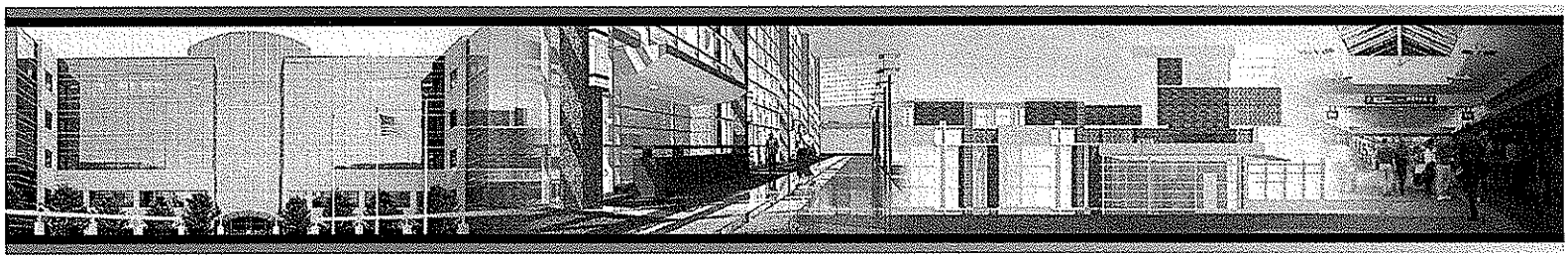


Expression of Interest to Provide Architectural / Engineering Design Services New Office Building AGR1013 Gus R. Douglas Agriculture Center Charleston, West Virginia

submitted to:

Mr. Ron Price
Purchasing Division
2019 Washington Street East
Charleston, West Virginia 25305-0130

submitted by:

Michael Baker Jr., Inc.
5088 Washington Street West
Charleston, West Virginia 25313

February 23, 2010

Baker
Engineering & Energy

ChallengeUs.

Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation

5088 West Washington Street
Second Floor
Charleston, WV 25313

304.769.0821 Phone
304.769.0822 Fax

February 23, 2010

Mr. Ron Price
Purchasing Division
2019 Washington Street East
Charleston, West Virginia 25305-0130

RE: Expression of Interest to Provide Architectural/Engineering Services New Office Building at the Gus R. Douglas Agriculture Center, Charleston, WV

Dear Mr. Price:

Michael Baker Jr., Inc. (Baker) is pleased to present our qualifications and experience as it relates to the Planning and Design of the proposed Office Building for the West Virginia Department of Agriculture. During your review of the enclosed information, you will see that Baker has completed or is currently performing assignments very similar to those outlined in your solicitation.

Baker is a global engineering and energy firm with some 4,700 members in 50 office locations. We propose to undertake this assignment from our Charleston office with a staff of over 40 individuals including architects, engineers, landscape architects, planners, surveyors, environmental specialists, construction managers, public safety specialists, inspectors, and technicians.

We feel this combination of global expertise and West Virginia based experience is unique to Baker and we will provide efficient, timely, personal, cost effective, and quality solutions for the West Virginia Department of Agriculture.

We continue to strive to be the best at what we do. No other firm can match our commitment. Please call us for an interview so that we can present our qualifications and convince you, in person, that Baker is eager to forge a long-term relationship with the West Virginia Department of Agriculture. We would welcome the opportunity to become your project delivery team. For the purposes of future contact and further questions, please feel free to contact me at (304) 769-0821 or by e-mail at rhall@mbakercorp.com.

Sincerely,

Michael Baker Jr., Inc.

Russell E. Hall, PE, PS
Assistant Vice President
Charleston Office Manager

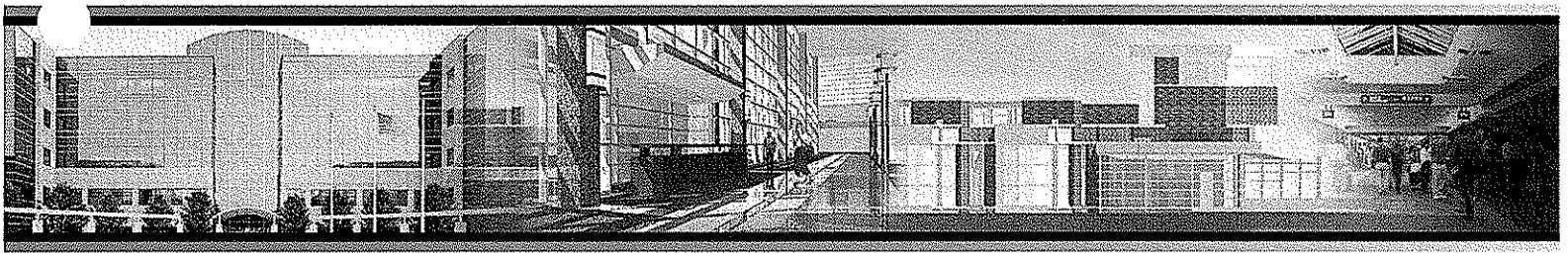


Table of Contents

Part 1 – Introduction

The WV Department of Agriculture is seeking a highly qualified firm experienced in the planning, design, and construction administration of a new office facility. Michael Baker Jr., Inc. (Baker) is a highly qualified firm with extensive experience in providing these services, and we are extremely interested in establishing a professional relationship with the WV Department of Agriculture.

> *"...we are extremely interested in establishing a professional relationship with WV Department of Agriculture."*

Corporate Capabilities

Baker is a wholly owned subsidiary of the Michael Baker Corporation (a publicly owned company traded on the American Stock Exchange), employs over 5,000 people in 50 offices world-wide, and ranks in the top 10% of the nation's top 500 engineering firms. Baker provides consulting, engineering, architecture, operations, and technical services worldwide. The firm has a national practice with 34 offices throughout the U.S. from which to serve clients nationally. Since our founding in 1940, Baker has compiled an outstanding record of transportation engineering design achievements including more than 1,000 bridges of every description and over 100,000 miles of roadway. We are committed to using computer technology and provide services in the areas of Water Resources, Environmental Design and Permitting, Geographic Information Systems, GPS and Field Data Collection, Infrastructure Management, Database Development, Computer/Web Programming, and CADD.

Baker has extensive resources and the required qualifications to provide planning and design services for the WV Department of Agriculture for this important project. We have nationally recognized experts with the technical experience necessary for this assignment. In addition, Baker's team of experienced professionals has an established record of delivering quality work products to our clients, on schedule and within budget.

In summary, Baker's staff can provide documentation of our extensive experience in the following areas for this project:

- Nationally recognized expertise in Program Management Assignments;
- Facilities (Buildings, Access, Parking, Site Development) Plan Preparation;
- Full range of Public Transportation Services;
- Graphic Design Skills (CADD); and
- Coordination with State and Federal Agencies, as required.

Baker's Charleston office is a "single-stop resource" capable of providing comprehensive professional services, from environmental and public safety planning, final design, and construction management through operational support. From major

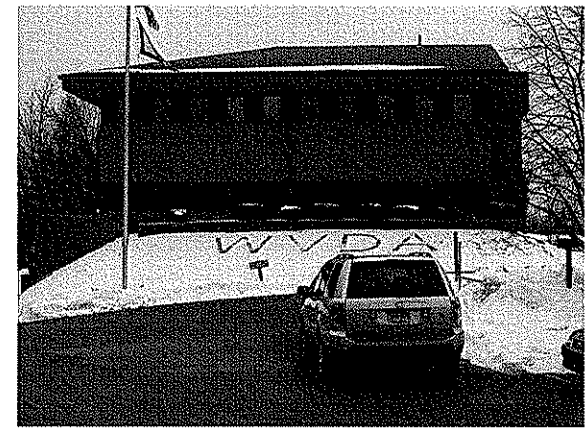
new bridges and roadway designs to surface mine permitting and water resource projects, Baker has evolved into one of the leading engineering and energy services firms by consistently providing targeted solutions for its clients' most complex challenges.

"Baker has evolved into one of the leading engineering and energy services firms by consistently providing targeted solutions for its clients' most complex challenges."

Baker's clients for facilities design and program management projects include, but are not limited to, the Counties, Cities, Towns, and local municipalities, numerous State Departments of Transportation, Military facilities, airport complexes, and private sector clients. Baker's geographic location and extensive experience enables us to quickly respond to wide-ranging scopes of service in order to meet client needs.

Cost Accounting System

Baker's cost accounting system segregates and accumulates costs by project and by task within each project. Through our work on past Transportation Enhancement projects, the WVDOH is familiar with this system. A current Cost Accounting Information Statement is on file with the WVDOH and is available upon request.

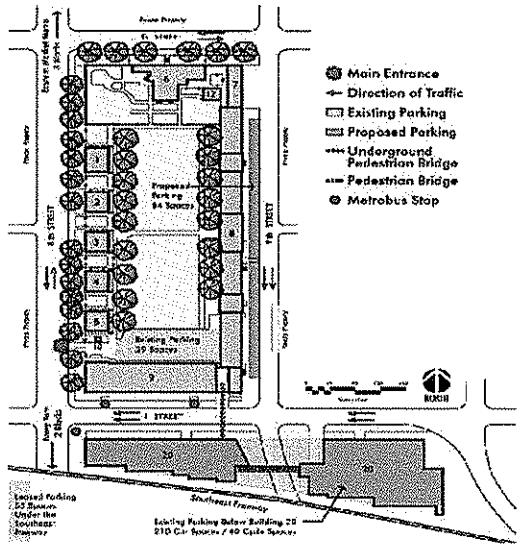


Part 2 – Qualifications

Baker routinely provides architectural/engineering services and project management for the design of public facilities that include state of the art communications connectivity, and the associated construction oversight of these projects when required. Project assignments have included educational facilities, maintenance facilities, garage facilities, emergency services facilities, and office buildings. Services for these assignments have included planning, surveying, mapping, right of way services, geotechnical design, architecture, civil, mechanical, electrical, plumbing and structural engineering, public safety programming, permitting and cost estimating. Specific project elements have included, architecture, landscaping, retainage structures, access road design, utility adjustment/relocation, storm drainage, water and sewer connections, site design, parking, fire protection design, pump stations, electrical duct banks, gas mains, fiber optic communication systems, corrosion control systems, HVAC design, oil/water separators, and security systems.

Baker's expertise includes but is not limited to:

- Program Management
- Conceptual Planning
- Design Charrettes
- Coordination and Public Involvement
- Sub-surface Investigation
- Land Development Planning
- Building Facility Siting
- Architecture and MEP
- Screening and Noise Abatement
- Landscape Architecture
- Permitting
- Construction Cost Estimating
- Right of Way and Easements
- Pre-Bid Meeting
- Bidding and Contracting
- Construction Inspection Services



Naval Facilities Planning, Chesapeake, Virginia

In addition, and of particular importance to this project, Baker is committed to sustainable design and the reuse of recycled materials on all projects with client approval. We have numerous LEED® accredited professionals on staff which are completely familiar with the five elements of the Leadership in Energy and Environmental Design, Green Building Rating System.

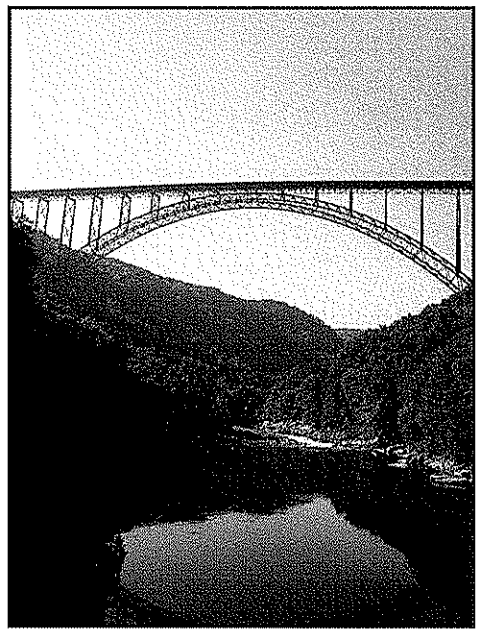
Part 3 – Technical Expertise

Baker can offer the WV Department of Agriculture proven experience in the following Professional Services which are typical for projects such as the type identified in your Request for Qualifications:

Preliminary Plans and Costs

Baker proposes to prepare preliminary site plans, elevations and schematic details with supporting design documentation. This document will describe the individual elements required for the architectural, engineering, public safety, environmental and traffic issues associated with the proposed facility.

Preliminary Cost Estimates for Construction will be prepared and included in the Preliminary Engineering Report submittal.



New River Gorge Steel Arch Bridge

Plan and Specification Preparation

Baker has vast experience in the development of construction plans and technical specifications for all types of architectural engineering projects. Initial survey data, topography, and physical features are collected electronically and downloaded into our CADD system for use by the designers in either AutoCAD or Microstation format. Plan and/or Profile sheets are then developed. Detail Sheets are created from our Standard Detail Library then modified to suit specific project applications. Specifications in Microsoft Word format are created from our Master Spec Library and tailored to meet individual project requirements.

During the project design phase, Baker routinely prepares permit applications for public and private clients. We have recently been involved in this process for local Municipalities. Permits which may be required for this project include:

- WV Department of Environmental Protection, NPDES Permit
- WVDOT/Division of Highways, MM-109 Permit
- WV Department of Health & Human Resources, Water & Sewer Permit

"Baker has established relationships with each of these agencies which will streamline the permit acquisition process."

Baker has established relationships with each of these agencies which will streamline the permit acquisition process.

Bidding and Contracting Document Preparation

Baker generally makes use of E.J.C.D.C. and/or A.I.A. bidding and contracting documents, as normally dictated by the funding agencies. Blank copies of these forms are included in the Project Manual and made available to all plan holders during the bidding process to minimize the risk of confusion or controversy and "level the playing field" for all prospective bidders. In our bid documents, Baker makes use of additive/deductive alternates and the unit costs approach to bidding. This allows the owner flexibility in spending, to insure the project meets budgetary requirements and that no "surprises" are realized.

Project Bid Evaluation

Bids will be scrutinized by the Baker Project Manager. Likewise, detailed bid tabulations will be developed to allow WV Department of Agriculture and the funding agencies to work with the Project Manager toward the development of a Construction Contract award.

Construction Administration and Inspection

Baker is well equipped to provide the administration and inspection of construction projects. Pre-Construction and regular job-site meetings, as well as shop drawing review, requests for information, pay requests and all other construction-related correspondence will be the responsibility of the Project Manager. Resident inspection services will be conducted by Baker technicians or staff engineers trained in construction practices and certified, as required, for the particular type of installation (i.e. concrete placement, compaction, asphalt, trenching, etc.). Constant communication between field and office is essential and will be achieved via cellular telephone, internet access, and facsimile.

Stonewall Jackson Lake Recreation Area

Part 4 – Management and Staffing Capabilities

The management approach for this assignment will follow ***The Baker Way*** which is the clearly defined and scalable internal process by which all projects are managed throughout Baker. This process requires administrative training for all Project Managers. This training module is known as ***Baker BEST*** (Business Enterprise Systems Training) and includes project setup, delivery, and billing modules.

Through better organization, tools and methods to monitor budgets, an emphasis on communication, and a structured approach to delivering quality; ***The Baker Way*** clearly provides considerable value to our clients.

Baker's Charleston office possesses a large and diverse engineering, architectural, and environmental planning staff. Baker's proposed team of experienced professionals has demonstrated the ability to deliver quality work products to our clients, on-time and within budget. While Baker can provide the entire depth of services necessary to complete the project, we will be willing to subcontract certain services (i.e., surveying, geotechnical engineering, inspection and testing, etc.) in an effort to control cost or to meet any small and/or disadvantaged business participation goals established by the principal funding agency or the WV Department of Agriculture.

Each individual on this project team has extensive experience in their field of expertise and have demonstrated success on projects of similar size and scope. The following provides a brief discussion of each team member's experience base relevant to this project.

As Principal-In-Charge, **Russell Hall, P.E., P.S.,** will ensure that all required resources including staff and equipment are available to the project manager to execute the project successfully. Mr. Hall has over 22 years of experience in transportation engineering working in both the government and private sectors. Mr. Hall has been responsible for the design and management of multiple transportation projects of varying size and complexity. His experience, understanding of project delivery and dedication to client satisfaction will guide this project.

Patrick Fogarty, P.E., P.S., is the Civil Services Group Manager. Mr. Fogarty has over 23 years of experience with civil and structural engineering projects of various sizes and levels of complexity. Mr. Fogarty will ensure that quality deliverables are submitted according to project schedule and within budget. Some of his notable projects that are directly related to the current proposed project are as follows:

- Town of Lost Creek – Historic Train Depot Improvements (completed)
- Lakewood Elementary School Boundary Survey (completed)

- Bonham Elementary School Flood Protection Study (completed)
- Charleston Housing Authority – Numerous Projects (completed)

Ron Bolen, AIA, with over 36 years of diverse experience, will serve as the Project Manager for this project. Mr. Bolen's project design experience includes master planning, educational, parks, recreation, institutional, commercial, housing, health care, long-term care, and religious facilities. He is experienced with the submittal process for various State Agencies, including WV SBA, and State Fire Marshal's office.

- Logan Office Complex, Logan, WV (completed)
- TCI – Television Cable Facility, Beckley, WV (completed)
- Glenville State College Science Hall Additions and Renovations (completed)
- West Virginia State Capitol Campus Master Plan (in design)
- West Virginia State Capitol Restroom Renovation & Restoration (in design)

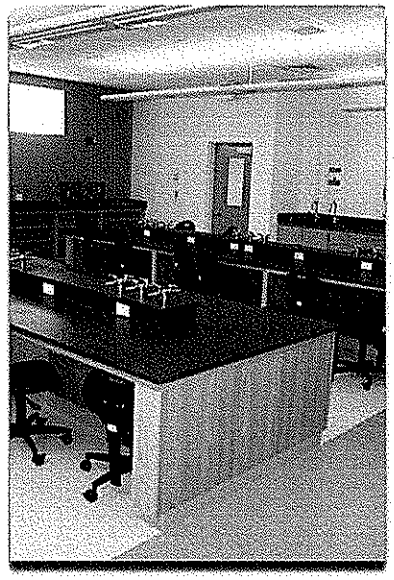
Laura Cox, PLA, ASLA, is a Registered Landscape Architect with over 26 years of experience in the fields of landscape architecture and land planning. She has extensive background in site and land use planning for counties and municipalities including, feasibility studies, review and evaluation of preliminary and final subdivision plans, special exceptions, rezoning applications, yield studies, special use permits and client representation at public hearings and meetings with civic groups.

