# Expression of Interest to Provide Architectural & Engineering Services for:

# School for the Deaf and Blind

Receiving Department 301 East Main Street Romney, West Virginia 26757-1894

submitted to:

# Ms. Shelly Murray

Department of Administration
Purchasing Division
Building 15
P.O. Box 50130
Charleston, West Virginia 25305-0130

submitted by:

Michael Baker Jr., Inc.

5088 Washington Street West Charleston, West Virginia 25313

April 16, 2009

Belker

**Engineering & Energy** 

ChallengeUs.

RECEIVED

2009 APR 16 AMII: 56

WW PURCHASING DIVISION



April 16, 2009

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

Ms. Shelly Murray School for the Deaf and Blind Receiving Department 301 East Main Street Romney, WV 26757-1894

RE: Architectural/Engineering Services - Building Evaluation Study

Dear Ms. Murray:

Michael Baker Jr., Inc. (Baker) is pleased to present our qualifications and experience as it relates to the Building Evaluation Study on the Administrative Building and the Central Boiler Building for the School for the Deaf and Blind. As you will see from the enclosed project profiles and personnel resumes, Baker has extensive experience in building evaluation studies. Baker's vast experience in evaluation studies will allow us to provide the School for the Deaf and Blind unmatched services and the ultimate success of the project.

Baker is a global engineering and energy firm with some 5,000 members in 50 office locations. We propose to undertake this and any subsequent assignments from our Charleston, West Virginia office. We have maintained a Charleston office since 1952 and currently employ over 40 individuals including engineers, architects, landscape architects, planners, surveyors, environmental specialists, and technicians.

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

We continue to strive to be the best at what we do and no other firm can match our commitment. Let us put our experience and enthusiasm to work for you! We eagerly await the opportunity to personally present our qualifications and approach for this important project. Please feel free to contact me at (304) 769-0821 or by e-mail at <a href="mailto:project.green">project.green</a>

Sin**ge**rely,

Patrick W. Fogarty, PE, PS Civil Services Group Manager

Baker 🛭 r.,

Inc.



# Table of Contents

Part 1 - Introduction	
Corporate Capabilities	
Part 2 - Qualifications	3
Part 3 - Technical Expertise	4
Goals and Costs	4
Preparation and implementation	
Part 4 - Management and Staffing Capabilities	6
Project Key Staff	6
Part 5 - Project Understanding	8
Part 6 - Related Prior Experience	10
Part 7 - Resumes	11
Part 8 – References	12

### Part 1 - Introduction

The School for the Deaf & Blind is seeking a highly qualified firm experienced in architecture and engineering to perform a building evaluation study. Michael Baker Jr., Inc. (**Baker**) is a highly qualified firm with extensive experience in providing these services, and we are extremely interested in a professional relationship with the School for the Deaf & Blind.

### 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 4,700 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, landscape architecture, operations, and technical services worldwide. The firm has a national practice with 34 offices throughout the U.S. from which to serve our domestic clients. Our multinational architectural/engineering services result



WV School for the Deaf and Blind

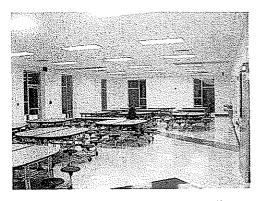
in over \$400M gross revenue per year. We are committed to using the latest computer technology and provide best quality services in the areas of Architectural Facility Design and Planning, Landscape Architecture, Environmental Design, and CADD.

**Baker** has extensive resources and the required qualifications to provide the architectural and engineering services for this very important project. The **Baker** team of experienced professionals have an established record of delivering quality work products to our clients, on-time and within budget.

**Baker** is a "single-stop resource" capable of providing comprehensive and professional architectural / engineering services. Our team is structured to deliver the very best building evaluation study for the School for the Deaf & Blind.

In summary, the **Baker** team will be providing a Plan which will include guidance and input in following areas for your project:

- Assessment of Existing Facilities
- Building Improvement Cost Summaries
- Educational Specifications
- Schematic Design Drawings
- Design Development Drawings
- Construction Documents
- Bidding Assistance
- Construction Administration



Elementary School Dining Hall

### Baker's Facilities Evaluation will include assessments of:

- Existing Building Structures
- Site Elements
- Lighting, HVAC, Energy Efficiency
- Health and Safety Elements
- Architectural and Aesthetic Elements
- Your overall goals; to insure they are complied with

Our team will be there to ensure all aspects of the design process are met and as our client, your expectations are exceeded. **Baker's** extensive experience enables us to evaluate facility elements and educational needs while keeping in mind we are here to meet our client's wishes, needs and requirements in developing a building evaluation study on the Administration and Central Boiler Buildings.



Elementary School Main Corridor

# Part 2 - Qualifications

**Baker** provides all phases of architectural / engineering services for educational facilities, including costs analysis and scheduling of construction as required. Project assignments have also included maintenance facilities, garage facilities, and office buildings relating to the educational field. Services for these assignments have included master planning, surveying, mapping, right of way services, geotechnical design, architecture, civil, mechanical, electrical, plumbing and structural engineering, public safety programming, permitting and cost estimating.

### Baker's Educational experience includes but is not limited to:

- Educational Specifications
- Architectural Design
- Interior Design
- Landscape Architecture
- Mechanical / Electrical Design
- Structural Design
- Civil Engineering
- Utility Design
- Water Distribution and Treatment
- Wastewater Collection and Treatment
- Storm Water Management
- Access Road Design
- Decorative Retaining Walls / Noise Abatement Walls
- Construction Inspection Services

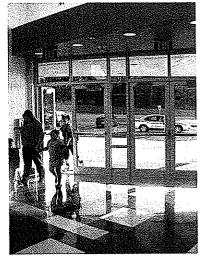




# Part 3 - Technical Expertise

**Baker** can offer the School for the Deaf & Blind proven experience in the following Professional Services consistent with the requirements of typical projects as identified in your Request for Proposals:

- Pre-Design Services
  - o Educational Specifications
  - o Schematic Design
  - o Design Development
  - Construction Documents
  - o Construction Administration
  - Post Construction Services



Elementary School Main Entrance

#### Goals and Costs

**Baker** will assist your Board and committees in clarifying project goals and design issues to provide a clear Program of Spaces for the basis of design and to ensure the project reflects the client's values. We will prepare Cost Estimates to assist the client's determination of the project priorities and to maximize your dollar.

# Preparation and Implementation

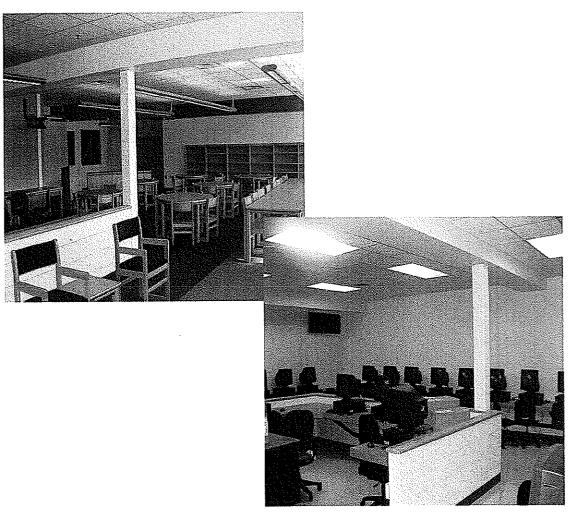
Members of Baker's Charleston, West Virginia office will be heading up this project from the preliminary phases through implementation of the final document. Our staff has the knowledge and skills required for architectural design, space standards, construction methods, costs and timelines. We will assist the client in determining project goals, project constraints and opportunities, and prioritizing

client and user values.

