

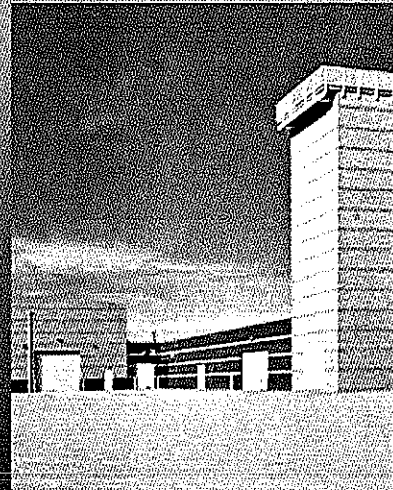
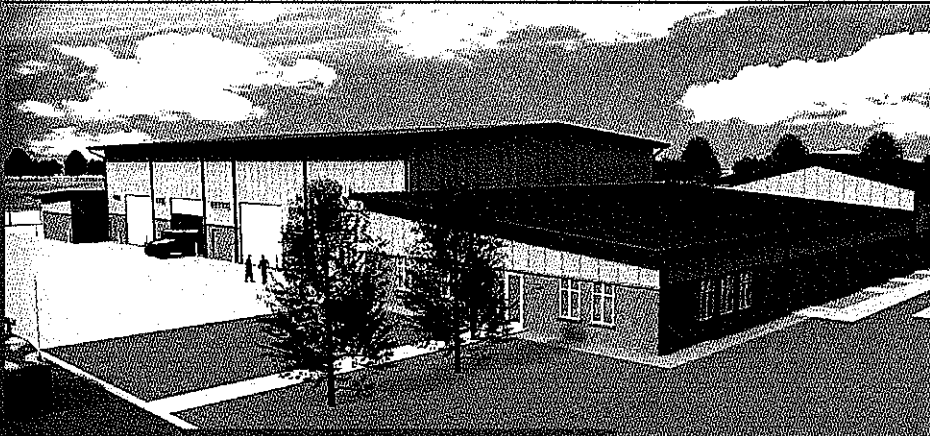
EXPRESSION OF INTEREST FOR A

Maintenance Complex at the Charleston Armory

West Virginia Army National Guard



Requisition Number: DEFK11026
March 3, 2011



Baker

Submitted by

Michael Baker Jr., Inc.
5088 W. Washington Street
Second Floor
Charleston, WV 25313

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Submitted to

Purchasing Division
State of West Virginia
2019 Washington Street, East
P.O. Box 50130
Charleston, WV 25305-0130

Baker

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

March 3, 2011

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Charleston, WV 25313

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Ms. Tara Lyle
State of WV Department of Administration
Purchasing Division
2019 Washington Street East
Charleston, West Virginia 25305-0130

**RE: Expression of Interest to Provide Architectural / Engineering Design Services
DEFK11026 – Maintenance Complex at the Charleston Armory
WV Army National Guard, Kanawha County, West Virginia**

Dear Ms. Lyle:

Michael Baker Jr., Inc. (Baker) is pleased to present our qualifications and experience as it relates to the design of the new Maintenance Complex for the West Virginia Army National Guard. During your review of the enclosed information, you will see that Baker has completed or is currently working on similar assignments at various locations across the nation. For example, the Vehicle Maintenance Facility at U.S. Army Reserve Center, Greenville, SC; Field Maintenance Shops for Stryker Brigade Combat Teams for the Pennsylvania National Guard; and other field maintenance, vehicle maintenance shop projects including: AFRC Vehicle Maintenance Shops in Bell, CA – 44,000 SF; Camp Bullis, TX – 37,622 SF; and McAlester, OK – 25,504 SF. Baker also designed the West Ox Road Transit/Bus Maintenance Facility complex in Fairfax, VA, the DASH Transit System Headquarters/Bus Maintenance Facility in Alexandria, VA; and the New Haven Bus Maintenance Facility in Hamden, Connecticut.