David Hilliard has over 20 years of mechanical/electrical engineering experience and will provide HVAC and MEP services for this project. Mr. Hilliard brings extensive MEP design experience from numerous educational facilities, housing projects, medical facilities, and commercial office space projects.

Craig W. West, P.E., LEED® AP is the Mechanical Technical Manager for mechanical engineering department. He is responsible for fee estimating, job cost control, and construction cost estimating. He is responsible for all facets of the job, including initial client contact, project organization and management, load calculations, equipment/system selection, layout, developing department technical standards, supervision, fan static and pump head calculations, specifications, and sequences of operation.

Richard Bates, R.C.D.D., PMP, has over 32 years of experience in fields of electrical and communiciations distribution engineering. Mr. Bates serves as

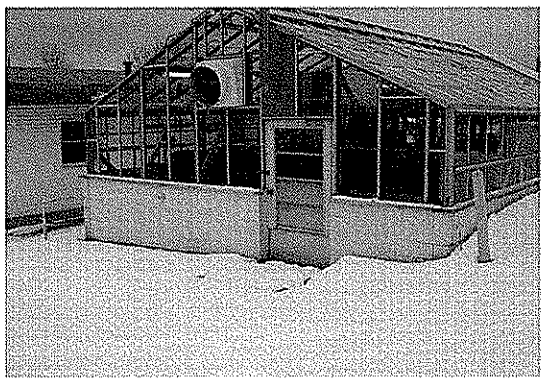
client manager for a major wireless communications provider in Western Pennsylvania for Mobile Switch Center facilities. Mr. Bates is certified as a Registered Communications Distribution Designer and Project Management Professional.



Research and Development Facilitv. Fairmont. WV

Kevin Louk, R.C.D.D., N.T.S., O.S.P., LEED® AP has lead electrical design projects for military installations, higher and secondary education, telecommunications buildings, medical facilities, commercial buildings, restaurants, and large-scale retail. A licensed master electrician, Mr. Louk's design and installation experience has been in the specialized areas of hazardous locations, clean rooms, and data centers. In addition to electrical design, he has performed construction administration duties and specification writing for his projects.

Joe Crowder has over 11 years of diverse experience that includes assignments in civil design, surveying, construction inspection and field testing. He is a professional surveyor, and engineering technician with over eighteen years of diverse experience in civil, environmental, and geotechnical engineering assignments. Mr. Crowder will be responsible for the data collection associated with surveying, easements, and right of way coordination for the project.



Site of Proposed Office Building

Part 6 – Project Outline

We have carefully reviewed your Expression of Interest to improve our familiarity and to identify any key issues. Based upon this intelligence, Baker has developed the following project outline:

Existing Issues

- The WV Department of Agriculture has a need for a new Office Building.
- Due to the physical constraints of the site the new building cannot be larger than 66' x 34'.
- The new structure will be located in Building to be located at the Gus R Douglas Agricultural Center in Charleston, West Virginia.

Project Description

- The Office Building for the WV Department of Agriculture as currently planned will consist of a two story building with approximately 2,000 square feet of space on each floor.
- The first floor of the new structure may include controlled climate storage and mechanical areas along with a small laboratory space.
- Anticipated spaces on the second floor of the building may include offices, restrooms, a conference room with audio/visual accommodations, a kitchenette and lunch room, a document center and a reception area
- The Office Building will necessitate construction of additional parking area for building personnel and visitors.

Technical Approach

Based upon our knowledge to this point, we consider this an architectural assignment with civil engineering, landscape architecture, mechanical and electrical engineering, and electronic communications components. Architectural elements may include structural shell building design, load allocation development, final masonry and foundation improvements designs, provisions for training areas, office space and restrooms within, development of interior finishes and amenities. Landscape architecture elements may include design geometrics, ADA compliance, road access, parking, utilities and earthwork.

Conceptual Planning Phase

During this phase Baker will collect all available data including historic information, utility maps, soils surveys, etc. We will use our existing E-911 mapping with 10' contour intervals and edit with conventional field surveys. Once all graphic data has been acquired, we will prepare a mosaic of the information and review for concepts and conflicts. We will then develop conceptual layouts for the mechanical, electrical and communications elements, structural elements, foundation design, and any other desired project elements.

Design Development Phase

Once conceptual plans have been approved by the WV Department of Agriculture, Baker will prepare the Preliminary Engineering Report and Cost Opinion for submission to the funding agencies. A 50% Design Submittal will also be prepared for review and approval.

Construction Documents Phase

Upon receipt of comments for the Design Development submittal, Baker will prepare construction plans, technical specifications, bid documents, final construction estimates, and all necessary permit applications. Likewise, we will assist the WV Department of Agriculture in the preparation of additional funding applications if necessary.

Bidding Phase

During this phase, Baker will prepare the Bid Advertisement, conduct the Pre-Bid Conference, prepare any necessary Addenda, perform the Bid Opening, create and distribute the Bid Tabulation, provide a recommendation of award of contract, and complete the Notice of Award for execution by the WV Department of Agriculture.

Construction Phase

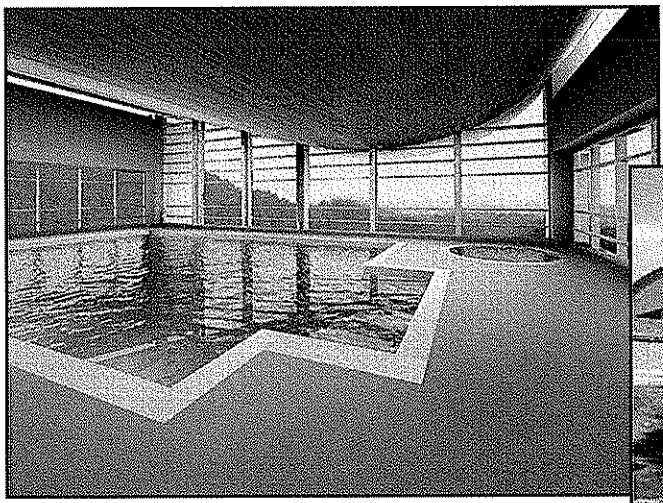
Initially, Baker will request insurance and scheduling information from the successful bidder and complete the Contract Documents and Notice to Proceed. Construction administration services will consist of shop drawing review, processing requests for information, monitoring construction progress, conducting construction meetings, processing payment applications, Davis-Bacon compliance review, and providing periodic construction inspection.

Part 7 – Related Prior Experience

The following Project Descriptions illustrate Baker's related prior experience. We have included examples of building facilities used for administrative office space, maintenance, training, parking and support functions for both military and civilian clients at various locations across the nation. Many of these projects are LEED® and/or SPiRiT (Sustainable Project Rating Tool) rated. We believe these projects show the depth of our expertise in all aspects of engineering and architecture. While we propose to conduct all activities from our West Virginia operation, these diverse project locations are meant to emphasis our ***One Baker*** philosophy. Which simply means that the WV Department of Agriculture will have access to the human resources, expertise, and technology of all Baker locations should the need arise.

In addition to this project experience, members of Baker's Charleston office have established relationships with many potential funding agencies including:

- West Virginia Fire Marshall's Office;
- WV Department of Transportation / Division of Highways;
- WV Development Office;
- USDA Rural Utility Service;
- US Department of Commerce E.D.A.;
- US Environmental Protection Agency; and
- WV Department of Environmental Protection.



Recreation and Fitness Center, Institute for Scientific Research, Fairmont, West Virginia

WVU Student Recreation Center, Morgantown

APG Billeting Office (Swan Creek)

Aberdeen Proving Ground, Aberdeen, Maryland

Baker provided a conceptual level, landscape plan for the Billeting Office, Swan Creek Inn, located on Aberdeen Proving Ground, Aberdeen Maryland. The design intent was to provide a warm, welcoming setting to accentuate the newly remodeled interior of the facility.

Although the existing condition of entry and parking areas was adequate, the overall visual perception of the area was not. Dominated by the two-story brick structure, the site lacked visual interest and pedestrian scale. Landscape delineation was minimal, at best, consisting mainly of lawn areas and a few aging trees. The asphalt parking areas had deteriorated and the overhead lighting was inadequate. In general, the entire site was stark and somewhat neglected.

The landscape plan accomplished the established goal by suggesting the following: Reorganize the parking areas to accommodate a pedestrian plaza and drop-off point at the main entry of the facility, provide new walkways and pedestrian scale lighting, provide site furnishings such as benches, trash receptacles, and bike racks, introduce brick paving into the landscape to reflect the architectural character of the facility, provide landscape delineation to enhance the site and to reduce the scale of the building, and to provide a new entry drive with appropriate signage and landscape delineation.

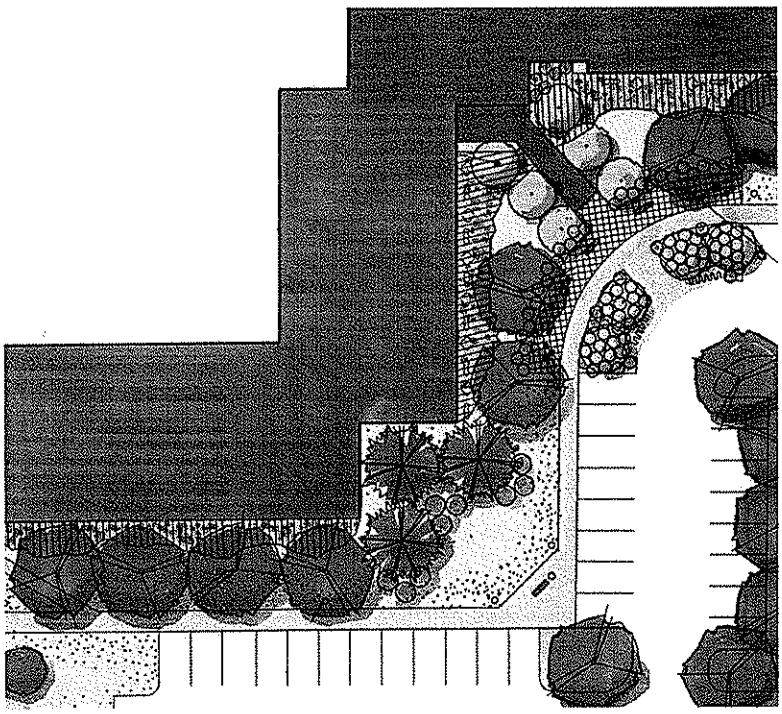
Client
U.S. Army Corps of Engineers,
Baltimore District
Planning Division
P.O. Box 1715
Baltimore, MD 21203-1715

Ted Gross
410-962-4577

Completion Date
Estimated: 1996
Actual: 1996

Baker's Role

- Landscape Architecture



Office Building Assessments for Corporate Expansion

VA, IL, and, Massachusetts

In 1994, Legent Corporation was undergoing a worldwide expansion phase for their coding and marketing operations. Legent contracted Baker to evaluate office buildings in the following various geographic locations to determine whether or not the buildings were suitable for purchase as local office space:

Location	Building Square Feet
Herndon, VA	140,000
Haperville, IL	27,000
Westboro, MA	74,000
Marlborough, MA	78,800

Baker conducted condition assessment surveys of the structural, mechanical, electrical, and fire protection systems, compliance with existing codes, the Americans with Disabilities Act, and good engineering practices. The mechanical and electrical systems had to be evaluated to determine whether or not they were suitable for the high power and air conditioning loads of a software programming environment, as well as the availability of emergency power.

Reports were generated for each facility stating the suitability to Legent's needs, assessing all system types, noting their deficiencies and adaptability, logging of all code violations, and making recommendations for improvements (both required and suggested) with associated preliminary cost estimates.

Client
Legent Corporation
2000 Park Lane
Pittsburgh, PA 15275

Completion Date
Estimated: 1994
Actual: 1994

Baker's Role

- Condition Assessments
- Structural Engineering
- Mechanical Engineering
- Electrical Engineering
- Plumbing Engineering
- Fire Protection Engineering
- Code and ADA Compliance
- Report Generation
- Cost Estimating

Office Building 100 and Parking Structure

Airside Business Park, Moon Township, Pennsylvania

This new 117,000-square-foot design/build-to-suit project was custom-designed to serve as the headquarters for a corporate tenant, yet offers the built-in flexibility to accommodate potential new tenants in the future. Many features enhance the flexibility of the building.

- Under-floor power and communications cabling and the use of carpet squares throughout, allowing easy reconfiguration of data network and electrical outlets.
- Use of movable glass and solid wall partitions, standard modular workstation panels, and the open plan concept, to enable quick and easy reconfigurations of workstations and office spaces.
- Six separate air handlers (two for each floor), to accommodate potential future use with two tenants per floor.
- Indirect lighting to reduce eye strain and increase productivity for employees using CAD systems.
- Phones run from a data network ("Voice over IP"), meaning that each phone is addressable through programming and that extensions can be redirected without moving wires.
- Many conference rooms, with varying amounts of space, identically located on each floor, with kitchenettes close by for convenience.
- Few individual printers; rather, multiple-function machines that serve as printers, copiers, scanners, and fax machines, strategically located throughout each floor.

Client
Airside Business Park, L.P.
1 Bigelow Square
Suite 630
Pittsburgh, PA 15219

William E. Hunt
412-281-8731

Completion Date
Estimated: 2002
Actual: 2002

Project Costs
$15,800,000 (Construction)

Baker's Role

- Planning
- Environmental Engineering
- Site/Civil Engineering
- Geotechnical Engineering
- Landscape Architecture
- Architecture
- Space Planning
- Interior Design
- Mechanical Engineering
- Electrical Engineering
- Plumbing Engineering
- Fire Protection Engineering
- Structural Engineering
- Traffic Engineering

Even the structure of the building itself came as an innovation, contributing even more flexibility. The office buildings in Airside Business Park are the first tilt-up office buildings in Western Pennsylvania. This method of construction enables the buildings to be closed in more quickly and, therefore, more economically. Because of the proximity to the Pittsburgh International Airport, the roof consisted of a composite concrete slab and composite beams for sound control.

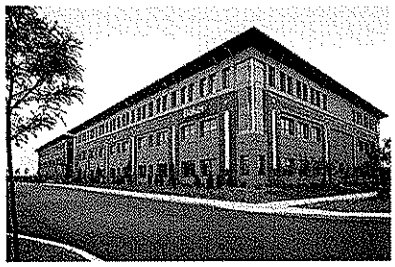
A training facility is provided, as well as a suite of conference rooms on each floor.

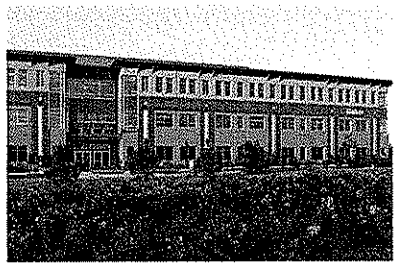
The combined use of both movable glass and solid wall partitions enable quick and easy reconfiguration of spaces. Under-floor power and communications cabling and carpet squares allow easy reconfiguration of networks and electrical outlets. Phones run from a data network, so that each phone is addressable through programming and extensions can be redirected without moving wires. Although one tenant is currently housed in the building, separate air handlers are provided for each floor, to accommodate future usage by multiple tenants. This flexibility, along with a "Class A" image, was achieved at a cost more associated with

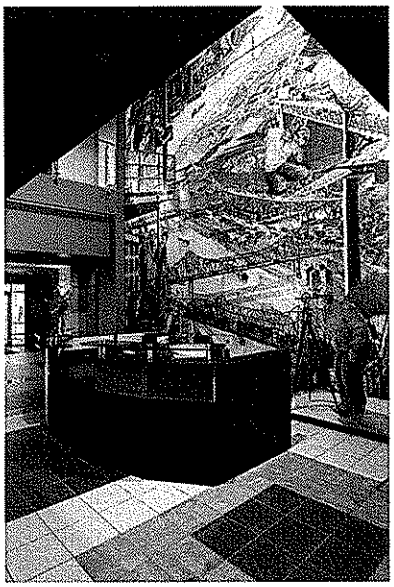
a speculative building than a custom design/build-to-suit. A parking deck was constructed to accommodate the office park tenants. The three-level 260-vehicle structure, constructed above ground-level surface parking for 150 vehicles, was designed using precast concrete panels to match the office building design.

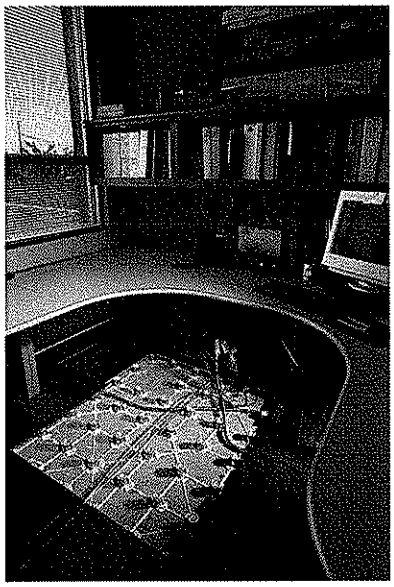
Project Features

- Sustainable, flexible design to accommodate easy reconfiguration of spaces.
- Corporate headquarters facility built on spec developer budget.
- Parking structure to accommodate 260 vehicles.





