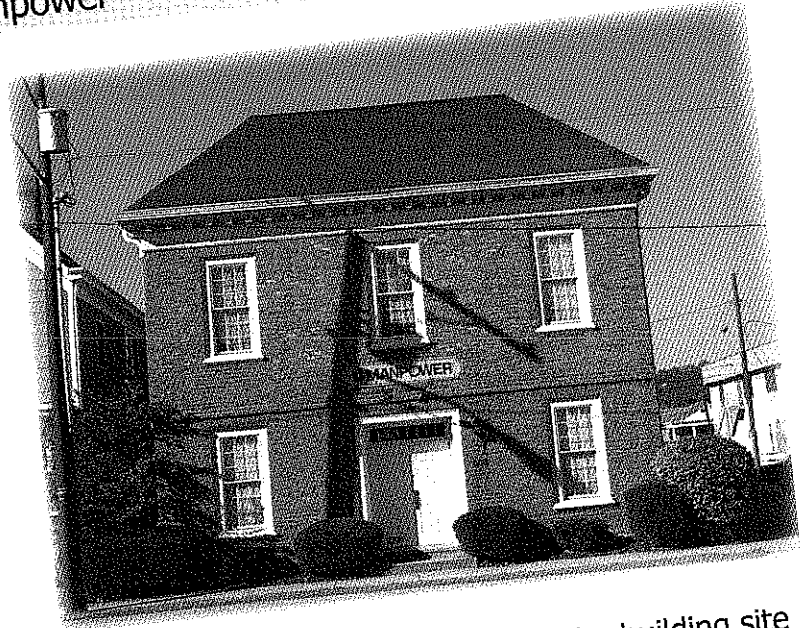
Manpower

Project Location: Charleston, WV

Construction Cost: \$1 million approx.

Firm's involvement:
Project Architects

Project Representative:
Jane Strong-Treister
Manpower Temporary Services
13 Pennsylvania Ave
Charleston, WV 25302
304.346.9617



Project Description:
This two-story building design was inspired by the Williamsburg architectural style. The building site was limited on street frontage, so the building was elongated to accommodate the space requirements needed.

Allstate Insurance Office Buildings

Project Location: Multiple Locations

Construction Cost: Multiple Buildings

Firm's involvement:
Project Architects

Project Representative:
Thomas M. Logan
Hesterbrook Corporate Center
Suite 200 701 Lee Road
Wayne, PA 19087
215.648.8870



Project Description:
Our firm provided design services to Allstate Insurance Company for three of their branch offices. Each office building contained 15,000 sq. ft. of office space, as well as an inspection garage for claims. These offices are located in Cross Lanes and Bridgeport, WV and Pittsburgh, PA.



Associated Architects, Inc.

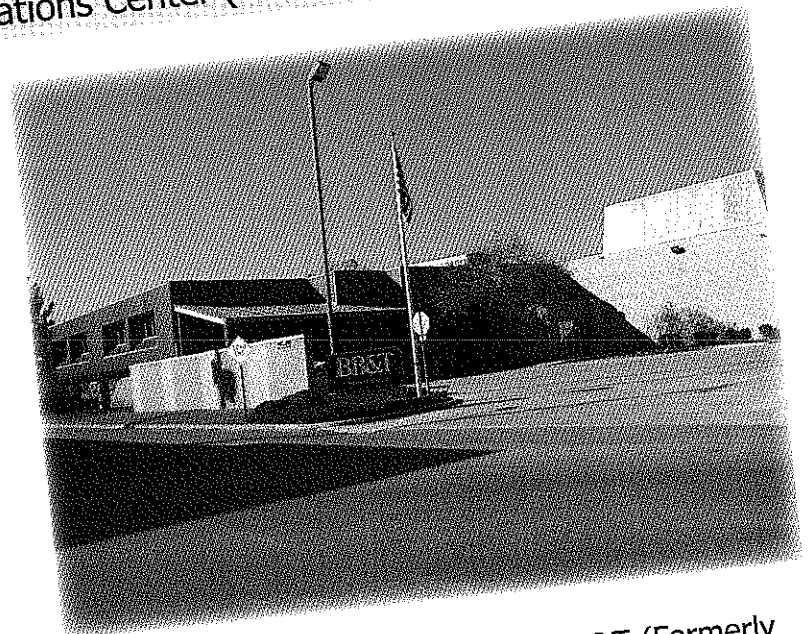
Atlantic Financial Operations Center (Now BB&T)

Project Location: Charleston, WV

Construction Cost: \$3 million approx.

Firm's involvement:
Project Architects

Project Representative:
Private Owner



Project Description:
This two-story building design contains 100,000 sq. ft. of office and work space for BB&T (Formerly Atlantic Financial).

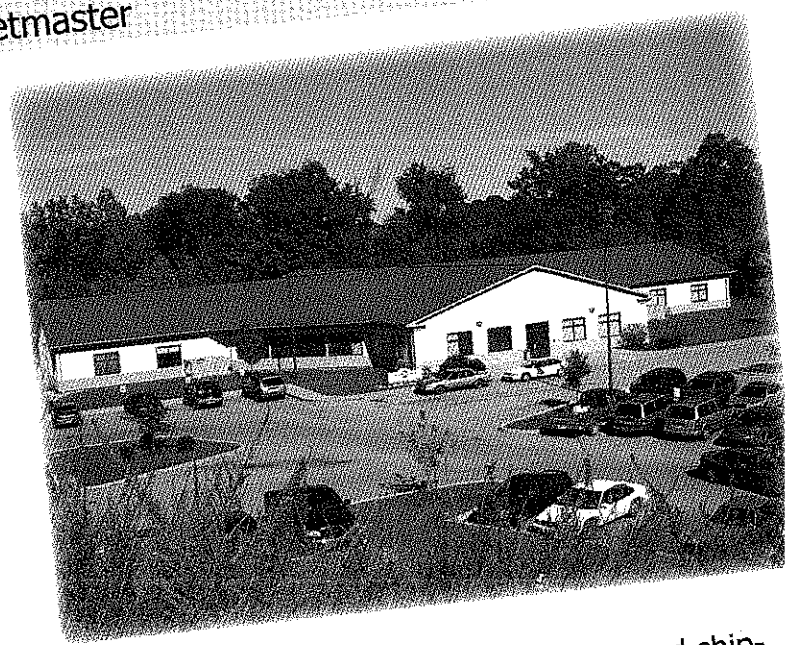
Ticketmaster

Project Location: Charleston, WV

Construction Cost: \$1.2 million approx.

Firm's involvement:
Project Architects

Project Representative:
Eric Showalter
Contact Center Director
1000 Corporate Landing
Charleston, WV 25311
304.357.6100



Project Description:
Ticketmaster's building, located in Northgate Business Park, houses both their call center and shipping department as well as the operations center and offices.



Associated Architects, Inc.

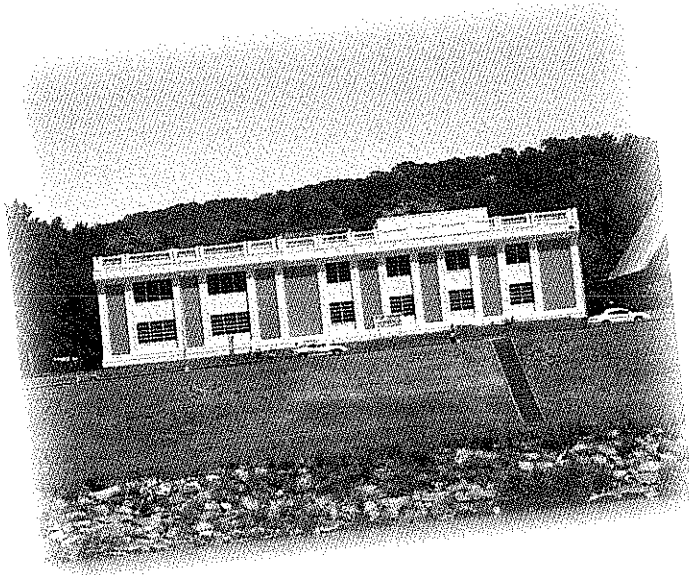
Legal Numbers

Project Location: Charleston, WV

Construction Cost: \$2.3 million approx.

Firm's involvement:
Project Architects

Project Representative:
Virginia Slicer
Legal Numbers, LLC
P.O. Box 3953
Charleston, WV 25339
304.345.1400



Project Description:
This 36,000 sq. ft. two-story office building was renovated to provide space for the law offices of Shuman, McCuskey and Slicer and for the accounting firm of Suttle and Stalnaker.

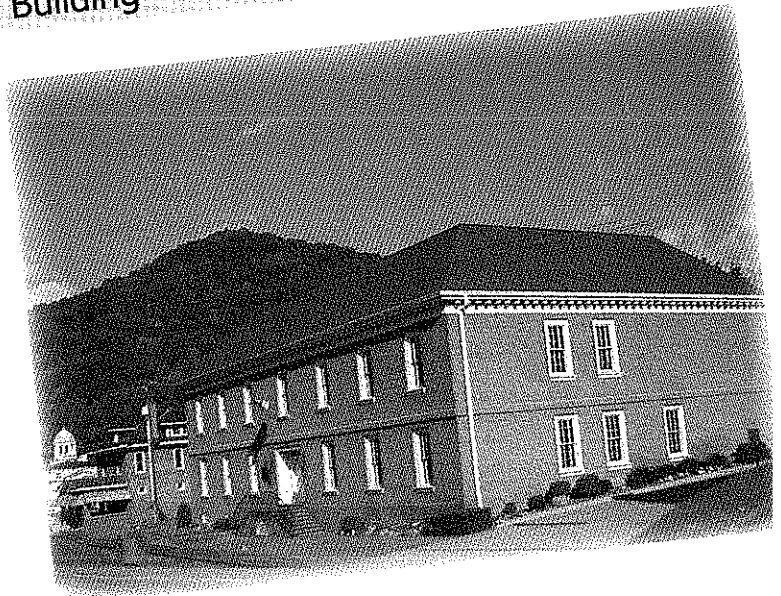
Lawoff Building

Project Location: Madison, WV

Construction Cost: \$1.8 million approx.

Firm's involvement:
Project Architects

Project Representative:
Private Owner



Project Description:
This four-story building design was inspired by the Williamsburg architectural style. The building contains 40,000 sq. ft. of office and storage space.



Associated Architects, Inc.

Arnett and Foster

Project Location: Charleston, WV

Construction Cost: \$1.8 million approx.

Firm's involvement:
Project Architects

Project Representative:
John Kee
Arnett and Foster, PLLC
P.O. Box 2629
Charleston, WV 25329
304.346.0441



Project Description:
This 40,000 sq. ft. three-story office building was designed for the accounting firm Arnett and Foster and serves as their home office. The building design includes storage spaces, offices, conference rooms and a break room.

West Virginia American Water Company

Project Location: Charleston, WV

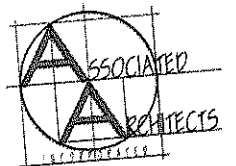
Construction Cost: \$4.5 million approx.

Firm's involvement:
Project Architects

Project Representative:
David Shultz
P.O. of Operations
P.O. Box 1906
Charleston, WV 25327
304.340.2051



Project Description:
This new office building was designed to serve as the corporate headquarters for the West Virginia American Water Company. Among many features of the building, the front entry offers a full glass two-story atrium space.



Associated Architects, Inc.

Department of Health and Human Resources - Williamson Office

Project Location: Williamson, WV

Construction Cost: \$2.2 million approx.

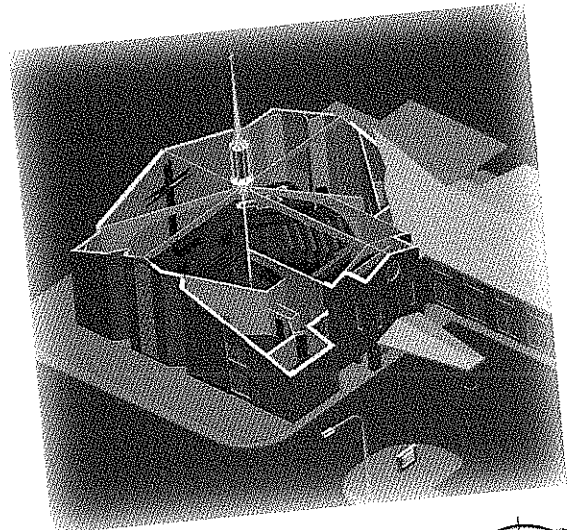
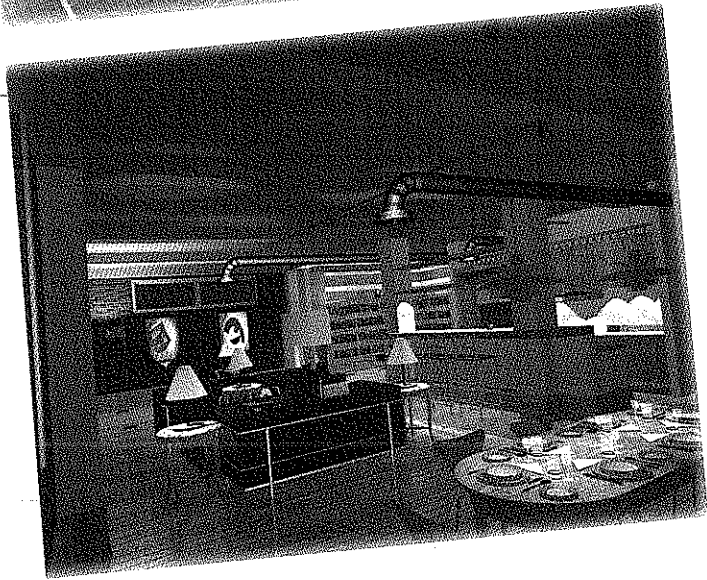
Client's involvement:
Project Architects

Project Representative:
City of Williamson
Garrin McCormick
17 E 4th Ave.
Williamson, WV 25661
304.235.1510



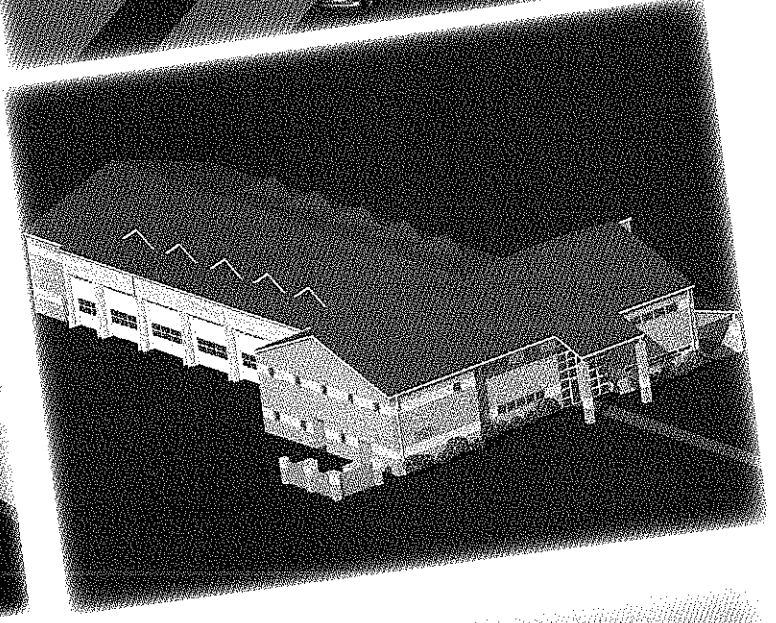
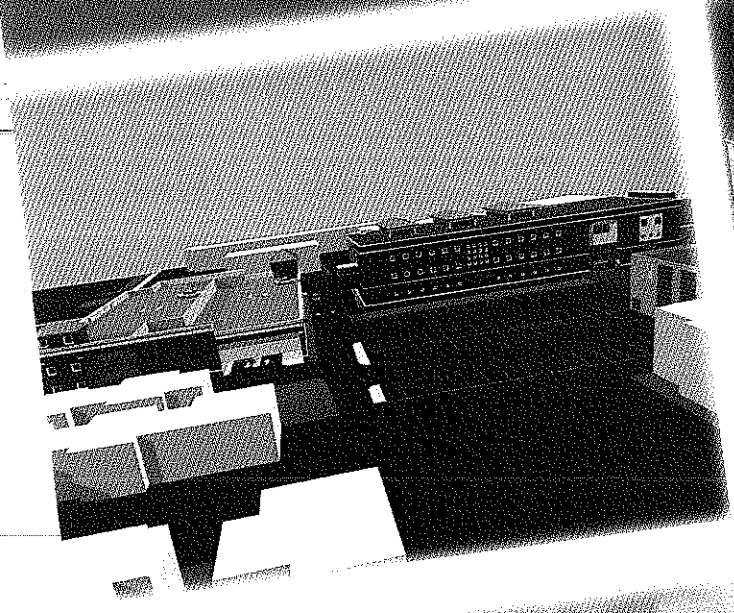
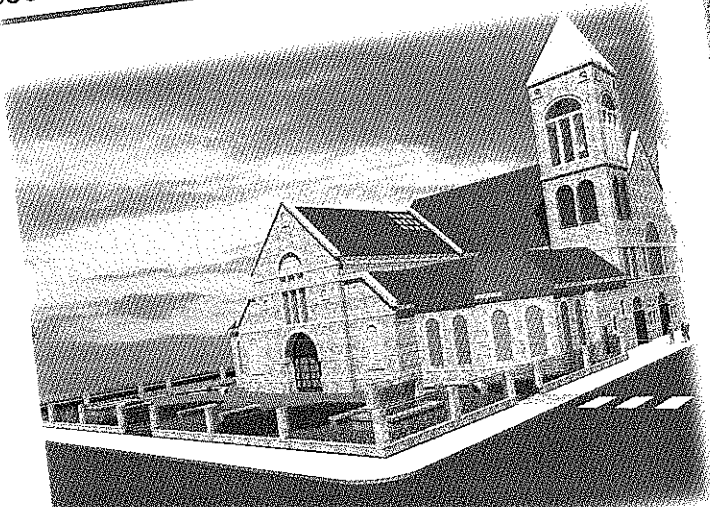
Project Description:
This one-story office building was constructed for the City of Williamson to blend with their existing campus. It was leased to WV Department of Health and Human Resources as a field office for Mingo County.