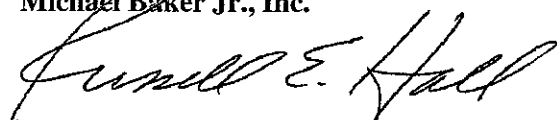
Baker is a full-service consulting firm with some 2,900 professionals in over 90 office locations. We propose to manage this assignment from our Charleston, West Virginia office which employs over 40 individuals including architects, landscape architects, engineers, planners, surveyors, environmental specialists, and technicians.

We feel our combination of national DOD expertise, National Guard experience, regional experience, and close proximity is unique to Baker and will provide efficient, timely, personal, cost-effective, and quality solutions for the West Virginia Army National Guard, and the Division of Engineering and Facilities.

We have greatly enjoyed our professional relationship with the West Virginia Army National Guard and wish to continue our collaborative effort toward the successful completion of this important project. We would welcome the opportunity to personally present our qualifications and proposed approach. Should you have any questions or require additional information, please contact me at (304) 769-0821 or by e-mail at rhall@mbakercorp.com.

Very truly yours,

Michael Baker Jr., Inc.



Russell Hall, PE, PS
Assistant Vice President and Principal-In-Charge

Executive Summary

As an essential part of our country's defense and an integral part of the total force, the West Virginia National Guard continues its historic dual mission, providing to the state, units trained and equipped to protect life and property, while providing to the nation units trained, equipped and ready to defend the United States and its interests, all over the globe.

Baker understands the mission and requirements and stands ready with the experience, capability and capacity to assist the West Virginia National Guard to accomplish these challenges. Baker currently serves the National Guard and has worked at 56 National Guard installations. Additionally, we have worked at over 59 Air Force installations, 36 USACE Districts, and several NAVFAC Divisions on scores of successful projects.

With this submission, we present our highly skilled and experienced team, who has worked together on multiple National Guard and Army Reserve projects, prepared to support you with excellent planning, architectural, engineering, and construction phase services from concepts through operation.

We believe Baker is the best choice for this work because of an unmatched combination of experience, skills, and proven project delivery success as is demonstrated throughout the proposal. The key advantages Baker offers are highlighted below:

In-depth Knowledge and Experience with the National Guard and its Construction Program

- Knowledge of the National Guard procedures and design criteria gained from previous work with the National Guard Bureau and USPFO. We have worked on state-specific IDIQ AE contracts, as well as individual Design/Build projects, most notably the Pennsylvania National Guard for the Stryker Brigade Combat Teams.
- Baker is a national contract holder for Environmental Program Management Services

for the Air National Guard Bureau, Arlington, Virginia.

Experience with Vehicle Maintenance Facilities, Training Centers, Administrative Facilities, Supply & Storage Facilities.

- Technical professionals highly trained in the design of Military Maintenance Facilities.
- Successful Teaming experience on multiple military Design-Build projects, including Field Maintenance Shops for the Stryker Brigade Combat Teams across Pennsylvania.
- Prepared to immediately begin work with no learning curve necessary.
- Over 2,900 technical professionals available to meet the demands of a large volume of work and simultaneous task orders

Knowledge of the Guard's Objectives and a Strong Commitment to Your Support

- The West Virginia National Guard is committed to quality. Baker is very familiar with all of the policies and procedures and fully supports this commitment, with development and monitoring of quality management plans in line with the Guard's requirements, including establishment of Independent Technical Reviews for all of our task orders.
- Building Energy Management. Baker understands that all of our designs need to be best value solutions for our clients including designing building systems that meet the energy reduction mandates of EPA Act 2005. Baker has on staff Certified Energy Management technical professionals that understand how to implement these criteria to develop building systems that reduce energy consumption as well as result in the lowest life cycle costs to the end user.

Wide Array of Services

- A multi-disciplined project staff knowledgeable in all of the areas required under this contract, with substantial, full-service back-up support from Baker.
- The added value is our ability to provide any other peripheral service associated with facility projects from initial economic analysis, through design, operations and maintenance, and clean-up and decommissioning.

A Strong Local Presence

Baker has a full-service office within 25 minutes of the Charleston Armory Complex. Since 1952, we have offered a vast array of services to our West Virginia clients. Several members of our Charleston office have proudly served in the United States military through the National Guard and Reserve.