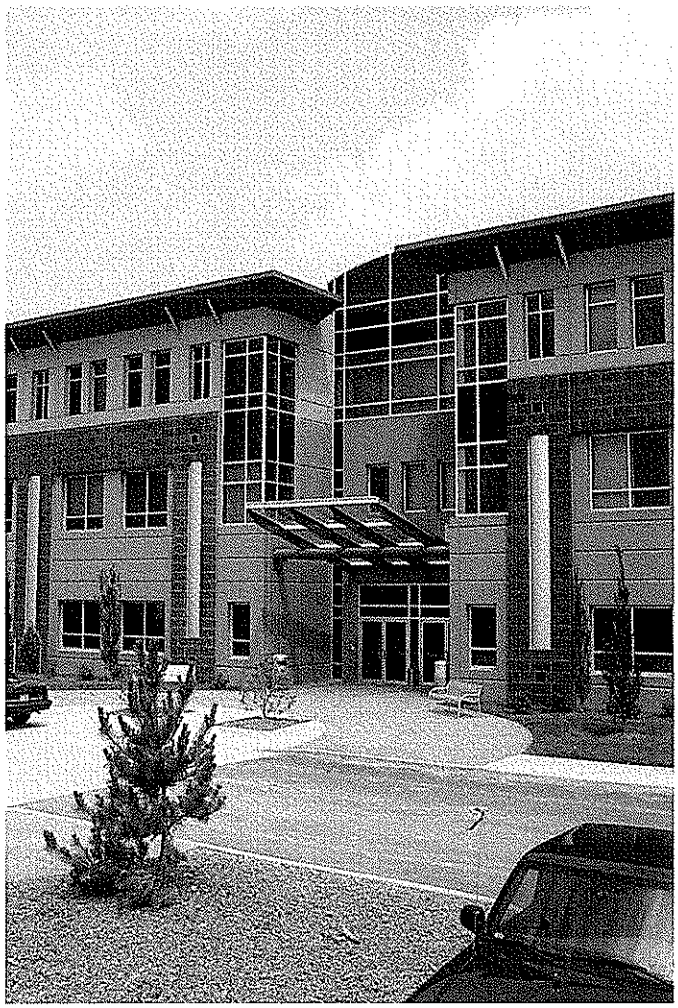




Building 200, Airside Business Park

Moon Township, Pennsylvania

Baker provided planning, architectural, and engineering services for the design of the shell and core of this 93,000-square-foot office building. The building is located in the Airside Business Park at Pittsburgh International Airport, a mixed office/flex park that was designed to create a strong, high-end visual presence from the highway, while screening warehouse truck traffic associated with the flex facilities. A lively outdoor court space between office buildings, special landscaping, and site circulation create an appealing work environment. Both the flex and office buildings are precast architectural and tilt-up concrete with metal accents at entrance canopies, compatible with the nearby airport's terminal.



Client
Airside Business Park, L.P.
1 Bigelow Square
Suite 630
Pittsburgh, PA 15219

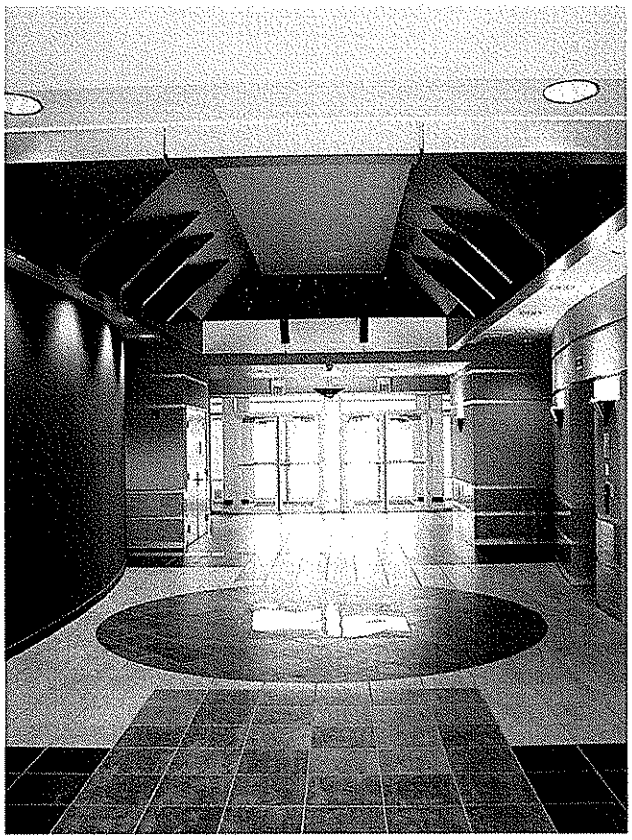
William E. Hunt
412-281-8731

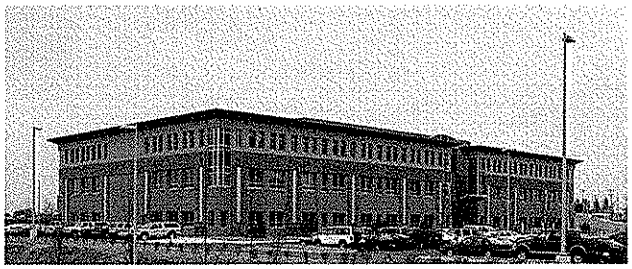
Completion Date
Estimated: 2004
Actual: 2002

Project Costs
$5,957,671 (Construction)

Baker's Role

- Planning
- Environmental Engineering
- Site/Civil Engineering
- Landscape Architecture
- Architecture
- Mechanical Engineering
- Electrical Engineering
- Plumbing Engineering
- Fire Protection Engineering
- Structural Engineering





Flex Office/Warehouse Building 400

Airside Business Park, Moon Township, Pennsylvania

Completed in 2004, Flex Building 400 was the second office/warehouse flex building that was constructed at Airside Business Park. Baker provided planning, architecture, and engineering services. The Flex Buildings were designed for visibility from Business Route 60, with warehouse truck traffic sequestered behind the buildings.

The building was designed to provide flexibility for tenants that need both office and warehouse space. The one-story office space surrounds the 1.5-story high-bay warehouse space on three sides. The loading dock for the warehouse was originally designed to have six depressed dock parking locations. Due to predetermined tenant needs, this building was modified to provide only two dock locations.

The office park at Pittsburgh International Airport was planned around an office and warehouse market mix. In addition to two 63,000-square foot Flex Buildings with 80% office and 20% warehouse space, the office park was designed to contain two three-story office buildings. In 2006, rather than constructing a third flex office/warehouse building, the owner elected to alter the plans for the business park and construct a third office building similar to the two existing ones.

The flex and office buildings are either tilt-up or precast concrete with metal accents at entrance canopies, compatible with the nearby airport's terminal.

Client
Airside Business Park, L.P.
1 Bigelow Square
Suite 630
Pittsburgh, PA 15219

William E. Hunt
412-281-8731

Completion Date
Estimated: 2005
Actual: 2004

Project Costs
$3,657,275 (Construction)

Baker's Role

- Master Planning
- Civil Engineering
- Geotechnical Engineering
- Environmental Engineering
- Traffic Engineering
- Architecture
- Space Planning
- Interior Design
- Landscape Architecture
- Mechanical Engineering
- Plumbing Engineering
- Fire Protection Engineering
- Electrical Engineering
- Structural Engineering
- Signage

Flex Office/Warehouse Building 500

Airside Business Park, Moon Township, Pennsylvania

Completed in July 2000, Flex Building 500 was the first of two office/warehouse buildings that were constructed at Airside Business Park. Baker provided planning and full architectural and engineering services, including tenant improvement services, for the 63,000-square-foot facility. The Flex Buildings were designed for visibility from Business Route 60, with warehouse truck traffic sequestered behind the buildings. The office park at Pittsburgh International Airport was planned around an office and warehouse market mix. In addition to two 63,000-square-foot Flex Buildings with 80% office and 20% warehouse space, Baker designed the office park to contain two three-story office buildings. In 2006, rather than constructing a third flex office/warehouse building, the owner elected to alter the plans for the business park and construct a third office building similar to the two existing ones.

Both the flex and office buildings are precast architectural concrete with metal accents at entrance canopies, compatible with the nearby airport's terminal.

Client
Airside Business Park, L.P.
1 Bigelow Square
Suite 630
Pittsburgh, PA 15219

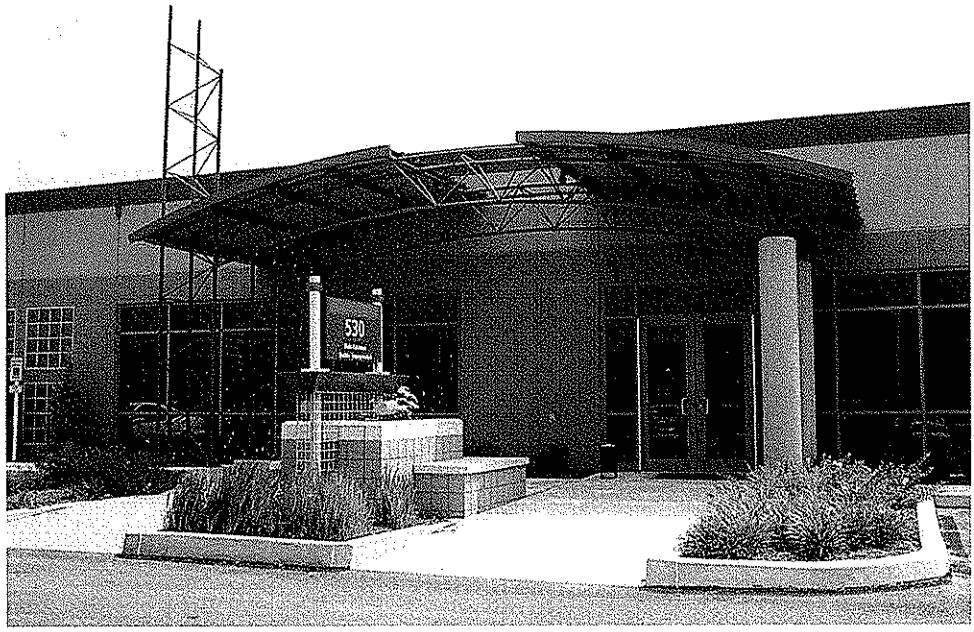
William E. Hunt
412-281-8731

Completion Date
Estimated: 2001
Actual: 2001

Project Costs
$3,850,000 (Construction)

Baker's Role

- Master Planning
- Civil Engineering
- Geotechnical Engineering
- Environmental Engineering
- Traffic Engineering
- Architecture
- Space Planning
- Interior Design
- Landscape Architecture
- Mechanical Engineering
- Plumbing Engineering
- Fire Protection Engineering
- Electrical Engineering
- Structural Engineering
- Signage
- Construction Management At-Risk with GMP


530

Little Kanawha Bus Facility

Calhoun County, West Virginia

Baker is providing architectural and engineering services, landscape architecture, and construction-phase support for a new, 10,000-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility.

The facility will include 4,500 square feet of administrative space, including four or five offices, a conference room, a money-counting room, office storage space, copier and supply room, and a driver-training room that will accommodate approximately 25 individuals. This space requires a ceiling height of at least eight feet, plus additional height for the required duct work and structural members, resulting in an overall building height of 12 feet. The offices will be carpeted and have painted sheet-rock walls.

The remaining 5,500 square feet will serve as a bus maintenance garage, with 16-foot ceilings to accommodate buses, concrete floors, and masonry block and exposed steel. The maintenance area will also provide indoor storage for approximately seven buses, and will be designed to all the vehicles to move through the facility without backing to enter or leave the building.

The facility will be fully compliant with Americans with Disabilities Act requirements and international building codes, state, local, federal, and fire codes, and is being designed to meet Leadership in Energy and Environmental Design certification.

Baker is developing a study report with preliminary site and building layouts and estimated costs. Baker is also providing site surveys, geotechnical engineering, and utility coordination, and is responsible for environmental requirements and permits, erosion control measures, groundwater protection and stormwater pollution prevention plans.

Baker will prepare final design drawings, construction specifications, contract plans, and related documents, site design, and landscaping, including a facility sign with an electronic message board and two dedication plaques.

Baker will assist in the preparation of bidding documents, cost estimates, evaluation of bids, and the pre-bid conference, and will provide construction oversight and as-built drawings. Baker will also respond to stakeholder and public inquiries about the project.

Client
WV Division Of Public Transit
Building 5, Room 906
1900 Kanawha Blvd, East
Charleston, WV 25305-0432

Susan L. Oâ€™Connell
Director
304-558-0428

Completion Date
Estimated: 2010

Project Costs
$1,600,000 (Construction)

Baker's Role

- Preliminary and final design
- Cost estimates
- Site survey
- Geotechnical testing
- Building-code compliance
- ADA compliance
- Sustainable design
- Environmental compliance
- Erosion control plans
- Groundwater protection plan
- Stormwater pollution prevention plan
- Utility coordination
- Construction documents
- Bid-phase support
- Construction oversight
- As-built documents

Office Complex and Testing Laboratory Renovation - Adaptive Reuse of Maintenance Garage

Ottawa, Illinois

Baker performed architectural, engineering, and construction services for the conversion and renovation of the garage structure attached to the Illinois Department of Transportation, District 3 Headquarters in Ottawa, Illinois. The existing one-story maintenance garage was converted into additional office space and materials testing laboratories for the department.

Client
Illinois Department of Transportation, District 3
700 East Norris Drive
Ottawa, IL 61350-0697

Completion Date
Estimated: 2005
Actual: 2004

Project Costs
$1,100,000 (Construction)

Baker's Role

- Architectural
- Civil
- Electrical
- Mechanical
- Structural Design
- Construction Phase Services

The existing building wing, originally built in the 1940s, is constructed of long span steel beams and columns with masonry infill. The renovation of this building entails:

- Complete interior demolition and removal of all non-structural walls and partitions.
- Replacement of existing overhead garage doors with matching masonry infills and glass/steel storefronts.
- Complete demolition and removal of exposed existing mechanical, electrical, and plumbing systems.
- Installation of new interior office partitions and concrete block partitions for the materials laboratory.
- Installation of new interior finishes, including vinyl floor, tile and carpeting, painting, and acoustical ceiling.
- Addition of new connecting corridor to the existing administration wing.
- Complete re-roofing, with new EDPM Membrane System, including the removal of old systems and non-friable asbestos in roof flashing.
- Installation of new electrical, lighting, communication, and fire alarm and security systems service.
- Installation of new HVAC system for the offices and laboratories, including equipment ventilation.

Project Features

- Office, laboratory, and functional spaces
- Classroom/training spaces
- Interior finishes
- Communication, fire, and security systems
- Laboratory equipment and ventilation
- Underground storage tank removal

Part 8 – Resumes

Russell E. Hall, P.E., P.S.

Charleston Office Manager

General Qualifications

Mr. Hall is an experienced transportation engineer who has been involved in numerous bridge and highway design projects in West Virginia for over 22 years. His project management responsibilities involve overseeing staff from project inception through completion, and ensuring that the clients' needs and requirements are met.

He has over seven years of experience in office management as well. His office management responsibilities include financial oversight and accountability for a staff of over 45 engineers, scientists, and administrative personnel for Baker's Charleston office. His major strengths include organizing and managing a project team, quality control and quality assurance, and problem resolution. He provides overall direction and maintains direct communications with all clients.

Years with Baker: 4

Years with Other Firms: 18

Education
B.S., 1985, Civil Engineering, West Virginia Institute of Technology

Professional Registrations
Professional Engineer, West Virginia, 1990, 10947

Professional Surveyor, West Virginia, 1996, 1878

Mr. Hall is very proud of the fact that he has been able to spend his entire career in West Virginia working to address West Virginia's transportation needs.

Experience

2004 to Present, Michael Baker Jr., Inc. – *Office Manager* for the Charleston, West Virginia office.

1998 to 2004, Neff, Longest, and Beam, L.L.C. – *Office Manager* for the Charleston, West Virginia office. Responsibilities included the duties of both project manager and office manager. The following is a list of representative projects:

- **WV 9, Charles Town Bypass to Virginia State Line, Jefferson County** – The project provided for the preparation of construction and right of way plans for an approximately five mile section of 4-lane highway. This project included the design of two interchanges, four bridges, and multiple intersections and access roads. This project was divided into seven construction contracts.

- **Fetterman Truss Bridge, Taylor County** – The project provided for the preparation of construction and right of way plans for the replacement of the existing Fetterman Bridge in Grafton, West Virginia. This project included the design of a multiple span curved bridge over the Tygart River and a 200,000 gallon CSO tank.

- **Corridor H, Hardy County** – The project provided for the preparation of construction and right of way plans for a two mile section of 4-lane divided highway. This project included the design of one interchange, two bridges, and multiple intersections and access roads. This project was divided into three construction contracts.

- **Wellington Bridge, Roane County** – The project provided for the preparation of construction and right-of-way plans for the replacement of the existing Wellington Bridge over Spring Creek.

- **I-64 Widening, Putnam County** – This project provided for the preparation of a design report and contract plans for the upgrade of I-64 to six-lane for the proposed US 35 interchange to the existing six-lane section at the 25th Street Overpass Bridge. Neff is a subconsultant to Site-Blauvelt and is

responsible for surveys, right-of-way plans, all bridges except the Kanawha River bridge crossing, and the St. Albans interchange. The project is in the final stage of the design report phase. The design report phase assesses the engineering and environmental impacts of multiple alignments and interchange configurations.

- **US 35/I-64 Interchange, Putnam** – Neff was a subconsultant to Baker responsible for all right-of-way plan development.

- **New River Parkway, Summers and Raleigh counties** – Neff is a subconsultant to Kimley-Horn responsible for all right-of-way plan development.

- **US 52, King Coal Highway, US 119 Mingo County to US 460 Mercer County** – Neff was program manager for the entire corridor. The responsibilities include all engineering design review and approval; develop and maintain schedules; and coordinate with all resource agencies, the WVDOH, and the public.

- **Statewide Services Contract** – Neff provided construction and right-of-way development and review on an as needed basis.