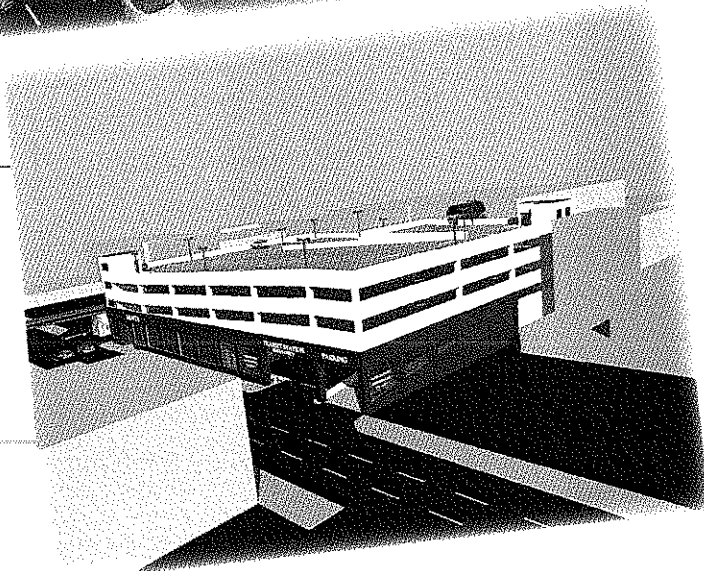
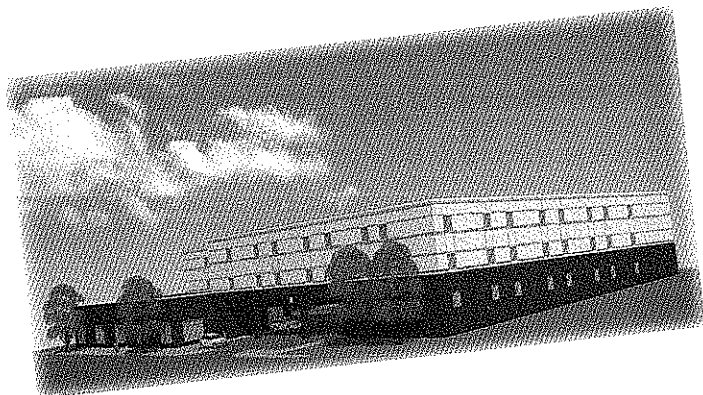
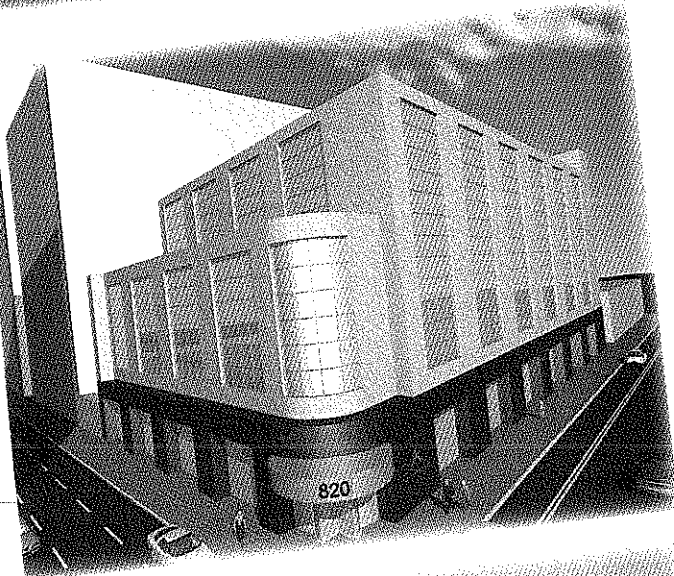
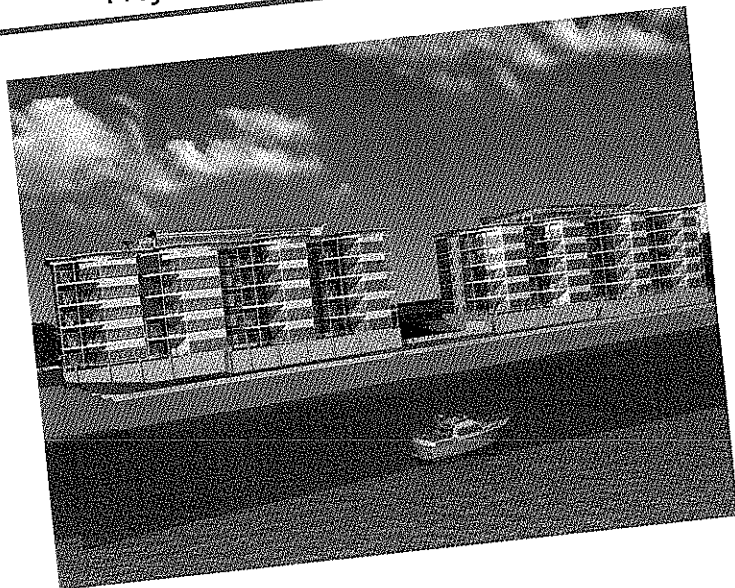
Project Profiles - 3-Dimensional Modeling

sociated Architects, Inc.



Project Profiles - 3-Dimensional Modeling

Associated Architects, Inc.



ociated Architects, Inc.

Company References

BBL-Carlton, LLC
900 Lee Street, Suite 1400
Charleston, WV 25301
Mr. Keith McClanahan
304.345.1300

Margaret Workman
1596 Kanawha Blvd. East
Charleston, WV 25301
304.343.9675

Ferro Products
P.O. Box 753
Charleston, WV 25323
Mr. Will Moore
304.342.8111

E. L. Robinson Engineering
5088 Washington St., West
Cross Lanes, WV 25313
Mr. Ed Robinson
304.776.7473

Wiseman Construction Company
1616 6th Avenue
Charleston, WV 25312
Mr. John Wiseman
304.344.1200

Thomas Maroney
603 Virginia Street, E.
Charleston, WV 25301
304.346.9629

Bill J Crouch & Associates, Inc.
Health Care Consulting Services
210 MacCorkle Ave., SE
Charleston, WV 25314
304.343.2462

Karen H. Miller - Attorney at Law
2 Hale Street
Charleston, WV 25302
304.343.7910

Davis & Davis Accounting Services
602 Tennessee Avenue
Charleston, WV 25302
Mr. George Davis
304.343.4656

Better Foods/Tudors
209 First Avenue South
Nitro, WV 25143
Mr. Oshel Craigo
304.722.2955

Law Office of James T. Cooper
108 Hills Plaza
Charleston, WV 25312
Mr. Jim Cooper
304.344.3542

Goldman Associates
1014 Bridge Road
Charleston, WV 24314
Mr. Jay Goldman
304.343.5695

Pack Hawley Lambert & Burdette PLLC
332 6th Ave. - 2nd Floor
P.O. Box 18387
South Charleston, WV 25303
Mr. Larry Pack
304.343.1949

Glenville State College
200 High Street
Glenville, WV 26351
Dr. Peter Barr
304.462.6100

Simpson Properties, Inc.
239 Main Street - 5th Floor
Johnstown, PA 15901
Donald (Don) S. Simpson
814.539.8900



Associated Architects, Inc.

Company References

Petroplus & Associates
150 Clay Street
Suite 200
Morgantown, WV 25601
Mr. Parry Petroplus
304.284.5000

John F. McGee
812 Bank One Center
Charleston, WV 25301
304.343.8339

Daymark, Incorporated
1598C Washington Street, East
Charleston, WV 25311
Mr. Dennis Pease
304.340.3675

Asthma & Allergy Center
208 MacCorkle Avenue, S.E.
Charleston, WV 25314
Dr. Kumar
304.346.7900

The Mallory Group.
1400 A Ohio Ave.
P.O. Box 970
Dunbar, WV 25064
Mr. Steve Mallory
304.768.2478

Kimberly Industries
1 Wellford Way
Charleston, WV 25311
Mr. John Wellford
304.346.3775

Charleston Area Medical Center
3410 Staunton Ave.
Charleston, WV 25304
Mr. Jim Lowe
304.388.4930

Wells Home Furnishings
101 Bowers Road
Charleston, WV 25314
Mr. John M. Wells, III
304.343.3600

RC General Contractors, Inc.
318 Lee Street West
Suite 101
Charleston, WV 25302
Thomas H. Reece
304.346.7307

Morrison Building
Quarrier Street
Charleston, WV 25301
Mr. Brawley Tracy
344.344.2403

John Cavendish
Realcorp, Inc.
P.O. Box 2
Charleston, WV 25321
304.925.700

WV Division of Natural Resources
State Capitol Complex
Bldg 3 Room 719
Charleston, WV 25305
Bradley S. Leslie, P.E.
304.558.2775

Charleston Newspapers
1001 Virginia St. E
Charleston, WV 25301
Mrs. Betty Chilton
304.348.5125

Animal Care Associates, Inc.
840 Oakwood Road
Charleston, WV 25314
Paul G. Gunnoe, DVM
304.344.2244

Dr. Charles Rhodes, DDS
871 Oakwood Road
Charleston, WV 25314
304.344.4430



Atlanta Real Estate Specialists
6600 Sugarloaf Parkway
Suite 600
Duluth, GA 30097
Mike Runyan, CCIM
678.472.1321

130th Civil Engineer Squadron
1679 Coonskin Drive
Charleston, WV 25311
Cpt. Rick Thomas Deputy Base Civil Eng.
304.341.6649

St. Albans Metal Works
Rock Branch Industrial Park
Nitro, WV 25143
Mr. Jim Clark
304.755.9101

Abundant Life Ministries
P.O. Box 11040
Charleston, WV 25339
Pastor Wayne Crozier
304.342.0058

Agsten Construction Company
110 Wyoming Street
Charleston, WV 25302
Carl Agsten
304.343.5400

Lewis, Friedburg, Glasser, Casey & Rollins
One Valley Square, Suite 700
P.O. Box 1746
Charleston, WV 25326
Nicholas Casey
304.345.2000

O.V. Smith and Sons
P.O. Box 12150
Big Chimney Station
Charleston, WV 25302
George Smith
304.965.3481

WV DHHR
350 Capitol Street
Diamond Building
Charleston, WV 25301
Greg Nicholson
304.558.0234

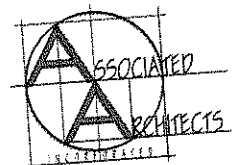
Kanawha County Commission
407 Virginia Street, East
3rd Floor
Charleston, WV 25301
Brent Pauley, County Manager
304.357.0100

University of Charleston
2300 MacCorkle Ave. SE
Charleston, WV 25304
Cleta Harless
304.357.4736

Pison Development
2014 Quarrier Street
Charleston, WV 25311
Bill Turner
304.342.2766

Advanced Professional Hearing Aid Services
318 Lee Street, West
Suite 201
Charleston, WV 25302
Sheri L. Jeffries M.S., CCC-A
304.345.7102

Jamon Global
2106 Kanawha Blvd. East
Charleston, WV 25325
William (Bill) T. Ellis
304.550.1000



3

POTESTA

7012 MacCorkle Avenue, SE
Charleston, WV 25304
p.304.342.1400
f.3404.343.9031

POTESTA & ASSOCIATES, INC.

Civil Engineering and Design

Potesta & Associates, Inc. (POTESTA) helps clients evaluate and plan projects by completing the following types of preliminary investigations and analyses.

- Phase I environmental site assessments
- Floodplain determination
- Geotechnical explorations including soil, bedrock, and groundwater characterization
- Foundation recommendations
- Monitoring well systems and site characterization plans
- Boundary, topographical and photogrammetric surveys
- Utility planning
- Earthwork evaluations including volume analysis
- Opinion of probable costs/engineer's construction cost estimates

Once the project has been determined feasible, POTESTA's design professionals complete preliminary and final designs. Frequent communication is made with the client and any other design professionals to review completed activities and obtain input for the design process. Our goal is to provide our services to achieve or exceed our clients' expectations.

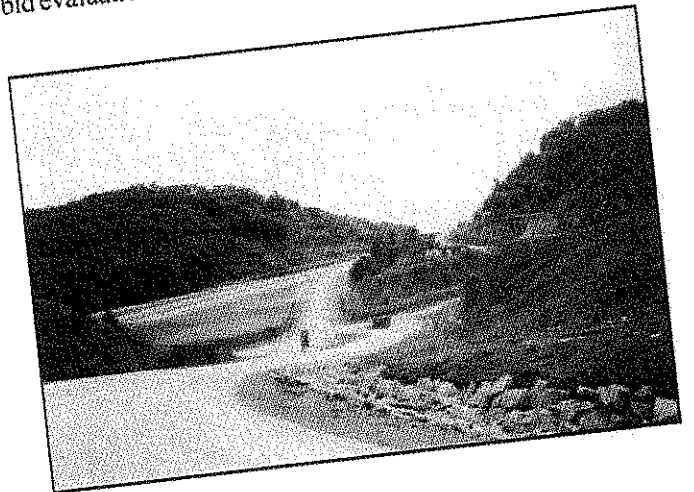
Our design services include:

- Erosion and sediment control plans
- Earth retaining structures design
- Geometric site layout
- Grading and drainage plans, including excavation and fill optimization
- Access road design
- Hydraulic structure design
- Water and sewer design
- Slope stability analysis
- Subsurface drainage system design
- Construction drawings, specifications and contract document preparation

POTESTA offers experienced environmental engineers and scientists to prepare applications for various environmental permits that may be required. These services include:

- Stormwater management permit/erosion and sediment control plans
- Office of Air Quality Permit to Construct
- Wetland delineation and permits
- National Pollutant Discharge Elimination System (NPDES) permits
- Floodplain management permits
- Groundwater protection plans
- Spill prevention control and countermeasure plans
- Environmental site assessments
- Environmental impact statements

POTESTA routinely provides professional services throughout construction of our projects. These services include survey layout, construction management, construction monitoring, record drawing preparation, and bid evaluation assistance.



POTESTA & ASSOCIATES, INC.

7012 MacCorlde Avenue, S.E. • Charleston, West Virginia 25304

Phone: (304) 342-1400 Fax: (304) 343-9031 • www.potesta.com

Regional Offices: Morgantown, West Virginia and Winchester, Virginia

POTESTA & ASSOCIATES, INC.

Construction Monitoring

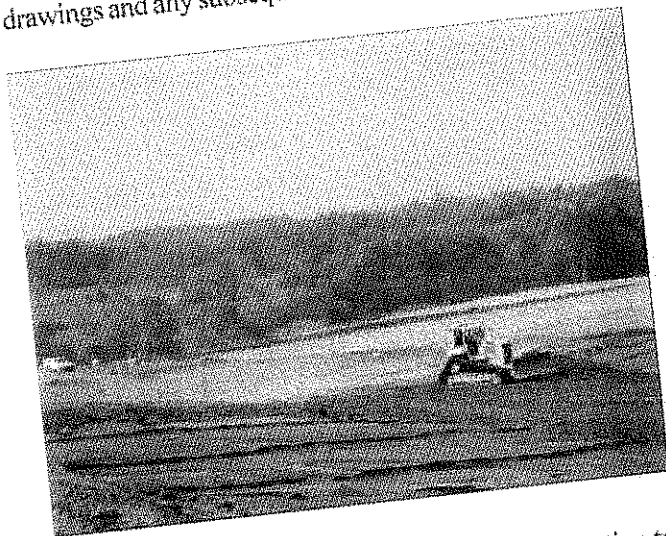
Potesta & Associates, Inc. (POTESTA) provides construction monitoring and construction management services to assist clients in achieving regulatory and contractual compliance; to document that contractor activities are in compliance with design requirements; and to serve as an extension of clients' staff. POTESTA can provide full-time or part-time field services utilizing one or more engineers or technicians.

Regulatory compliance is often best documented by providing full-time construction monitoring services for a construction project. POTESTA can assist clients in observation of construction activities and documenting compliance. Our typical involvement in such projects includes:

- Conducting a pre-construction review of design and contract documents to identify potential problem areas, and consultation with the owner or client to develop strategies or procedures to avoid anticipated problems.

- Assistance in contractor selection. POTESTA can recommend construction contractors who specialize in the type of work associated with the project and can assist in bid evaluation by reviewing proposed quantities, unit costs, lump sum costs, and any proposed exceptions or qualifiers for the project. POTESTA can conduct pre-bid conferences to help contractors understand project requirements. We can also conduct pre-construction conferences prior to the start of the project to help establish lines of communication, review detailed plans, discuss testing requirements and establish proper reporting procedures.