Meeting the Need

Baker is working on Department of Defense projects nationwide from Fort Lewis in Washington, to Texas and New England, and Fort Allen in Puerto Rico. We are committed to putting experienced technical professionals wherever they are needed to deliver successful projects for the National Guard as well as the Guardsman and Reservists who will be using these facilities.

The Best-prepared Firm to Assist the National Guard in Meeting Your Requirements

The Baker Team is proud of the work we have done for the National Guard and Army Reserve and we welcome the opportunity to a successful partnership with our colleagues of the West Virginia National Guard in delivering important projects that serve the needs of our country's defense forces nationwide.

“Baker has the experience to provide creative solutions, the capacity to get the job done, the track record to control projects better and lower your risk, and the commitment to be the National Guard’s partner for success.”

The National Guard has long been, and continues to be, an important client to Baker, and we very much appreciate your business. We thank you for the opportunity to serve you in the past, we look at this contract as a natural extension of the good working relationship we have shared, and we are excited about the possibility of working with you on more successful projects.

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Relevant Project Descriptions

Qualifications of Personnel

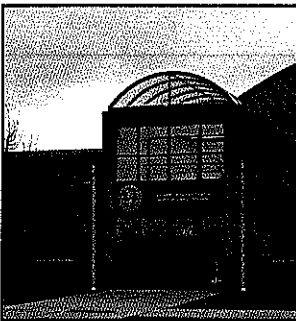
Part 1 – Introduction

The WV Army National Guard is seeking a highly qualified firm experienced

“... we are extremely interested in continuing a professional relationship with the WV Army National Guard.”

in program management, planning, design, and construction to provide A/E services for a new maintenance complex to be located at the Charleston Armory Complex, Kanawha County, WV. Michael Baker Jr., Inc. (Baker) is a highly qualified firm with extensive experience in providing these services, and we are extremely interested in continuing a professional relationship with the WV Army National Guard.

Corporate Capabilities



Headquartered near Pittsburgh, PA, Baker currently employs over 2,900, maintains numerous office and project locations domestically and internationally, and is publicly traded on the NYSE Amex

exchange under the symbol, BKR. In 2009, the Company's continuing operations achieved total contract revenues of \$445.2 million. Engineering News-Record (ENR) magazine currently ranks Baker in the top 10 percent of the 500 largest U.S. engineering firms (currently 36st in ENR's Top 500 Design Firms) and as one of the Top 25 engineering firms in a variety of markets, including transportation, airports, highways, bridges, water supply, pipelines, environmental site assessments and telecommunications.

Baker has extensive resources and the required qualifications to provide planning and design services for the Office of the Adjutant General, DEF for this important project. We have nationally recognized experts with the technical experience necessary for this assignment. In addition, Baker's team of experienced professionals have an established record of

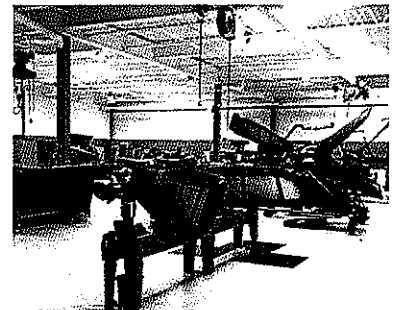
delivering quality work products to our clients, on schedule and within budget.

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

- Nationally recognized expertise in Department of Defense assignments
- Facilities (Buildings, Access, Parking, Site Development) Plan Preparation
- Construction Administration and Construction Monitoring
- Coordination with State and Federal Agencies, as required

Baker's Charleston office is a "single-stop resource" capable of providing comprehensive professional services, from environmental planning, final design, and construction management through operational support. From major new bridges and roadway designs to surface mine permitting, building facilities, aviation, and water resource projects, Baker has evolved into one of the leading engineering and energy services firms by consistently providing targeted solutions for its clients most complex challenges.