1996 to 1998, West Virginia Department of Transportation – *In-House Design Section Head* for the WVDOH. Responsibilities included the management of four design squads containing approximately 15 engineers and 10 engineering technicians. The In-House Design staff was responsible for the design and preparation of construction and right of way plans for multiple projects throughout the state.

1994 to 1996, West Virginia Department of Transportation – *Consultant Review Section Head* for the WVDOH. Responsibilities included the management of five project managers. Each project manager was responsible for the oversight, review, and approval of consulting engineers' design work. Each manager was responsible for several consultants, most with multiple projects.

1991 to 1994, West Virginia Department of Transportation – *Consultant Review Section Project Manager* for the WVDOH. Responsibilities included oversight, review, and approval of consulting engineers' design work. Each manager was responsible for several consultants, most with multiple projects.

1988 to 1991, West Virginia Department of Transportation – *In-House Design Section Squad Leader* for the WVDOH. Responsibilities included the management of one design squads containing approximately 3 engineers and 2 engineering technicians. The design squad was responsible for the design and preparation of construction and right of way plans for multiple projects throughout the state.

1988 to 1991, West Virginia Department of Transportation – *In-House Design Section Project Engineer* for the WVDOH. Responsibilities included the design and preparation of construction and right of way plans for multiple projects throughout the state.

Patrick W. Fogarty, P.E., P.S.

Civil Services Group Manager

Years with Baker: 3

Years with Other Firms: 19

Education

B.S. 1985, Civil Engineering, West Virginia University Institute of Technology

Diploma 1993, Surveying and Mapping, International Correspondence Schools

Registrations

Professional Engineer, West Virginia

Professional Engineer, Kentucky

Professional Engineer, Virginia

Professional Engineer, Pennsylvania

Professional Engineer, Maryland

Professional Engineer, Ohio

Professional Engineer, North Carolina

Professional Surveyor, West Virginia, Kentucky and Ohio

Certifications

Laboratory Procedures, FAA 1992

Construction Document Technologist, CSI 1996

Roadway Worker for Rail Line Sites, CSX 2001

40 Hour HAZWOPER, OSHA 29 CFR 1910.120, OSHA 2001

Technician, PCC, Asphalt, Aggregate, Compaction, WVDOT 1991

General Qualifications

Mr. Fogarty is an asset to the Michael Baker Jr., Inc. team with over 23 years of project management experience. He is responsible for technical and management aspects of planning, civil design and surveying projects within the office. Mr. Fogarty has designed and managed projects in numerous disciplines including civil, structural and transportation engineering, site development, planning and surveying. These projects have included retail/commercial site preparation, airports, streets/highways, bridges, parking lots, buildings, retaining walls/foundations, sanitary systems and structures, as well as boundary and topographic and photogrammetric surveys. Duties included field surveying, drawings and specification preparation, design, design drafting, construction inspection, quality control testing, shop drawing review, project management, contract administration and report preparation. Management duties include financial planning, management and staff utilization for two departments, human resource planning, marketing, and strategic planning.

Experience

Bicycle and Pedestrian Plan, Kanawha and Putnam Counties, West Virginia. *Regional Intergovernmental Council.* Project Manager. Responsible for the development of a 2-phase bike and pedestrian study for a 2-county area. The plan included data collection, facilities inventory, identification of activity centers, public involvement, community information analysis, identification of specific improvement locations and their corresponding physical deficiencies and improvement recommendations.

Capitol Campus Master Plan, *State of West Virginia General Services Division.* Project Manager. Responsible for the development of a campus-wide (55 acres) master plan for the West Virginia State Capitol Complex. Elements of the plan included: Vehicular and pedestrian access, security, utilities, parking, landscaping, and space planning.

Corridor Management Plan, Country Roads Scenic Byway, Various Counties, West Virginia. *Country Roads Byway, Inc.* Project Manager. Responsible for the development of a Corridor Management Plan for a designated State Scenic Byway over a multi-county area. The plan included an inventory of Intrinsic Qualities, an assessment and analysis of existing conditions, an opportunity analysis and proposed development alternatives. The focus of the plan was to provide for inclusion in the National Scenic Byway Program.

Pennsylvania Avenue Tunnel, Kanawha County, West Virginia. *West Virginia Department of Transportation, Division of Highways.* Project Manager. Responsible for complete services toward the development of Right of Way and Construction Plans for the rehabilitation of a 1 lane, tunnel structure on County Route 6/6 near the City of St. Albans. Services included field surveying, right of way, utilities verification and relocation, storm drainage, traffic control, structural design and approach road design. Baker provided project management, environmental coordination, geotechnical engineering, preliminary and final design as well as construction phase services.

On-Call Engineering/Architectural Services, Yeager Airport (CRW), Charleston, West Virginia. *Central West Virginia Regional Airport Authority.* Project Manager. Responsible for management planning and lead design for miscellaneous assignments. Additionally, provided engineering consultation on a current construction project as needed. Baker provided multi-discipline, on-call services to the Central West Virginia Regional Airport Authority (CWVRAA), which owns and operates Yeager Airport (CRW). Baker provided a full range of services to CWVRAA on an "On-Call/As-Needed" basis, including architecture, civil, structural, mechanical, electrical and environmental engineering, general engineering administration, surveying, and construction management.

Flood Protection Options Report-Bonham Elementary School, Kanawha County, West Virginia. *West Virginia Division of Homeland Security and Emergency Management.* Project Manager. Responsible for the development of a report listing potential flood protection options for the facility. Baker was retained by the West Virginia Division of Homeland Security and Emergency Management to prepare a report to address flood protection options for Bonham Elementary School in Kanawha County, West Virginia.

Blennerhassett Island Bridge, Appalachian Corridor D, Washington County, Ohio and Wood County, West Virginia. *West Virginia Department of Transportation, Division of Highways.* QA/QC. Responsible for quality assurance review of final computations. Upon completion of construction of the Blennerhassett Island Bridge over the Ohio River by 2007, the 878' – 6" long network tied arch that ranks as the longest of its type in the United States and one of the longest in the entire world. Baker provided project management, environmental and location studies, permitting, preliminary and final design as well as construction phase services.

Municipal Planning and Design, Engineer-of-Record, Various Locations, *State of West Virginia*
Performed numerous assignments as Lead Designer and Project Manager for various municipalities including: Planning, and Bituminous and Concrete Pavement Design and Rehabilitation, Sidewalk Design, Storm Drainage Design and Stormwater Permitting, Wetlands Delineation and Mitigation, Equipment Specifications, Sanitary Sewage Collection and Potable Water Distribution Systems, Parking Lot Design, Security Lighting, Environmental Site Assessments, Pre-Bid Meetings, Bid Evaluation and Tabulation, Grant Applications, Construction Management, Pre-Construction Meetings, Construction Phasing Plans, Outlay Requests and Project Close-Out Packages. Notable clients include: City of Parsons; Town of Moorefield; Town of Hambleton; Town of Mason; Town of Lost Creek; and the Town of West Milford.

PRIOR BAKER EXPERIENCE

Planning, Various Airports, *State of West Virginia*
Performed numerous assignments as Lead Planner and Project Manager for various airports over the past 23 years, including: Site Selection Studies, Master Planning, and ALP Preparation and Update, Wetlands Delineation and Mitigation, Aircraft Wash and De-Ice Facilities, VASI and PAPI Systems, NAVAIDS, Security and Access Control Systems, Security Lighting, and Security Fencing, Capital Improvement Plans, DBE Plans, Maintenance Plans, Spill Control, Containment and Countermeasures Plans, Environmental Site Assessments, FAA Forms A and C, Pre-Bid Meetings / Construction Management Plans / Construction Phasing Plans, Outlay Requests and Project Close-Out Packages. Services provided

for notable airport clients include the following: Mercer County Airport Authority, Bluefield; Upshur County Regional Airport, Buckhannon; Wood County Airport Authority, Parkersburg; Raleigh County Airport Authority, Beckley; Grant County Airport Authority, Petersburg; Eastern West Virginia Regional Airport Authority, Martinsburg; Mason County Commission; Point Pleasant; Elkins-Randolph County Airport Authority, Elkins; Roane County Airport Authority, Spencer; Central West Virginia Regional Airport Authority, Charleston; Mingo County Airport Authority, Williamson; Philippi-Barbour County Airport Authority, Philippi; Nicholas County Airport Authority, Summersville; Marshall County Airport Authority, Moundsville.

Putnam County Parks and Recreation Commission, Various Projects, Hurricane, West Virginia. *Valley Park.* Project Manager and Lead Designer. Provided Planning, Surveying, Design and Inspection Services on the waterslide and splashdown pool and the Museum in the Community, including structural and civil engineering.

Kanawha County Parks and Recreation Commission, Various Projects, Charleston, West Virginia. *Coonskin Park.* Project Manager and Lead Designer. Provided Planning, Surveying, Design and Inspection Services for soccer fields, recreational trails, shelters and wedding garden.

Municipal Planning and Design, Various Locations, *State of West Virginia*
Performed numerous assignments as Lead Designer and Project Manager for various municipalities over the past 20 years, including: Planning, Bituminous and Concrete Pavement Design and Rehabilitation, Sidewalk Design, Storm Drainage Design and Stormwater Permitting, Wetlands Delineation and Mitigation, Equipment Specifications, Sanitary Sewage Collection and Potable Water Distribution Systems, Parking Lot Design, Security Lighting, Environmental Site Assessments, Pre-Bid Meetings, Bid Evaluation and Tabulation, Grant Applications, Construction Management, Pre-Construction Meetings, Construction Phasing Plans, Outlay Requests and Project Close-Out Packages. Notable clients include: Town of Poca; Town of Moorefield; City of Buckhannon; City of St. Albans; Town of Hambleton; City of Williamson; Town of Mason; Town of West Milford; City of Bridgeport

Professional Affiliations

American Society of Civil Engineers

International Right of Way Association

Construction Specifications Institute

American Planning Association

West Virginia Airport Managers Association

Previous Work History

Triad Engineering, Inc., Vice President/Senior Engineer/Civil and Survey Manager, 1996-2005

Chapman Technical Group, Vice President Transportation Engineering, 1991-1996

Chapman Technical Group, Project Engineer, 1986-1991

Steel Service Company, Senior Steel Detailer, 1985-1986

Ron L. Bolen, AIA

Senior Architect

General Qualifications

Mr. Bolen brings over 35 years of design and project coordination experience to the project. Mr. Bolen insists on listening to the client's needs and bringing those desires to reality in a distinctive, functional and state of the art facility – on time and within budget. Project types include a multitude of small and large-scale designs, including office, hotel, and multi-purpose facilities, augmented by varied experience in a wide range of opportunities in renovation and new facility design. Truly innovative designs are based on a well-articulated program developed in a close and continuing interaction between the client and the design team.

While at Baker, Mr. Bolen has focused most of his time on design and coordination with clients while maintaining a close relationship with the design team. Increasingly, Mr. Bolen's facilities have become the result of collaborative problem solving with other design professionals and our clients. The results are design solutions that balance interests, intentions and objectives with concepts that reflect quality, integrity and aesthetic appeal.

Years with Baker: 1
Years with Other Firms: 35+

Education

- B.S. Architectural Design, Parkersburg Community College / WVU Ext., 1980

Registrations

- Registered Architect, No. 3135, West Virginia, 1999

Professional Affiliations

American Institute of Architects (AIA)
West Virginia Board of Architects (WVBOA)
Comprehensive Education Facilities Planners, International (CEFPI)

Experience

- **A/E Services for the Harrison County Extension Service and the Parks and Recreation – Clarksburg, West Virginia.** *Harrison County Commission, Clarksburg, West Virginia.* Project Manager. Responsible for Design, Document Preparation, and Construction Administration for the renovation of an existing facility for use as Administrative Offices and as Storage Facility. The Harrison County Commission selected Baker to provide complete design and construction administration services for architectural improvements. The existing facility located near Clarksburg, West Virginia was originally constructed in the early 1960's and was used recently as a business for a local exterminating firm. Over the years, there have been additions and upgrades to the facility. Baker was selected by the Harrison Co. Commission to upgrade of front area of the facility for the Harrison County Extension Service's offices and back area of the facility for use as storage by the Harrison County Parks and Recreation. With funding through an ARRA Stimulus Grant, the Owner desires the modernization of approximately 6,000 square feet of existing with appropriate "Green Building" materials. Upgrades of the exterior doors and windows, interior partitions and finishes replacing the outdated heating, ventilation, and air conditioning equipment, and replacing the existing electrical service with energy efficient product. Total project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, alterations to the existing floor plan, exterior window and door replacements, new interior doors and hardware, new wall finishes, updated water saving toilet facilities and a new energy efficient HVAC system. Baker is currently working closely with the client during the planning phase to define a project scope to upgrade the existing facility into an energy efficient facility and within their budget.

A/E Services for the Charleston Armory Improvements, West Virginia Army National Guard, Division of Engineering and Facilities, Charleston, West Virginia. *State of West Virginia, Division of Engineering and Facilities.* Project Architect. Responsible for design and document quality oversight. The Facilities Management Officer (FMO) for the State of West Virginia, Division of Engineering and Facilities (DEF), West Virginia Army National Guard (WVARNG) selected Baker for architectural and engineering services. The State Army National Guard Headquarters in Charleston, West Virginia was originally constructed in the early 1960's. Over the years, there have been numerous upgrades to the facility. Baker was selected by the Division of Engineering and Facilities to provide complete design and construction administration services for architectural improvements of the first floor of the Office of the Adjutant General (TAG), and further provide MEP and HVAC design improvements for the entire TAG Wing, Headquarters Building, and Armory/Drill Floor. The Owner desired the modernization of approximately 55,000 square feet of existing outdated heating, ventilation, and air conditioning equipment. Total project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, alterations to the existing floor plan, exterior door replacements, new interior doors and hardware, new wall finishes, asbestos removal, and a new 4-pipe environmental control system. Baker worked closely with the client during the planning phase to define a project scope to upgrade the existing facility consistent with previous renovations and within a limited budget.

A/E Services for the Capitol Campus Master Plan, State of West Virginia, Charleston, West Virginia. *State of West Virginia, General Services Division.* Architectural Project Manager. Mr. Bolen is currently providing the State of West Virginia General Services Division a comprehensive campus-wide master plan for the 55+ acre state capitol campus. Working in conjunction with the owner and a team of specialized sub-consultants, Ron is currently providing elements including:

- Master Planning
- Public Involvement
- Programming
- Architectural / Review
- Document Management
- GIS
- Project Scheduling
- Cost Estimating
- Facilities Planning
- Sub-consultant Management
- Client Coordination

Non-Baker Project Experience

Logan Office Complex –*Logan, WV* On this Design Build project, Mr. Bolen provided Project Manager Services through pre-design and all phases of document preparation, consultant coordination, Client and Relations. This new 25,000 square foot office facility design addition on the existing parking structure located in downtown Logan. The design incorporated an added floor to the existing facility and created a roof cover over the existing parking garage structure. The facility was leased to a tele-communications company.

TCI- Television Cable Facility – *Beckley, WV* Mr. Bolen provided Project Manager Services through pre-design and all phases of document preparation, consultant coordination, Client and Relations. This new 10,000 square foot office facility design replaced an existing rented office complex for the Television Cable Company.

Glenville State College, *Glennville, West Virginia*
Mr. Bolen provided Project Manager Services for the development of two projects at Glenville State College as follows:

- Science Hall – Mr. Bolen provided Project Manager Services through Pre-design and all phases of Document Preparation, Consultant Coordination, Client Relations, and Construction Administration. Design for an addition of four-story office complex with elevator, making an existing building ADA accessible.
- Louis Bennett Hall – Mr. Bolen provided Project Manager Services through Pre-design and all phases of Document Preparation, Consultant Coordination, Client Relations, and Construction Administration. Design for a addition of three story office complex with elevator and walking bridge between two buildings, (Louis Bennett Hall and Administration Building) making each existing building ADA accessible.

Main Harts Creek Vol. Fire Station *Main Harts Creek Vol. Fire Department.*
As Project Manager, Mr. Bolen provided services from pre-design through all phases of document preparation, consultant coordination, and client relations. The design was for renovation to an existing emergency medical service facility by modifying it to meet the surrounding area's needs. The facility houses six emergency vehicles, dayroom area, kitchenette, two bunkrooms, toilets and showers.

Raleigh Co. Board of Education Bus Maintenance Facility *Raleigh County Board of Education.*
Mr. Bolen preformed duties as Project Manager Services through From Schematic Design through Contract Document. Design for a new facility to replace an existing building for the Bus Maintenance program with new facility within the required state guidelines.

Ghent Maintenance Facility *WV Parkways Authority.* As Project Manager, Ron provided services through pre-design and all phases of document preparation, consultant coordination, client relations, and construction administration. This new facility design replaced an existing building for the Snow Removal Vehicle Maintenance Program. The WV Parkways Authority funded this project.

Standard Maintenance Facility *WV Parkways Authority.* As Project Manager, Ron provided services through pre-design and all phases of document preparation, consultant coordination, client relations, and construction administration. The new facility design replaced the existing building for the Snow Removal Vehicle Maintenance Program. The WV Parkways Authority funded this project.

Ronceverte City Hall – *Ronceverte, WV*
As Project Manager, Mr. Bolen provided services from pre-design through all phases of document preparation, consultant coordination, client relations, and construction administration. This new facility design replaced an existing City Hall with administrative offices and a council meeting hall.

Ronceverte Vol. Fire Station & Community Center *Ronceverte Vol. Fire Department.*
As Principal / Project Manager, Mr. Bolen provided services from pre-design through all phases of document preparation, consultant coordination, client relations, and construction administration. The design replaced an existing fire station. The facility was designed with five truck bays, office spaces, and conference hall, large meeting hall, toilets, and kitchen facilities and equipped with facilities for community flood relief.