Our documents will detail completely the individual elements required for the architectural, site design, engineering, environmental, and permitting issues associated with the development of the project.

"We have established relationships with all state agencies having jurisdiction which helps to streamline the process."

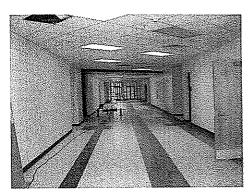
In preparation of the documents, we have established relationships with all state agencies having jurisdiction which helps to streamline the process. We work early and often with agencies such as the WV State Fire Marshal and this minimizes addendums and change orders from that agency alone.



Elementary School Media Center and Computer Lab Renovation

# Part 4 - Management and Staffing Capabilities

Baker's Charleston office possesses a large and diverse architectural, engineering and environmental planning staff. Baker's team of experienced professionals has demonstrated the ability to deliver quality work to our clients, on-time and within budget. Each individual on this team has extensive experience in their field of expertise and have demonstrated success on similar projects. The following provides a brief discussion of each team member's experience base relevant to this project.



Elementary School Main Corridor

Project Kay Staff

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 23 years of experience in civil engineering working in both the government and private sectors. Mr. Hall has been responsible for the design and management of numerous multi-disciplinary projects of varying size and complexity. His experience, understanding of project delivery and dedication to client satisfaction will guide this project.

Patrick W. Fogarty, P.E., P.S., is the Civil Services Group Manager. Mr. Fogarty has over 23 years of experience with architectural and civil engineering projects of various size and levels of complexity. Mr. Fogarty will ensure that quality deliverables are submitted according to project schedule and within budget.

Ron L. Bolen, AIA, with over 36 years of diverse experience, will serve as the Project Manager for the **Baker** effort of the architectural element of 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 State Agencies, including WV Division of Purchasing and State Fire Marshal's office. Some of Mr. Bolen's directly related notable projects are as follows:

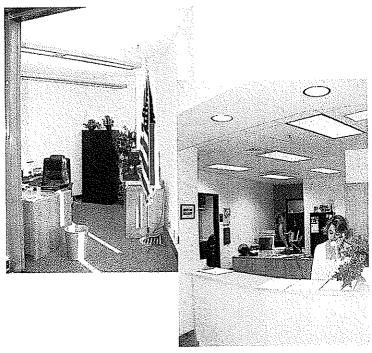
 Project Manager for Berlin-McKinney Elementary School Renovations – Wyoming County Board of Education

- Project Manager for Glenville State College Science Hall Additions and Renovations
- Project Architect for West Virginia University Ruby Memorial Hospital Addition Renovations
- Project Architect for West Virginia University Indoor Practice Facility-Programming

Laura Cox, PLA, ASLA, has over 26 years of experience in fields of architecture, landscape architecture, and land planning. She has extensive knowledge of all phases of design from site analysis and conceptual planning through construction, documentation, permitting and administration.

**David Hilliard**, Mr. 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 medical facilities, educational facilities, and commercial and industrial office space projects.

John W. Dawson, PE, PS, will serve as Construction Services Manager. Mr. Dawson has over 34 years of construction management experience. In his tenure at WVDOH, he has worked as a Construction Engineer, Maintenance Engineer, and District Engineer. In this capacity, Mr. Dawson has been responsible for construction management and inspection of construction contracts throughout the state. Mr. Dawson manages all of Baker's Construction Management and Inspection contracts in West Virginia.

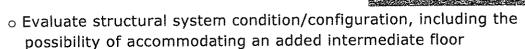


Elementary School Administrative Offices

# Part 5 - Project Understanding

- Baker will provide the necessary professional architectural and engineering services to prepare building evaluation studies on the Administration Building and the Central Boiler Facility.
- The School for the Deaf & Blind is located in a majestic, rural community near Romney, West Virginia.
- The West Virginia School for the Deaf & the Blind are requesting a building evaluation study completed on the Administrative Building and the Central Boiler Facility. This is a two phase process.
- Phase I In-depth Evaluation/Recommendation

The study for the **Central Boiler Facility** will include an in-depth evaluation of the following:



- Condition and construction of exterior wall system with emphasis on repointing, repair and insulation
- o Evaluation of the condition and construction of roof system
- o Evaluation of the condition and type of existing windows and exterior doors
- Evaluation of the condition of electrical systems and requirement of replacement.
- Evaluation of existing power supply, along with evaluation of existing campus systems and existing security system.
- Evaluation of the mechanical system or replacement. Recommendation of viable options of HVAC System as appropriate for the indicated reuse of facility
- o Evaluation of the existing water supply and sewage systems
- Report on the extent of demolition required as well as any unusual demolition requirement; indicate demolition requirements including hazardous material abatement if necessary.
- Report summary with specific thoughts on reuse of building as an office, therapy service area or school facility, interior stair requirements, building code requirements and accessibility compliance including an elevator. Include sketches where required to illustrate concepts.

The study of the **Administration Building** will include an in-depth evaluation of the following:

- Evaluation of the structural system including compliance with current building codes, deterioration and existing condition of the structure including foundations, identification and examination of areas of concern, and suggested repairs. Investigation shall be conducted with minimally invasive methods.
- o Evaluate the feasibility of accommodating an elevator, including recommended locations, as well as recommended main entry accessibility modifications.
- o Evaluation of the condition of existing porches and columns.
- Evaluation of the condition on construction of exterior and interior wall system with emphasis on re-pointing, repair and insulation
- o Evaluation of the condition and construction of roof system
- Report summary with specific thoughts on restoration of building to be structurally sound and weather tight with exposed surfaces, exterior and interior to be uniformly repaired and rehabilitated in general workmanship and appearance.

### Phase II – Design/Construction

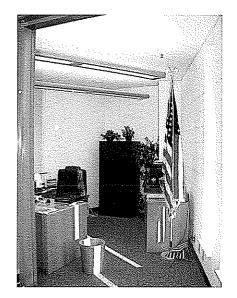
As funding is available, design contracts will be negotiated for the execution of recommended modifications. Building priority order will be established after the evaluation phase. **Baker** will provide all necessary professional architectural and engineering services

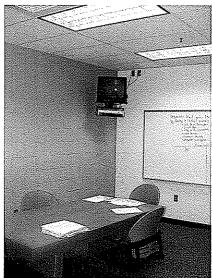


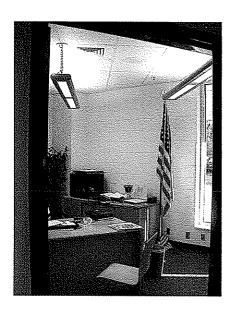
Administration Building

# Part 6 - Related Prior Experience

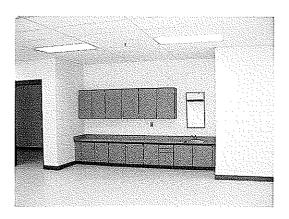
The following Project Descriptions illustrate Baker's related prior experience. We have included examples of educational projects from various locations across the nation. Many of these projects are LEED® and/or SPiRiT (Sustainable Project Rating Tool) rated. We believe these projects show the depth of our expertise in all aspects of engineering and architecture. While we propose to conduct activities from our West Virginia operation, these diverse project locations are meant to emphasis our <code>One Baker</code> philosophy, which simply means that the School for the Deaf & Blind will have access to the human resources, expertise, and technology of all <code>Baker</code> locations as particular needs arise.