- POTESTA can provide surveying for construction layout, measurement for payment quantities, and documentation of as-built conditions. Survey results are downloaded to form computer-aided drafting (CAD) drawings allowing the efficient preparation of record drawings and any subsequent evaluations required.



- Construction monitoring can include field testing to document compliance such as field density tests, concrete testing, sampling of materials for laboratory analysis, and documentation of site conditions and work performed on a daily basis or as required.

- Preparation of summary of construction reports including photographs, videotape documentation, test results, daily construction logs, industrial hygiene monitoring, and other documentation as may be required by the client.

- Preparation of certifications as may be required.



POTESTA & ASSOCIATES, INC.

7012 MacCorkle Avenue, S.E. • Charleston, West Virginia 25304
Phone: (304) 342-1400 Fax: (304) 343-9031 • www.potesta.com

Regional Offices: Morgantown, West Virginia and Winchester, Virginia

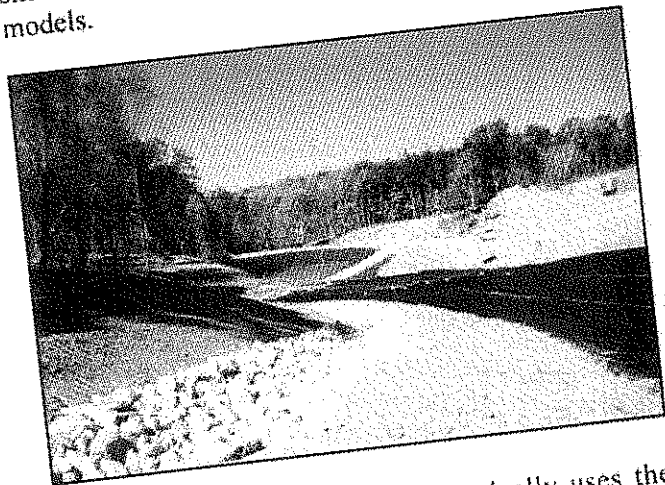
POTESTA & ASSOCIATES, INC.

Hydrology and Hydraulics Design

Our engineers have extensive experience in the application of hydrology and hydraulic principles to the design of real world systems. These applications include:

- Drainage structure sizing
 - Stream relocations
 - Culverts
 - Channels
- Pond and dam design
 - Sediment ponds and basins
 - Spillways
 - Design/rehabilitation
 - Slurry impoundments
 - Lagoons
 - Dams
- Detention and detention systems
 - Ponds
 - Pipes
 - Underground bladders
- Floodplain Management Permits/Approval
- Floodway studies
 - FEMA (Federal Emergency Management Agency)
 - NFIP (National Flood Insurance Program)
 - Flood elevation surveys/certifications
 - Flood routing
- Dam break analysis
- Hydrology surveys
- Stream gauging
- Rainfall and flow data collection
- Stormwater drainage system design
- Pressure pipe systems
- Stream restoration plans
- Natural Stream Channel Design/Restoration
- Expert witness testimony

To complete these types of applications, our engineers, scientists, and surveyors work jointly to develop an effective and economical solution to your situation. Their analyses use widely accepted computer models.



Potesta & Associates, Inc. typically uses the following computer modeling programs:

- HEC RAS
- HEC HMS
- TR-20/TR-55
- StormCAD
- Culvert Master
- Flow Master
- Pond-Pac
- CORMIX

We have provided these services to a wide variety of public and private sector clients. Our staff not only understands the technical details, but is very experienced in working with the various state, federal, and local regulatory agencies. We know the level of detail they require and can obtain the necessary approvals in a timely manner.



POTESTA & ASSOCIATES, INC.

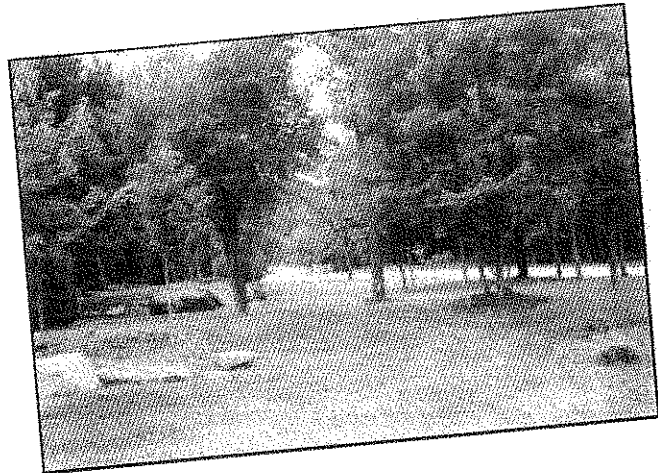
7012 MacCorkle Avenue, S.E. • Charleston, West Virginia 25304
Phone: (304) 342-1400 Fax: (304) 343-9031 • www.potesta.com

Regional Offices: Morgantown, West Virginia and Winchester, Virginia

POTESTA & ASSOCIATES, INC.

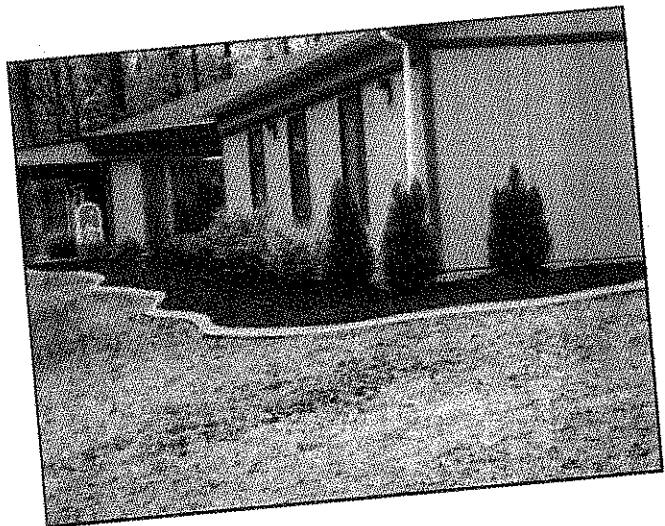
Landscape Architecture

With our project experience, we can meet our clients' needs from conceptual planning through construction document preparation, bidding and construction monitoring.



Potesta & Associates, Inc. has a landscape architect on staff and can provide landscape architectural services with our site/civil engineering and environmental science capabilities. Our staff members have a strong background in land use planning, community planning and urban design, and park and recreation planning and design. Project types include:

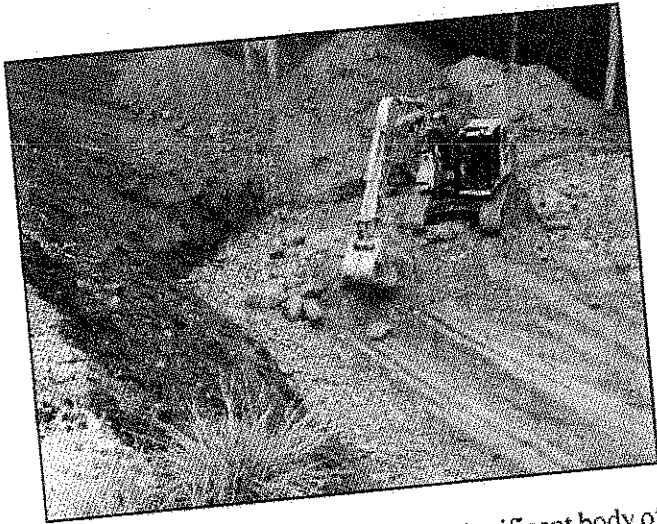
- Park master planning
- Park facilities design
- Land use analysis and development planning
- Environmentally sensitive site design issues
- Campus planning and design
- Streetscape design
- Community revitalization planning/design
- Gateway design
- Greenway and trail development
- Visual resource analysis



POTESTA

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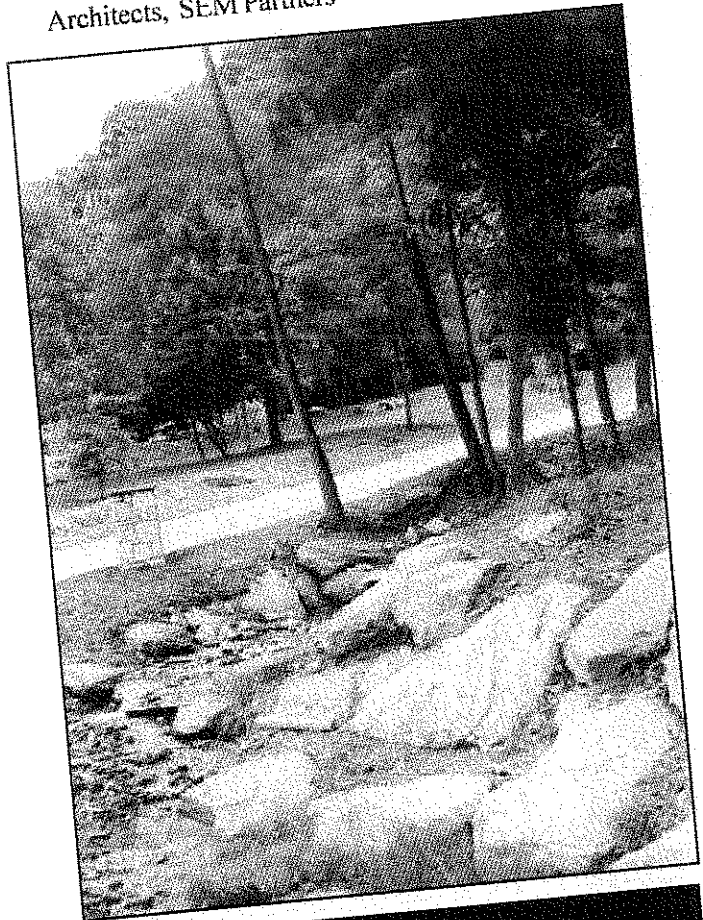
Some clients who have used our site design services include:

- West Virginia Development Office
- Development Authorities: Tucker, Wood and Roane Counties
- Bright Enterprises
- BIDCO (Capital Area Development Corporation)
- University of Charleston
- Timberwolf Development Corporation
- West Virginia Department of Environmental Protection
- West Virginia Division of Natural Resources
- Marshall University
- Architects: Associated Architects, Bastian & Harris, Architects, SEM Partners

Potesta & Associates, Inc. has a significant body of work in site design for residential, commercial and industrial clients. Projects range from power plant siting to subdivision design. We have assisted numerous developers and development agencies with the creation of business industrial parks throughout West Virginia, and have been part of design teams for elementary, secondary and collegiate projects primarily associated with new building construction.

Our staff of civil, environmental, and geotechnical engineers; surveyors and environmental scientists can provide the following site planning and design services.

- Surveying - topo and boundary
- Base mapping from aerial photography
- Geotechnical engineering
- Land planning
- Environmental issues evaluation and mitigation
- Site grading
- Vehicular and pedestrian circulation
- Utility design
- Site features
- Stormwater management plans



POTESTA & ASSOCIATES, INC.

Surveying and Mapping

Our surveyors are experienced in many aspects of surveying such as topographic mapping, boundary surveys (rural/farms, city lots, and subdivisions) and ALTA surveys, control surveys, flood certificate surveys, well location surveys, and construction surveys for layout of work, record drawings, and quantity measurements. Related areas include courthouse research, preparation of right-of-way plans, and verification of property owners. Potesta & Associates, Inc. (POTESTA) has licensed professional surveyors registered in West Virginia, North Carolina, South Carolina, Ohio, Virginia, and Pennsylvania. Their total combined surveying experience comes to well over 50 years.

POTESTA's surveyors use state-of-the-art equipment such as Topcon total stations, Trimble R-8 GNSS, and SMI Version 8 data collectors with SMI software. Reduction and design software used includes AutoCAD, Softdesk Civil/Survey design, Autodesk Land Design, Microstation, and InRoads design software.

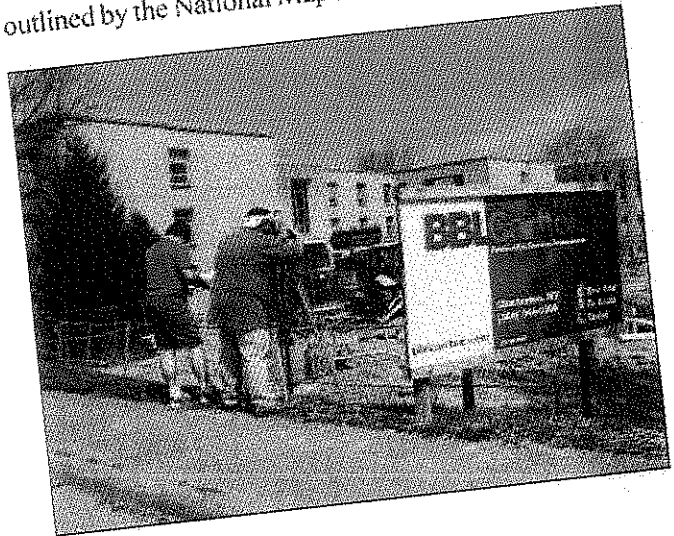
POTESTA is equipped with modern surveying instruments, allowing efficient data processing and accurate gathering of field information. Total station instruments equipped with data collectors are utilized for complete field-to-office automation allowing for high levels of productivity in the field. The latest versions of software are then used to process survey data and create drawings or required end products. These products can be supplied to our clients in AutoCAD and/or Microstation format.

Small topographic mapping projects can be completed in-house using the aforementioned process. Larger projects are better suited for mapping using aerial

photography.

POTESTA can provide the necessary surveying required for establishing ground control for aerial mapping. As a quality control measure, aerial mapping is field checked for accuracy by surveying cross sections or random points.

Surveys completed by POTESTA are performed by or under the direction of a professional licensed surveyor. Surveys and mapping are completed to the standards outlined by the National Map Standards as well as other



applicable quality standards.

Our staff is experienced in global positioning surveys (GPS). GPS equipment, Trimble R-8 GNSS, and existing base stations are among POTESTA's surveying tools. Based upon the site location and ultimate use of the survey information, a recommendation is made to the client as to whether or not traditional survey or GPS is most applicable to their project.

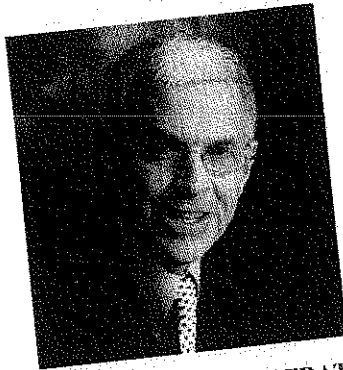


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PROFESSIONAL REGISTRATION

Professional Engineer - West Virginia,
Illinois

OSHA 40-Hour Health and Safety
Training

EDUCATIONAL BACKGROUND

B.S. Civil Engineering, 1978
West Virginia University

M.S. Civil Engineering, 1979
West Virginia University

EMPLOYMENT HISTORY

1997-Pres. Potesta & Associates, Inc.
1994-1997 Terradon Corporation
1979-1994 GAI Consultants, Inc.
1978-1979 West Virginia University
1976-1977 West Virginia Department of
Highways (summers)

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers
National Society of Professional
Engineers
WV Association of Consulting
Engineers

HONORS

Tau Beta Pi/Chi Epsilon

AREAS OF SPECIALIZATION

Management of design and permitting of civil, environmental, geotechnical, and mining engineering projects. Siting, design and permitting of industrial and municipal waste disposal sites; reclamation of abandoned mine lands; and development of stormwater management plans and groundwater sampling programs. Environmental/reclamation liability assessments. Development of site plans for commercial and industrial facilities including hydrologic and hydraulic analyses. Expert witness testimony.