West Virginia University, *Morgantown, West Virginia*
Mr. Bolen provided Project Manager Services for the development of two projects at West Virginia University as follows:

- Ruby Memorial Hospital – Mr. Bolen provided Project Job Captain & CADD tech services through Design Development and Contract Document. Design for an addition renovation to an existing facility for the ICU department with the University Hospital.
- WVU – Indoor Practice Facility – Mr. Bolen provided Project Job Captain & CADD tech services through the Programming and Pre Design phase for an addition Design Build project to an provide a new indoor sports practice facility for the Athletic Department with the University.

- WVU – Natatorium Facility – Mr. Bolen provided Project Job Captain & CADD tech services through the Programming and Pre Design phase for an addition Design Build project to provide an addition to the existing natatorium facility for the Athletic Department with the University.

Comprehensive Education Facilities Plans (CEFP) 2000-2010
Mr. Bolen assisted in the development of the various Counties' Facilities Plan for the ten-year period of 2000 - 2010. The plans included evaluation of all existing facilities, plans for bringing existing facilities up to current codes and guidelines, cost estimates to bring facilities up to current standards, and final planning scenarios. The following are counties that Mr. Bolen assisting in the development of their CEFP:

- Nicholas County Board of Education
- Cabell Co. Board of Education
- Wetzel County Board of Education
- Raleigh County Board of Education (required update)

Comprehensive Education Facilities Plans (CEFP) 2000-2010
Mr. Bolen provided Project Manager Services for the development of the various Counties' Facilities Plan for the ten-year period of 2000 - 2010. The plans included evaluation of all existing facilities, plans for bringing existing facilities up to current codes and guidelines, cost estimates to bring facilities up to current standards, and final planning scenarios. The following are counties that Mr. Bolen developed the CEFP plan in conjunction with educational component of DeJong and Associates in the development of their CEFP:

- Pocahontas County Board of Education
- Marshall County Board of Education
- Monroe County Board of Education

A/E Services for Berlin McKinney Elementary School. *Wyoming County Board of Education.*
Ron provided Project Manager Services from pre-design through all phases of document preparation, consultant coordination, client relations, and construction administration. This major renovation design repaired classrooms, toilets and auxiliary spaces for an existing school which was flooded and provided the project within the required state guidelines.

A/E Services for Beckley Elementary School. *Raleigh County Board of Education.*
Mr. Bolen provided Project Manager Services from pre-design through all phases of document preparation, consultant coordination, client relations, and construction administration. This new facility design replaced two existing schools within the required state guidelines and funded by the School Building Authority.

A/E Services for Elkins Middle School. *Randolph County Board of Education.*
As Job Captain, he provided services from design development through all phases of document preparation, and consultant coordination. This addition / renovation design to the existing facility provided needed classroom, and toilet facilities within the required state guidelines.

A/E Services for Daniels Elementary School. *Raleigh County Board of Education.*
Ron provided Project Manager Services from pre-design through all phases of document preparation, consultant coordination, client relations, and construction administration. This major renovation / addition design replaced two existing schools within the required state guidelines, and the project was funded by the School Building Authority.

A/E Services for Cheat Lake Elementary and Middle School. *Monongahela County Board of Education.*
Mr. Bolen was Project Job Captain through Pre Design and all phases of Document Preparation, Consultant Coordination, and Client Relations. Design for a major addition / renovation to the existing facility to replace

four existing schools with new facility within the required state guidelines. The two schools shared the dining / kitchen facilities.

A/E Services for Lincoln County High School. *Lincoln County Board of Education.*
As Project Architect, Ron provided services through Contract Document Preparation. Design for a new facility to replace two existing schools with new facility within the required state guidelines. This project included new administration, kitchen / dining, gymnasium, classrooms and labs. The project was a silver LEED designed project.

A/E Services for Roane County High School. *Roane County Board of Education.*
Ron preformed duties as Project Job Captain through Pre Design and all phases of Document Preparation, Consultant Coordination, and Client Relations. Design for a new facility to replace two existing schools with new facility within the required state guidelines. The project included new administration, kitchen / dining, gymnasium, classrooms and labs. This project won the state AIA Design Award.

North Central Regional Juvenile Detention Center. *WV Division of Juvenile Services, Parkersburg, WV.*
Mr. Bolen provided construction administration services during the renovation and expansion of the North Central Juvenile Detention Center. Responsibilities included site visits, periodic project walk through, documentation of contractor progress, and approving contractor billings.

Sam Perdue Juvenile Detention Center. *WV Division of Juvenile Services, Princeton, WV.*
Mr. Bolen provided bidding and construction administration services during the renovation and expansion of the South Regional Juvenile Detention Center. Responsibilities included site visits, periodic project walk through, documentation of contractor progress, and approving contractor billings.

Gymnasium Facility. *Federal Bureau of Prisons Beckley, West Virginia.*
As Project Job Captain, he provided services through all phases of document preparation, consultant coordination, and client relations. This new facility design provided an indoor gymnasium facility for the medium security prison.

Americans with Disabilities Act (ADA) Compliance Studies. *Federal Bureau of Prisons, Beckley, WV.*
As Project Job Captain, Mr. Bolen provided services through all phases of document preparation, consultant coordination, and client relations to update existing facility with ADA standards for medium security prison.

Alderson Women's Dormitory, Alderson, WV.
Mr. Bolen provided Project Architect services during contract document preparation and client relations. This new facility design replaced an existing dormitory facility at the women's correctional facility.

Classroom and Outdoor Training Facility Upgrades, Camp Atterbury, Columbus, Indiana. *Directorate of Public Works, Post Engineer.* Project Architect. Project responsibilities included site surveying and base map preparation, site civil and architectural plan preparation, detailing, bidding, and construction administration for renovations required by the Post Engineer, Camp Atterbury, Indiana. Elements of the project included expansions and renovations to existing classrooms, expansion of existing office space, renovations to electrical, communications, and fire detection and suppression systems, and development of outdoor MWR facilities and training facilities such as a community park, and obstacle course. Periodic construction administration services were included during construction.

Glen Jean Armory, Glen Jean, Fayette County, West Virginia. *State of WV, Division of Engineering and Facilities.* Project Architect. Responsible for design development and construction document preparation for a new Armed Forces Readiness Center in Glen Jean, Fayette County, WV. The project consisted of military offices constructed of structural steel frame, brick veneer exterior, and EDPM membrane roofing system. The new Armory was constructed as a Readiness Center to consolidate the Oak Hill and Beckley Organizational Maintenance Shops and houses the 77th Bridge Troop Command from Charleston, the 18-63rd Transportation Company from Oak Hill's armory and the 150th Armored Division from Raleigh County's armory in Beckley.

UPS Distribution Facility – *UPS- Bluefield, WV*
Mr. Bolen provided Project Manager services through pre-design and all phases of document preparation, consultant coordination, client relations, and construction administration. A new facility design houses the Bluefield Vehicle Distribution for the United Parcel Service.

Clay Dental Clinic – *Jeff Clay, DDS - Daniels, WV*
As Project Manager, Mr. Bolen provided services from pre-design through all phases of document preparation, consultant coordination, and client relations. This new dental facility design included 12 exam rooms, offices, and staff lounge and denture laboratories and replaced an existing rented facility.

Harrison County Emergency Squad Facility in Shinnston WV *Harrison County Commission.*
As Principal / Project Manager, Mr. Bolen provided services from pre-design through all phases of document preparation, consultant coordination, client relations, and construction administration. The design was for a replacement of the existing emergency squad facility. The facility was designed with four truck bays, office spaces, and conference / training room, meeting hall, toilet and kitchen facilities.

David Hilliard

Senior Mechanical Designer

General Qualifications

General Qualifications

Mr. Hilliard has a wide range of "hands on" design and construction experience. From his simple beginnings as a carpenter he has expanded his professional abilities. His recent design experience has included the complex mechanical design of such projects as a large Charleston, WV hospital. His resume covers over 20 years of real world work in design, layout, fabrication, construction and finishes in both the mechanical and general trades.

Years with Baker: 1

Years with Other Firms: 19

Education
B.S., 2002, Mathematics, West Virginia State College

B.S., 2005 Mechanical Engineering, West Virginia University Institute of Technology

Professional Affiliations
ASME

ASHRAE

SMACNA

Over the years, while practicing his profession, Mr. Hilliard continued his education. He attended night school and began working on a civil engineering degree, which later changed to mathematics then finally to mechanical engineering. While in school, he used his HVAC work experience to evaluate mechanical problems and make design recommendations on two campus buildings. He has continued his education and professional development through his involvement with ASHRAE and other pertinent organizations.

Experience

Charleston Armory Improvements, WV Army National Guard, Division of Engineering and Facilities, Charleston, WV. *State of WV, Division of Engineering and Facilities.* Project Engineer. David is responsible for all mechanical design oversight and construction management. The Facilities Management Officer (FMO) for the State of West Virginia, Division of Engineering and Facilities (DEF), West Virginia Army National Guard (WVARNG) selected Baker for architectural and engineering services. The State Army National Guard Headquarters in Charleston, West Virginia was originally constructed in the early 1960's. Over the years, there have been numerous upgrades to the facility. Baker was selected by the Division of Engineering and Facilities to provide complete design and construction administration services for architectural improvements of the first floor of the Office of the Adjutant General (TAG), and further provide MEP and HVAC design improvements for the entire TAG Wing, Headquarters Building, and Armory/Drill Floor. The Owner desired the modernization of approximately 55,000 square feet of existing outdated heating, ventilation, and air conditioning equipment. Total project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, alterations to the existing floor plan, exterior door replacements, new interior doors and hardware, new wall finishes, asbestos removal, and a new loop-pipe environmental control system. Baker worked closely with the client during the planning phase to define a project scope to upgrade the existing facility consistent with previous renovations and within a limited budget.

WV Capitol Building Restrooms Restoration/Renovations, State of WV, Charleston, WV. *State of WV, General Services Division.* Mechanical Engineer.
Mr. Hilliard is currently providing the State of West Virginia General Services Division a comprehensive plumbing plan for the renovation and renovation of the 33 restrooms of the WV State Capitol Building.

Capitol Campus Master Plan, State of WV, Charleston, WV. *State of WV, General Services Division.* Mechanical Engineer. Mr. Hilliard is currently providing the State of West Virginia General Services Division a comprehensive campus-wide master plan for the 55+ acre state capitol campus. Working in conjunction with a team of specialized consultants, Dave is currently providing programming, cost estimating and facilities planning support. Services included HVAC Loads as well as utility evaluation and planning for future growth.

A/E Services for the Harrison County Extension Service and the Parks and Recreation – Clarksburg, West Virginia. *Harrison County Commission, Clarksburg, West Virginia.* Mechanical engineer. Mr.Hilliard is responsible for the Mechanical, Electrical and Plumbing Design, MEP Document Preparation, and Construction Administration for the renovation of an existing facility for use as county Extension Administrative Offices and as a Parks and Recreation Storage Facility. The Harrison County Commission selected Baker to provide complete design and construction administration services to upgrade the building and increase energy efficiency. With funding through an ARRA Stimulus Grant, the Owner desires the modernization of approximately 6,000 square feet of the existing building with appropriate "Green Building" materials. Replacements of outdated heating, ventilation and air conditioning equipment, as well as the existing electrical service with energy efficient products are at the core of the design. Some of the elements to be included in the design are energy-saving light fixtures, duplex outlets, communications jacks, alterations to the existing floor plan, updated water saving toilet facilities and a high efficiency HVAC system. Baker is currently working closely with the client during the planning phase to define a project scope to upgrade the existing facility into an energy efficient facility and within their budget.

A/E Services for the Little Kanawha Bus Terminal–Grantsville, West Virginia. *State of WV, Department of Administration. Charleston, West Virginia.* Mechanical engineer. Mr.Hilliard is responsible for the Mechanical, Electrical and Plumbing Design, MEP Document Preparation, and Construction Administration for a new bus maintenance and office facility for Gilmer County. His duties include the design of the vehicle storage, cleaning and maintenance mechanical systems, as well as oil pumping and collection systems. The design of an energy efficient HVAC system for the entire building is also part of his responsibilities.

Recent Non-Baker Project Experience

Geary Plaza Office Building; Charleston, West Virginia
Mr. Hilliard worked on Design, Design Evaluation (quality control) and Coordination of the Medium Pressure VAV Mechanical System. He prepared design and coordination drawings. His duties also included Construction Administration.

Carriage Point Office Park; Scott Depot, West Virginia
On this project Mr. Hilliard worked on the Mechanical, electrical and plumbing design. As well as architectural and structural design support. He prepared design documents and supervised construction on this design build project.

CAMC Memorial, Kanawha City, West Virginia.

Performed design calculations, layout of Plumbing, HVAC ductwork, piping and components for three floors of the Clinical Teaching Center; Lobby, Cath Labs and patient rooms. This work was all done in affiliation with BSA Life Structures.

Summer Street Office Building; Charleston, West Virginia
Mr. Hilliard worked on Design Evaluation and Coordination of the VAV Mechanical System. He prepared coordination drawings. His duties also included Construction Administration and Air Balancing.

CASCI Building; Charleston, West Virginia
Mr. Hilliard worked on Design, Design Evaluation (quality control) and Coordination of the Medium Pressure VAV Mechanical System. He prepared design and coordination drawings. His duties also included Construction Administration.

West Virginia Army National Guard support Maintenance Shop; Eleanor WV

Mr. Hilliard worked on Design Evaluation and Coordination of construction of the HVAC system; including infrared heat, gas unit heaters, auto fume exhaust and make-up air

Air National Guard Maintenance Facility; Ashland KY

Mr. Hilliard worked on coordination drawings and managed construction of the HVAC system; including infared heat, gas unit heaters, auto fume exhaust and make-up air

City of Charleston Fire Department -2; Virginia Street West, Charleston WV

Mr. Hilliard worked on shop and construction drawings for the HVAC system; including gas unit heaters, Carmon retractable auto fume exhaust and make-up air

Raleigh General Hospital Surgery Suite; Beckley West Virginia,

Worked on value engineered and shop drawing for a 20,000 square foot surgery addition, as well as managed and coordinated construction of this complex mechanical design.

Donald R. Kuhn Juvenile Detention Center; Julian WV Project Coordinator / Mechanical Engineer
Mr. Hilliard developed HVAC shop drawings, Masonry Opening drawings and worked as a construction coordinator.

Camden-Clark Memorial Hospital -, Parkersburg, WV. Mechanical Engineer.
Mr. Hilliard developed Plumbing, HVAC ductwork, piping coordination drawings for the five story addition. Included in that building were eleven operating and patient rooms. Construction Administration was also part of his duties.

Riverside High School; Charleston, WV
Mr. Hilliard worked on Design Evaluation and Coordination of the VAV Mechanical System. He prepared shop drawings and coordination drawings. His duties also included Construction Administration.

Huntington High School; Huntington, WV
Mr. Hilliard worked on Design Evaluation and Coordination of the Heat Pump Mechanical System. He prepared shop drawings and coordination drawings. His duties also included Construction Administration.

PREVIOUS WORK HISTORY

Air Systems Sheet Metal Company; Contractors & Engineers, 1990 - 2009, ***Drafter / Designer / Construction Manager / Estimator.*** Air Systems is currently the largest sheet metal contractor in West Virginia. They engineer, fabricate and install both commercial HVAC and industrial ventilation systems in the tri-state area.

During his tenure at Air Systems, he managed and directed the drafting and design department preparing shop, design and value engineered drawings. He also worked as a project coordinator for HVAC ductwork, piping, plumbing and sprinkler. Estimating jobs (Quick Pen software), construction management, submittal review, procurement of supplies and air balancing were also part of his working experience.

Craig W. West, P.E., LEED® AP

Mechanical Engineering Manager

General Qualifications

Mr. West is the Mechanical Technical Manager for mechanical engineering department. His background includes project management and providing design and specifications for HVAC, plumbing, fire protection, piping, and process exhaust systems for educational, military, commercial, institutional, healthcare, and industrial facilities. He is responsible for all facets of the job, including initial client contact, project organization and management, load calculations, equipment/system selection, layout, developing department technical standards, supervision, fan static and pump head calculations, specifications, and sequences of operation. Mr. West has handled bidding, requests for information, meetings, shop drawings, construction situations, job progress, and closeout. He is responsible for fee estimating, job cost control, and construction cost estimating. He has gained specialized experience in geothermal, DDC controls, clean rooms, and hospital work, including medical gases, labs, operating rooms, and isolation rooms.

Years with Baker: 8

Years with Other Firms: 16

Education

B.S., 1984, Mechanical Engineering, Youngstown State University

Licenses/Certifications

LEED® Accredited Professional, 2008

Professional Engineer, Connecticut, 2001

Professional Engineer, New Jersey, 2009

Professional Engineer, Ohio, 1989

Professional Engineer, Pennsylvania, 1990

Professional Engineer, Virginia, 2002

Experience

Condition Assessment of Creative Arts Center, Evansdale Campus, West Virginia University, Morgantown, West Virginia. *West Virginia University.* Mechanical Engineer. Provided preliminary HVAC engineering consulting to the planning team. Baker performed a facility condition assessment of WVU's Creative Arts Center to help determine a capital spending program for the building. Baker conducted physical site visits, reviewed drawings, and met with University representatives to assess and document the existing condition of the facility. In addition to identifying the physical and programmatic deficiencies of the facility, Baker prioritized the deficiencies and developed budget costs to determine the optimal correction by the University, as well as construction phasing and implementation schedules.

Library HVAC and Direct Digital Control Upgrades, The Pennsylvania State University's Beaver Campus, Monaca, Pennsylvania. *The Pennsylvania State University.* Mechanical Engineer. Performed a site inspection to review the condition of the existing HVAC system including mechanical units, ductwork, and control systems. After consultation with the university to determine the scope of the upgrade, provided mechanical engineering design consultation for the construction documents to upgrade the HVAC system. A condition assessment and inspection was performed on the existing HVAC system, including mechanical units, ductwork, and control systems, for the Library at Penn State University's Beaver, Pennsylvania campus. After consultation with the University to determine the scope of the upgrade, Baker provided mechanical engineering design and construction documents to upgrade the HVAC system. The work included replacing the rooftop mechanical unit serving the main library, making upgrades to the lower-level HVAC units, and providing a new direct digital control system that provides system information to Penn State's University Park Campus through an Internet connection.