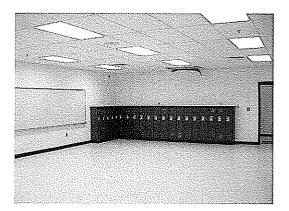






Administrative Offices





Elementary School Classrooms

# **Creative Arts Center**

# West Virginia University, Morgantown, West Virginia

Located at West Virginia University's Evansdale Campus, the Creative Arts Center is the focal point for the arts, music, theatre, and other cultural amenities and serves the needs of both WVU and the City of Morgantown as a venue for national performers, and a learning environment for students in the fine and graphics arts programs.

Baker was selected by WVU to provide professional services under an Open-End Architectural and Engineering contract. Specifically, the University required a firm experienced in providing program management, construction management, cost estimating, scheduling, inspection services, programming, planning, design development, construction documents, evaluations, feasibility studies, and construction contract administration services.

One of the task orders assigned under this contract was for the performance of a facility condition assessment of the Creative Arts Center, which helped determine a capital spending program for the building. The assessment identified both physical and programmatic deficiencies of the facility. The physical assessment identified the optimal procedure and phasing sequence to maximize the building's expansion potential, flexibility, and adaptability.

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 potential phasing and implementation schedules.

#### Client

West Virginia University P.O. Box 6570 Morgantown, WV 26506

Randy Hudack
Director of Physical Plant
304-293-2330

John Thompson
Manager, Design & Construction
304-293-3625

#### **Completion Date**

Estimated: 2004 Actual: 2004

#### Project Costs

\$8,900,000 (Construction) \$213,196 (Fee)

#### Baker's Role

- Program Management
- Construction Management
- Cost Estimating
- Schedule Management
- Inspection QA/QC

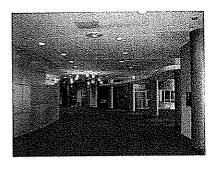
Renovations were completed to the 1,445-seat theatre, 155-seat recital hall, administrative offices, main lobby, and ticket office. During renovation, the entire building was brought up to current safety codes with the installation of a fire alarm and sprinkler system. Also, American with Disability Act (ADA) requirements were addressed with the installation of handicap restrooms, numerous access ramps, and special designed seating areas. In addition, new stage rigging equipment was installed in the theatre to allow for better and larger productions.

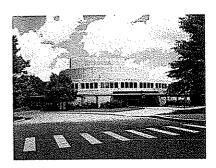
#### **Project Features**

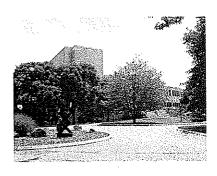
- New interior finishes in the Concert Theatre
- New interior finishes in the Recital Hall
- New interior finishes in the main entry lobby
- Asbestos abatement with put back finishes

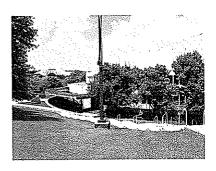
- Installation of a new fire alarm system to bring the building up to current codes
- Installation of a fire sprinkler system to bring the building up to current codes
- Replacement of air handling units for the Concert Theatre
- Replacement of theatre rigging in the Concert Theatre increasing the rigging capacity by 50%

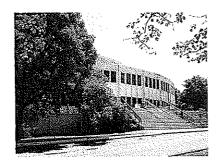
Special Requirements: Maintaining facility operations throughout renovations.

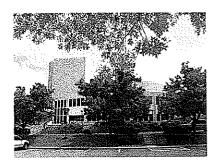


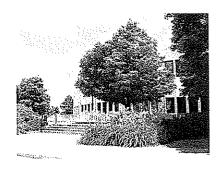


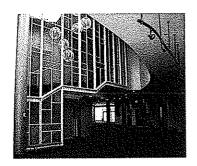


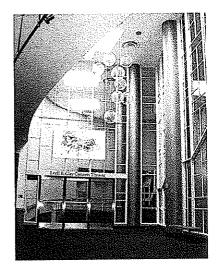


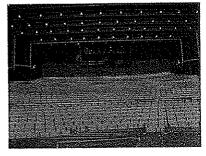












## **Student Recreation Center**

West Virginia University, Morgantown, West Virginia

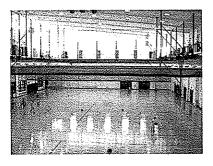
Through an open-end architectural and engineering services agreement, Baker provided program management services to West Virginia University to oversee the implementation of the construction program that supported their campus master plan.

Specifically, the University required a firm experienced in providing program management, construction management, cost estimating, scheduling, inspection services, programming, planning, design, construction documents, site evaluations, feasibility studies, and construction contract administration services.

Responsibilities included providing full-time on-site owner representation to monitor the work of the designers, contractors, and construction management teams for WVU's new 170,000-square-foot Student Recreation Center.

The facility provides a focal point for campus life and includes seven basketball courts, three racquetball courts, a squash court, 17,000 square foot weights/fitness area, three multi-purpose sports rooms, a three-story tall indoor rock climbing wall, large lap swimming pool, leisure pool, spa, elevated in-door jogging track, food court area, and administrative offices. The building was designed to serve the entire student population, along with University staff.





#### Client

West Virginia University P.O. Box 6570 Morgantown, WV 26506

Randy Hudack
Director of Physical Plant
304-293-2330

John Thompson Manager, Design & Construction 304-293-3625

#### **Completion Date**

Estimated: 2003 Actual: 2003

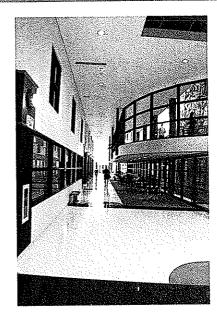
#### **Project Costs**

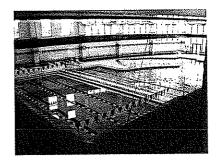
\$35,000,000 (Construction) \$405,745 (Fee)

#### Baker's Role

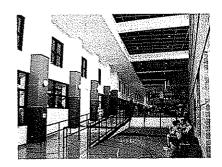
Program Management/Construction Management-related Services:

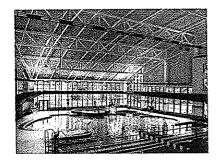
- Cost Estimating
- Schedule Management
- Inspection QA/QC
- Acted as extension of staff for the university
- Budget Monitoring
- Project Coordination
- Procurement Support
- Pay Application Approvals
- Move-in Coordination
- Closeout Support
- Change Order Review and Recommendations



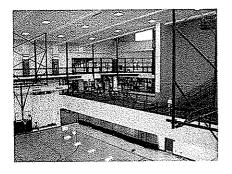














# Open-End Architectural/Engineering Services at West Virginia University

Morgantown, West Virginia

Baker was retained by the West Virginia University (WVU) under an Open-End Architectural and Engineering contract to oversee the construction implementation of the university's campus master plan. Baker's specific tasks include program management, programming, planning, design development, construction documentation, evaluations, feasibility studies, and construction contract administration services.

Functioning as an extension of WVU's staff, Baker provided fulltime, on-site owner representation to monitor the work of the design, contractor, and construction management team on the projects noted below.