PROFESSIONAL EXPERIENCE

Municipal Solid Waste:

- ▶ West Virginia Solid Waste Management Board/Monongalia County Sanitary Landfill - Morgantown, WV
- ▶ Northfork Landfill - Wheeling, WV
- ▶ Disposal Service, Inc. Landfill - Hurricane, WV
- ▶ Sycamore Landfill, Inc. - Hurricane, WV
- ▶ City of Charleston Landfill - Charleston, WV
- ▶ WVDEP's Landfill Closure Assistance Program
 - Montgomery Sanitary Landfill - Montgomery, WV
 - Wyoming County Sanitary Landfill - Pineville, WV
 - Jackson County Sanitary Landfill - Ripley, WV
 - City of Moundsville Landfill - Charleston, WV
- ▶ Mingo County Landfill
- ▶ Omar Landfill - Omar, WV
- ▶ Pocahontas County Landfill - Marlinton, WV
- ▶ HAM Sanitary Landfill - Peterstown, WV
- ▶ Kanawha-Western Landfill - Cross Lanes, WV
- ▶ S&S Landfill - West Milford, WV

Industrial Solid Waste:

- ▶ Mobay Hazardous Waste Landfill - Natrium, WV
- ▶ American Cyanamid (4 Projects) - Willow Island, WV
- ▶ Client Confidential - Parkersburg, WV
- ▶ Monsanto Company - Nitro, WV (Multiple Projects)
- ▶ Harrison Power Station - Haywood, WV
- ▶ Fort Martin Power Station - Morgantown, WV
- ▶ Mount Storm Power Station - Mount Storm, WV
- ▶ Keystone Power Station - Elderton, PA
- ▶ New Castle Power Station - New Castle, PA
- ▶ Conemaugh Power Station - New Florence, PA
- ▶ Alcoa Corporation - Newburgh, IN
- ▶ Portsmouth Power Station - Portsmouth, VA
- ▶ F. B. Culley Power Station - Newburgh, IN
- ▶ Hatfield Power Station - Masontown, PA

- ▶ Armstrong Power Station - Armstrong County, PA
- ▶ Cheswick Power Station - Springdale, PA
- Development of construction drawings, technical specifications, contractor's bid sheet and engineer's cost estimate for closure of Montgomery Sanitary Landfill. Work included leachate collection system, cap and double walled leachate tank.
 - ▶ WVDEP - Office of Waste Management
- Development of construction drawings, technical specifications, contractor's bid sheet, and engineer's cost estimate for final closure of the Wyoming County Landfill. Work included site assessment, double walled leachate tank, pump station and connection of leachate line to the Center Public Service District sanitary sewer.
 - ▶ WVDEP - Office of Waste Management
- Development of interim closure plans including leachate collection system, adequacy of groundwater monitoring wells and soil cover for the Jackson County Landfill and the City of Moundsville Landfill.
 - ▶ WVDEP - Office of Waste Management
- Management of three liner expansions, borrow area determination, minor permit modifications, 1.6 MG double-lined leachate pond design, construction monitoring, and investigation of future alternatives for the WV Solid Waste Management Board's Monongalia County Sanitary Landfill.
- Evaluation of landfill expansion and leachate minimization. Preparation of permit application for Phase I Cell 3 and Phase II including drawings, specifications and CQA manual. Preparation of construction drawings for Phase I Cell 3 Stage 1 and management of construction monitoring. Preparation of erosion and sedimentation control plan, soldier beam and lagging retaining wall, gabion basket retaining wall, and assistance on FERC permit to relocate gas line.
 - ▶ Disposal Services, Inc. - Hurricane, WV
- Preparation of Landfill Expansion Revisions, permit revisions and permit negotiation. Detailed review of hydrogeology and groundwater flow regime. Management of QA/QC for landfill expansion including clay/synthetic liner system, double walled leachate tank, sedimentation pond, drainage channels and associated facilities.
 - ▶ S&S Landfill - Harrison County, WV
- Management of miscellaneous services including preliminary closure plan, evaluation of leachate treatment alternatives, repair of tear in synthetic liner, preparation of annual reports, and surveying for Pocahontas County Landfill.
 - ▶ Pocahontas County Solid Waste Authority - Marlinton, WV
- Investigation of potential landfill fire at Kanawha Western Landfill-Kanawha County Solid Waste Authority.

- Detailed geologic and hydrologic studies, monitoring well installation, and preparation of associated sections of landfill permits.
 - ▶ North Fork Landfill - Wheeling, WV
 - ▶ Sycamore Landfill - Hurricane, WV
- Management of non-hazardous industrial landfill design project involving design report, technical specifications, construction drawings, QA/QC manual, operation manual, permit application, and environmental assessment. Included three site selection studies. Complete geologic and hydrogeologic investigations including installation of monitoring wells.
 - ▶ Rhone-Poulenc Ag Company
- Design, permitting, economic analyses, and preparation of construction bid documents for coal ash/refuse sites including HDPE and PVC liner systems.
 - ▶ Virginia Electric and Power Company
 - Portsmouth Power Station ash pond to dry fill conversion project
 - Mount Storm Interim Ash Site
 - ▶ Pennsylvania Electric Company
 - Keystone Coal Ash/Coal Refuse Site
 - ▶ Allegheny Power System
 - Hatfield Ash Site
- Siting studies, including environmental impacts and economic analyses, for industrial waste and coal ash/refuse sites.
 - ▶ Peabody Coal Company - slurry impoundment
 - ▶ Rhone-Poulenc Ag Company - 3 sites for industrial landfill
 - ▶ Virginia Electric and Power Company - Mt. Storm Power Station
 - ▶ Southern Indiana Gas and Electric Company - 4 sites at F.B. Culley Station
 - ▶ Alcoa Generating Corporation - 7 sites at Warrick Station
- Preparation of permit applications for the New Castle ash site and Mitchell scrubber sludge disposal site.
 - ▶ Pennsylvania Power Company
 - ▶ Allegheny Power System
- Evaluation of natural and synthetic liner systems for coal ash/coal refuse sites.
 - ▶ Pennsylvania Electric Company
- Management of QA/QC monitoring program for first RCRA industrial waste impoundment in EPA Region 3. Composite liner system consisted of 3-foot soil-bentonite liner and two 60-mil HDPE synthetic liners separated by an HDPE drainage net. Provided on-site testing laboratory. Daily and weekly project reports were provided. Prepared summary report and necessary "certifications" for submittal to WV Division of Natural Resources and EPA.
 - ▶ American Cyanamid Company-Willow Island, WV

- Management of QA/QC monitoring program for a stormwater retention basin consisting of a 3' soil bentonite liner with a concrete overlay. Daily, weekly, and project summary reports were prepared.
 - ▶ American Cyanamid Company-Willow Island, WV
- Preparation of plans, specifications, and permit application for the closure of an industrial waste disposal site. The capping system included geogrid to assist in supporting the overlying HDPE liner and soil cap.
 - ▶ American Cyanamid Company-Willow Island, WV
- Management of QA/QC monitoring for closure of a 3-acre hazardous waste disposal area with sludge stabilization and an HDPE cap. Provided an on-site testing laboratory, daily and weekly project reports, a summary report and agency required certifications.
 - ▶ American Cyanamid Company-Willow Island, WV
- Management of the QA/QC monitoring for the stabilization and capping of 10-acre hazardous waste equalization basin.
 - ▶ American Cyanamid Company-Willow Island, WV
- Management of monitoring well installations.
 - ▶ North Fork Landfill
 - ▶ Rhone-Poulenc Ag Company
- Coordinator of the compilation of data for a RCRA Part B permit application for a hazardous waste transfer facility in Parkersburg, WV including SPCC plan.
- Preparation of the Coal Ash Disposal Manual and various manuals for the High Volume/Low Technology Fly Ash Utilization Program.
 - ▶ Electric Power Research Institute
- Investigation of contamination from underground storage tanks and hydrocarbon spills. Included preparation of necessary regulatory forms, sample acquisition and analyses, and meetings with regulatory agency.
 - West Virginia Division of Natural Resources-Variou projects under Master Agreement
 - ▶ Goldman Associates
 - ▶ Vandalia Mining Company
 - ▶ Marshall University
- Development of reclamation plans for over 60 projects including landslides, mine fires, acid mine drainage, mine subsidence, refuse piles, water supply systems and asbestos abatement. Projects include the following:
 - ▶ Grass Run Refuse
 - ▶ Allen Sheridan Hazardous Facility (asbestos)
 - ▶ Elk City - Century - Volga Phase I/II Water Study
 - ▶ Camp Mohonegan Regrade
 - ▶ Comfort Run Coal Company (asbestos)
 - ▶ Allen AMD

- ▶ Turner Douglas Complex
- ▶ Buffalo Creek No. 5 Refuse
- ▶ Dawmont Mine Facility
- ▶ Helen (Lewis) Refuse
- ▶ Upshur 10/15 Drainage
- ▶ Phase I Water Studies Brooke and Fayette Counties
 - Gauley River PSD - Belva
 - Hammond PSD - Wellsburg
 - New Haven Chamber of Commerce - Hico
- ▶ Mill Creek Regional Water Project Phase II Water Study (Boone, Lincoln and Logan Counties)
- ▶ Godby Branch Phase II Water Study
- ▶ Madison Street Portals/Fairview Route 218 Portals
- ▶ Summerlee Refuse Pile (project won 1996 southern reclamation award)
- ▶ Putnam County Phase I Water Studies
 - Heizer Creek
 - Manila Creek
- ▶ Boone County Phase I Water Studies
 - Jeffery Area
 - Jeffery
 - Hewett Creek
 - Seacoal
 - Ottawa Area
 - Ottawa
 - Greenview
 - Missouri Fork
 - Meadow Fork
 - Aleshire Branch
 - Dent Fork
 - Mike's Fork
 - Duncan Hill Subsidence
 - Phase II Water Feasibility Studies: Logan County
 - Cow Creek
 - Crooked Creek
 - Upper Rum Creek
 - Cora Mine Drainage No. II
 - Covey Creek Mine Fire
 - Phase I Water Studies for Logan County
 - Pecks Mill - Godby Heights Communities
 - Cow Creek - Sarah Ann - Crystal Block Communities
 - Upper Rum Creek Community
 - Clothier Community
 - Crooked Creek Community
 - Godby Branch
 - Whitman Creek - Holden Project
 - Vivian Refuse Pile
 - Kimball Refuse Pile (project won 1995 southern reclamation award)
 - Hampden (Smith) Landslide
 - Bear Run Refuse (project won 1994 Ducks Unlimited award)
 - Beaver Creek Waterline Extension: Phase III Water Project

- Charleston (Ratcliffe) Landslide
- Garrison Complex
- Cassity Fork Water Supply Extension: Phase III Water Project
- Mulberry Fork (Stover) Landslide
- Beckley Subsidence
- Courtright Highwall
- Jonben (Haga) Subsidence
- Belle Landslide
- Holden (Padgett) Subsidence
- Minden Drilling
- Kitchen/Gibson Landslide
- Gray and Iaquina Subsidence
- St. John's Road Subsidence
- High Coal Tipple
- Route 19/28 Subsidence
- Omar Refuse Pile (project won reclamation of the year award)
- Mt. Hope Subsidence
- Morgantown Airport Drainage/Subsidence
- Logan Drainage
- Huffman Street Subsidence
- Switzer Adams/Robinson Drainage
- Follansbee Drainage
- Fairmont East Subsidence
- Fairmont IV Subsidence
- Hawkins AMD
- Vargo Drainage
- Duck Creek Landslide
- Kistler Mine Fire
 - West Virginia Division of Energy and West Virginia Division of Environmental Protection
 - Ohio Department of Natural Resources

- Detailed design and preparation of construction drawings, specifications, contractor's bid sheet, and engineer's cost estimate for six-mile water line extension including fire protection. Project included 90,000-gallon watertank, booster station, and pressure relief valves. Extension tied into Norton Harding Jimtown PSD System and served town of Cassity in Randolph County.
 - WVDEP-AML

- Detailed design and preparation of construction drawings, specifications, contractor's bid sheet, and engineer's cost estimate for a half-mile water line extension to serve Beaver Creek near Junior in Randolph County.
 - WVDEP-AML

- Management of four Phase II water studies and five Phase I water studies to determine if water supplies had been affected by coal mining. Work included resident interviews, mine map searches, area reconnaissance, obtaining water samples, reviewing water analysis data, preparing conceptual designs and associated costs and preparation of summary report.
 - WVDEP-AML

- Preliminary and detailed air pollution modeling for Pittsburgh's convention center complex and for the Washington Heights development.
 - ▶ Urban Redevelopment Authority of Pittsburgh
- Management of certified emission statements for 11 coal preparation plants and air emission inventories for 8 coal preparation plants for submittal to the West Virginia Office of Air Quality.
 - ▶ Eastern Associated Coal Corp.
- Operation permit from West Virginia Air Pollution Control Commission for cement/grout portable batch plant for mine subsidence control project in Follansbee, West Virginia.
 - ▶ Nicholson Construction Company
- Management of numerous environmental assessments for property transactions.
 - ▶ 70-acre parcel of land adjacent to Kanawha - Western Landfill for Kanawha County SWA
 - ▶ 65,000 acre Environmental/Reclamation Liability Assessment for A.T. Massey Coal Company
 - ▶ Environmental/Reclamation Liability Assessment involving 56 coal permits in KY for A.T. Massey Coal Company
 - ▶ General Electric Company - Nitro, WV
 - ▶ K-Mart in Parkersburg, WV
 - ▶ Mac's Body Shop for use as recycling center - KCSWA
 - ▶ 1200 acres for Island Creek Coal Co. in KY
 - ▶ South Central Regional Jail site near Charleston, WV
 - ▶ 300 acre coal property in Logan County for FDIC
 - ▶ 180 acre parcel of land for potential landfill developments
 - ▶ Rhone-Poulenc Ag Company - Institute, WV
 - ▶ Laboratory/office building for Eastern Associated Coal Corporation - Beckley, WV
 - ▶ Environmental/Reclamation Liability Assessment involving 27 coal permits in southern WV
 - ▶ Environmental/Reclamation Liability Assessment for 24,000 acre coal property in southern WV for Eastern Associated Coal Corporation
 - ▶ Environmental/Reclamation Liability Assessment involving 11 coal permits in southern WV
 - ▶ Environmental/Reclamation Liability Assessment for 37 permits covering 7,000 acres for Massey Coal Services in WV
 - ▶ Environmental/Reclamation Liability Assessment for 28 permits covering 6,300 acres for Massey Coal Services in WV
 - ▶ Environmental/Reclamation Liability Assessment for 7,000 acres in southern WV for Massey Coal Services
- Development of alternative truck transportation cost schemes:
 - ▶ Industrial and Hazardous Waste Management Study, Allegheny County, PA
 - ▶ Holcomb, KA, Power Station, Sunflower Electric Cooperative

- ▶ Portsmouth Station remote ash structural fill, Virginia Electric and Power Company
- Development of a computer program that provides a detailed cost estimate for a coal ash disposal area.
 - ▶ Electric Power Research Institute
- Evaluation of settling characteristics for an emergency fly ash disposal pond and design of associated modifications at a plant in Institute, WV.
 - ▶ Rhone-Poulenc Ag Company
- Sampling/sounding of two basins containing sludge from secondary biological treatment of industrial wastewater and subsequent determination of sludge quantities.
 - ▶ Rhone-Poulenc Ag Company
- Subsurface investigations, subsidence monitoring, review of a coal reserve analysis, site plans, preblast/presubsidence surveys, hydrologic analyses, preparation of mining permits, and design and permitting of coal slurry impoundments for coal mining companies in West Virginia, Virginia, Kentucky, Ohio, and Maryland.
 - ▶ Peabody Coal Company
 - ▶ Eastern Associated Coal Company
 - ▶ Southern Ohio Coal Company
 - ▶ Island Creek Corporation
 - ▶ Massey Coal Services
 - ▶ Appalachian Mining Inc.
 - ▶ Oneida Coal Company
 - ▶ Old Ben Coal Company
 - ▶ Mettiki Coal Company
- Management of fly ash utilization permits for various coal companies.
 - ▶ Rawl Sales, Inc.
 - ▶ Elk Run Coal Company
 - ▶ Appalachian Mining, Inc.
 - ▶ Peerless Eagle Coal Company
- Managed subsurface investigation, foundation design and development of mine stabilization program for NASA's Independent Verification and Validation Center in Fairmont, WV.
- Development of specification manual for conducting soil and groundwater sampling programs for Rhone-Poulenc Ag Company, Institute, WV. Manual detailed decontamination methods and proper handling/disposal methods.
- Development of fly ash flowable fill specification for submittal to WV Division of Highways.
 - ▶ Monongahela Power Company-Fairmont, WV

- Hydrologic and hydraulic analyses of South Ruffner Watershed. Project analyzed various storm events and presented conceptual recommendations to reduce effects of these storms.
 - ▶ City of Charleston, WV
- Management of numerous projects at Plasma Processing Corporation's aluminum reprocessing facility near Ravenswood, WV.
 - ▶ Subsurface investigation and preparation of soils report
 - ▶ NPDES Permit
 - ▶ Development of sampling program for Plasma to follow in obtaining samples for NPDES Stormwater Analyses
 - ▶ Development of hazardous waste operations manual
 - ▶ Acquisition of WV Air Pollution Commission permits
 - ▶ Environmental audit of facility operations
- Internal and external methane gas monitoring at nursing home facility in Boone County, WV.
- Inspection and preparation of rehabilitation design for Parking Garage No. 1 for City of Charleston.
- Sludge sampling programs at the Institute, WV plant of Union Carbide Corporation and at the Tri-State Terminal of Ashland Petroleum Company.
- Economic analyses of wet versus dry disposal processes, including conveyor belts, trucks, and sluicing by pipe, for fly ash and bottom ash.
 - ▶ Tennessee Valley Authority
- Groundwater sampling programs:
 - ▶ Herr's Island, Urban Redevelopment Authority of Pittsburgh
 - ▶ Robertshaw Controls in New Stanton, PA
 - ▶ New Castle Power Station
 - ▶ Pennsylvania Power Company
 - ▶ Portsmouth Power Station
 - ▶ Virginia Electric and Power Company
 - ▶ Rhone-Poulenc Ag Company, Institute, WV
- Management of pump tests.
 - ▶ Peabody Coal Company - Bim, WV
 - ▶ Southern Ohio Coal Company - Meigs County, Ohio
 - ▶ Rhone-Poulenc Ag Company - Institute, WV
- Closure of above ground storage tanks. Included preparation of documentation for regulatory agency and sample acquisition and analyses.
 - ▶ Rhone-Poulenc Ag Company - Institute, WV
 - ▶ American Cyanamid Company - Willow Island, WV
- Design of a holding tank and ventilation system vault near Houston, PA.
 - ▶ Washington County Industrial Development Agency

- Development of specifications for a sand mound treatment system at the U.S. Air training center near Pittsburgh, PA.
- Computer modeling of groundwater movement of contaminants resulting from underground coal gasification.
- Determination of watershed areas along the Suwannee River Basin for the Jacksonville District, U.S. Army Corps of Engineers.
- Inspection of bridge and highway construction for the West Virginia Department of Highways.
- Coordination for Environmental Impact Statement for Route 19 upgrade from Summersville to Interstate 79 in Braxton County and New River Parkway from Sandstone Falls on I-64 to near Athens on I-77.
 - West Virginia Division of Highways
- Management of stream stabilization and restoration plan for segment of East Fork of Queer Creek in Hocking County, Ohio.
 - Columbia Gas Transmission Corporation
- Management of consulting services for environmental report preparation and FERC permit applications for various natural gas pipeline projects.
 - Columbia Gas Transmission Corporation

D. MARK KISER, P. E.
Chief Engineer, Licensed Remediation Specialist



PROFESSIONAL REGISTRATION

Professional Engineer, West Virginia
Licensed Remediation Specialist, West Virginia

PROFESSIONAL CERTIFICATION

- Hazardous Waste Site Operations and Superfund
- Worker Protection Training, 40-Hour Training.
- Supervisory Training, and Annual Refreshers
- Troxler Nuclear Densometer Certification
- Licensed Remediation Specialist - West Virginia

EDUCATIONAL BACKGROUND

B.S. Civil Engineering, 1984
West Virginia University

EMPLOYMENT HISTORY

1997-Present Potesta & Associates, Inc.
1995-1997 Terradon Corporation
1984-1995 GAI Consultants

HONORS

Chi Epsilon
Tau Beta Pi
American Society of Military Engineers
Scholarship

AREAS OF SPECIALIZATION

Conceptual and final designs for chemical, utility, and municipal solid waste disposal sites including liner systems, leachate management systems, stormwater management systems, operational plans, and capping/closure systems; abandoned mine lands reclamation projects; sludge stabilization and basin/pond closure projects; environmental sampling and remedial programs; environmental permitting; hydrologic and hydraulic analyses; quality assurance/quality control monitoring.