Allen Hall HVAC Upgrade and Asbestos Abatement, West Virginia University, Morgantown, West Virginia. *West Virginia University.* Mechanical Engineer. Assisted with preparation of design development phase specifications for asbestos remediation of Allen Hall, including the removal of asbestos-containing fireproofing on structural steel and metal decking, fitting insulation on domestic water piping, and asbestos-containing floor tile and adhesive. Complex renovation/asbestos abatement project for the 104,855 GSF university classroom building, Allen Hall, with $6.6 million estimated construction cost. Scope included asbestos abatement, new ceilings and lighting systems, upgrades to existing HVAC system, and replacement of all flooring materials.

Lodge Complex Development, Stonewall Jackson Lake State Park, Roanoke, West Virginia. *McCabe Henley Durbin.* Mechanical Engineer. Provided HVAC consulting services to assist with problems uncovered during construction for this large lodge/meeting facility. Baker provided scheduling, project quality control reviews, and electrical and mechanical system design review under a construction management service agreement for the construction of a new lodge complex at Stonewall Jackson Lake State Park in Roanoke, West Virginia. The 158,000-square-foot Lodge and Conference Center consists of four three-story wings and 196 guest rooms. The facility is constructed of natural stone, cast-in-place concrete, structural precast concrete, concrete masonry, structural steel, and metal decking, and includes synthetic plaster, fiber-cement siding, standing seam roofing, insulated single-ply roofing, skylights, coiling shutter doors, wood doors, and aluminum store-front windows and a curtain wall. Site work included all new infrastructure, including electrical service and an HVAC system.

Renovation of Historic Building 39, Fort McNair, Washington, DC. *U.S. Army Corps of Engineers, Baltimore District.* Mechanical Engineer. Provided HVAC engineering services and some mechanical project management services for this renovation redesign project. Baker provided services for renovation of Building 39, a 40,000 square foot building designed by the renowned American architectural firm of McKim, Mead, and White which was constructed in 1903. The renovation updated the existing building to provide sophisticated computer and office space, a SCIF (a secure space), a Command Center executive suite, an emergency operations center, and provost marshal offices.

Flex Office/Warehouse Building 400, Airside Business Park, Moon Township, Pennsylvania. *Airside Business Park, L.P.* Mechanical Engineer. Provided HVAC design and supervisory services. Flex Building 400 was designed to provide flexibility for tenants that need both office and warehouse space. The one-story office space surrounds the 1.5-story high-bay warehouse space on three sides. The loading dock for the warehouse was originally designed to have six depressed dock parking locations. Due to predetermined tenant needs, this building was modified to provide only two dock locations. The building was constructed using tilt-up concrete with metal accents at entrance canopies, compatible with the nearby airport's terminal.

Office Building 100 and Parking Structure, Airside Business Park, Moon Township, Pennsylvania. *Airside Business Park, L.P.* Mechanical Engineer. Provided HVAC design and some discipline management for the 117,000 square foot, three-story office building. This new 117,000-square-foot design/build-to-suit office building was custom-designed to serve as a corporate headquarters, yet offers the built-in flexibility to accommodate potential new tenants in the future. A training facility is provided, as well as a suite of conference rooms on each floor. The combined use of both movable glass and solid wall partitions enable quick and easy reconfiguration of spaces. Under-floor power and communications cabling and carpet squares allow easy reconfiguration of networks and electrical outlets. Phones run from a data network, so that each phone is addressable through programming and extensions can be redirected without moving wires. Separate air handlers are provided for each floor, to accommodate future usage by multiple tenants. A parking deck was constructed to accommodate the office park tenants. The three-level 260-vehicle structure, constructed above ground-level surface parking for 150 vehicles, was designed using precast concrete panels to match the office building design.

Renovations to Historic Machinist Training Building #3074, Aberdeen Proving Ground, Maryland. *U.S. Army Corps of Engineers, Baltimore District.* Mechanical Engineer. Provided very minor consulting to main design team for mechanical issues. As a Task Order under an Indefinite Delivery Multi-Discipline Contract, Baker designed building system upgrades as well as a 7,000-square-foot addition to the existing 36,440-square-foot historic Machinist Training Building # 3074 at Aberdeen Proving Ground.

Gymnasium Locker Room Rehabilitation, USCG Training Center Cape May, New Jersey. *U.S. Coast Guard.* Mechanical Engineer. Responsible for HVAC and plumbing engineering for this locker room renovation project. Baker prepared the design, construction documents, and cost estimate for the interior rehabilitation of an existing facility to combine two women's locker rooms into one large room.

Continuing Education/Training

Technical Seminar for Pumping Systems and Energy Conservation, Deckman Company and York International, November 2, 2006, 2 PDHs

Technical Seminar for Front End Loading of Hydronic Systems, Riverside Hydronics, December 6, 2006, 1 PDH

Technical Seminar for Underfloor Systems, Deckman Company and York International, 2 PDHs

Technical Web Cast for Energy Saving Strategies for Rooftop VAV Systems, Trane Corporation, 1.5 PDHs

Technical Web Cast for Waterside Heat Recovery, Trane Corporation, 1.5 PDHs

Technical Web Cast for Design for Places of Assembly, Trane Corporation, 1.5 PDHs

Technical Web Cast for Sustainability and the Building Environment, ASHRAE, Certificate and 3 PDHs

Technical Seminar on Outside Air and Energy Recovery, Deckman Company/Munters Corporation/Des-Champs, Certificate and 2 PDHs

Computer Skills

Autodesk AutoCAD
Bentley BIM
Dr. Checks
Microsoft Excel
Microsoft Word
SpecsIntact
Trane System Analyzer
Trane Trace Load and Energy Modeling
WordPerfect

Professional Affiliations

American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)

Richard J. Bates, R.C.D.D., PMP

Project Manager II

General Qualifications

Mr. Bates is a project manager responsible for the successful completion of projects to meet and exceed his client's expectations, scope, and budget. His responsibilities include ultimate accountability to the client to deliver the services and products to the quality standards required by the contract. Duties involve client liaison, project management functions, coordination of design disciplines, adherence to all codes and regulations, budget and schedule controls, manpower allocations, and quality assurance/quality control. Projects include military, government, public, telecommunications, aviation, commercial, transit, municipal, retail, and development clients.

Mr. Bates is currently managing Baker's portion of a $250 million design/build MATOC (Multiple Award Task Order Contract) program for the U.S. Army Corp of Engineers, Savannah District. Projects are executed as task orders through Baker's design/build partner and prime contractor. Representative projects awarded under the MATOC include six TEMFs at Fort Bragg valued at $42 million.

Years with Baker: 18

Years with Other Firms: 14

Education

B.S.A.S., 1987, Electrical Engineering Technology, Youngstown State University

Master's Certificate, 2007, Project Management, University of Pittsburgh, Katz Graduate School of Business

Licenses/Certifications

Registered Communications Distribution Designer, 2004

Project Management Professional (PMP), 2007

Mr. Bates also continues to serve as client manager for a major wireless communications provider in Western Pennsylvania for Mobile Switch Center facilities. His aviation experience includes the electrical design and coordination of airport terminals and site infrastructure design. He has project experience working on regional malls and peripheral property development, anchor department stores, big box retail facilities, and restaurants for a major developer. He has extensive experience in the design of public water and wastewater treatment plants, pumping stations including SCADA control systems, medium-voltage power distribution systems for 4.15 Kv to 15Kv, lighting systems including site, interior, decorative and streetscape lighting, fire protection and security systems, and communication systems. Mr. Bates is certified as a Registered Communications Distribution Designer and Project Management Professional.

Commissioning is a systematic process of ensuring that building systems perform interactively according to the design intent and the owner's operational needs. This is achieved beginning in the design phase by documenting the design intent and continuing through construction, acceptance, and the warranty period with actual verification of performance, operation and maintenance (O&M) documentation verification and the training of operating personnel.

Experience

Research and Development Facility, Institute for Scientific Research, Fairmont, West Virginia. *BE & K Building Group.* Electrical Designer. Responsibilities included the complete electrical and telecommunications design, drawings, and specifications for this high-tech software laboratory research and development facility. Using a design/build delivery method, a new 263,000-square-foot, five-story Research and Development Facility was constructed for The Institute for Scientific Research (ISR). The facility was outfitted with advanced technology features and amenities that included: distance learning centers; voice/data systems; two-story exhibit hall; heavy research floor with high bay area; prototype workshop and 10-ton

crane; fitness center; and full-service kitchen/restaurant. In addition to the environmentally sensitive design features, a number of unique energy-efficient strategies were used to accomplish LEED® certification.

Airside Business Park Master Planning and Design Services, Moon Township, Pennsylvania. *Airside Business Park, L.P.* Electrical Designer. Responsibilities included the electrical, security, and telecommunications design for two office buildings and two flex office/warehouse buildings. Baker worked with Airside Business Park, LP and The Elmhurst Group to develop Airside Business Park, approximately 26 acres of property owned by Allegheny County at the Pittsburgh International Airport. The site is the location of the old airport terminal parking lot along Business Route 60, between University Drive and the Thorn Run interchange. The Elmhurst development, under long-term land lease, was planned and designed to include five buildings - three 63,000-square-foot flex buildings, one 93,000-square-foot three-story office building, and one 117,000-square-foot three-story office building - plus all the associated site work.

Flex Office/Warehouse Building 400, Airside Business Park, Moon Township, Pennsylvania. *Airside Business Park, L.P.* Electrical Designer. Responsibilities included design of the electrical, security, and telecommunications systems for this office/warehouse flex building. Flex Building 400 was designed to provide flexibility for tenants that need both office and warehouse space. The one-story office space surrounds the 1.5-story high-bay warehouse space on three sides. The loading dock for the warehouse was originally designed to have six depressed dock parking locations. Due to predetermined tenant needs, this building was modified to provide only two dock locations. The building was constructed using tilt-up concrete with metal accents at entrance canopies, compatible with the nearby airport's terminal.

Office Building 100 and Parking Structure, Airside Business Park, Moon Township, Pennsylvania. *Airside Business Park, L.P.* Electrical Designer. Responsibilities included design of the electrical, security, and telecommunications systems for an office building and parking structure. This new 117,000-square-foot design/build-to-suit office building was custom-designed to serve as a corporate headquarters, yet offers the built-in flexibility to accommodate potential new tenants in the future. A training facility is provided, as well as a suite of conference rooms on each floor. The combined use of both movable glass and solid wall partitions enable quick and easy reconfiguration of spaces. Under-floor power and communications cabling and carpet squares allow easy reconfiguration of networks and electrical outlets. Phones run from a data network, so that each phone is addressable through programming and extensions can be redirected without moving wires. Separate air handlers are provided for each floor, to accommodate future usage by multiple tenants. A parking deck was constructed to accommodate the office park tenants. The three-level 260-vehicle structure, constructed above ground-level surface parking for 150 vehicles, was designed using precast concrete panels to match the office building design.

Flex Office/Warehouse Building 500, Airside Business Park, Moon Township, Pennsylvania. *Airside Business Park, L.P.* Electrical Designer. Responsibilities included design of the electrical, security, and telecommunications systems for this flex office/warehouse building. Completed in July 2000, Flex Building 500 was the first office/warehouse building to be constructed at Airside Business Park. Baker provided planning and full architectural and engineering services, including tenant improvement services, for the 63,000-square-foot project. The structure is constructed of precast architectural concrete with metal accents at entrance canopies, compatible with the nearby international airport terminal.

Due Diligence Condition Assessment, CIS Data Center / Office Building, Dewitt, New York. *Interstate Hotels Corporation.* Electrical Designer. Responsibilities included electrical system condition assessment, field survey, document reviews, and cost estimates for due diligence upgrades. A due diligence condition assessment of the CIS Data Center / Office Building located in Dewitt, a suburb of Syracuse, New York, was performed prior to Interstate Hotel's purchase of the property. Baker's assessment included site landscaping, drainage, parking, and pavement; environmental; lighting, electrical, and communication systems; mechanical and HVAC systems; building envelope, roof, and windows; architecture and interiors; and code, ADA, and

life safety compliance. A cost estimate and report with recommendations for replacement of equipment and required upgrades to bring the complex to present day standards, and to minimize operation and maintenance costs was prepared.

Winstar Communications Facilities, Program Management and Inspection Services, for Turnkey Facilities, Various States. *Lucent Technologies.* Electrical Designer. Responsible for developing a Design Criteria Manual to be used by any architectural and engineering firm for the design of Winstar Hub sites in the United States. Baker provided program management services as part of Lucent Technologies' contract to provide turn-key wireless telecommunication facilities for Winstar Communications. Project locations included Minneapolis, MN; Chicago, IL; Kansas City and St. Louis, MO; Cleveland, OH; Buffalo, NY; and Pittsburgh, PA.

Lodge Complex Development, Stonewall Jackson Lake State Park, Roanoke, West Virginia. *McCabe Henley Durbin.* Technical Advisor. Responsibilities included review of consultant's design, drawings, and specifications, as representative to the owner. Baker provided scheduling, project quality control reviews, and electrical and mechanical system design review under a construction management service agreement for the construction of a new lodge complex at Stonewall Jackson Lake State Park in Roanoke, West Virginia. The 158,000-square-foot Lodge and Conference Center consists of four three-story wings and 196 guest rooms. The facility is constructed of natural stone, cast-in-place concrete, structural precast concrete, concrete masonry, structural steel, and metal decking, and includes synthetic plaster, fiber-cement siding, standing seam roofing, insulated single-ply roofing, skylights, coiling shutter doors, wood doors, and aluminum store-front windows and a curtain wall. Site work included all new infrastructure, including electrical service and an HVAC system.

Electrical Power and HVAC Upgrades, Bridgeville MSC Building, Bridgeville, Pennsylvania. *Verizon Wireless.* Project Manager. Responsibilities included performing all project management duties, electrical design, and quality oversight of all disciplines. Baker provided Verizon Wireless with engineering services for an upgrade to the company's existing 28,000-square-foot Mobile Switch Center (MSC), including a Switch Room, Control Room, and Battery Room power, ventilation and air conditioning systems. The upgrades in the Main Electrical Room also included distribution equipment to support an increased load in the Battery Room.

Cricket Switch Centers & Network Operations Centers, Design Review and Construction Assessment Services, Various Locations. *Lucent Technologies.* Project Manager. Responsible for the technical quality review of the electrical designs for 15 Mobile Switch Center facilities. Lucent Technologies has established a relationship with a major CLEC customer, Cricket, in order to support the deployment of telecommunications facilities. Lucent is participating with the customer in the delivery of full turnkey services. Project locations include Charlotte and Greensboro, NC; Knoxville and Memphis, TN; Little Rock, AR; Tulsa, OK; Salt Lake City, UT; Tucson and Phoenix, AZ; Albuquerque, NM; Denver, CO, and Columbus, GA.

Comprehensive Facility Assessment and Architectural/Engineering Services, National Energy Technology Laboratories, Bruceton, Pennsylvania. *U.S. Department of Energy.* Electrical Designer. Responsibilities included Title III design services for the electric substations and power distribution network, and Title I and II services for the assessment and upgrade of electrical distribution systems, and for power and data cabling for site-wide video surveillance. Baker provided architecture, engineering, and program and construction management under two consecutive five-year open-end contracts for Title I, Title II, and Title III services for the entire 32-building campus. Task orders for 233 projects were completed under these contracts.

Hopewell Flexspace Development, Hopewell, Pennsylvania. *Property Ventures LTD.* Electrical Designer. Responsible for complete electrical design of an 8,000-square-foot repair/test facility and tenant space as

directed by AT&T facility requirements. Baker designed a 50,000-square-foot flex-space facility with the ability to contain research, light industrial, manufacturing, warehousing, and office functions in 5,000-square-foot tenant areas. Each tenant space is served by a retail/office entrance and loading dock facility with a 25' clear height. Site services included a project feasibility study, geotechnical investigation, preliminary infrastructure and roadway layout, and conceptual cost estimates. Water and sewer lines were designed for the site as well as access road design, widening of S.R. 151, and excavation of over 150,000 cubic yards of material. Baker also provided liaison services with PennDOT and utility representatives. Complete construction phase services were provided for six separate construction contracts for the individual developments within the park.

Design of Gatehouse and Administration Areas, Confidential Site. *Confidential Client.* Technical Manager. Responsibilities included review and approval of the electrical design, drawings, and specifications. Renovations were designed for the gatehouse and administrative spaces in three buildings. Services included renovation of approximately 3,300 square feet of office space and an underground control center, and renovation and expansion to the 10,000-square-foot gatehouse, including new roofing and siding, new main site access gate and control system, relocation of the existing security alarm center, support for special electrical systems, security, LAN, and under-vehicle surveillance system, as well as supporting site work such as fencing, external turnstiles, concrete security bollards, and paving.

Midfield Terminal Development Project, Pittsburgh International Airport (PIT), Pittsburgh, Pennsylvania. *Allegheny County Airport Authority.* Electrical Designer. Responsible for the electrical systems design and compliance with Life Safety and Americans with Disabilities Act regulations, project coordination efforts for the installation of people movers, elevators, and escalators, and construction drawings and specifications for medium-voltage power distribution, power lighting, fire alarm, security, sound, and communications systems. Also responsible for shop drawings review, construction administrative duties, construction inspection, and punch lists. Baker was the lead project engineer for design and construction of a new 100-gate Midfield Terminal facility, including landside and airside buildings, terminal aprons and taxiway system, an underground people mover, landside access and parking, parking garage and all ancillary facilities at Greater Pittsburgh International Airport. The entire project was constructed between the primary operating runways and taxiways of the nation's ninth busiest passenger airport and was accomplished without disruption to airline schedules. Key design issues resolved included relocation of a landfill, on-site bioremediation of hazardous materials, and the replacement of 22 acres of wetlands. The new airport was opened on schedule, October 1, 1992.