- New Life Sciences Building
- Wise Library Renovation and Expansion
- New Student Recreation Center
- Creative Arts Center Facility Condition Assessment
- Creative Arts Center Renovation
- Allen Hall HVAC Upgrade and Asbestos Abatement
- Clark Hall and Boreman Hall South Roof Assessments
- Boreman Hall South Roof Repairs

The duties of Baker's on-site program managers include the following:

- Maintain the project program
- Manage and administer the contract requirements of the A/E and construction manager
- Review the bid packaging strategies with the owner
- Assisting in the review and recommendation of apparent responsible low bidders
- Coordinate owner-directed change orders, and reviewing and recommending acceptance or rejection of, and/or modifications to, contractor requests
- Monitor and maintain project budgets on behalf of the University
- Review Requests for Information and responses
- Monitor contractor progress related to the project schedule and contract requirements and provide daily updates to the owner
- Provide quality review of ongoing work activities
- Perform daily inspection of the site to mitigate future quality and/or schedule impact issues
- Prepare bid proposal documents for FF&E and reviewing FF&E items to account for field requirements

#### Client

West Virginia University P.O. Box 6570 Morgantown, WV 26506

Randy Hudack
Director of Physical Plant
304-293-2330

John Thompson Manager, Design & Construction 304-293-3625

#### Completion Date

Estimated: 2006 Actual: 2006

#### **Project Costs**

\$137,269,280 (Construction) \$1,859,125 (Fee)

#### Baker's Role

- Program Management
- Construction Management
- Architecture
- Multi-Discipline Engineering
- Cost Estimating
- Scheduling
- Inspection QA/QC

- Review of project site and notifying the construction manager of safety concerns and/or potential violations
- Attend project progress and coordination meetings, as well as University facility and administration meetings related to the various projects
- Offer constructive suggestions to the construction manager for areas requiring attention, along with methods to expedite the work
- Review and assist with schedule updates
- Review and recommend payment for construction manager and contractor invoices
- Assist in move coordination functions with the various College Deans, their designated representatives, physical plant personnel, and the construction manager
- Schedule, coordinate, and participate in the Labor and Industry and local Fire Marshall inspections, as well as following up with the appropriate parties for any action required as a result of the inspections
- Schedule and coordinate the participation of the appropriate university maintenance staff in the contractor/vendor training sessions for new facilities
- Participate in preparation of punchlists and monitor satisfactory completion

#### **New Life Sciences Building**

The new 190,000-square-foot Life Sciences Building was one of five projects constructed at WVU's Morgantown, West Virginia, campus under Baker's program management. The Life Sciences Building is home to the Biology and Psychology Departments and the Quin Curtis Center, as well as an Animal Facility group to support the research. Key components of the \$49,000,000 facility include 29 teaching and research labs, 10 holding rooms for research animals, six greenhouses on rooftop with temperature and humidity controls, a 265-person capacity auditorium, a 125-person capacity lecture hall, and four classrooms. Multilevel entrances encourage and enhance the flow of pedestrian traffic from the adjacent neighborhood while defining the northern border of the campus. The structure's facade incorporates both traditional and innovative building materials. Brick was used to match the nearby Woodburn Hall, while pre-painted copper soffit and siding with matching frit glass was incorporated to project the image of a new, yet ageless, high-tech facility.

#### Wise Library Renovation and Expansion

The university's new 90,000-square-foot addition to and 120,000-square-foot renovation of the historic Wise Library was one of the five projects constructed at the Morgantown, West Virginia, campus under Baker's program management. The Wise Library contains more than 300,000 books and processes over 1,200 visitors daily. The library is now equipped with electronic classrooms, group study rooms, 180 public computers, wireless web capabilities, and reading tables with electric power and data capabilities. The renovation focused on the restoration of two large reading rooms and original furniture. The combined construction cost for both the new addition and renovation work was \$37,000,000.

#### **New Student Recreation Center**

The new 170,000-square-foot Student Recreation Center provides a focal point for campus life and includes seven basketball courts, three racquetball courts, a squash court, a 17,000-square-foot weights/fitness area, three multi-purpose sports rooms, a three-story tall indoor rock climbing wall, large lap swimming pool, leisure pool, spa, elevated indoor jogging track, food court area, and administrative offices. The building was designed to serve the entire student population, along with university staff.

## **Creative Arts Center Facility Condition Assessment**

Located at WVU's Evansdale Campus, the Creative Arts Center is the focal point for the arts, music, theatre, and other cultural amenities and serves the needs of both WVU and the City of Morgantown as a venue for national performers and a learning environment for students in the fine arts and graphics arts programs. Baker conducted a facility condition assessment that identified the building's physical and programmatic deficiencies to determine a capital spending program for improvements. The university's goal was to maximize the facility's potential for expansion, as well as its adaptability. Tasks performed by Baker in determining physical deficiencies and documenting the facility's existing condition include conducting site visits, reviewing drawings, and meeting with university representatives. Baker prioritized the physical deficiencies according to need for correction, and identified the optimal solutions to be implemented by the university and associated budget requirements, as well as potential phasing and implementation schedules.

#### **Creative Arts Center Renovation**

Following Baker's recommendations from its facility condition assessment of the Creative Arts Center, renovations were completed for the 1,445-seat theatre, 155-seat recital hall, administrative offices, main lobby, and ticket office. Renovations included upgrading the entire building to conform to current safety codes through the installation of a fire alarm and sprinkler system. Americans with Disabilities Act requirements were addressed through the installation of handicap-accessible restrooms, numerous access ramps, and specially designed seating areas. In addition, new stage rigging equipment was installed in the theatre to allow for better and larger productions.

### Allen Hall HVAC Upgrade and Asbestos Abatement

In the late 1960s, Allen Hall was constructed as a 104,885 GSF addition to Percival Hall. Baker was responsible for providing complete design services to upgrade the facility which included extensive asbestos abatement and interior renovations, including an HVAC system upgrade. Baker's services ranged from preliminary field investigations to construction administration.

Asbestos remediation services included 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. The design also involved the cleaning, removal, and/or encapsulation of asbestos-contaminated building components such as ceiling tile, non-asbestos-containing pipe insulation, electrical floor duct banks, walls, floor surfacing materials, pipe chases, perimeter fan coil unit enclosures, and other building components. Hydronic heating and cooling piping and insulation serving the perimeter two-pipe fan coil units was replaced because it had deteriorated due to condensation between the piping and the elastomeric insulation.

Baker conducted site investigations to identify partition revisions required for the drawings of existing conditions provided by WVU and to identify specific areas requiring special protection considerations during the remediation work. An Asbestos National Emissions Standards Hazardous Air Pollutants report was prepared as required by the EPA. The university's drawings were updated to document existing conditions for general construction partitions, the sprinkler system, HVAC ductwork, and the fire alarm system. Baker prepared a Site Setup Plan as well as plans and specifications for asbestos abatement and building renovations that included ceiling/lighting restoration, sprinkler system extensions, hot and cold domestic water piping insulation replacement, and hydronic heating/cooling pipe and insulation replacement. Baker's services also include development of contractor prequalification packages, design and construction schedules, construction cost estimates, bid and construction documents, shop drawings, and a final punchlist, as well as participation in bi-weekly construction meetings.