PROFESSIONAL EXPERIENCE

- Final design and preparation of construction drawings, detailed technical specifications, and engineer's construction cost estimate for the construction of a 1.9-million gallon double-lined pond and 5 acres of a landfill liner system. This project included development of an ultimate facility layout plan, a two year detailed development plan, and construction monitoring. Project also included negotiations with regulatory agency to obtain approval of the permit.
 - ▶ Client Confidential
- Design; preparation of drawings, technical specifications, contractor's bid sheet, engineer's cost estimate, contract, and cap acceptability evaluation; evaluation of contractor bids, and construction monitoring associated with the capping and closure of a 2.5-acre cell of an industrial waste landfill facility. Cap included a multi-layer geocomposite system to minimize infiltration and the production and leachate to improve the areas groundwater quality.
 - ▶ Client Confidential
- Design; preparation of drawings, technical specifications, and contract/bid documents; construction monitoring; air monitoring; sludge sampling; and analysis; review and approval of a detailed health and safety plan; permitting; and other miscellaneous engineering services for the stabilization and closure of a 3-acre sludge basin and a 1-acre sludge pond. The project included management of a pilot-scale demonstration, procurement of stabilization reagents from multiple providers, and development of an adjacent soil borrow area.
 - ▶ Client Confidential
- Response to regulatory agency review comments and redesign of a pond liner system and piggyback landfill liner system for a 20-acre landfill in West Virginia.
 - ▶ Client Confidential
- Consulting regarding the design of a final cover/cap for an industrial waste landfill located in West Virginia.

▶ DuPont Environmental Remediation Services

• Project manager/engineer for independent quality assurance/quality control monitoring associated with closure of a three acre SWMU consisting of a waste impoundment. Project included construction of an earthen buttress to improve slope stability, in-place waste stabilization using fly ash and kiln dust, and construction of a RCRA cap. Responsible for field design revisions to overcome problems, conformance testing, and preparation of certifications and a summary report. Project included sampling and analysis of raw and stabilized sludge.

▶ American Cyanamid Company

• Field (construction) monitoring for development of a residual waste landfill including compaction testing for heavy earth moving, synthetic (PVC) liner installation, concrete testing, and other miscellaneous testing.

▶ Pennsylvania Electric Company

• Design and permitting for a proposed industrial solid waste landfill. Project included complete hydrogeologic evaluation including several borings and installation of seven monitoring wells; documentation of soils, geology, water quality and hydrogeology; detailed site design of leachate ponds, liner system, stormwater collection system, access road, and capping/closure system. Multi-volume permit application prepared including Operations Manual, Quality Assurance/Quality Control Plan, Technical Specifications, Permit Application, and Design Drawings.

▶ Rhone-Poulenc Ag Company

• Leachate Minimization Study for a RCRA Hazardous Waste Landfill. Project included assessment of existing landfill operation and recommendations to reduce quantity of contaminated runoff from over 8 million gallons per year (MGY) to between 2 and 3 MGY. Detailed staging and operating plan, stormwater management plan, and cost estimates prepared.

▶ Rhone-Poulenc Ag Company

• Closure plan and permit application for closure of a three acre surface impoundment containing sludge and tar. Stability concerns for an existing embankment containing the waste lead to the development of a lightweight cap. Subsurface investigation and field surveying completed. Closure application as required by the West Virginia Division of Environmental Protection provided.

▶ American Cyanamid Company

• Evaluation of an emergency fly ash pond for a chemical plant in Institute, West Virginia. Recommendations, including conceptual design drawings and an engineer's cost estimate, to increase the settling efficiency of the pond. Special design elements, including a polymer feed system, submerged manifold pipe, splitter dike, and an overflow weir.

▶ Rhone-Poulenc AG Company

- Engineer responsible for expansions, planning, and upgrades for the Monongalia County Sanitary Landfill from 1990 through 1992. Activities included three expansions (7 acres total) of the landfill liner and leachate collection system including grading, groundwater collection drains, landfill liner system and leachate drains, protective cover and surface drainage control; construction monitoring and certification of landfill expansions; construction of a 1.6 million gallon leachate storage basin including clay liner, double synthetic liner, synthetic drainage layer, protective cover, drainage control devices; annual landfill volume reports including surveyed cross sections; two borrow area investigations to identify clay liner sources; feasibility study for expansion and continued operation of the facility; and a final closure plan for the facility including a multi-layered cap and drainage control plan.

- Utility relocation plans required for site development, waterline, and sewer construction projects. Projects included determination of utility locations by records review, utility contacts, and surveying. Designs were prepared including locations, details, and pavement replacement. Design also included obtaining approvals from West Virginia Division of Highways and the owners of the utilities.

- Storm water drainage plans for site development projects including pre- and post-development discharges, design of sediment control devices, preparation of stormwater general permit application, and consulting for numerous construction projects in West Virginia.

- Consulting and permitting for the development of seven coal-based synthetic fuel manufacturing plants in West Virginia, Indiana, Kentucky, and Illinois. Project included obtaining pre-construction and operating permits for air, water and mining for the manufacturing plants and the feedstock coal recovery operations. Assignments included permit application preparation, assistance in locating and evaluating coal feedstock sites, construction monitoring, Phase I environmental site assessments, and other miscellaneous engineering consulting functions.
 - Pace Carbon Fuels, L.L.C.

- Site reconnaissance, development of alternative capping/closure systems, and preparation of engineer's cost estimates for the closure of two West Virginia municipal waste landfills in support of rate making testimony and hearings.
 - West Virginia Public Service Commission

- Consultant for site development and construction of a fly ash disposal facility including a review of site operations, developing a maintenance program, compaction testing and review, and problem shooting.
 - Virginia Power Company

- Yearly construction designs for lined coal ash and coal refuse disposal sites at the Keystone and Conemaugh power stations, including a synthetic liner system, ground-water and surface-water control, leachate collection, landfill development, and haul road design. Construction quantity and cost estimates

and development of IBM-PC software for evaluating the storage capacity of the disposal sites.

- ▶ Pennsylvania Electric Company

• Preparation of solid waste disposal permit applications for the Monroeville Landfill, Monroeville, Pennsylvania, and the Southern Alleghenies Landfill, Cambria County, Pennsylvania, both of which include a double synthetic liner system combined with a drainage net leak detection system to conform to Pennsylvania DER regulations.

- ▶ Chambers Development Company

• Coordination of field activities associated with construction monitoring and laboratory testing for RCRA hazardous waste impoundment (the first permitted and constructed in EPA Region III) in Willow Island, West Virginia, including earth moving, construction of a soil-bentonite liner, monitoring of three, sealed double-ring infiltrometers, and construction of an HDPE double-lined impoundment.

- ▶ American Cyanamid Company

• Responsible for hydrogeologic investigation and preparation of the WVDEP Part A Solid Waste Disposal Permit Application for the Sycamore Scenic Landfill in Putnam County, West Virginia. Work included coring, test pit, and laboratory analysis of soils; review of existing ground water data; and analysis and evaluation of data for completing the Part A Application.

• Responsible for detailed hydrogeologic investigation and preparation of a major portion of the WVDEP Part A Solid Waste Disposal Permit Application for the Northfork Landfill near Wheeling, West Virginia. Project included field reconnaissance and mapping of existing site conditions, rock corings, test pits, laboratory analysis of soils for potential construction materials, installation of four monitoring wells, and the corresponding analysis and evaluation of data for completing the Part A Application.

• Project manager/engineer for the West Virginia Division of Environmental Protection's landfill closure assistance program for 1993 through 1995. Responsible for conceptual design, field investigation, construction drawings, specifications, permit applications, etc., for the following projects.

- ▶ Wyoming County Landfill
- ▶ Jackson County Landfill
- ▶ Kanawha Western Landfill
- ▶ Monongalia County Sanitary Landfill
- ▶ Fayette County Landfill

• Quality assurance/quality control monitoring for closure of a 10-acre SWMU containing biological treatment sludge. The contents of the basin were stabilized by mechanical mixing. The contents of the basin were data evaluation, and a revised interim grading and drainage plan. Report and certification provided for WVDEP-OWM.

- ▶ Cytex Industries

- Closure plan and permit application for closure of a 5-acre industrial waste landfill. Steep slopes over a portion of the landfill necessitated the design of an innovative cap system and leachate collection system. Project also included closure and capping of a small pit containing tar residue.
 - ▶ Cytac Industries

- Project engineer/project manager for finalizing a permit application for the S&S Landfill near Clarksburg, West Virginia. Components of the plan included a detailed staging and closure plan to comply with sediment control and leachate storage requirements. Successfully represented the landfill in a permit appeal hearing before the Water Resources Board. Prepared two construction/bid packages for constructing the initial 10 acres of the landfill.
 - ▶ Eastern Environmental Services, Inc.

- Project engineer/project manager for the West Virginia Division of Environmental Protection's abandoned mine lands reclamation open-end contract from 1988 through 1995. Responsible for conceptual design, permit applications, etc. for the following projects.

- ▶ Turner Douglas Complex
- ▶ Omar Refuse Piles (project won reclamation of the year award)
- ▶ Bear Run Refuse (project won 1994 Ducks Unlimited award)
- ▶ Kimberly Refuse Pile (project won 1995 southern reclamation award)
- ▶ Vivian Refuse Pile
- ▶ Duncan Hill No. 1 and No. 2 Subsidence
- ▶ Urso Subsidence
- ▶ Summerlee Refuse Pile
- ▶ Godby Branch Water Extension
- ▶ Jonben Subsidence
- ▶ Williamson (Elias) Landslide
- ▶ Lefthand Fork Burning Refuse
- ▶ Belle Landslide
- ▶ Doug Gray Subsidence
- ▶ Harris Acid Mine Drainage
- ▶ Numerous Phase I and Phase II Water Quality Studies/Surveys

- Detailed design and preparation of construction drawings, specifications, contractor's bid sheet, and engineer's cost estimate for six-mile water line extension including fire protection. Included in project was 90,000 gallon water tank, booster station, and pressure relief valves. Extension tied into Norton Harding Jimtown PSD System and served town of Cassity in Randolph County.
 - ▶ WVDEP-AML

- Detailed design and preparation of construction drawings, specifications, contractor's bid sheet, and engineer's cost estimate for a half-mile water line extension to serve Beaver Creek near Junior in Randolph County.
 - ▶ WVDEP-AML

- Management of four Phase II water studies and five Phase I water studies to determine if water supplies had been affected by coal mining. Work included

resident interviews, mine map searches, area reconnaissance, obtaining water samples, reviewing water analysis data, preparing conceptual designs and associated costs and preparation of summary report.

- ▶ WVDEP-AML

- Design for waterline extension projects including preparation of construction drawings, specifications, and engineer's cost estimates for the West Virginia Division of Environmental Protection, Office of Abandoned Mine Lands and Reclamation.

- ▶ Cassity Fork Waterline
- ▶ Beaver Creek Waterline Extension
- ▶ Godby Branch Waterline Extension

- Soundings and sampling of 3 basins containing sludge. Two basins contained sludge from secondary biological treatment of industrial wastewater. One basin contained petroleum product sludges. Sludge quantities determined from soundings and cross sections prepared. Samples obtained for laboratory analysis.

- ▶ Rhone-Poulenc Ag Company
- ▶ Ashland Petroleum Company

- Closure of thirteen aboveground RCRA storage tanks. Closure services included review of agency approved closure plan to determine compliance items, visual inspection of tank interiors and earthen containment berm areas, review of rinsate analyses, review of soils testing analysis from berm areas, and preparation of closure documentation and certification.

- ▶ Rhone-Poulenc AG Company
- ▶ American Cyanamid Company

- Phase I environmental assessment for the West Virginia Regional Jail and Correctional Facility Authority to document potential liability for a potential regional jail site in Kanawha County, West Virginia. Activities included historic records search, interviews, and site reconnaissance with a report prepared documenting the findings.

- Geotechnical investigation for two proposed above-ground reinforced concrete tanks to serve as secondary wastewater treatment unit. Investigation included soil drilling, sampling, laboratory analysis for engineering properties, and analysis for contamination. Field survey completed to locate existing structures. Report prepared outlining soils/geology and foundation recommendations.

- ▶ Rhone-Poulenc AG Company

- Assessment of environmental liabilities associated with a large tract of property including over 25 permitted mines and a coal preparation plant. Investigation included a review of permits and requirements, past environmental compliance record, walkover of each site, and development of estimated reclamation costs for each site. Report prepared to document results of the liability assessment.

- ▶ Massey Coal Services, Inc.

- Management and oversight of environmental assessment to identify any liabilities or soil/water degradation for a proposed industrial solid waste landfill. Investigation included drilling, sampling, monitoring well sampling, site reconnaissance, and historic records research. Results presented in a report.
 - ▶ Rhone-Poulenc AG Company
- Environmental Impact Statement (EIS) for proposed Route 19 upgrade from Summersville, West Virginia to Interstate 79 in Braxton County, West Virginia. Project included evaluation of three alternatives over approximately 25 mile length. Involvement included responsibility for hazardous waste section and general data.
 - ▶ West Virginia Division of Highways
- Project manager/engineer for the preparation of coal ash utilization permits for West Virginia mining operations. Permits included placing ash in the embankment of refuse disposal sites and placing ash with spoil backfill.
 - ▶ Elk Run Coal Company
 - ▶ Appalachian Mining, Inc.
 - ▶ Peerless Eagle Coal Company
 - ▶ Rawl Sales and Processing Company
- Coal ash utilization study including five mining operations and four coal ash sources in Virginia and West Virginia. Study evaluated both surface and underground beneficial uses of ash to neutralize acidic drainage.
 - ▶ Eastern Associated Coal Corp.
- Project manager for in-house consulting services provided for environmental reports and permit applications for natural gas pipeline transmission projects.
 - ▶ Columbia Gas Transmission Corp.
- Numerous Phase I Environmental Site Assessments including reclamation liability assessments for mining and industrial properties in West Virginia and Kentucky.
 - ▶ Client Confidential
- Assistance with site design and engineer's construction cost estimate for the remedial design of a CERCLIS waste disposal facility.
 - ▶ Virginia Electric Power Company
- QA/QC monitoring oversight for a municipal waste landfill in Tazwell County, Virginia.
 - ▶ Tazwell County, Virginia
- Design of stream stabilization and restoration plan for a section of East Fork of Queer Creek in Hocking County, Ohio. Project included obtaining 401/404 certification and preparation of a detailed construction plan.
 - ▶ Columbia Gas Transmission Corporation

- Preparation of a permit to construct and site development plan for a secondary aluminum processing facility start-up in Jackson County, West Virginia.
 - ▶ Plasma Processing Corporation
- Feasibility study for the replacement of the CSX Ramp in Charleston, West Virginia
 - ▶ City of Charleston
- Business development, preparing proposals, and scheduling of staff for a 25-person office in Charleston, West Virginia.
- Cum Laude Graduate of Introduction to Professional Practice Course developed by Institute for Professional Practice. Topics included risk management, contract administration, communications, and other aspects associated with consulting and professional practice.
- Assessment of environmental and reclamation liabilities associated with over 40 surface mine permits in western Virginia. Evaluation included PCB concerns, reclamation costs, underground and aboveground storage tanks, and acid mine drainage.
- Completion of eight Phase I environmental site assessments for nursing and rehabilitation care facilities in West Virginia.
 - ▶ The Multicare Companies, Inc.
- Abandoned underground storage tank investigation including sampling of tank contents, geoprobe investigation, and field and laboratory analysis of soil samples.
 - ▶ Cannelton, Inc.
- Phase 2 environmental site assessment to characterize contamination at an abandoned mine facility. Concerns included underground storage tanks, extensive surface hydrocarbon contamination, PCBs, and asbestos concerns.
- Phase I environmental site assessment for property proposed for development as a strip mall.
 - ▶ DiMucci Development

CHRISTOPHER A. GROSE

Senior Engineering Associate I, Licensed Remediation Specialist



PROFESSIONAL REGISTRATION/CERTIFICATION

- West Virginia Licensed Remediation Specialist
- Hazardous Waste Site Operations and Superfund Worker Protection Training
- American Red Cross Standard First Aid and CPR Training
- Troxler Moisture-Density Gauge

EDUCATIONAL BACKGROUND

- B.S. Civil Engineering, 1988
West Virginia Institute of Technology
- M.S. Geological Engineering, 1990
University of Missouri-Rolla

EMPLOYMENT HISTORY

- 1997-Present Potesta & Associates, Inc.
- 1994-1997 Terradon Corporation
- 1990-1994 GAI Consultants, Inc.
- 1989-1990 University of Missouri-Rolla
- 1989 Triad Engineering Consultants (summer)
- 1988 West Virginia Institute of Technology
- 1983-1988 (summer) Clint Bryan & Associates Architects

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers
- Association of Engineering Geologists
- Society of America Military Engineers

AREAS OF SPECIALIZATION

Surface and subsurface hydrology and hydrogeology including contaminant transport and groundwater flow modeling. Hazardous waste remediation, including CERCLA/SARA, RI and FS report compilation. Geological and geotechnical aspects of the siting and design of municipal and industrial waste landfills, foundation recommendations and cut slope designs in soil and rock.