As lead project engineer, Baker's responsibilities included Master Planning, feasibility studies, taxiways, aprons, parking lots and access roads, electrical design, mechanical design, site design, lighting, drainage, sanitary and storm sewers and conceptual, preliminary and finals design. Baker managed final design services for site grading and drainage, access roadways, terminal bridges, public parking, aprons, taxiways and service roads for the construction of a new two million square foot air terminal facility.

Materials Research Technology Complex, Confidential Location, Pennsylvania. *Confidential Client.* Technical Manager. Responsibilities included performing technical quality reviews of the electrical design, drawings, and specifications.

Baker provided planning, architectural, and engineering services for the preliminary and conceptual design of a new $26 million, 43,000-square-foot Materials Research Technology Complex. The new facility consolidates multiple antiquated, inflexible, hazardous laboratories into one facility. Lab functions include mass spectrometry, radiochemistry, analytical chemistry, metallography, instrument labs, and administrative areas. Special considerations were given for vibration and light sensitive equipment, as well as exhaust gas dispersion to prevent recirculation of fume hood exhaust into the outside air intakes. Several features were designed into the radiochemistry laboratory wing, considering the potential safety hazards associated with

radiological materials. The wing is physically separated from the remainder of the building and also includes an entrance vestibule/airlock, separate plumbing systems, and separate exhaust systems. Space pressurization, airlocks, fume hoods, glove boxes, HEPA filters, and redundant exhaust fans with backup ("emergency") power generators maintain primary, secondary, and tertiary containment in accordance with all applicable standards. The project design will achieve a LEED® Certification for sustainable design.

BFMA Municipal Engineering Services, 1950 - 2009, Beaver Falls, Pennsylvania. *Beaver Falls Municipal Authority.* Electrical Designer. Responsible for the design, drawings, and specifications for power distribution and control systems for a 10 MGD water treatment plant sludge dewatering project. The project included the design and implementation of specified equipment through the final construction phase and plant startup. The system included a primary settling basin sludge collection system, a filter backwash settling tank, a sludge pump station, a gravity thickener, a filter press dewatering facility, process and instrumentation design, and site improvements. The plant expansion site was highly congested and required design within Beaver River floodway and under and around an active Contrail mainline railroad. Baker is the retained authority engineer for the Beaver Falls Municipal Authority and has maintained a relationship with the Authority since 1950. The Authority owns and operates a potable water system serving over 18,000 accounts throughout 22 municipalities in Western Pennsylvania. The Authority's water system consists of: 2 surface water treatment plants (10 MGD and 6 MGD), 7 distribution system pumping facilities, 14 water storage tanks, and over 300 miles of distribution / transmission lines. As Consulting Engineer, Baker performs various services for the Authority on an annual basis.

Legent Regional Headquarters, Pittsburgh, Pennsylvania. *ADD, Inc.* Electrical Designer. Responsible for the electrical design, drawings, and specifications for power distribution, lighting, fire alarm systems, and integration of an extensive telecommunications data network. Baker provided mechanical, plumbing, fire protection, and electrical system design, value engineering, general construction/construction management of the site and building concrete, installation of doors, frames, hardware and miscellaneous specialties, tenant fit-out, and construction management services for this contemporary 240,000-square-foot office complex. The seven-story tower with three-story wings is situated on an 11.5-acre site with parking for 720 cars on a terraced grade. The facility provides training suites with classrooms, conference areas, cafeteria, fitness center, and a formal southern courtyard.

DODDS-LAN/Facility Upgrade Surveys and Designs, Various Schools throughout DODDS, Europe Region. *DODDS - Europe Service Center.* Electrical Designer. Responsibilities included electrical and telecommunications designs to provide complete local area network (LAN) and backbone wiring, HVAC, and power receptacles for Department of Defense dependent school systems at 74 military locations throughout Europe and the Middle East. Project consisted of performing site surveys to determine power and data requirements for installation of campus-wide Local Area Networks. Design of LAN systems included determination of power requirements, locating telecommunication closets, horizontal cabling, fiber optics and Category 5 data wiring according to EIA/TIA telecommunication standards.

Nationwide A-E IDIQ, Southwestern United States. *U.S. Army Corps of Engineers, Fort Worth District.* Technical Manager. Responsibilities included the technical quality review and approval of the electrical design, drawings, and specifications. The Department of Homeland Security (DHS) is the government organization responsible for protecting the 8,000-mile perimeter of the US; they administer United States immigration and customs laws at more than 250 land, air and sea ports of entry and maintaining control of our borders. Baker supported this mission, in the southwestern border states, through the Fort Worth District, US Army Corps of Engineers, by providing a complete range of mapping, general civil engineering, architectural, GIS, risk management/force protection and construction management services. Delivery orders ranged from providing support to agency staff to assuming the complete project from concept to construction administration and documentation of work constructed.

Mobile Switch Center Feasibility Study and Addition of a Second Mobile Switch, Bridgeville, Pennsylvania. *Verizon Wireless.* Project Manager. Responsibilities included performing all project management duties, electrical and security systems design, and quality review of all disciplines for an engineering feasibility study to investigate the required upgrades to the existing Bridgeville Mobile Switch Center (MSC) to support the addition of a second switch. Baker provided professional engineering services for an Engineering Feasibility Study to investigate two new building additions, each approximately 23,000 square feet in size, for the support of a second wireless telephone switch at the Bridgeville site. An Executive Summary was provided that included a Pros and Cons Analysis of the two building options along with estimated construction costs. The study was a comparison between the Verizon Wireless square foot dollar allowances for new facility construction, versus the building upgrade costs required to comply with Verizon Wireless Network Standards for upgrades to existing facilities. The study included architectural, structural, mechanical, plumbing, fire detection and protection, electrical, and security systems design, as well as construction cost estimating.

U.S. Army Reserve Center OMS/AMSA/STRG, North Canton, Ohio. *U.S. Army Corps of Engineers, Louisville District.* Technical Manager. Responsibilities included support for the development of the project scope of work and review of project design. The U.S. Army Reserve required a Training Center and Organizational Maintenance Shop/Area Maintenance Support Activity (OMS/AMSA) facility for the 88th Reserve Support Command. Approximately 400 reservists work and train in the new Silver SPiRiT-certified, 61,344-square-foot complex. The Training Center and OMS/AMSA is comprised of a one-story L-shaped building with a two-story element at the connection of two wings. The Training Center portion of the complex includes offices and administrative spaces, caged unit storage, classrooms, library, learning center, physical readiness, engagement skills trainer, COMSEC training room, arms vault and armorer's room, assembly hall, kitchen, toilets, lockers, showers, and building support functions. The OMS/AMSA portion of the building includes office and administrative areas, tool and parts storage, 10 work bays, one welding bay, controlled and flammable storage, wash bay, and building support functions. One drive-through bay is serviced by an overhead traveling crane.

Mobile Switch Center Additions and Alterations, Verizon Wireless, Bridgeville, Pennsylvania. *Verizon Wireless.* Project Manager. Responsibilities included performing all project management duties, electrical design of the replacement of the existing overhead electrical service to an underground service with pad-mounted transformer at the Bridgeville MSC, and quality review of all disciplines. Baker was responsible for the first floor renovation and expansion of an existing switch center. Tasks included a condition assessment of the existing systems, design of the system upgrades, and preparation of drawings and specifications for the relocation and upgrade of existing HVAC, fire alarm, fire suppression (FM200 and CO2), security, data, and communications systems located in the 5,000-square-foot renovation area.

Site Civil and Geotechnical Survey, Verizon Wireless, Bridgeville, Pennsylvania. *Verizon Wireless.* Project Manager. Responsibilities included performing all project management duties and quality oversight. Baker provided site survey and geotechnical design services for the addition of a second Mobile Switch Center (MSC) Building at the Bridgeville MSC site.

Upgrades to Mobile Switch Center, Verizon Wireless, Pittsburgh, Pennsylvania. *Verizon Wireless.* Project Manager. Responsibilities included performing all project management duties, electrical design, and quality oversight for this renovation project. Baker was responsible for the upgrade of HVAC equipment and electrical service to support increased equipment demand requirements. Tasks consisted of a condition assessment of the existing systems, design of the system upgrades, and preparation of drawings and specifications for the project.

Dominion - Microwave and Radio Towers, Pennsylvania, Ohio, and West Virginia. *Dominion Transmission, Inc.* Technical Manager. Responsible for the technical quality review of the electrical design,

drawings, and specifications. The project involved developing a wireless Sonet Ring for the communications network of Dominion Transmission's natural gas pipeline network in Pennsylvania, Ohio, and West Virginia. Approximately 25 tower facilities were involved.

Previous Work History

DeBartolo Corp., Electrical Engineer, 1988-1991

- Responsibilities included engineering, design, coordination, and supervision of design and drafting of electrical construction drawings and specifications for retail shopping centers. Mr. Bates was responsible for negotiating and coordinating with the engineering departments of utility companies and local fire authorities for service requirements. Mr. Bates was responsible for coordinating with and directing the activities of consultant engineering firms hired to complete drawings.

L.T.V. Steel Corp., Plant Engineer/Electrical Supervisor, 1979-1988

- Electrical Supervisor/Journeyman Electrician. Responsibilities included the supervising of 22 electricians and 30 cranemen in a 56" hot strip mill. Duties involved the electrical maintenance, installation, and modification to steel strip production equipment's electrical systems. Troubleshooting of motor controls such as PLC's (GE series 6), as well as relay logic, P.I.D. temperature controllers, recorders, thickness gauging control using x-ray generation and isotope sources, force monitoring devices utilizing load cell sensors, pinhole detection systems, various line speed footage counters and elongation equipment, radio-controlled heavy equipment (both analog and digital bi-phase), closed-circuit television monitoring systems, public address systems, and unitized sound communication equipment.

Computer Skills

Adobe Acrobat Professional
Bentley MicroStation
Lotus
Microsoft Access
Microsoft Excel
Microsoft Power Point
Microsoft Word
Oracle Application - Project Manager
WordPerfect

Laura L. Cox, P.L.A.,A.S.L.A.

Landscape Architect

Years with Baker: 2

Years with Other Firms: 26

Education

B.S. Landscape Architecture, West Virginia University, 1978

Computer Aided Drafting, Putnam County Technical Center, 1995

Registrations

CLA, Virginia, 1987

PLA, West Virginia, 2008

NICET Level 3 (Highway Design), 1983

Professional Affiliations

American Society of Landscape Architects

WV Chapter – American Society of Landscape Architects

WV Chapter – American Institute of Architects

General Qualifications

Ms. Cox is a Registered Landscape Architect with over 26 years of experience in the fields of landscape architecture and land planning. She has knowledge of all phases of design from site analysis and conceptual planning through construction documentation, permitting and administration. Her design experience includes large scale site preparation and grading, drainage analysis, storm water conveyance and detention, and utility and infrastructure design.

Ms. Cox has an extensive background in site and land use planning for counties and municipalities including, feasibility studies, review and evaluation of preliminary and final subdivision plans, special exceptions, rezoning applications, yield studies, special use permits and client representation at public hearings and meetings with civic groups.

Experience

A/E Services for the Harrison County Extension Service and the Parks and Recreation –Clarksburg, West Virginia. *Harrison County Commission, Clarksburg, West Virginia.* Project Site Civil Designer. Ms. Cox will be responsible for all site and civil design aspects for the renovation of an existing facility for use as Administrative Offices and as Storage Facility. The Harrison County Commission selected Baker to provide complete design and construction administration services for architectural improvements. The existing facility located near Clarksburg, West Virginia was originally constructed in the early 1960's and was used recently as a business for a local exterminating firm. Over the years, there have been additions and upgrades to the facility. Baker was selected by the Harrison Co. Commission to upgrade of front area of the facility for the Harrison County Extension Service's offices and back area of the facility for use as storage by the Harrison County Parks and Recreation. With funding through a ARRA Stimulus Grant, the Owner desires the modernization of approximately 6,000 square feet of existing with appropriate "Green Building" materials. Upgrades of the exterior doors and windows, interior partitions and finishes replacing the outdated heating, ventilation, and air conditioning equipment, and replacing the existing electrical service with energy efficient product. Total project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, alterations to the existing floor plan, exterior window and door replacements, new interior doors and hardware, new wall finishes, updated water saving toilet facilities and a new energy efficient HVAC system. Baker is currently working closely with the client during the planning phase to define a project scope to upgrade the existing facility into an energy efficient facility and within their budget.

Dunbar Zoning Ordinance Update, Dunbar, West Virginia. *Town of Dunbar.* Project Manager, Ms. Cox is assisting the Town of Dunbar in updating its Zoning Ordinance and Mapping System. The original ordinance adopted in 1961 and its associated mapping have undergone very little updating. This project, when complete will bring the current Ordinance into the Twenty first Century along with its GIS based

electronic mapping which will be available to the public. Ms. Cox is assisting the Dunbar Planning Commission in the necessary public involvement process, as well as ordinance writing, research, mapping and coordination efforts for this project

West Virginia Capitol Complex Master Plan, Charleston, West Virginia. *WV Department of Administration.* Project Planner, Ms. Cox is assisting in providing the State of West Virginia General Services Division a comprehensive campus-wide master plan for the 55+ acre state capitol campus. Ms. Cox is part of the Baker Team which is working in conjunction with the owner and a team of specialized consultants providing planning elements including master planning, public involvement, document management, facilities planning, and document preparation.

Winfield On-Call Planning Services, Winfield, West Virginia. *Town of Winfield.* Project Planner, Laura serves as the Planning Director of the Town, where she staffs subdivision, special exception, and rezoning applications. She meets with the public and serves as Town Staffing to the Planning Commission and Board of Zoning Appeals. Upcoming projects for the Town include assisting in the preparation of a Comprehensive Land Use Plan and updating the Zoning ordinance.

Historic Wellsburg and Bethany Scenic Byway Corridor Management Plan, Wellsburg, West Virginia. *Byway Committee.* Project Landscape Architect, Ms Cox was responsible for field inventory and analysis, community input facilitation, and document preparation. She helped prepare a Corridor Management Plan for the Historic Wellsburg and Bethany Scenic Byway in Brooke County West Virginia in preparation for Federal recognition in the National Scenic Byway Program. The plan showcased the story of settlement and the development of industry along the Ohio River in the Northern Panhandle of West Virginia, as well as developing recreational opportunities and improving safety along the circular 22-mile scenic corridor loop.

Parsons City-wide Comprehensive Parks and Recreation Master Plan, Parsons, West Virginia. *Parsons Parks Board.* Project Planner. Ms. Cox was responsible for assisting in the master planning design. She assisted in preparing a Master Plan of improvements and recommendations for existing and proposed parks and recreation amenities for the city limits of Parsons, Tucker County, West Virginia. Through a series of public meetings and stakeholder meetings, a final plan was realized with recommendations for ball fields, hiking and biking trails, a recreation center, miniature golf course, additional play structures, picnic facilities, ADA-compliant fishing access, interpretive signage, and landscaping improvements for the existing and new park areas.

Ararat River Greenway Parks Projects, Mount Airy, North Carolina. *City of Mount Airy, North Carolina.* Project Landscape Architect. Ms. Cox was responsible for design and construction document preparation. She assisted in the preparation of construction documents and provided construction administration and construction inspection for three (3) parks along the Ararat River in North Carolina. The designs were prepared on a previously developed master plan of the Ararat River Greenway. The first park, Riverside Park, includes basketball courts, playground structures, parking areas, a premier soccer field, picnic shelters, nature trails, canoe launch facility, restrooms, fencing, signage and landscaping. Rowe Environmental Park showcases environmental issues in the park design and construction, including an outdoor amphitheater and classroom, picnic facilities, nature trails, parking area, pedestrian bridge to nearby middle school, fishing access and canoe launch facility. The final park design is for Tharrington Park, which l includes a premier soccer field, additional soccer fields to create a soccer complex, access road and parking, fitness trail, restroom facility, concessions, and a maintenance building.

Kanawha & Putnam County Bicycle – Pedestrian Master Plan, South Charleston, West Virginia. *Regional Intergovernmental Council (RIC).* Project Planner. Ms. Cox provided assistance in field inventory and analysis, plan preparation and graphic support. She helped perform a two-phase bicycle and pedestrian circulation study for Kanawha and Putnam Counties. Based on these efforts, a list of

recommended improvements to the 2-county area was proposed to improve bicycle and pedestrian safety and user-friendliness throughout the project area.

Country Roads Scenic Byway Corridor Management Plan, Boone, Logan and Mingo Counties, West Virginia. *Coalfield Convention and Visitors Bureau.* Project Landscape Architect. Ms. Cox was responsible for field inventory and analysis, community input facilitation, and document preparation. She helped prepare a Corridor Management Plan for the Country Roads Byway in southern West Virginia in preparation for Federal recognition in the National Scenic Byway Program. The plan showcased the story of organized labor and its relation to the industrial revolution in West Virginia, as well as developing recreational opportunities and improving safety along the nearly 180-mile scenic corridor loop.

Valley Park Sidewalk Improvements Project, Hurricane, West Virginia. *Putnam County Parks and Recreation Commission.* Project Landscape Architect. Ms. Cox was responsible for design and construction document preparation. She assisted in complete planning, design, and construction management services for new sidewalks and streets improvements for access into Valley Park, Putnam County. The improvements included concrete sidewalks with integral concrete curbs, driveway curb cuts, ADA accessible curb ramps with truncated domes, ladder-style crosswalks, and storm water improvements. The park sidewalks have a unique colored stamping of natural elements found in West Virginia, such as leaves and ferns, animal tracks, and flowers. Ms. Cox helped provide Construction Administration and inspection services as well as periodic site review during construction.

Habitat for Humanity Restore Parking Lot and Rain Garden Project, Charleston, West Virginia. *Habitat for Humanity Corporation.* Project Landscape Architect. Ms. Cox was responsible for design and construction document preparation. She performed complete planning and design services for a new parking lot that included a rain garden. This was a pilot project of the City of Charleston and is the City's first rain garden. This Low Impact Design element is an innovative solution to urban storm water detention problems.