#### Clark Hall and Boreman Hall South Roof Assessments

Baker was responsible for site investigations, evaluation, and scope definition for the repair and replacement of the roof systems for both Clark Hall and Boreman Hall South.

Baker performed a comprehensive observation of the roofs to develop preliminary design data. The detailed assessment of the structures' roofs, vertical wall construction and installation aided in the development of design criteria based on environmental and operational constraints. Baker performed cross-sectional analyses of core samples of the roofs, sealant, and coating system assemblies. Cost estimates were developed based on primary roofing, waterproofing, and related components. Baker also made recommendations for repair or replacement based on the assessments and on the information provided by the university pertaining to chemicals that may be potentially exhausted from the fume collection hoods.

Following the initial discovery period, and upon the university's concurrence, Baker prepared design construction documents for the re-roofing of both facilities. A low-cost design specification was developed for Clark Hall that provided for short-term protection from further damage to the roof and building interior until the university could obtain budget approval for a more comprehensive long-term solution.

### **Boreman Hall South Roof Repairs**

Following the roof assessment of Boreman Hall South in 2003, Baker was tasked to prepare construction documents for repair/replacement of the structure's steep-slope slate tile roof, low-slope membrane roof sections, and gutter system. The replacement of the roof system included verification of the slate type and identification of a replacement source for the tile, field verification of the roofing substrate, and gutter repairs. In addition to creating design construction documents for the project, Baker provided a list of prequalified roofing contractors experienced in the installation of the specific roofing assemblies. Baker's services during the construction phase included conducting a pre-bid meeting with interested contractors, assisting in bid reviews and contractor selection, conducting a pre-construction meeting and weekly progress meetings, preparing the final punchlist, and securing project closeout on behalf of the university.

#### **Project Features**

Special Requirements: Each of the facilities required significant coordination between the contractors design professionals, University administration, University faculty and the testing and commissioning agents. Wise Library - construction of a major addition on a very limited downtown campus parcel. Creative Arts Center and Allen Hall - maintaining facility operations throughout renovations.

# Miscellaneous Studies and Designs for Domestic Dependent Elementary & Secondary Schools

Fort Bragg, North Carolina

Miscellaneous studies were prepared to assist in prioritizing projects at schools that support Fort Bragg. Representatives from Baker (prime), Parkhill, Smith, and Cooper, Inc. (subconsultant), Fort Worth District USACE, Department of Defense Domestic Dependent Elementary and Secondary Schools (DDESS), and Fort Bragg schools met to prioritize projects at the schools. Design analyses, cost estimates, and analyses of comparable design solutions, and building code evaluations were prepared for the following projects. Due to the historic nature of the property, the work required approval by the State Historic Preservation Office, as well as coordination with the Academy's Master Plan.

**Roof Replacement and Flooring at Bowley** Elementary - \$700,000 Est. Const. The existing roof consisted of flat areas of a "reversed" roofing system (IRMA), with membrane under the insulation and concrete pavers. Sloped areas of the roof were covered with asphalt shingles. There were known leaks and water damage inside the building, but because of the type of roofing system on the flat areas, the sources of the leaks could not be found and repaired. It was recommended that the entire 80,000 square foot roof system be replaced. The shingled sloped areas were to be replaced with a metal roofing system, and the flat roof areas were to be replaced with a fully adhered membrane roofing system. Roof access ladders and hatches should be added for maintenance access. Gutters, fascia, and soffit areas were damaged and in poor condition and in need of replacement with materials compatible with the new roofing system. Exterior doors, door frames, and window frames were to be cleaned and repainted. As a

#### Client

DDESS - Domestic Dependent Elementary and Secondary Schools 700 Westpark Drive, Third Floor Peachtree City, GA 30269

> Mike Chaney Chief, Facilities Branch - DDESS 678-364-8035

#### Completion Date

Estimated: 2006 Actual: 2003

Project Costs \$297,896 (Fee)

#### Baker's Role

- Studies
- Condition Assessments
- Architecture
- Mechanical Engineering
- Electrical Engineering
- Structural Engineering
- Civil Engineering
- Geotech Engineering
- Transportation Engineering

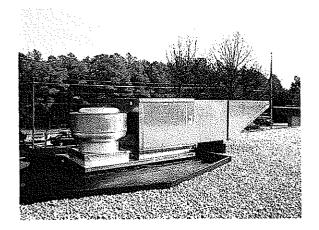
result of the leaks, interior work included replacement of carpeted classroom areas with vinyl tile.

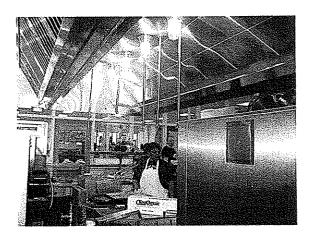
• HVAC and Controls Systems Upgrade at Bowley Elementary - \$1,300,000 Est. Const. Installed in the early 1980s, the existing HVAC system utilized water source heat pumps for cooling and heating. While individual HVAC units were not causing considerable maintenance problems, adequate coordination between heat pumps, the boiler, the cooling tower, and associated pumping systems were not provided. Make-up air requirements of ASHRAE Standard 62-1999 were not being met, making it difficult to achieve an acceptable indoor air quality. Recommendations were made for a DDC system compatible with other Johnson Control systems recently installed. New make-up air systems capable of providing tempered air at below 50% relative humidity should also be added. It was recommended that the feasibility of converting the existing fuel oil fired boiler to natural gas should also be evaluated.

- Improve Stormwater Drainage Issues at Devers School \$350,000 Est. Const. Stormwater drainage away from the building is very poor. Water ponds and infiltrates back into the building; roof gutters and downspouts are non-existent; and the ground at the building is nearly flat and slopes into the structure. Recommendations were made to install a full perimeter roof drainage collection system and a new below-grade drainage system around the building perimeter. Regrading and turfing around the building would provide positive drainage away from the structure into area drains including underground piping that ties into the existing storm water system. Special permitting may be required due to increased runoff into the existing stormwater system. Carpeting in the perimeter rooms would also need replaced.
- HVAC Rehabilitation at Devers Elementary School \$1,000,000 Est. Const. Built in 1994, the 65,000 square foot Devers Elementary School is served by a hydronic heat pump system that utilizes hot water from a boiler system for heating, and uses DX cooling with air-cooled condensers. Fresh air is supplied to the individual heat pumps by a central fresh air make-up fan. An indoor air quality report determined that the air inside Devers didn't meet the requirements of ASHRAE Standard 62-1999. It was recommended that a chilled water coil be installed up-stream of each fresh air in-take fan. The air would then be reheated to approximately 70 degrees F before entering the make-up air fan, allowing the fresh air fan to serve the individual heat pumps with tempered air that is at or below 50% relative humidity. The proposed system will help to filter out contaminants, and the new equipment will tie into the existing DDC systm to help monitor the air quality.
- HVAC Replacement at Irwin Middle School \$2,400,000 Est. Const. A new HVAC system is critically needed at this facility. It was recommend that the new system would use a central chiller, fan coil units, heat recovery and make-up air units, which reduce the relative humidity to below 50%. The existing boilers, pumps, and DDC system could be used if expanded to include new equipment and room temperature monitoring. The boilers had already been replaced, and a new DDC system added for the boiler room equipment only. The existing HVAC system, conditioning approximately 80,000 square feet, used fan coil units, a few air-handlers and unit ventilators having hot water coils for space heating, and DX coils for cooling. Air-cooled condensers serving individual unit ventilators were installed on the exterior of classrooms. This system created a significant maintenance problem due to unit failures and unavailability of parts, and was unable to reduce moisture levels in the facility to eliminate mold growth, causing significant concern over indoor air quality.
- HVAC Replacement at Murray Elementary School \$1,500,000 Est. Const. Approximately 50,000 square feet of space was being conditioned by a few air handlers and unit ventilators having hot water coils for space heating and DX coils for cooling. Air cooled condensers, which serve individual unit ventilators, are installed on the exterior of classrooms. Hot water heating and domestic hot water boilers were replaced because the existing units were in dangerous condition. A new DDC system was added for boiler room equipment only. As designed, control of indoor air quality was virtually impossible due to an excessive amount of moist outside air that was being introduced. Even though ASHRAE 62-1999 standards were being met, the system was unable to reduce moisture levels in the facility, as required, to eliminate black mold growth. A new HVAC system utilizing existing boilers and pumps, a new central chiller, fan coil units and a heat recovery/dehumidification system was recommended. The existing boiler room DDC system could be expanded to include new equipment and room temperature monitoring.
- Kitchen Area Renovations at Butner Elementary School, Fort Bragg, NC \$350,000 Est. Const. Remove existing built-in walk-in refrigerator and adjacent existing office (10'x 10'), to make way for a new larger kitchen office. The project will also inculde repairs to adjacent glazed masonry walls and the removal of asbestos-containing materials in the insulation surrounding the existing refrigerator enclosure.