Baker's clients include, but are not limited to, counties, cities, towns, local municipalities, numerous state departments of transportation, military facilities, airport complexes, and private sector clients. Baker's geographic location and extensive experience enables us to quickly respond to wide-ranging scopes of service in order to meet our client's needs.



Aircraft Engine Inspection and Repair Shop, WV Air National Guard

Part 2 – Qualifications

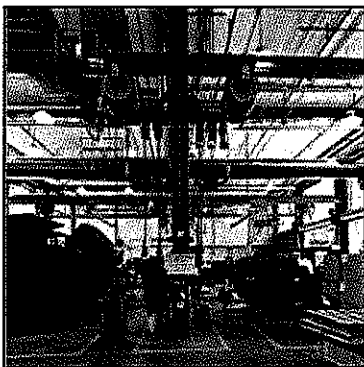
Services

- Architecture
- Arc Flash Suppression
- Condition Assessment
- Electrical Engineering
- Energy Management
- Engine Exhaust Removal
- Equipment Layout Design
- Facilities Program Management
- Feasibility Studies
- Fire Protection Engineering
- Geographic Information Systems
- Interior Design & Space Planning
- Landscape Architecture
- Maintenance Management Systems
- Master Planning
- Mechanical Engineering
- Site and Civil Engineering
- Structural Engineering
- Sustainable Design
- Urban Design
- Water Reclamation Reclaim for Vehicle Wash

Baker has a large design staff and extensive experience in design of many types of facilities, both for military installations and the private sector. Our design experience includes readiness centers, training centers, administrative offices, aviation hangars, vehicle maintenance shops, warehouses, cargo facilities, dining halls, schools, dormitories, barracks, and housing. Some of these projects include renovation and restoration of buildings that are on the National Register of Historic Places. All projects incorporate anti-terrorism and force protection measures, and most meet SPiRiT or LEED® certification requirements.

With our technical expertise and industry knowledge, we have the ability to support the evolving trends in design and construction. Baker has long performed traditional design/bid/build projects. We are also experienced in generating design/build performance bidding documents and performing design/build projects for contractors as the designer-of-record (DOR). The experience gained through our full knowledge of various project delivery methods strengthens our capabilities in maximizing client value and project quality.

Vehicle Maintenance Shops/ Equipment Maintenance Facilities



Baker is a nationally-known expert in maintenance facilities, having planned, designed, and provided construction administration services for 42 operations and

maintenance facilities for 27 different DOD and public agencies since 1990. Most OMS/AMSA projects house office and administrative areas, tool and parts storage, multiple work bays, paint booth, welding bays, controlled and flammable storage, wash bays, building support functions,

and is serviced by at least one overhead traveling crane. Vehicle maintenance projects also typically include paving design for on-site parking and storage for military vehicles including Hum-V's and trailers, along with spaces for privately-owned vehicles. Clients and projects include the following:

- **Tactical Equipment Maintenance Facility SATOC.** For the Tulsa District, Baker is providing design/build services for Tactical Equipment Maintenance Facilities (TEMF) with a construction value of \$250 M. This contract has generated seven (7) task orders for TEMFs at Fort Bliss, TX, Ft Sill, OK, Ft Hood, TX and White Sands Missile Range, NM. These two level facilities feature maintenance bays for light and heavy

tracked vehicles, machine and parts shops, administrative space, a training center, and arms vaults. All facilities meet AT/FP and LEED requirements.

- **Tactical Equipment Maintenance Facility MATOC.** Under a Savannah District MATOC, Baker is providing design/build services for six (6) TEMFs located at Fort Bragg, NC. These two level facilities feature maintenance bays for light and heavy tracked vehicles, machine and parts shops, administrative space, a training center, and arms vaults. All facilities meet ATEP and LEED requirements.
- **Tactical Equipment Maintenance Facility, Fort Drum, NY.** 35,500-SF facility consist of a vehicle maintenance shop, deployment equipment storage areas, oil and HAZMAT storage areas, and organizational vehicle parking.
- **Field Maintenance Shops for Stryker Brigade Combat Teams, PA.** Baker is developing Design/Build RFPs to support the PAARNG's 56th Brigade's conversion to a Stryker Brigade Combat Teams. The program provides facilities for the training of soldiers and for the maintenance and storage of various military vehicles, including the Stryker lightweight tank.