PROFESSIONAL EXPERIENCE

- Engineering design for the closure of a chemical waste landfill in Parkersburg, WV. Completion of a settlement analysis to determine the expected consolidation of waste during dewatering. Cover design incorporated a composite liner system with synthetic drains. The cap utilized synthetic reinforcement to minimize consolidation-induced stresses on the synthetic liner.
 - ▶ American Cyanamid
- Operation and maintenance of several groundwater remediation systems including pump and treat and sparge systems for a large chemical manufacturer in Nitro, West Virginia. The pump and treat technology is designed to recover kerosene in one instance and TCE in another. Both systems are safety oriented and are fully automatic. The sparge system is a study/field test to determine the impact that oxygen injection will have on the degradation of phenolic compounds existing in the groundwater.
 - ▶ Nitro, West Virginia
- Responsible for the design and implementation of drilling and sampling programs for several Phase I and Phase II environmental assessments.
- Permit completion for closure of a chemical sludge impoundment near Parkersburg, WV. Analysis of existing monitoring well configuration.
 - ▶ American Cyanamid
- Analysis and study of elevated levels of organic constituents and elevated pH values in existing monitoring wells. Study to determine if well construction techniques or development procedures contributed to the presence of these constituents.
 - ▶ Rhone Poulenc Ag Company
- Design and completion of several monitoring wells to monitor an abandoned fly ash disposal area. Included hydrologic analysis of site geology to determine major aquifers present in the area.
 - ▶ Union Carbide Corporation

- Completion of several groundwater contamination studies in West Virginia. Contaminates included diesel fuel, gasoline, chlorobenzene and benzene. Studies included field exploration utilizing various methods including air and mud rotary drilling. Responsible for the setup, calibration and analysis of groundwater computer models to lend insight into the flow regimes and dispersion characteristics of the potentially affected areas.
- Evaluation of subsurface conditions including both soil and rock to provide geotechnical recommendations related to potential bridge abutment foundation systems near Martinsburg, West Virginia. Alternatives included both shallow and deep foundations. Deep foundations were required at several abutments due to voids encountered in limestone bedrock.
 - ▶ West Virginia Department of Highways
- Preparation of foundation investigations for several large structures including a parking garage and student housing complex at Marshall University, Huntington, West Virginia. Tasks included development of a subsurface exploration program, soils/rock sampling and testing program as well as a preparation of a final geotechnical report.
 - ▶ Huntington, West Virginia
- Evaluation of numerous failed soil fill slopes to determine probable failure mechanisms in order to develop and remediation alternatives. Responsible for the development of regrading plans which included subsurface drains, benching schemes and toe buttresses.
- Design of final landfill closure for an abandoned solid waste facility for the WVDEP-Closure Assistance Program. Design included diversion and collection channels, cap design, leachate collection system and 150,000 gallon leachate storage tank.
 - ▶ Montgomery, WV
- Permit completion for a new municipal landfill, including design and construction of monitoring wells monitoring several aquifers.
 - ▶ North Fork Landfill, Wheeling, WV
- Part I permit completion, design and implementation of a drilling program, including evaluation of an existing monitoring well configuration. Testing of existing site soils for suitable liner material sources.
 - ▶ Sycamore Landfill, Hurricane, WV
- Completion of several Part I Solid Waste Facility permits including the design and implementation of drilling programs, formal geological studies, hydrogeological analysis of the proposed sites, and locations and development of upgradient and downgradient groundwater monitoring wells. Design, Construction, and development of seven monitoring wells for a proposed 13-acre industrial waste disposal facility near Institute, WV.
 - ▶ Rhone Poulenc Ag Company

- Responsible for the development and design of several interim or maintenance related items associated with drainage at the Monongalia County Landfill. Included the design and upgrade of both new and existing channels, diversions or berms to minimize surface water infiltration and minimizing the amount of leachate generation.
 - Morgantown, West Virginia
 - West Virginia Division of Environmental Protection
- Design, management and project oversight during construction for the closure of a 7-acre biological sludge pond in Nitro, West Virginia. Preliminary design studies included the completion of batch tests to evaluate stabilization materials. Also handled the development and submittal of several permits associated with the project including erosion and sediment control plan, Army Corps of Engineers permit and a wetland's investigation and nationwide 404 permit.
 - Nitro, West Virginia
- Subsurface sample collection, resistivity measurements, explosivity measurements, and decontamination procedures for an organic contamination study at Institute, WV.
 - Rhone Poulenc Ag Company
- Underground storage tank contamination study in Jesse, WV. Delineation of a subsurface hydrocarbon contamination plume as well as possible flow directions to determine potential receptors.
 - West Virginia Division of Natural Resources
- Site evaluation, including continuous HNU scanning of collected soil samples and installation of piezometers, for two proposed sites near Charleston, WV.
 - General Services Administration
- Foundation design for a proposed 100,000 gallon potable water storage tank and valve pit near Cassidy, WV.
 - West Virginia Division of Environmental Protection
- Engineering evaluations, including collection and analysis of core samples, for possible subsidence-related fracturing of several areas potentially affected by mining subsidence.
 - West Virginia Division of Environmental Protection
- Evaluation of numerous groundwater monitoring wells to determine the direction of migration and the feasibility of utilizing them in a planned pump and treat recovery system. The site was an active compressor facility located in Eastern Kentucky.
 - Columbia Gas Transmission Corporation
- Subsidence evaluation and slope monitoring, using extensometers and tilt plates located on the slope face, of a 60-foot road cut experiencing subsidence-induced fracturing near Koppeston, WV.
 - Peabody Coal Company

- Engineering design of several wetland habitat areas relating to the effective remediation of a coal refuse disposal site in Glenville, WV.
 - ▶ West Virginia Division of Environmental Protection
- Completion of formal subsidence control plan for a proposed 14,000-acre longwall mining operation at the Mountaineer Mine, Wharncliff, WV.
 - ▶ Mingo Logan Coal Company
- Preparation of several article 3 surface mining permit applications for various West Virginia Coal Companies:
 - ▶ Proposed deep mine using longwall mining techniques in Boone County, West Virginia located in the Eagle coal seam.
 - Eastern Associated Coal Corporation
 - ▶ Deep mine using conventional mining techniques near Madison in Boone County, West Virginia. Located in the No. 2 Gas (Campbell Creek) coal seam.
 - Hobet Mining, Inc.
 - ▶ Deep mine using conventional mining techniques near Logan in Logan County, West Virginia. Located in the Alma coal seam.
 - Rum Creek Coal Sales
 - ▶ Surface mine using mountain top removal techniques near Twilight in Boone County, West Virginia. Located in the Coalburg and Lower Kittanning seams.
 - Eastern Associated Coal Corporation
- Completion of several environmental assessments for coal properties. Work included emphasis on both environmental and reclamation liabilities associated with pre and post SMCRA sites on the properties.
 - ▶ Massey Coal Services, Inc.
 - ▶ Eastern Associated Coal Corporation
- Preparation of Phase I, II and III water studies throughout the state of West Virginia for the West Virginia Division of Environmental Protection, AML section. Work items included interview of area residents to determine major quality and quantity problems, field and records research to determine the location of known pre-law mining activity which could potentially affect groundwater quality, collection of groundwater samples and design of water distribution facilities.
- Responsible for the design, management and inspection of a geotechnical investigation of a proposed five mile rail extension located in Nicholas County, West Virginia. Investigation included study and design of planned rock cuts and track foundation materials.
- Preparation of several spill prevention control and countermeasure plans for gas storage well sites in Pennsylvania and West Virginia.
 - ▶ Columbia Gas Transmission Corporation

- Design of stream relocation plans including preparation and coordination of applicable environmental permits. The relocation was required due to an adjacent gas pipeline near the stream.
 - ▶ Columbia Gas Transmission Corporation

- Development of closure design for a 14-acre inactive waste water treatment pond. Responsibilities included evaluation of sludge stabilization technologies, types of reagent and mixing ratios to achieve the required in-place strengths. Conducted contractor interviews with the owner, as well as providing assistance to the owner during preparation of the construction contract. During construction, conducted weekly safety meetings on-site with the contractor. This project was also expanded to provide stabilization of a 1.5-acre digester basin adjacent to 14-acre pond. The original contract was extended to cover stabilization of this pond. Stabilization efforts included submittal of an Army Corps of Engineers' nationwide permit to stabilize the bank of the Kanawha River and application of a West Virginia NPDES General Stormwater Construction Permit.
 - ▶ Nitro, West Virginia

KENNETH W. KINDER, P.E.

Staff Engineer



PROFESSIONAL REGISTRATION

Professional Engineer, WV Board of Professional Engineers

CERTIFICATIONS

Troxler Nuclear Density Equipment Operator, 2001

Humboldt Scientific, Inc. HAZMAT Training Certification, 2005

EDUCATION

B.S. Civil Engineering, 2003
West Virginia University Institute of Technology, Montgomery, WV

EMPLOYMENT HISTORY

2003-Present Potesta & Associates, Inc.
May 2000 - Potesta & Associates, Inc.
May 2003
1995-2000 Eagle Surveying, Inc.

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers (ASCE)

AREAS OF SPECIALIZATION

Civil/site design, hydrology analysis, hydraulic design, stormwater management, floodplain management, erosion and sediment control, wastewater treatment, computer modeling associated with hydrology and hydraulics, geotechnical, construction monitoring, computer aided drafting, land surveying.

PROFESSIONAL EXPERIENCE

Civil/Site Design

Developed a civil site design for a proposed petroleum storage tank farm in Raleigh County, WV. Tasks included preparing a boring layout for geotechnical drilling, boring observation, preparing construction drawings to show proposed grading, and determining the volume of excavation required. Coordinated the design of reinforced concrete foundations and slab with structural engineer.

Assisted with the civil site design for the Spring Hill Apartment Complex in Charleston. Tasks included regrading the site to accommodate new housing facilities, design of the storm drainage system, and meeting stormwater runoff requirements of the City of Charleston.

Assisted with the civil site design for a proposed pharmacy school building for the University of Charleston. Tasks included preparing a proposed grading plan, coordinating connections to existing utilities, and assisting with stormwater management.

Hydrology and Hydraulic Design

Completed the design of proposed ephemeral and intermittent stream mitigation channels on several projects located at active and reclaimed mine sites. Tasks included delineating drainage areas, computing runoff, and designing stream channels with a main channel to contain a 1-year to 2-year storm event and a riparian zone which would contain a 10-year storm event.

Assisted with the design of a proposed gravity and force main sewer line project to convey sanitary sewage and landfill leachate. Tasks included coordinating the location of sewer taps, hydraulic design of the system, preparing permit applications, preparing construction bid documents, and preparing an estimate of probable construction costs.

Completed hydraulic design of components associated with three membrane bioreactor (MBR) wastewater treatment plants. Tasks included sizing gravity and force main process piping, slidegates, flow control weirs, and other components for head works and tail works of the treatment plant

Stormwater Management

Performed a stormwater runoff evaluation for the existing Wal-Mart in Lewisburg, WV. Tasks included evaluating the performance of an existing stormwater management pond and redesigning the outlet structure to meet the pre-development peak runoff flows. PondPack was utilized to model the two stormwater management ponds, which were located in series.

Modeled the drainage system of the Mingo Logan Coal Company Mountaineer Mine using the SedCad software. The hydrologic evaluation was conducted to meet the requirement of a West Virginia Division of Environmental Protection (WVDEP) Surface Water Runoff Analysis (SWORA) which requires that during-mining and post-mining flow rates shall not exceed pre-mining flowrates. The modeling included the evaluation of existing drainage structures and several proposed structures.

Completed the hydraulic design of a stormwater collection system (storm sewer) for a proposed apartment complex in Mason County, WV. Tasks also included the design of a sedimentation pond to meet the WVDEP NPDES construction stormwater requirements. The sedimentation pond was designed to be converted to a permanent stormwater control structure upon completion of construction.

Floodplain Management

Assisted with the analysis of a flood event that occurred in 2004 on Straight Fork of Mate Creek in Mingo County, WV, a watershed adjacent to the construction project associated with the King Coal Highway. Tasks included modeling the storm event from actual precipitation data obtained and using HEC-HMS and HEC-RAS to determine flood levels and the impacts on the properties of local residents. Other scenarios were modeled to show impacts to properties in the event that an upstream sediment pond would breach, existing underground mine works would blow out, and a combination of the above scenarios. The study also evaluated the effects of blasting upon existing underground mine works.

Generated a civil site design for a golf course located in the floodplain of a stream which is prone to frequent flooding. Tasks included overseeing the development of aerial topographic mapping and developing a grading plan to regrade portions of the golf course to minimize flooding potential in areas of high-play, without borrowing off-site fill material.

Submitted a floodplain building permit to the Town of Moorefield, WV for the placement of fill material in the floodplain of a tributary of the South Branch of the Potomac at a property adjacent to the proposed Corridor H. Tasks included coordinating the proposed grading plan with the local floodplain manager to show that upstream flood levels would not be affected.

Submitted a floodplain building permit to Marshall County, WV for the placement of fill in the floodplain and floodway of the Ohio River. Tasks included obtaining the original computer model which was prepared by the United States Army Corps of Engineers in 1983, running the original model data in HEC-RAS and altering the computer model to analyze the effect of the proposed grading plan. An engineering

report was prepared and submitted along with the floodplain building permit application to show that 100-year flood elevations would not be affected by our project

Erosion and Sediment Control

Modeled the drainage system of the Mingo Logan Coal Company Mountaineer Mine using the SedCad software. The hydrologic evaluation was conducted to meet the requirement of a WVDEP SWORA and also include a sedimentologic evaluation. The modeling included the evaluation of existing drainage structures to determine which structures were most efficient at treating sediment laden runoff. Inefficient structures were updated and additional structures were proposed to reduce the sediment discharge to an acceptable concentration.

Assisted with the preparation of several WVDEP NPDES construction stormwater permit applications including two projects associated with construction of the King Coal Highway in Mingo County, WV, which included nearly five miles of roadway and over 30 erosion and sediment control structures. Tasks included computing peak flow rates, design of erosion and sediment control structures, and developing Stormwater Pollution Prevention Plans.

Wastewater Treatment

Assisted with the design of three membrane bioreactor wastewater treatment plants (WWTP) for proposed residential developments. Tasks included preparation of Health Department and WVDEP permit applications, coordination with state and local agencies, hydraulic design of piping, screens, weirs and other hydraulic components, coordinating structural, mechanical, and electrical designs, and preparation of drawings and construction documents. Average daily flow rates (ADFs) of the WWTPs ranged from 125,000 gpd to 1 MGD.

Assisted with the design of treatment ponds for two separate projects in Marshall County, WV. The treatment ponds were to be utilized to treat high levels of iron and manganese. Tasks included evaluating the costs and benefits of precast concrete tanks versus constructed earthen settling ponds, design of hydraulic components such as inlet and outlet channels, determining geometric dimensions of ponds to increase the efficiency of the ponds and reduce the effects of shortcircuiting, design of an aeration trough to aid in the treatment of iron, and the preparation of construction cost estimates.

RYAN K. MCGLOTHEN, P. E.

Senior Engineer I



PROFESSIONAL REGISTRATION

Registered Professional Engineer - West Virginia

CERTIFICATIONS

Troxler Moisture-Density Gauge

EDUCATION

M. S. Environmental Engineering,
Marshall University Graduate
College (Completed 36 hours
of course work; require final
project to complete degree.)

B. S. Civil Engineering, 1996
West Virginia University

EMPLOYMENT HISTORY

2001-Present Potesta & Associates, Inc.
1997-2001 Civil Tech Engineering,
1993 Summit Engineering, Inc.
(summer)

CONTINUING EDUCATION/ ADDITIONAL TRAINING

Short Course - "Settlement of Structures
and Embankments" presented by the
Center for Geotechnical Practice and
Research at VPI.

Short Course - "Slope Stability
Analysis" presented by the Center for
Geotechnical Practice and Research,
VPI.