- HVAC Replacement at Butner Elementary School \$1,000,000 Est. Const. Moisture levels within the facility are causing mold growth because the current HVAC system is unable to remove adequate moisture from the air as it is currently designed, creating significant maintenance problems. It is recommended that a new HVAC system is installed that utilizes existing boilers and pumps, and expands the existing boiler room DDC. Other architectural, electrical, mechanical, plumbing, and structural work would be required on an as-needed basis.
- HVAC Replacement at Pope AFB Elementary School \$2,000,000 Est. Const. The school includes approximately 43,000 square feet of conditioned space. The HVAC system is made up of package terminal unit ventilators with heat pump technology, with electric strip back-up heat. Except for the natural gas water heater installed in the late 1990s, the school uses a total electric system that is inefficient and requires significant maintenance. Control of indoor air quality is virtually impossible due to the amount of moist outside air being introduced. The system is unable to reduce moisture levels in the facility, as required to eliminate mold growth. A new four-pipe hydronic HVAC system utilizing a new chiller, fan coil units, natural gas boilers, DDC, and heat recovery/dehumidification system was recommended. The school will require a mechanical/electrical room addition to support the new system.
- Relocate Refrigeration at McNair Elementary School \$250,000 Est. Const. The existing built-in walk-in refrigerator was no longer in use. The project consisted of converting the existing refrigerator into a storage room and building a new walk-in refigerator within an existing exterior storage room. The existing refrigerator floor, assumed to consist of asbestos-containing materials, was to be demolished and rebuilt, the walls and ceiling cleaned and painted, and the existing insulated door system replaced with a new interior type metal door and frame. This room would then be used for storage. Replacement of the structural floor system replacement in the area of the existing refrigerator was anticipated.
- HVAC Replacement at McNair Elementary School \$1,600,000 Est. Const. Approximately 55,000 square feet of space was being conditioned by a few air handlers and unit ventilators having hot water coils for space heating and DX coils for cooling. Air cooled condensers, which serve individual unit ventilators, are installed on the exterior of classrooms. Hot water heating and domestic hot water boilers were replaced because the existing units were in dangerous condition. A new DDC system was added for boiler room equipment only. As designed, control of indoor air quality was virtually impossible due to an excessive amount of moist outside air that was being introduced. Even though ASHRAE 62-1999 standards were being met, the system was unable to reduce moisture levels in the facility. A new HVAC system utilizing existing boilers and pumps, a new central chiller, fan coil units and a heat recovery/dehumidification system was recommended. The existing boiler room DDC system could be expanded to include new equipment and room temperature monitoring.
- HVAC Replacement at Holbrook Elementary School \$1,600,000 Est. Const. A new HVAC system for the complete facility was recommended, utilizing existing boilers and pumps, new central chiller, fan coil units, and make-up air/dehumidification units. The existing boiler room DDC system could be expanded to include new equipment and room temperature monitoring. The existing HVAC system conditioned approximately 54,000 square feet. Hot water heating and domestic hot water boilers had been replaced and a new DDC system added for the boiler room equipment only. The existing system used fan coil units, a few air-handlers, and unit ventilators having hot water coils for space heating and DX coils for cooling. Air-cooled condensers serving individual unit ventilators were installed on the exterior of classrooms. The system was unable to remove moisture from the outside air as required by ASHRAE 62-1999, causing mold growth and indoor air quality issues in

the classrooms. Maintenance requirements were continuing to escalate due to unit failures and the unavailability of parts.





# **Barnard Elementary School, DC Public Schools**

Washington, DC

The challenge in this project was to build a new replacement school on site, while keeping the deteriorated existing school fully usable until the new facility is completed. Once the new school was constructed, the old school would be demolished. Design of the new 78,000 square foot school responded to the urban context of a neighborhood dominated by row houses, with limited open space. To echo the scale of surrounding structures, the new building was visually divided into a series of bays, accented with pitched roofs. A tower located at a prominent corner of the building overlooking a busy intersection identifies the school as a neighborhood landmark, and serves as a beacon to draw residents to the facility. Taking advantage of the large, sloping lot that resulted from demolition of the existing structure, the new replacement school offers an attractive, terraced site. The new facility provides classrooms, a library, a gymnasium, and administrative offices for 530 students. To meet a critical schedule, the project was taken from concept drawings to bid documents appropriate for obtaining a Guaranteed Maximum Price in only ten weeks.

#### Client

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

Frank A. Cirinicione, P.E. 410-962-4170

#### Completion Date

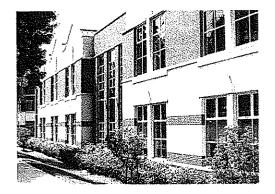
Estimated: 2003 Actual: 2003

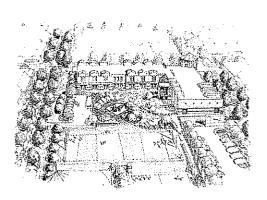
#### Project Costs

\$15,000,000 (Construction) \$1,358,032 (Fee)

#### Baker's Role

- Architecture
- Interior Design
- Landscape Architecture
- Civil Engineering
- Environmental Engineering





# Lajes Field Construction and Renovation IDIQ

Lajes Field, Azores

This \$1.5 million contract demonstrates Baker's responsiveness to small Task Orders, even when located a great distance from the project site. Located on an island in the middle of the Atlantic Ocean, Lajes Field serves as an important base of U.S. military air operations. Baker has provided ongoing services to the installation since 1993 under a series of Indefinite Delivery Contracts. Because of this experience, the firm's professionals are experienced in addressing the unique issues of working overseas, including developing Host Nation Packages, responding to climatic and seismic conditions, incorporating architectural vernacular, utilizing local materials and construction methods, understanding local construction costs and bid environment, and complying with local regulatory requirements. The Azores, for example, is a seismically active, high wind area, with a strong tradition of Portuguese architecture, and a bid environment strongly impacted by a limited island economy.