Other Vehicle Maintenance Shop (VMS)/Field Maintenance Shop projects include:

- Armed Forces Reserve Center; Bell, CA; 44,000-SF VMS
- Armed Forces Reserve Center; Camp Bullis, TX; 37,622-SF VMS
- Army Reserve Center, Fort Lewis, WA: 10,702-SF OMS/AMSA
- Armed Forces Reserve Center; Grand Prairie, TX; 30,580-SF FMS
- Armed Forces Reserve Center; McAlester, OK; 25,504 SF VMS
- Armed Forces Reserve Center; Round Rock, TX; 21,400-SF FMS
- Armed Forces Reserve Center; Tyler, TX; 13,199-SF OMS
- West Ox Vehicle Maintenance Facility for Fairfax County, VA; 134,000-SF
- Equipment Maintenance & Operations Center, Rockville, MD; 164,500-SF
- Vehicle Maintenance, Storage and Administrative Facility; Hamden, CT; 290,000-SF



Part 3 – Technical Expertise

Baker can offer the Office of the Adjutant General, DEF proven experience in the following Professional Services consistent with the requirements of projects of the type identified in your Request for Proposals. These services are performed *The Baker Way* which means that our client benefits from the streamlined internal process of Project Management and Quality Assurance.

Preliminary Planning and Costs

During this phase, Baker proposes to prepare a Preliminary Engineering Report, Concept Plan, and Opinion of Probable Construction Cost. These documents will detail the individual elements required for the architectural, mechanical, electrical, engineering, public safety, environmental and permitting issues associated with the proposed new facility.

Members of our Charleston office have recently completed both Design Development and Construction Document submissions for local clients in accordance with the West Virginia Army National Guard, Division of Engineering and Facilities, and other local development agency requirements. These documents have since been used in the successful completion of the HVAC and Architectural Improvements to the Charleston Armory on Coonskin Drive, Charleston, WV. Detailed Cost Estimates for Construction, Operation and Maintenance, Engineering, Right of Way, and Utility Relocations are prepared and included in the Preliminary Engineering Report submittals.

Plans and Specifications Preparation

Baker has vast experience in the development of construction plans, details, and technical specifications for all types of architectural and engineering projects. Initial survey data, topography, and physical features are collected electronically and downloaded into

our CADD system for use by the designers. Plan and/or Profile sheets are then developed. Detail Sheets are created from our Detail Library then modified to suit specific project applications. Specifications are created from our Master Spec Library and tailored to meet individual project requirements.

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

- WV Department of Environmental Protection, NPDES Permit;
- WV Department of Health & Human Resources, Water or Sewer Permit;
- WV State Historic Preservation Office (SHPO) Section 106 Review;
- WV State Fire Marshall Review.

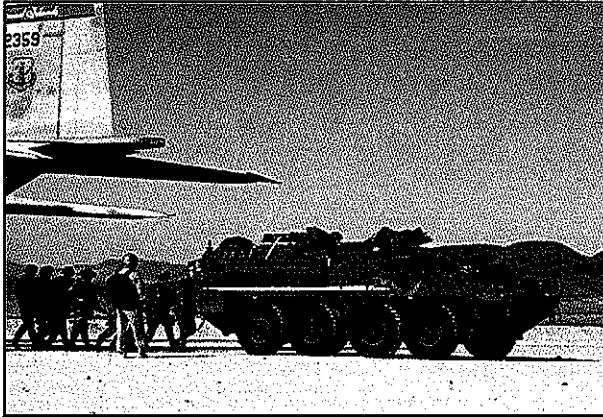
We have established relationships with each of these agencies which will streamline the permit acquisition process.