Seminar - "Geosynthetic Reinforced Soil
Slopes and Walls" by the West Virginia
Society of Professional Engineers

AREAS OF SPECIALIZATION

Geotechnical engineering including subsurface explorations, foundation recommendations, slope stability and design, landslide evaluation, retaining wall design. Surface and subsurface hydrologic and hydraulic evaluations including stormwater runoff, peak discharge evaluations, stormwater detention analysis and structure design. Water supply design including distribution piping, pump stations, and storage tank design. Sanitary sewer design including collection system design/rehabilitation, pump stations. Residential and commercial structure forensic damage evaluations.

PROFESSIONAL EXPERIENCE

Miscellaneous Geotechnical/Foundation Projects

Served as engineer responsible for performing subsurface explorations, coordinating laboratory analysis program, preparation of geotechnical reports, including providing recommendations for bearing capacity, lateral earth pressures, soil strength parameters, settlement analysis, and site development and construction considerations for foundation construction.

- Conway Freight CCX Service Center, Belle, WV
- Jordan Landing Apartments, Pt. Pleasant, WV
- Valley Village Apartment Complex, Elkins, WV
- North Bend Apartments, Harrisville, WV
- Elk Crossing Apartment Complex, Elkview, WV
- Proposed War K-8 Elementary/Middle School, McDowell County, WV
- Proposed Jaeger Elementary School, McDowell County, WV
- Proposed Bradshaw High School, McDowell County, WV
- Equitable Gas Company New Compressor Station, Prestonsburg, KY
- Spring Hill Townhouse Development, Charleston, WV
- Knollview Village Apartments, St. Albans, WV
- Marshall University Biotechnology Center, Huntington, WV
- Marshall University Student Housing Complex and Dining Hall, Huntington, WV
- Residuals Handling Facility at WVAWC Water Treatment Plant, Charleston, WV
- Proposed Coal Fired Power Station for Dominion Generation, Upshur County, WV
- Dundon Bridge Replacement Project, Clay, WV
- Emmanuel Baptist Church Addition, Charleston, WV
- Benjy's Harley Davidson, Huntington, WV
- Steel of West Virginia, Huntington, WV
- Middleport Terminals Inc. Asphalt Storage Tanks, Gallipolis, OH

Landslide Evaluation/Slope Stability Projects

- Residential Landslide Evaluation - Turley Residence, Alum Creek, WV
- Landslide Evaluation and Slope Stability Recommendations for Hemingway Place Development, Charleston, WV
- Consultant and Expert Witness Services for a Residential Landslide/Retaining Wall Evaluation - Flaherty, Sensabaugh & Bonasso, Charleston, WV
- Consultant and Expert Witness Services for a Residential Landslide - Legal Aid Services of West Virginia, Boone County, West Virginia
- Consultant and Expert Witness Services for a Residential Evaluation - Shuman, McCuskey & Slicer, Charleston, WV
- Residential Landslide Evaluation - Ciccarello, Del Giudice & LaFon, Charleston, WV
- Williamson (Hatfield) Nursing Home Retaining Wall Design, Williamson, WV
- Columbia Gas Coco Compressor Station Retaining Wall Design, Clay County, West Virginia
- Retaining Wall Evaluation for West Virginia Department of Environmental Protection - Office of Abandoned Mine Lands, Charleston, WV
- George's Creek Retaining Wall Design, West Virginia Department of Environmental Protection - Office of Abandoned Mine Lands, Charleston, WV
- Segmental Block Retaining Wall Design - R. C. Construction, Tappers Creek, WV
- Slope Stability Analysis for Multiple Dam Design and Rehabilitation Projects.
- Various Residential Property Landslide Evaluations.

Civil/Site Design Projects

Served as a design engineer for various civil/site design projects. Typical tasks completed for projects include site grading and earthwork balances, utility design and layout including water and sanitary sewer service, stormwater management and drainage design.

- Jordan Landing Apartments, Pt. Pleasant, WV
- Valley Village Apartment Complex, Elkins, WV
- North Bend Apartments, Harrisville, WV
- Elk Crossing Apartment Complex, Elkview, WV
- The Woodlands Subdivision, Charleston, WV
- Spring Hill Townhouse Complex, Charleston, WV
- Tucker County Industrial Park, Tucker County, WV
- New Residence Hall at University of Charleston, Charleston, WV
- Emmanuel Baptist Church Addition, Charleston, WV
- Energy Services & Technical Support, Inc., Paintsville, KY
- West Virginia Mountaineer Energy, Cannelton, WV

- Cogentrix, Inc., Marshall County, WV
- Dominion Resources, Upshur County, WV
- Tupper's Creek Megaplex, Kanawha County, WV
- Old Standard Housing Development, Jefferson County, WV
- First Church of God, Charleston, WV
- West Virginia-American Water Company Residuals Facility, Charleston, WV

Dam Design & Modification Projects

Served as a design engineer on multiple dam design and rehabilitation projects. Tasks included hazard/flood routing, hydraulic/hydrologic analysis, geotechnical investigation and recommendations, slope stability, seepage analysis, preparation of final construction drawings, specifications, and project narrative reports.

- Holtz, Upper Ward and Lower Ward Dam Inspections, Dow Technical Center, South Charleston, WV
- Seneca Lake Dam, Pocahontas County, WV
- FMC Sportsman's Club Dams, Putnam County, WV
- FMC Lithium Division No. 2 Tailings Dam, Bessemer City, NC
- Thomas Dam, Tucker County, WV
- Teter Creek Lake Dam, Barbour County, WV
- McClintic Wildlife Management Area Pond 11, Mason County, WV
- Handley Public Hunting and Fishing Area Dam, Barbour County, WV
- Wells Lock and Dam, Elizabeth, WV

Water/Sewer Projects

Served as a design engineer for various water supply and sanitary sewer projects. Responsibilities on these projects have included hydraulic modeling of water supply systems, water distribution line layout and design, potable water storage tank design and pump station design, sanitary sewer collection system modeling and design, existing system rehabilitation design, sanitary pump station design, treatment system design.

- Norborne Glebe Subdivision Pump Station, Charles Town, WV
- Jordan Landing Apartments, Pt. Pleasant, WV
- Valley Village Apartment Complex, Elkins, WV
- North Bend Apartments, Harrisville, WV
- Elk Crossing Apartment Complex, Elkview, WV
- The Woodlands Subdivision, Charleston, WV
- Old Standard Residential Housing Development, Jefferson County, WV
- University of Charleston Sanitary Sewer Pump Station and Force Main, Charleston, WV
- Fleming Sanitary Landfill Leachate Collection System and Pump Stations, Kanawha County, WV
- Inflow/Infiltration Study and Preliminary Engineering Report for Segregation of a Municipal Sanitary and Storm Sewer System.

- Thomas, WV
- Joe's Creek Water Line Extension for WVAWC, Boone County, WV
- City of Philippi Water Extension Project, Barbour County, WV
- Tucker County Industrial Park, Tucker County, WV

Residential and Commercial Structures Forensic Damage Investigation

Performed numerous evaluations of both residential and commercial structures to determine causes of damage to structures related to foundation movement, landslides, wind/snow loading, improper construction, water damage, construction blasting, and mine subsidence.

- State Farm Insurance Company
- Nationwide Insurance Company
- Allstate Insurance Company
- Motorists Mutual Insurance Company

Project Abstract

CHILD CARE CENTER

Marshall University

Huntington, West Virginia

Marshall University, working in conjunction with the City of Huntington, coordinated the efforts of a development committee to design a child care facility for the faculty and students of the University, as well as the residents of the city. POTESTA was contracted to Marshall to prepare a topographic map of the site indicating the locations of the utilities at the site. The site also housed an abandoned block structure which served as a hardware store in the past. Prior to demolition of the structure, POTESTA conducted an environmental assessment of the property to determine the presence of any environmental concerns including the presence of asbestos containing materials.

POTESTA also conducted a geotechnical exploration of the property and prepared a foundation recommendation report to indicate the acceptable bearing capacity of the site soils to aid the structural engineering in the design of the foundation system. POTESTA field technicians and engineers were also involved during the construction of the structure. Various tasks included the sampling of concrete, field tests to ensure the bearing capacity of the subgrade met the original design criteria and design changes instituted during construction due to poor subgrade conditions.

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(304) 342-1400/www.potesta.com

Project Abstract

BIOTECHNOLOGY CENTER

Marshall University

Huntington, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by the HDMR Group, Inc. to prepare topographic mapping, boundary surveys, plat descriptions, geotechnical design and utility engineering services for the site of the proposed Marshall University Biotechnology Center.

Site mapping development included the location of buried site utilities, limits of WVDOH and City of Huntington right-of-ways and 1 foot contours based on a ground survey of the site. POTESTA tied the mapping information into a campus coordinate system. All utility providers maintaining utilities at the site were contacted and arrangements were made to have the buried utilities located. The surveyors then located the utilities for placement on the final site mapping. In addition to the preparation of the site mapping, POTESTA surveying personnel also completed a boundary survey of the property. Final plats and deed descriptions were prepared and submitted to the University for their use in finalizing the funding structure of the project.

The geotechnical exploration included the completion of ten subsurface borings to determine the subsurface conditions underlying the site. Several of the borings were completed to refusal on bedrock to allow for the design of deep foundations. Soil and rock samples were collected from the borings and tested to determine soil strength criteria. A preliminary report was prepared to indicate the results of the drilling program and laboratory testing, as well as recommendations of allowable bearing capacities for the various foundations elements. An elevated enclosed walkway connected to the existing science building across 3rd Avenue was also designed for the project. Drilling and foundation recommendations were also provided for the walkway supports to be located on the south side of 3rd Avenue.

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Project Abstract

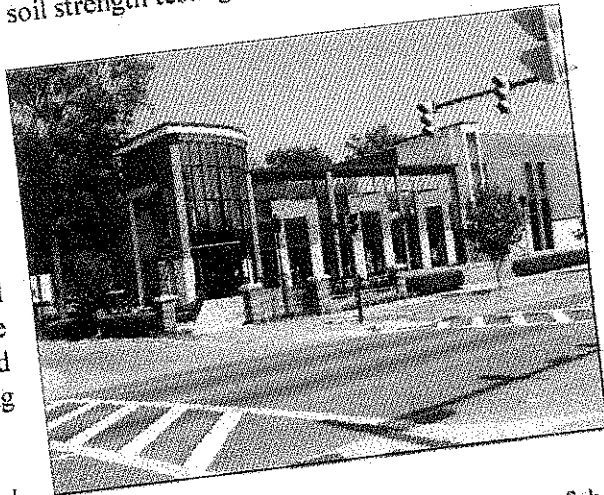
BOOKSTORE ADDITION

Marshall University

Huntington, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained to provide geotechnical exploration and foundation design services for the bookstore addition to the existing student center building on the campus of Marshall University in Huntington, West Virginia. POTESTA completed a total of 4 subsurface borings at the addition site to determine the nature of the foundation subgrade materials. Soil samples were collected during completion of the drilling program which were logged at the site during drilling and were subsequently subjected to soil strength testing.

POTESTA prepared a final foundation recommendation report which summarized the findings of the subsurface exploration, results of the soils testing program and provided final foundation recommendations for the planned addition structure. These recommendations included an evaluation of the potential foundation systems for the project, allowable bearing capacity recommendations and settlement estimates given the intended loading conditions.



The subsurface investigation encountered high plasticity clay in approximately fifty percent of the planned foundation area. Recommendations included a requirement for over-excavation of the clay material at the planned foundation locations. The over-excavated areas were then backfilled with borrow soils and commercially purchased stone to enhance the allowable bearing capacity of the foundation subgrade areas.

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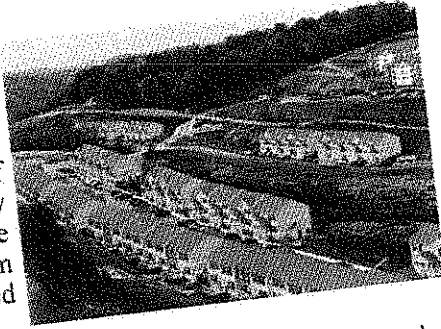
Project Abstract

COPPER BEECH STUDENT HOUSING

Copper Beech Townhome Communities, LLC

Morgantown, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by Copper Beech Townhome Communities, LLC to prepare design plans and specifications for a proposed 40-acre student housing development, containing 31 proposed residential buildings, clubhouse, and parking. The project consisted of various constraints, such as a West Virginia County highway bordering the north side of the site, existing townhome development to the south, and an existing perennial stream bisecting the project. Also to be considered were related wetlands and ephemeral/intermittent stream channels.



In addition, many of the natural slopes on the project site in areas not affected by the stream/wetlands were two horizontal to one vertical.

POTESTA's work began with an existing layout provided by a previous design firm and moved through conceptual layout and grading activities to reduce impacts to the existing stream and wetland areas. Roughly 11,250 linear feet of retaining walls ranging up to 50 feet in height were proposed to aid in the creation of proposed roadway, parking, or building locations, while remaining out of the environmentally sensitive areas. POTESTA performed a geotechnical evaluation of the site's subsurface conditions to gather information for use with various aspects of POTESTA's scope of work.

Specific services associated with POTESTA's scope include:

- Stream and wetland delineation and report
- U.S. Army Corps of Engineers (USACE) conceptual and compensatory mitigation plan
- USACE 404/WV State 401 Permit
- WV Department of Environmental Protection WV/NPDES construction storm water permit
- Preparation of construction drawings and technical specifications
- Geotechnical evaluation through field underground exploration and report
- Storm water design and incorporation into WV/NPDES Permit
- Utility coordination-including sewer main line relocations
- Bridge design coordination for project onsite crossing of stream
- Construction stakeout of retaining walls, roadways, buildings, utilities and curbing.
- Construction observation and soils testing for walls
- FEMA Letter of Map revision due to fill (LOMR-F)
- Flood Plain permit through Monongalia County Planning Commission

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Project Abstract

WING "D" ASSISTED LIVING ADDITION

Edgewood Summit

Charleston, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by the owner and developer, Edgewood Summit, to provide both civil and geotechnical services for the project. POTESTA personnel were involved in the project from the initial schematic phases to provide input related to the project scope. This included hydrology recommendations designed to minimize impact of the increased runoff from the site to existing residential and recreational developments which existed downslope from the planned structure. These areas had historically experienced increased runoff and erosion from the previously completed phases of the project. POTESTA worked with the City of Charleston Planning Commission officials to provide a workable and affordable solution to collect and detain the increased runoff from impermeable areas of the development.



POTESTA also provided geotechnical exploration and design recommendations to the structural engineering consultant related to the allowable bearing capacities of the planned structure. POTESTA field personnel worked closely with the contractor during the excavation of the foundation trenches to ensure that the bearing surfaces which were located in a highly weathered shale and claystone were adequate for the intended footing pressures. Field personnel conducted numerous cone penetrometer tests in the field to determine actual subgrade bearing capacities prior to foundation construction. The exposed subgrade materials were susceptible to rapid weathering after exposure to the atmosphere. This required close coordination with the contractor to minimize the time the excavation was exposed to the elements after excavation.

POTESTA survey personnel provided construction layout services in the field for the contractor during construction of the planned addition. This included the layout of the building foundations as well as site grades, access roads and utility services.

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Project Abstract

HOLIDAY INN

The Winter Construction Company

Huntington, West Virginia

Potesta & Associates, Inc. (POTESTA) was contracted by The Winter Construction Company to provide surveying and geotechnical engineering services during the construction of a four-story hotel located in Huntington, West Virginia. The surveying portion of this project involved performing a site survey which included a topographic survey and utility mapping. POTESTA also provided construction layout which included the building footprint, the location of the auger-cast pile foundation system, utilities, entrance and exit ways, and parking areas.

POTESTA also provided geotechnical engineering services during the completion of pile load tests on piles of various lengths. These tests were performed to evaluate the feasibility of utilizing the piles to support the anticipated loading conditions.



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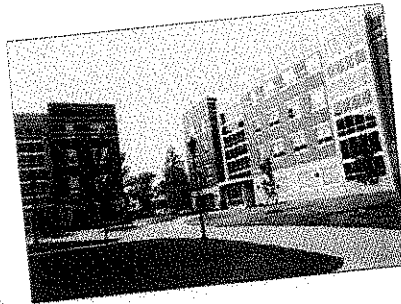
Project Abstract

STUDENT HOUSING COMPLEX AND DINING HALL FACILITY

Marshall University

Huntington, West Virginia

Potesta & Associates, Inc. (POTESTA) was retained by the owner as part of a design team managed by a joint partnership between Einhorn, Yaffee & Prescott, Architects and Bastian & Harris, Architects to complete site mapping, conduct a geotechnical exploration and design of underground utility connections for construction of four student residence hall structures and an associated dining hall facility on the campus of Marshall University in Huntington, West Virginia.



During the schematic phases of the project, POTESTA survey personnel prepared topographic mapping of the project site with 1 foot contours. The mapping was developed on the current campus coordinate system. All utility providers maintaining utilities at the site were contacted to determine the location of all existing buried and above ground structures which were surveyed and placed on the final mapping. In addition to the preparation of the site mapping, POTESTA surveying personnel also completed a boundary survey of the affected parcels. Several residential and commercial parcels were not owned by the University, requiring the preparation of detailed boundary surveys. Plat and deed descriptions were developed for these tracts.

A geotechnical exploration and final foundation recommendation report was also prepared for the project. POTESTA completed a total of 10 borings at the site. These were performed to determine the subsurface conditions and to collect soil samples for strength testing. Structural loading conditions and combinations were determined by the structural engineer during development of the final construction design drawings, and these loads were utilized to make recommendations of allowable bearing capacities of the subgrade soils at each structure location. Settlement calculations were also developed for each structure and foundation type. Over-excavation of the existing surficial on-site soils was recommended to provide adequate allowable bearing capacities for the planned four story residence hall structures.