Baker has completed the following project under this IDC:

Bowling Alley Renovation. Expansion and comprehensive renovation of a 14,200 square foot bowling alley, including fixtures, finishes, equipment, snack bar with kitchen, and sports bar. The design incorporates a "Cosmic Bowling System" that includes fog, laser light show, and sound system to appeal to young bowlers.

Beira Mar Gate Revitalization. New gate house, intersection, road realignment, stone retaining wall, and landscaping for entry gate.

#### Client

U.S. Air Force Unit 7775, Bldg T-615 Lajes Field, Azores 09720

> Mena Meneses 011-351-29-557-1483

#### Completion Date

Estimated: 2002 Actual: 2002

#### **Project Costs**

\$1,500,000 (Total Contract) \$790,491 (Fee)

#### Baker's Role

- Planning
- Architecture
- Landscape Architecture
- Interior Design
- Site/Civil Engineering
- Structural Engineering
- Mechanical Engineering
- Electrical Engineering
- Plumbing Engineering

**Update of the General Plan**. Developed Area Improvement Plans for two separate areas of Lajes Field including the Central Flightline Support area and the School/Community Center area. Plans included improvements to roadways, long-range building improvement projects, and landscape and recreation improvements.

Aircraft Maintenance Support Storage Facility. Design of a new 3,500 square foot garage for aircraft ground maintenance equipment.

Repair of Interior Finishes, Command Headquarters Building. Interior upgrades to the Commander's offices, lobby, and entry.

Install Air Conditioning, Building T-709. Installation of air conditioning and design of renovations to air freight administrative offices.

**Pet Boarding Facility**. New 2,000 square foot building, ten care parking lot and new street access to the site. The building consisted of a customer lobby, administration/office areas, grooming, pet isolation and examination facilities, interior feline boarding facilities, and ten dog kennel pens with exterior dog runs.

Additions to Vehicle Maintenance Facility. Design of an addition and ramp access was to house a new vehicle paint booth, as well as a second addition with new customer lobby adjacent to a relocated office, locker and restroom break area. The existing metal shop was combined with the welding shop in one bay of the facility. Included the removal of hazardous materials.

Munitions Maintenance Facility, Building T-1421. This project involved the demolition and design of a new 2,300 square foot facility with office/administration area, munitions inspection bay, storage and mechanical/electrical rooms.

Elementary School (Building T-233), High School (Building T-234) Improvements. Included new cabinetry for 20 classrooms, new clock and intercom system, replacement of two underground fuel storage tanks with one aboveground tank for an Elementary School. Included renovation of a media center and renovation of a chemistry laboratory and classroom for the High School.

MHE Addition to Terminal Building T-709. A 4,600 square foot terminal vehicle storage addition and new airside building entrance. The character of the addition utilized elements found in the surrounding Portuguese architecture.

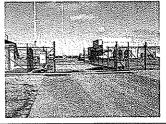
Munitions Maintenance Facility, Building T-1422. Replacement of existing munitions storage bay doors with new blast resistant doors; replacement of roofing, gutters, downspout and blast resistant lighting; and design of a new fence, gate system, controls building, and intrusion detection system.

**Dental Clinic Expansion**. New 1,400 square foot building addition and existing building renovation providing a new rear ADA accessible entry, office, conference, dental supply, dirty and clean dental instrument processing rooms, and mechanical room; renovations, including a new Prosthetics and Ceramics Lab, dirty and clean linen rooms, new X-ray facilities and relocated dental treatment room.

Library Roof Replacement. Replacement of an existing roof.

Repair Air Freight Terminal. Repair of an 18,000 square foot facility and installation of new laundry, locker, shower and restroom facilities, and handicap ramp and stair access.











# Slippery Rock University Open-End A & E Contract

Slippery Rock, Pennsylvania

Baker provided architectural and engineering services to Slippery Rock University under an Open-End contract. Services under this agreement have involved planning and engineering services. Task orders include:

# Task Order 1: Preliminary Study to Renovate Lower Campus Water Distribution System

Baker studied the renovation and replacement of the 50-year old campus water distribution system. Findings and recommendations along with cost estimates were provided to Slippery Rock University. Baker recommended designing the new 10,000-foot underground system to run parallel to the existing distribution system, allowing it to reconnect to various points of the existing system.

#### Task Order 2: Lower Campus Water Distribution System

The water lines in the lower portion of the campus were over 50 years old and consisted of transite and asbestos-lined piping. The new underground system runs parallel to the existing system and consists of over 10,000 feet of piping, valves, and fire hydrants. The new system connects to the existing system at various points, as well as reconnects new water service mains to 19 buildings. The water service inside the buildings was also replaced and includes new backflow preventers. Some of the building services required new pressure regulating stations.

#### Client

Slippery Rock University Maintenance Center Slippery Rock, PA 16057

Tod W. Horner
Facilities and Planning
Department
724-738-2534

#### **Completion Date**

Estimated: 2005 Actual: 2005

Project Costs \$104,379 (Fee)

#### Baker's Role

- Project Management
- Planning
- Plumbing Engineering
- Water Distribution Design

# Task Order 3: Restroom Additions and Renovations, Strain Behavioral Science and Old Main Buildings

Closet and storage spaces were renovated into an 85-square-foot handicap-accessible unisex restroom adjacent to the Women's Center in Strain Behavioral Science Building. Hot and cold water lines were extended to the building, as well as new recirculation lines from the mechanical room.

The Old Main Building received 330 square feet of new and renovated male and female restrooms on two floors, a janitor's closet, and ADA-compliant water coolers at the elevator lobbies. Stylish finishes and fixtures were used in the renovation of the third-floor facilities for the University's executive staff. The design included installation of a 6" exterior sanitary line that extended the existing line approximately 300 feet from the boiler room of Old Main to a manhole located adjacent to Miller Auditorium.

Special attention to phasing was required to minimize disruption of services to the occupied areas.

#### **Project Features**

- Open-Ended Architectural and Engineering Contract
- New Campus Water Distribution System Planning and Design

# Part 7 - 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 23 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 Years with Baker: 4

Years with Other Firms: 19

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

managing a project team, quality control and quality assurance, and problem resolution. He provides overall direction and maintains direct communications with all clients.

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 25<sup>th</sup> 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

## 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 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 for the 250 member firm as a member of the board of directors.

# Experience

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 multidiscipline, 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.

Years with Baker: 4
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 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

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.

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.

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.

#### PRIOR BAKER EXPERIENCE

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.

### Structures Resources, Inc., Huntington, West Virginia

As a Project Manager and Engineer of Record, provided design, administration and quality assurance services for numerous Site Development projects for various locations in Cabell, Putnam, Kanawha and Wayne Counties in West Virginia. Services included site layout, grading and drainage, utility design, road and parking layout, pavement design, site lighting, permitting and construction administration.

#### Notable sites have included the following:

- Commerce Park (40 Acres, Industrial, Commercial, Residential), Cabell and Wayne Counties;
- The Hamlets (10 Acres, Residential), Cabell County;
- Lakeview Manor (12 Acres Residential), Wayne County;
- Carriage Hill (10 Acres, Residential), Kanawha County;
- Teays Commons (8 Acres, Residential), Putnam County.

### 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, 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 included the following:

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

Society of American Military Engineers

International Right of Way Association

Construction Specifications Institute

American Planning Association

American Water Works Association

West Virginia Society of Professional Surveyors

Kentucky Association of Professional Surveyors

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 36 years of design and project coordination experience to the project. He believes in 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. 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 the client 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.