Non-Baker Project Experience

FPC Alderson, Federal Prison Camp; Alderson WV Landscape Architect. / Civil Designer
Ms. Cox worked on concept campus plans as well as well as complete site and landscape plans for the renovation and expansion of two dormitories along with extensive renovations to existing site recreational features.

Gene Spadero Juvenile Detention Center; Mt. Hope WV Landscape Architect / Civil Designer
Ms. Cox designed all site amenities including entrance configuration, parking; roads; grading; utilities; fencing and landscaping.

Lakin Correctional Center; West Columbia WV Landscape Architect / Civil Designer
Ms. Cox designed parking; roads; grading; utilities; fencing and landscaping for a new dormitory and a Correctional Industries Building.

Erma Byrd Center, Beaver, Raleigh County, West Virginia. *Southern West Virginia Community and Technical College.* Project Landscape Architect. Ms. Cox was responsible for master planning of the campus, detailed design, and site construction document preparation. She developed site design and construction documents for the development of a new multi-purpose education facility. Future plans for the campus include additional buildings arrayed around a central water feature.

Miniature Golf Course at Chief Logan State Park, Logan County, West Virginia. *Environmental Design Group.* Consultant. Laura was responsible for storm sewer design for a new recreational feature for the Park. Services included site drainage analysis and design of storm conveyance system.

Byrd Park Redevelopment Master Plan, Richmond, Virginia. *Richmond Parks and Recreation Board.* Project Manager. Ms. Cox performed site inventory and analysis, public outreach and preparation of a revitalization master plan for one of the oldest parks in the City.

Glen Jean Armory, Glen Jean, Fayette County West Virginia. Staff Landscape Architect. Laura prepared Complete Landscaping and Entrance Area Ramps/Stairs Plans addressing ADA and force protection issues.

Logan Readiness Center, Logan, West Virginia. Staff Landscape Architect. Ms. Cox designed parking lot and sidewalk system and prepared Landscaping Plan

Jackson County National Guard Facility, Cottageville, West Virginia. Staff Landscape Architect. Ms. Cox provided preliminary site analysis and conceptual plans for public comment phase of the project.

Morgantown National Guard Facility, Morgantown, West Virginia. Staff Landscape Architect. Ms. Cox provided conceptual site plan for submission to client.

St Albans High School, St Albans West Virginia, St. *Albans School Board.* Staff Landscape Architect/ Civil Designer – Ms. Cox prepared Complete Phased Civil and Site Construction Drawings for entire campus plan.

Lincoln County High School, Hamlin, West Virginia, *Lincoln County Board of Education.* Staff Landscape Architect/ Civil Designer. Laura prepared Complete Phased Civil and Site Construction Drawings for entire campus plan, including design of DOH roadway and extensive site grading.

Southside Elementary/Southwest Middle School, Huntington, West Virginia, *Cabell County Board of Education.* Staff Landscape Architect/ Civil Designer – Ms. Cox prepared Complete Phased Civil/Site/Landscape Construction Drawings for urban campus plan, which included a sustainable underground storm collection system.

Milton Middle School, Milton, West Virginia, *Cabell County Board of Education*. Staff Landscape Architect/ Civil Designer – Laura prepared Complete Phased Civil/Site Construction Drawings for rural campus plan, which included extensive site grading along with a sustainable underground storm collection system.

PREVIOUS WORK HISTORY

ZMM, Inc., Architects & Engineers, MAY 2000 – NOVEMBER 2007, *Landscape Architect*, Ms. Cox performed planning and site design functions, permit processing, software implementation and training. She was responsible for all in-house site design and civil engineering projects for West Virginia's largest multidisciplinary AEC firm, specializing in educational, correctional, and commercial projects. While employed at ZMM Laura was involved in all phases of design from site analysis and conceptual planning through construction documentation and administration. She prepared large scale site preparation and grading plans, provided drainage analysis, prepared storm water conveyance and detention plans, and produced utility and infrastructure design and worked with government agencies to obtain approvals and permits. In addition to design responsibilities, she was in charge of recurrent training of the technical staff to support upgrades, advances, and improvements in design software.

Self Employed as a Design Consultant, *April 1995 - May 2000*, Ms. Cox provided civil, architectural, and environmental design and drafting services, She also provided Instruction of both on and offsite AutoCAD classes. Laura also provided comprehensive design and drafting services for clients in the Charleston/Huntington area; Services included Land Use Planning, Civil Design and Drafting, Architectural Drafting, Environmental Design, and Landscape Architecture. Additionally she served as trainer for Mountain CAD, Charleston's Autodesk software reseller.

Fauquier County Department of Community Development, *August 1990 - December 1993*, Chief of Planning Division, Ms. Cox was responsible for the processing of land use applications. She also

supervised a design review team; Her responsibilities included organization and implementation of office procedures; enforcement of subdivision and zoning ordinances; review and evaluation of preliminary and final subdivision plans, special exceptions and rezoning. She answered public inquiries; represented the county at public meetings. In addition Ms. Cox provided reports and recommendations directly to the Fauquier County Planning Commission and Board of Supervisors.

Land Design Concepts, Incorporated, JUNE 1989 - AUGUST 1990, *Senior Planner/Office Manager*, Ms. Cox was responsible for oversight of office procedures and performed and supervised a broad spectrum of planning tasks. She managed the staffing, organizing, marketing and supervising the equipping of an office for a new planning firm; Ms. Cox was in charge of management of both office and planning staff; She developed all client contacts; prepared and negotiated contracts and supervised billing; Ms. Cox was responsible for preparing and processing rezoning applications, preliminary plans, feasibility studies, site and land use analysis, yield studies and conceptual design in Stafford and Spotsylvania Counties.

Kidde Consultants, AUGUST 1986 - MAY 1989, *Chief, Planning & Landscape Architecture Section,* Ms. Cox was in charge of a team that was involved in all phases of planning and landscape architecture. Her responsibilities included: coordinating with and assisting clients' attorneys in obtaining rezoning, special exceptions and special use permits; contract preparation, negotiation and billings; She represented clients at public hearings and meetings with civic groups in Arlington, Fairfax, Prince William and Stafford Counties.

Huntley, Nyce and Associates, P. C., OCTOBER 1984 - AUGUST 1986, *Staff Landscape Architect,* Ms. Cox was responsible for small and large scale landscape design, civil design and graphics presentations. She was in charge of a squad of design and drafting personnel. She prepared site, subdivision and landscape plans in Fairfax and Loudon Counties.

Paciulli, Simmons and Associates, APRIL 1984 - OCTOBER 1984, *Designer*, Ms. Cox was responsible for the design of commercial and residential site plans and all phases of site design including utility and drainage computations, layout grading plans and roadway design.

WVDOT Division of Highways, DECEMBER 1980 - APRIL 1984, *Highway Design Technician*, Ms. Cox was responsible for highway design including repair and improvement; horizontal and vertical layout of roads, quantity calculations, report graphics and drafting.

Joseph Crowder

Surveyor

Years with Baker: 2

Years with Other Firms: 16

Education

A.S., 1989, Computer Aided Drafting, West Virginia State University

Licenses/Certifications

Real Estate License, West Virginia

Registered Land Surveyor, West Virginia

General Qualifications

Mr. Crowder is currently employed as a surveyor at the Charleston, West Virginia office of Baker's South Region. Mr. Crowder has over 11 years of diverse experience that includes assignments in civil design, surveying, construction inspection and field testing.

Experience

CAMC-Flood Protection Project-Phase 1. *CAMC.* Surveyor. Assisted with field work during survey process. Also served as instrument person.

Coal River Energy-Aldrich Branch Permit. *Coal River Energy, LLC.* Surveyor. Assisted in GPS survey control for project. Also served as Instrument Person and Survey Party Chief during field surveys.

Commonwealth of Kentucky-Upper Cane Creek of Red River. *Commonwealth of Kentucky.* Surveyor. Participated as Instrument Person and Survey Party Chief to physically locate streams during survey. Also participated with GPS Surveying of control for Lidar Mapping of project.

Town of West Milford-Sidewalk Improvements, West Milford, West Virginia. *Town of West Milford.* Surveyor. Participated in construction stakeout and monitoring. Baker performed complete planning, design and construction management services for new sidewalks along U.S. Route 270 (Main Street) for the Town of West Milford. The improvements included concrete sidewalks with integral concrete curbs, driveway curb cuts, ADA accessible curb ramps with truncated domes, "ladder-style" crosswalks and storm drainage design. Baker provided Construction Administration and resident inspection services as well as periodic site review during construction.

Miscellaneous Surveying and Mapping Projects, Various Locations. *Columbia Gas Transmission Corporation.* Surveyor. Participated in duration of complete survey. Responsible for courthouse research, helped with actual field locations and mapping and plotting of deeds. Also, assisted in writing of legal description. Over the past nine years, Baker has performed well over 120 miles of extensive gas line surveys and mapping projects throughout the Columbia Gas System.

Non-Baker Project Experience

DuPont, near Washington Works Plant, Wood County, WV. Sampling of water wells. Assisted in gathering data from residents, locating potential sample points, such as old drilled water wells, cisterns, and springs. Assisted in actual water sampling using various methods - bailers, air pumps, etc.

Winfield ACF Site, ACF/Corps of Engineers, Winfield, WV. Work included Boundary, Topographic, Construction Layout, and Sample Point Layout of 15 acres along the Kanawha River. This project had over 12,000 sample points laid out on a 3' grid.

Poor Charlie, Riverside Site, Glasgow, WV; Poor Charlie, Sattes Site, Nitro, WV; Poor Charlie, Cramer Metals Site, Parkersburg, WV. Work included Boundary, Topographic, Location and Boring Stakeout of various VERA sites and adjoining properties.

Elkem Metals Disposal Facility, Elkem Metals, Alloy, WV. Work included Control Network, Boundary, Topographic Surveys, and yearly volume reports.

Solutia, Nitro, WV. Work included Boundary, Topographic and Location Surveys for various projects, disposal facility caps, charcoal filtering systems, and monitoring well control network throughout the site and adjoining properties.

Nicholas County Landfill, Summersville, WV. Work included Control Network, Boundary and Topographic Surveys for expansion of cells and yearly volume reports.

Pocahontas County Landfill, Pocahontas County, WV. Work included Control Network, Boundary and Topographic Surveys for expansion cells and yearly volume reports.

Fleming Landfill, WVDEP, Sissonville, WV. Work included Boundary and Topographic Surveys, along with control network and baseline stakeout for landfill closure.

Cunard Landfill, WVDEP, Fayetteville, WV. Work included Topographic and Construction Layout for landfill closure.

Mingo County Landfill, J & B Contracting, Mingo County, WV. Work included Topographic and Construction Layout for landfill closure.

Mercer County Landfill, Jimmy Dunn, Mercer County, WV. Work included Topographic and Construction Layout for landfill closure.

Merritts Creek Connector Road, WVDOT, Barboursville, West Virginia. Preliminary route survey of 2.2 miles of four-lane roadway. Work included courthouse research, property owner questionnaires, stake proposed centerline, tie to properties, set and reference construction control points. Crew Chief/Project Manager.

Bentons Ferry Bridge Replacement, WVDOH, Fairmont, West Virginia. Work included Topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points. Crew Chief/Project Manager.

North Bridgeport Connector Road, WVDOH, North Bridgeport, West Virginia. Work included GPS control survey of project area, preliminary route survey of centerline, tie to property lines, stake and reference centerline and construction control points, courthouse research, property owner questionnaires. Crew Chief/Project Manager.

Corridor H, WVDOH, Section 15, Elkins, West Virginia. Work included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of 2.2 miles of centerline, tie to property lines, stake and reference centerline and construction control points. Crew Chief/Project Manager.

Corridor D, WVDOH, Martown Section, Parkersburg, West Virginia. Work included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of 2.2 miles of centerline, tie to property lines, stake and reference centerline and construction control points. Crew Chief/Project Manager.

Martha Truss Bridge Replacement, WVDOH, Milton, West Virginia. Work included Topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points. Crew Chief/Project Manager.

Martha Girder Bridge Replacement, WVDOH, Milton, West Virginia. Work included Topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points. Crew Chief/Project Manager.

Smith Bridge, WVDOH, Wetzel County, West Virginia. Work included Topo survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points. Project Manager.

Opaquen Bridge, WVDOH, Wetzel County, West Virginia. Work included topographic survey of project area, property owner questionnaires, tie to property lines, river cross sections, stake and reference centerline and construction control points. Project Manager.

King Coal Highway, WVDOH, Mingo County, West Virginia. Work included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of 2.2 miles of centerline, tie to property lines, stake and reference centerline and construction control points. Project Manager.

Sharon Heights Connector Road, WVDOH, Mingo County, West Virginia. Work included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of 2.2 miles of centerline, tie to property lines, stake and reference centerline and construction control points. Project Manager.

Kanawha Turnpike, WVDOH, Charleston, West Virginia. Work included courthouse research, property owner questionnaires, GPS control of project area, preliminary route survey of 2.2 miles of centerline, tie to property lines, stake and reference centerline and construction control points. Project Manager.

East Huntington Bridge, WVDOH, Huntington, West Virginia. Work included annual bridge inspection survey of cable stay bridge over the Ohio River. Crew Chief/Surveying Supervisor.

Cogentrix Energy, Cogentrix, Marshall County, West Virginia. Work included GPS control survey of project area, boundary survey of 292 acres, topographic survey of 177 acres for site construction, courthouse research. Surveying Supervisor.

Big Sandy Peaker Plant, Constellation Power, Cabell County, West Virginia. Work included GPS control survey of project area, boundary and topographic of 42 acres, boundary and route survey for 1 mile of transmission lines, construction stakeout. Crew Chief/Surveying Supervisor.

Paintsville Power Plant, Energy Services, Paintsville, Kentucky. Work included control and topographic survey of a 180-acre site for proposed power plant, construction stakeout. Survey Supervisor.

Greenbrier Pipeline, Dominion, West Virginia, Virginia, and North Carolina. Work included control and preliminary route survey of a 264-mile pipeline running from Corton, West Virginia to Raleigh, North Carolina. Survey Supervisor.

Upshur County Power Plant, Dominion, Upshur County, West Virginia. Work included control survey and construction survey of a 170-acre power plant. Survey Supervisor.

Cellular telephone tower sites, Nextel, West Virginia, Kentucky, and Ohio. Work included courthouse research, boundary and topographic survey for 86 tower locations. Crew Chief/Survey Supervisor.

West Virginia-American Water Company. Work included boundary survey for 180 water tank sites throughout West Virginia. Crew Chief/Survey Supervisor.

National Lumber Plant Site, Roane County, West Virginia. Work included boundary and topographic survey, construction stakeout for plant site. Crew Chief/Survey Supervisor.

Buckskin Council Boy Scout Camp, Boy Scouts of America, Pocahontas County, West Virginia. Work included topographic survey and construction stakeout for new water and sewer system. Survey Supervisor.

Hampton-Clarke, Philips Lighting Company, Fairmont, West Virginia. Work included boundary and topographic survey, construction stakeout for cullet pile of hazardous waste site. Crew Chief/Survey Supervisor.

BIDCO, Kanawha County, West Virginia. Work included boundary and topographic survey of several parcels in the development, also stakeout of spec building and parking lots.

University of Charleston, Charleston, West Virginia. Work included boundary survey of several parcels of land for student housing and parking lot. Crew Chief/Survey Supervisor.

Marshall University, Charleston, West Virginia. Work included boundary and location survey of research complex. Survey Supervisor.

Marshall University, Huntington, West Virginia. Work included courthouse research, boundary and topographic survey of several city blocks for student housing and parking buildings. Crew Chief/Survey Supervisor.

Chief/Survey Supervisor.

Previous Work History

Triad Engineering, Inc., Survey Party Chief, July 2006-September 2007

HNTB Corporation, Survey Party Chief, July 2006-July 2005

Potesta & Associates, Survey Manager, Inc., 1999-2005

Design Tech, L.L.C., Survey Party Chief, 1997-1999

Site Blauvelt Engineers, Survey Party Chief, 1996-1997

Dunn Engineers, Survey Party Chief, 1993-1996

Professional Affiliations

West Virginia Society of Professional Surveyors (WVSPS)

Part 9 – References

Each of the Project Profiles found in Part 7 lists Baker's client and contact information for your use as a reference. Additionally, we offer the following diverse list of past or current clients and contact information:

- West Virginia Department of Transportation – Division of Highways
  1900 Kanawha Boulevard East,
  Building 5, Room A-109
  Charleston, WV 25305
  Mr. Darrell Allen, P.E., Deputy State Highway Engineer
  (304) 558-3304

- City of Charleston
  915 Quarrier Street, Suite 5
  Charleston, WV 25301-2607
  Mr. Chris Knox, City Engineer
  (304) 348-8106

- WV Division of Homeland Security & Emergency Mgmnt., E-911 Mapping
  1900 Kanawha Boulevard, East
  Building 1, Room EB-80
  Charleston, WV 25305
  Mr. Jimmy Joe Gianato, Director of Homeland Security
  (304) 530-6142

- WV Statewide Addressing and Mapping Board
  1124 Smith Street, Room LM-10
  Greenbrooke Building
  Charleston, WV 25301
  Ms. Leigh Cielensky, Executive Assistant
  (304) 558-4218

- Harrison County Planning Commission
  301 West Main Street
  Clarksburg, WV 26301
  Ms. Terry Schulte, Director
  (304) 624-8690

- Habitat for Humanity of Kanawha & Putnam County ReStore
  815 Young Street
  Charleston, WV 25301
  Ms. Amy McLaughlin, Director
  (304) 720-0141

- West Virginia Army National Guard – Division of Engineering and Facilities
  1707 Coonskin Drive
  Charleston, WV 25311-1099
  Major Michael J. Beckner, Facilities Management Officer
  (304) 561-6333