Construction Administrative Services

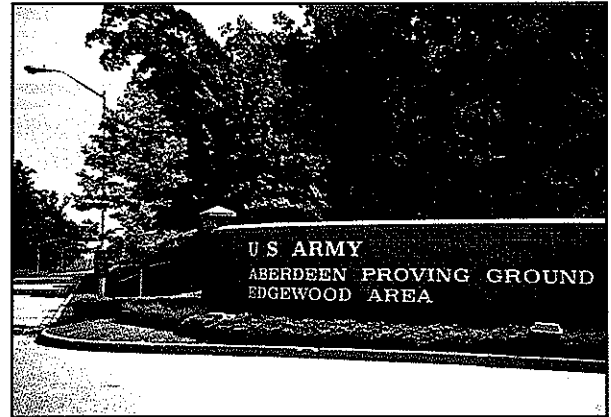
Baker is well equipped to provide the administration and inspection of construction projects. Pre-Construction and regular job-site meetings, as well as shop drawing review, requests for information, pay requests and all other construction-related correspondence will be the responsibility of the Project Manager. Resident inspection services will be conducted by Baker technicians or staff engineers trained in construction practices and certified, as required, for the particular type of installation

(i.e. concrete placement, compaction, asphalt, trenching, etc.). Constant communication between field and office is essential and will

be achieved via cellular telephone, internet access, and facsimile.



*National Guard Bureau IDIQ, Design/Build RFQ/RFP
Development for Statewide Construction Program,
Pennsylvania*



*U.S. Army Corps of Engineers, Baltimore District Aberdeen
Proving Ground, Maryland*

Part 4 – Management and Staffing Capabilities

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

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

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

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

As Principal-In-Charge, **Russell Hall, PE, PS**, 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 21 years of experience in transportation engineering working in both the government and private sectors. Mr. Hall has been responsible for the design and management

of multiple transportation projects of varying size and complexity. His experience, understanding of project delivery and dedication to client satisfaction will guide this project.

Patrick W. Fogarty, PE, PS, will serve as Project Manager. Mr. Fogarty has over 24 years of experience with civil engineering projects of various size and levels of complexity. Mr. Fogarty has been the lead designer and engineer-of-record for numerous pre-engineered maintenance and storage facilities. Some of his other notable projects that are directly related to the current proposed project are as follows:

- Camp Dawson Improvements, State Armory Board for West Virginia
 - Training Set Fire Observation Facility
 - Ammo Supply Point
 - Fuel Supply Point
 - Vehicle Storage Area Renovation
- 130th Airlift Wing, West Virginia Air National Guard Squadron Operations Facility
 - Squadron Operations Facility
 - Aircraft Parking Apron Expansion

Ron Kretz, RA, AIA will serve as QA/QC Architectural Manager for this project. Mr. Kretz has over 20 years experience as a Project Manager, designer and Principal. Mr. Kretz's project experience includes various building types for military, education, institutional, commercial, health care, aviation, transit, and housing clients in public and private sector facilities.

Ralph Deffenbaugh, PE, LEED GA will serve as QA/QC Engineering Manager. Mr. Deffenbaugh is Director of Facilities Engineering, and provides leadership for project quality and interdisciplinary coordination. His experience includes Project Manager, Lead Structural Engineer for various types of facilities including tactical equipment maintenance facilities, vehicle maintenance facilities, barracks and military facilities.

Ronald Schirato, PE, LEED AP is a civil engineer with a broad range of experience in environmental permitting and engineering for site development on military, commercial, and residential properties. He has extensive experience in stormwater management, best management practices, utility infrastructure design, engineering for transportation (roadways), computerized hydrology and hydraulics, and management. Mr. Schirato's military experience also includes design of military and privately owned vehicle parking and implementation of DoD AT/FP Measures.