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 fo the Capitol Campus Master Plan, State of West Virginia, Charleston, West Virginia. State of West Virginia, General Services Division.

As 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 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

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. As Project Architect, Ron is 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.

#### Non-Baker Project Experience

#### 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)

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 auxillary spaces for an existing school which was flooded and provided the project within the required state guidelines. The project was funded by the School Building Authority as a Needs Project.

#### 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. The Project was funded by the School Building Authority as a Needs Project.

#### 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.

# **David Hilliard**Senior Mechanical Designer

## **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, West Virginia 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.

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.

Years with Baker:

1

Years with Other Firms:

19

#### Education

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

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

#### Professional Affiliation

ASME ASHRAE SMACNA

# Experience

Construction Administration 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 Engineer. Dave 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 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. 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.

#### Recent Non-Baker Project Experience

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.

## 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

#### Other miscellaneous projects

Kings Daughters Medical Center Parkview addition; Ashland, KY

Ashland Community and Technical College; Ashland, KY

Riverside High School; Charleston, WV

Waverly City Schools; Waverly, OH (Three schools were built in the same complex. Elementary, Middle and High School)

Emergency Response Center (911) Huntington, WV

Army National Guard Construction & Facilities Management Office; Charleston, WV

Mountaineer Challenge Academy; Camp Dawson Kingwood, WV

#### **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 (QuickPen software), construction management, submittal review, procurement of supplies and air balancing were also part of his working experience at Air Systems.

CS Lewis Contracting Co., 1985 - 1990, Partner, Designer/Builder. As a business partner he designed and built homes and light commercial building from the ground up; including plumbing, electrical, HVAC. He also supervised the installation of underground utilities and concrete roads for various subdivisions; running a six to twelve men crew.

Xenia Construction Co., 1979 - 1984, Commercial Carpenter/Mason. Worked as a carpenter and concrete mason building midsized commercial buildings and half million dollar homes.

**Brown & Root Construction Co., 1975 - 1978,** *Structural Fitter.* In Houston Texas, Mr. Hilliard worker high steel in an Arco Petroleum Refinery as a pipe hanger fitter. The work included; layout, fabrication and installation of steel supports and hangers for pipe ranging from 1.5" to 102" in diameter.

Sinclair Construction Co., 1972 - 1975, Residential Carpenter. Carpenter and mason's helper on a wide range of new home construction

# Laura L. Cox, PLA, ASLA

# Landscape Architect

#### 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

Parsons City-wide Comprehensive Parks and Recreation Master Plan, Parsons, West Virginia. Parsons Parks Board.

Project Planner. Responsible for assisting in the master planning design. Baker is 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. The City of Parsons, over time, has acquired many parcels of FEMA-condemned properties due to the flood prone topography of Parsons. In and effort to properly manage the existing facilities, yet prepare for the future of the additional facilities scattered throughout the community, this master planning effort was begun. Through a series of public meetings and stakeholder meetings, a final plan will be 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. Responsible for design and construction document preparation. Baker will prepare construction documents and provide construction administration and construction inspection for three (3) parks along the Ararat River in North Carolina. The designs will be 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 will showcase 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 will include 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.

Years with Baker:

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 Kanawha & Putnam County Bicycle – Pedestrian Master Plan, South Charleston, West Virginia. Regional Intergovernmental Council (RIC). Project Planner. Providing assistance in field inventory and analysis, plan preparation and graphic support. Baker performed a two-phase bicycle and pedestrian circulation study for Kanawha and Putnam Counties. Under Phase I, Baker performed a cursory inventory of existing bicycle and pedestrian facilities, identified areas with a high level of bicycle and pedestrian activity, collected existing resources including traffic volumes and comprehensive plan documents and performed a broad base public outreach effort to identify bicycle and pedestrian issues in Kanawha and Putnam Counties. Under the Phase I effort, Baker incorporated the inventories into a series of public meetings, garnering input from each community and the client, and then summarizing the findings in the Plan. 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. Responsible for field inventory and analysis, community input facilitation, and document preparation. Baker prepared 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. Responsible for design and construction document preparation. Baker performed 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 will have a unique colored stamping of natural elements found in West Virginia, such as leaves and ferns, animal tracks, and flowers. Baker will 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. Responsible for design and construction document preparation. Baker 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**

Erma Byrd Center, Beaver, Raleigh County, West Virginia. Southern West Virginia Community and Technical College. Project Landscape Architect. Responsible for master planning of the campus, detailed design, and site construction document preparation. 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. 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. Responsible for 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. Prepared Complete Landscaping and Entrance Area Ramps/Stairs Plans addressing ADA and force protection issues.

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

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

Morgantown National Guard Facility, Morgantown, West Virginia. Staff Landscape Architect. 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 - 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. 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 - 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 - 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, Performed planning and site design functions, permit processing, software implementation and training. 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. Involved in all phases of design from site analysis and conceptual planning through construction documentation and administration. Prepared large scale site preparation and grading plans, provide drainage analysis, prepare storm water conveyance and detention plans, and produce utility and infrastructure design and worked with government agencies to obtain approvals and permits. In addition to design responsibilities, 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, Provided civil, architectural, and environmental design and drafting services, Provided Instruction of on and offsite AutoCAD classes. 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. 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, Supervisor of the processing of land use applications. Supervision of a design review team; 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; Answering public inquiries; Representing the county at public meetings. Providing 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, Oversight of office procedures and performed and supervised a broad spectrum of planning tasks. Staffing, organizing, marketing and supervising the equipping of an office for a new planning firm; Management of both office and planning staff; Overseeing all client contacts; Preparation and negotiation of contracts and billing; 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, Supervisor of all phases of planning and landscape architecture. Responsibilities included: Management of a planning team involved in various planning functions; Coordinating with and assisting clients' attorneys in obtaining rezoning, special exceptions and special use permits; Involved in contract preparation, negotiation and billings; Representing 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, Responsible for small and large scale landscape design, civil design and graphics presentations. Staffing and supervision of a squad of design and drafting personnel; Preparation of site, subdivision and landscape plans in Fairfax and Loudon Counties.

Paciulli, Simmons and Associates, APRIL 1984 - OCTOBER 1984, Designer, Responsible for the design of commercial and residential site plans. 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, Responsible for highway design including repair and improvement. Horizontal and vertical layout of roads, quantity calculations, report graphics and drafting.

Each of the Project Profiles found in Part 5 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:

- Central West Virginia Regional Airport Authority Yeager Airport 100 Airport Road, Suite 175 Charleston, WV 25311-1080 Mr. Richard A. Atkinson, III, Airport Director (304) 344-8033
- West Virginia Division of Transportation Division of Highways 1900 Kanawha Boulevard East Building 5, Room A-109 Charleston, WV 25305 Mr. Darrell W. Allen, P.E., Deputy State Highway Engineer (304) 558-3304
- 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) 558-5380
- 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
- U.S. Army Corps of Engineers Huntington District 502 Eighth Street Huntington, WV 25701 Mr. David Meadows, P.E. (304) 399-5243
- Federal Aviation Administration Beckley Airports District Office
   176 Airport Circle, Room 101
   Beaver, WV 25813-9350
   Mr. Matthew Di Giulian, P.E.
   (304) 252-6216
- 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