Work also included coordination with gas, electric, cable and telephone service providers to relocate aboveground and buried utilities and related service connections to structures scheduled for demolition. Coordination was also provided to establish new service connections for the planned structures. POTESTA coordinated the connections and service requirements with the project's mechanical engineer and landscape architect, as well as the City of Huntington for both storm water and sanitary sewer connections and provided design drawings and specifications for new underground sewer service lines to connect to the existing municipal system. POTESTA incorporated back flow prevention devices on all storm sewer connections to prevent against back flow flooding during periods when the storm sewer system was in pressure flow. POTESTA personnel worked with the design team members throughout the bidding phases of the project to answer any contractor questions through the preparation and development of required addendums to the bidding package.

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Ham
Engineering

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f.3404.744.3196

Ham Engineering
Structural Engineers
South Charleston, WV

Experience and Capabilities

Ham Engineering is a Structural Engineering firm with the capability to address the needs of the building professional. We are a full service structural engineering firm providing engineering consultation, engineering design, drafting, field assistance, structural evaluation, shop fabrication drawing assistance, and interdiscipline checking, and we are normally retained as the structural consultant for the Owner, the Architect or the General Contractor on a project. In the past twenty years, we have provided our services to Architects, Developers, Fabricators, and Owners for projects in the commercial, retail, educational, industrial, and residential areas. The principal engineer in the firm has over thirty years experience in structural engineering and is a registered professional engineer in West Virginia, Ohio, Pennsylvania, Tennessee, North Carolina, Georgia, and Virginia.

Contact Ham Engineering, Inc.

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Email: jham@hamengineer.com

Judson C. Ham, Jr., PE
Structural Engineer
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Email jham@hamengineer.com

EDUCATION: West Virginia Institute of Technology
1974 BSCE Civil Engineering

West Virginia College of Graduate Studies
1978 MSE Structural Engineering

West Virginia College of Graduate Studies
24 hours toward MS in Engineering Management

PROFESSIONAL REGISTRATION: West Virginia, Ohio, Pennsylvania,
Tennessee (Inactive), Georgia, North Carolina, and Virginia

PROFESSIONAL ASSOCIATIONS:

American Society of Civil Engineers, Structural Engineering Institute
American Concrete Institute
The Masonry Society
Light Gage Steel Engineers Association
American Institute of Steel Construction

HAM ENGINEERING Inc., South Charleston, WV
April 1988 to present
(part time July 1988 to December 1994)

Principal Structural Engineer engaged in the practice of structural engineering for residential, architectural, commercial, and industrial projects for Architects, Contractors, Owners, Developers, and Fabricators in Charleston, WV and the surrounding area.

JOHN BROWN E&C Inc., Charleston, WV
July 1988 to December 1994

Civil/Structural Department Manager responsible for all civil and structural engineering, design and drafting done by the Charleston Operations. Major clients have included El duPont, GE Plastics, Rhone Poulenc, Ashland Oil, American Cyanamid, Degussa, Union Carbide, Aristech, INCO Alloys, FMC, and South Charleston Stamping. (March 1989 to December 1994) (Renamed as Aker Kvaerner)

Resume of Judson C. Ham, Jr., PE

Civil/Structural Engineer responsible for the structural engineering and design of modifications and additions for an expansion project for Aristech Chemical, Haverhill, Ohio. July 1988 to February 1989)

TROJAN STEEL COMPANY, Charleston, WV February 1987 to April 1988

Structural Engineer responsible for engineering support of the steel fabrication shop and client projects done in house. Also represented the company in the sale of pre-engineered buildings, joists, and related construction products.

BELCAN CORPORATION, Charleston, WV March 1984 to January 1987

Structural engineer assigned to the Plant Engineering group at the Union Carbide Corporation, Silicone and Urethane Intermediates Plant. Responsibilities included engineering design and checking for plant projects.

CONSULTANTS AND DESIGNERS, Atlanta, GA August 1983 to March 1984

Structural Engineer assigned to the Tennessee Valley Authority, Watts Bar Nuclear Plant, Spring City, TN, Engineering Design On Site, as a pipe support engineer. Duties included design and checking of structural field change requests to expedite construction.

MIDWEST TECHNICAL INC., Kingsport, TN February 1983 to July 1983

Structural Engineer assigned to Dewberry and Davis, Engineers, Architects, Surveyors, and Planners, Marion, VA, to design and check calculations for bridges, mid-rise housing, commercial buildings, and waste water treatment facilities. (April 1983 to July 1983)

Structural Engineer assigned to Bechtel Petroleum, Inc., Kingsport, TN to perform "pre start-up" pipe stress analysis for a Coal Gasification Plant at Tennessee Eastman. (February 1983 to April 1983)

MIDWEST TECHNICAL, INC., St. Albans, WV September 1974 to January 1983

Structural Engineer responsible for the design, management, and coordination of civil, structural, and surveying work. The majority of my experience was in the chemical and industrial areas for clients such as Union Carbide, EI duPont, Volkswagen, Columbia Gas, and numerous steel fabricators. Extensive design experience in structural steel, reinforced concrete, foundations, site development, bridge inspections, and railroads.

Resume of Judson C. Ham, Jr., PE

LOWE ENGINEERS, INC., Charleston, WV
August 1973 to August 1974

Structural designer assigned to Bridge Department for the upgrading of portions of I-77 (West Virginia Turnpike) to Interstate standards.

WEST VIRGINIA DEPARTMENT OF HIGHWAYS, District One Bridge
Department, Charleston, WV
February 1971 to August 1973

Bridge inspector with primary duties of inspection, appraisal, and inventory of bridges on the West Virginia and Federal Highway Systems in the area covered by District One.

Ham Engineering
Structural Engineering
South Charleston, WV

Ronald L. Manning
Senior Structural Designer

Education

One year college, Kansas City, MO - Machine Drafting and Tool Design

John Brown Quality Training Program

AutoCad R-11 through R-13 John Brown Training

Professional Experience

Mr. Manning has over thirty years experience with industrial, chemical, commercial and residential projects. His responsibilities include design, drafting both manually and using AutoCad, shop fabrication detailing, fieldwork and full support for construction and steel erection.

Ham Engineering
Structural Engineers
South Charleston, WV

Project Experience

Ham Engineering is normally retained as the structural consultant for the Owner, the Architect or the General Contractor on a project. The majority of the structural engineering performed by our firm involves projects in the commercial, retail, educational, industrial, and residential areas. The following is a partial list of commercial projects completed within the last five years. A list of other projects in the educational, industrial, and residential areas can be provided.

**Additions to Kanawha County Judicial Annex
Charleston, WV**

One story additions to the front and rear of the existing Kanawha County Judicial Annex. The rear addition is a 1700 square foot precast concrete plank roof and load bearing masonry wall holding cell structure plus interior modifications to the building. The front addition is a 700 square foot structural steel framed enclosed corridor between the main entrance and the parking structure.

**BIDCO Shell Building
Southridge Center
Charleston, WV**

Shell building for future business relocations to Charleston. One story industrial/warehouse space with an office wing and a future office mezzanine level. Structural steel frame supporting a built up roof on joists with masonry exterior walls.

**City Holding, Inc.
Cross Lanes, WV**

General offices for bank processing. Three story with partial basement. Structural steel frame with concrete floors on joists. Caisson foundations due to extremely poor soil conditions.

Ham Engineering Project Experience, Cont'd

WOWK Television Building 13 Kanawha Boulevard Charleston, WV

Television Studio and offices. Three story steel frame with concrete floors on joists. Spread foundations. Unusual floor plan with 45 degree corners. Project was done as Design Build with General Contractor as prime.

USPS Post Office Beckley, WV

Post Office. One story steel frame supporting built-up roof with exterior brick veneer walls. Exterior loading docks for variable size trucks.

Caperton Center For Applied Technology WVU Parkersburg Parkersburg, WV

Classrooms, labs, and office space. Two story steel framed with concrete floor on joists. Extensive use of curved and intersecting exterior walls.

Buckingham Square Grand Cayman, BWI

Bank with general office space on second floor. Two story structural steel moment frame with concrete floors on steel joists. Designed for hurricane force winds.

Medical Office Building Division Street South Charleston, WV

Medical offices located across from Thomas Memorial Hospital. Three story steel frame with concrete floors on joists.

FOG Building MacCorkle Avenue South Charleston, WV

Medical and General offices located near Thomas Memorial Hospital. Four story steel frame with concrete floors on joists.

Ham Engineering Project Experience, Cont'd

G&G Building Scott Depot, WV

Office Building. Four story steel moment frame with concrete floor on joists. Set backs at each corner complicated the structural design.

Skaff Medical Building Charleston, WV

Medical Office Building. One story masonry building supporting a built up roof on steel joists.

Capital State Bank Southridge Center, Charleston, WV

Building houses a bank on the lower floor and office space on the second floor. Two story wood structure with wood and gypcrete floors.

Estes Medical Building Scott Depot, WV

Medical office building near the Putnam County General Hospital. Three story steel framed with concrete floors on joists.

Charter Communications Building Scott Depot, WV

General Office Building. Three story steel moment frame supporting concrete floors on steel joists. Building designed for a future fourth floor.

Holiday Inn Civic Center Huntington, WV

Hotel and related facilities. Five story masonry building with prestressed precast concrete plank floors. Steel framed entry canopy.

Musselman Middle School Berkley County, WV

Classrooms, labs, and other related educational facilities. Two story steel and masonry structure with concrete floors on joists.

Ham Engineering Project Experience, Cont'd

Piedmont Elementary Addition Charleston, WV

Classroom and multi purpose room addition to existing building. Two story steel and masonry structure with concrete floors.

Charleston Fire Station Corridor G Charleston, WV

Fire Station. One story wood framed building with wood floor joists. Partial second floor.

American Freightways Terminal Nitro, WV

Truck terminal. One story steel moment frame on concrete slab.

Family Enrichment Center Patrick Street Charleston, WV

Community space and related offices. Renovations and additions at the former West Virginia Tractor Building. One story steel frame with built up roof on steel joists. Partial second floor.

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HE Harper Engineering

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HE Harper Engineering

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Harper Engineering was founded in 2008 to provide innovative engineering design services to architects, owners and contractors throughout the state. We are a unique combination of eager young talent and proven experience fused together to serve all of your building systems design needs including heating, cooling, plumbing, lighting, and electrical.

Our goal is to design optimized systems that meet all of our client's performance, energy use, and budgetary needs. The staff at Harper Engineering has a combined 80 years of experience working with clients in a variety of fields including but not limited to education, hospitals, offices, airports, manufacturing, and water treatment plants.

Services:

HVAC Design
Heating and Cooling load calculations
Ductwork sizing
Hydronic pipe sizing
Equipment selection

Electrical Design
Electrical load calculations
Panel and switch gear selection
Lighting
Fire alarm
Site Utilities
Emergency Generators
Security and communications

Plumbing Design
Pipe sizing
Fixture selection
Sprinkler design
Site Utilities

Drafting
Specifications
Project Management
Construction Documents

HE Harper Engineering

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Fax: 304.722.3603



Jason E. Harper, PE
(304)-541-1390
jason@harperengwv.com

Education

West Virginia University Institute of Technology
Montgomery, WV
Bachelor of Science-Mechanical Engineering

Registrations/Professional Affiliations

Licensed Professional Engineer – WV, KY, MD
ASHRAE

Experience

Jason E. Harper, PE brings 7 years design experience to our firm. He has experience with HVAC and piping design. His projects include educational facilities (including colleges and universities), health care facilities, office buildings, banks, emergency services facilities, postal facilities, and government buildings.

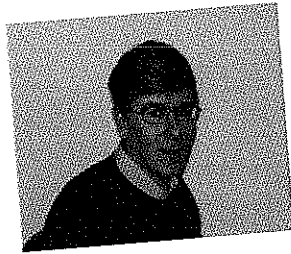
Projects

Stonewall Jackson Hospital Endoscopy Renovations
Baileysville Elem. HVAC Renovations
Dominion Gas Office Building
Berkeley Testing Lab
Oak Hill Police Station

Renovations to Gilmer Co. High
301 Virginia Street Alpha and Bravo
Renovations to Glenville ES
Moses Factory Outlet-Teays Valley
ARH-CT Scan Renovations

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Scott D. Phillips
(304)-722-3602
Scott@harperengwv.com

Registrations/Professional Affiliations

American Society of Plumbing Engineers

Experience

Scott D. Phillips brings 26 years design experience to our firm. He has experience with plumbing and fire suppression system design. His projects include educational facilities (including colleges and universities), health care facilities, office buildings, banks, emergency services facilities, postal facilities, and government buildings.

Projects

Renovations to Glenville ES
301 Virginia Street Alpha and Bravo
Terra Alta ES Fire Alarm
Oak Hill Police Station
Berkeley Testing Lab
Dominion Gas Office Building
Raleigh Co. BOE Credit Union

City of St Marys WWTP
Renovations to Burnsville ES
Timber's Lodge
Thrasher Engineering Office Addition
Moses Factory Outlet- Teays Valley
WVU Housing Sanitary Replacement
Renovations to Davis ES

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Fax: 304.722.3603



Richard M. Standish
(304)-722-3206
Rick@harperengwv.com

Registrations/Professional Affiliations

SHRAE

Experience

Richard M. Standish brings 37 years design experience to our firm. He has experience with HVAC, plumbing, and electrical design. His specialty is the electrical design of water treatment and wastewater treatment plants. Rick's projects include treatment plants, educational facilities (including colleges and universities), health care facilities, office buildings, banks, emergency services facilities, postal facilities, and government buildings.

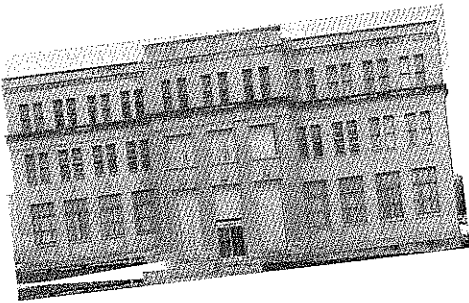
Projects

M Jefferson County Public Service District
Renovations to Burnsville Elementary
101 Virginia Street Alpha and Bravo
Berkeley Testing Lab
St. Albans WTP
Oak Hill Police Station
Monongah WTP
Long Beach WWTP
City of St Marys WWTP
Moses Factory Outlet-Teays Valley

Renovations to Glenville ES
WVU- Boreman Hall
Addition to Shady Spring Middle
Preston Co. High School Fire Alarm
Thrasher Engineering Office Addition
Flatwoods-Canoe Run PSD
Union PSD
Weirton WTP
Renovations to Flatwoods ES
Dominion Gas Office Building

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Fax: 304.722.3603

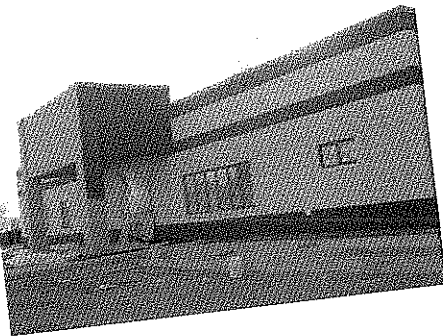


Alpha and Bravo Building for the Kanawha County Commission consisted of 50,000 sq ft of renovated office space that will be home to the Kanawha County Sheriff's Department and also the Kanawha County Prosecuting Attorney's Office. The project bid date was April 2009. The construction cost was \$6,400,000.

Dominion Gas Office consisted of 20,000 sq ft of new office space for Dominion Gas in Clarksburg, WV. The project was performed as design-build. Cost of construction was \$2,600,000. The building has been occupied since December 2008.



Oak Hill Police Station is located in Fayette County, WV. The building is approximately 5,400 square feet of office space for the City of Oak Hill's police department. The project is scheduled for completion Spring 2009. The cost of construction was \$1,400,000.



STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: 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.

DEFINITIONS:

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

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

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

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.

WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: Associated Architects, Inc.

Authorized Signature: [Signature] Date: March 9, 2010

State of West Virginia

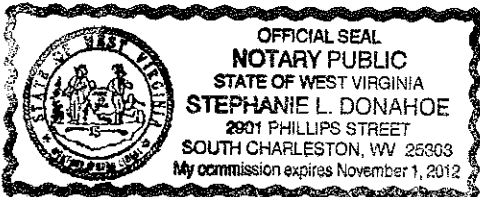
County of Kanawha, to-wit:

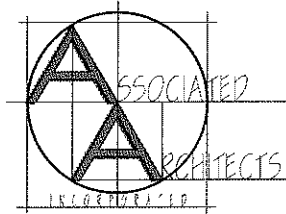
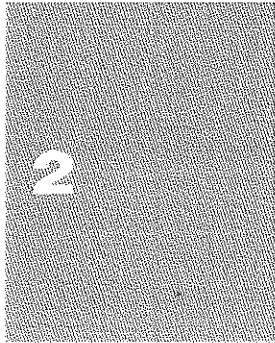
Taken, subscribed, and sworn to before me this 9 day of March, 2010.

My Commission expires November 1, 2012

AFFIX SEAL HERE

NOTARY PUBLIC Stephanie L. Donahoe





318 Lee Street W.
Suite 200
Charleston, WV 25302
p.304.345.1811
f.3404.345.1813