R. Todd Schoolcraft, PLA, ASLA, will provide landscape architectural support. Mr. Schoolcraft has over 18 years of experience in military facilities planning and design. He will be responsible for coordinating the surveying and data collection as well as the preparation of all site-civil related plans and documents. His experience includes numerous military installations, armories, and armed forces readiness center projects. Some of his notable projects that are directly related to the current proposed project are as follows:

- A/E Services for the Office of the Adjutant General, WVARNG DEF
- Alloy Armory Berm Repair, WVARNG DEF
- Parking Lot Expansion and ADA Accessibility Upgrade, FWAATS
- Robert E. Rooney Marshalling Yard & Rinse Facility, Port Ash Shuaybah, Kuwait
- Building 5 Command Group Renovations, Zone II, Camp Arifjan, Kuwait
- Port Shuaybah Pier Assessment, Port Ash Shuaybah, Kuwait
- APOD Consolidation Project, Kuwait City International Airport, Kuwait
- 130th Tactical Airlift Group Project 2000, WVANG

John Dziubek, PE, will serve as Geotechnical engineering for this project. He has managed projects for U.S. Army Corps of Engineers, U.S. Navy, and State Department of Transportation.

Ron L. Bolen, AIA, LEED Green Associate, with over 35 years of diverse

experience, will serve as Lead Architect for this project. Mr. Bolen's project design experience includes master planning, educational, parks, recreation, institutional, commercial, housing, health care, long-term care, and religious facilities. He is experienced with the submittal process for State Agencies, including WV ArNG, State Board of Education and State Fire Marshal's office. Some of Mr. Bolen's directly related notable projects are as follows:

- Charleston Armory HVAC and Architectural Improvements, WVARNG C&FMO
- Camp Atterbury, Indiana Miscellaneous Building and Site Improvements
- Glen Jean Armory Design, Fayette County, West Virginia

Duncan Penney, RA, LEED AP will serve as Project Architect. Mr. Penney's exceptional technical, analytical, and architectural skills reflect more than 24 years of experience in architectural design and project management. His achievements include delivering multi-million dollar projects on time and within construction budget. Mr. Penney has performed project design, project management, design charrettes, feasibility studies, construction administration, and specification writing. A Certified Construction Specifier (CCS), he is skilled in producing construction documents. Mr. Penney is also a U.S. Green Building Council, LEED® accredited professional, with recent experience on over a dozen Pennsylvania Army National Guard Readiness Centers, statewide, for the Stryker Brigade Combat Teams, and Silver LEED®-certified U.S. Army Reserve Center projects for the Louisville District, U.S. Army Corps of Engineers.

Alana Pulay, IIDA, LEED AP, has over 7 years experience in commercial interior design and the architecture industry. Ms. Pulay is a licensed interior designer and a LEED AP (Leadership in Energy and Environmental Design Accredited Professional). She has extensive knowledge and experience in

designing and specifying finishes, fixtures, and furnishings for educational facilities.

Eric Spicker, PE will serve as structural engineer with experience in the design and construction of commercial, military, governmental, industrial, transit, educational, and residential projects. He is skilled in fast tracked projects where substructure and foundation packages are released early and separately to contractors to allow an early construction start. These projects include hangars, reserve centers, vehicle maintenance facilities, office buildings, storage and warehouse facilities, schools, and numerous residential structures.

Dennis Myer, PE, LEED AP will serve as mechanical engineer and has extensive experience HVAC systems for military, educational, transit aviation, industrial and commercial applications. Mr. Myer has depth expertise in ASHRAE standards and Military Unified Facilities Criteria NAVFAC.

David Hilliard, LEED Green Associate will provide support for HVAC and Plumbing design for the project. Mr. Hilliard has over 21 years of mechanical design experience in

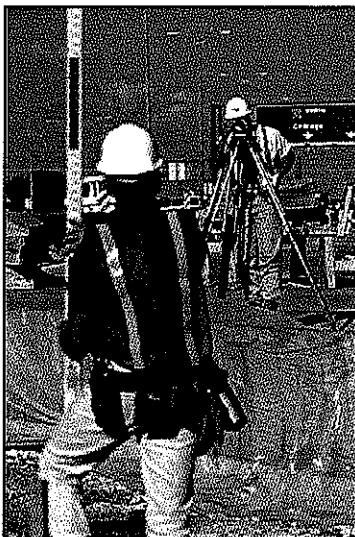
military, commercial, educational, and health care facilities.

Owen Milligan, PE, will provide QA-QC Electrical support for the project. Mr. Milligan is an electrical engineer who is experienced in the study and design of electric distribution and control systems, emergency power for process plants and facilities, water/wastewater treatment plants, government and commercial projects, ASHRAE energy-efficient building design, coordination with vendor and contractors, and approval of vendor drawings.

Kevin Louk, RCDD/NTS/OSP LEED AP will serve as communications designer. Mr. Louk has lead electrical design projects, various military installations, and data centers.

Steven Henry, CPD will serve as plumbing designer. Mr. Henry has experience in plumbing, fire protection, field surveys, and code interpretation.

David Cameron, AVS will serve for construction phase services. Mr. Cameron services will include bid phase, and overall construction administration.



Baker Surveying



Baker Construction Monitoring

Part 5 - Technical Approach

Pre-Design Planning

During this phase Baker will collect all available data including utility maps, property plats, record drawings, etc. We would have discussions with the Owner's selected groups for goals, aspirations, budget constraints and timelines. We will work with the Office of the Adjutant General, DEF and the end users to develop the basic program and all other functional elements. Design issues inherent to Maintenance Facilities, and specifically to the proposed site will be discussed at this time. Such issues will likely include:

- Vehicle circulation and flow
- Separation of HVAC systems to eliminate exhaust fumes in office areas
- Sizing of overhead cranes, pits, and lifts
- Vehicle maintenance fluid systems
- Potential HazMAT storage areas and permitting
- Geotechnical investigation (*Teays Clay* is prevalent in this area)
- Type, size, and location of site utilities
- Utilities easement coordination
- Storm Water Management
- Construction Access/Traffic Control

Preliminary Plans and Costs

Once all programming data has been acquired, we will work with the Office of the Adjutant General, DEF and the end users to develop conceptual layouts for the building program and all other functional elements.

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

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

Design Development Documents

Once conceptual plans have been approved by the Office of the Adjutant General, DEF, Baker will prepare the Preliminary Engineering Estimate and Cut Sheets for various HVAC and architectural amenities for submission to the State Fire Marshall's Office. A 50% Design Submittal of the construction plans will also be prepared for review and approval.

Plan and Specification Preparation

Upon receipt of comments from the Design Development submittal, Baker will finalize the construction plans, technical specifications, bid documents, final construction estimates,

and all necessary permit applications. Initial survey data, topography, and physical features are collected electronically and downloaded into our CADD system for use by the designers. Plan and/or Profile sheets are then developed. Detail Sheets are created from our Detail Library then modified to suit specific project applications. Specifications are created from our Master Spec Library and tailored to meet individual project requirements.

Baker generally makes use of E.J.C.D.C. and/or A.I.A. bidding and contracting documents, as normally dictated by the funding agencies. Blank copies of these forms are included in the Project Manual and made available to all plan holders during the bidding process to minimize the risk of confusion or controversy and "level the playing field" for all prospective bidders.

Project Bid Evaluation

During this phase, if needed, Baker will prepare the Bid Advertisement, conduct the Pre-Bid Conference, prepare any necessary Addenda, perform the Bid Opening, create and distribute the Bid Tabulation, provide a recommendation of award of contract, and

complete the Notice of Award for execution by the Office of the Adjutant General, DEF.

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

Construction Administration and Inspection

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

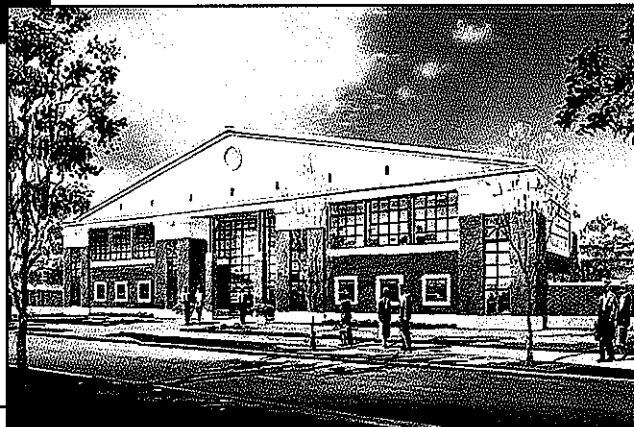
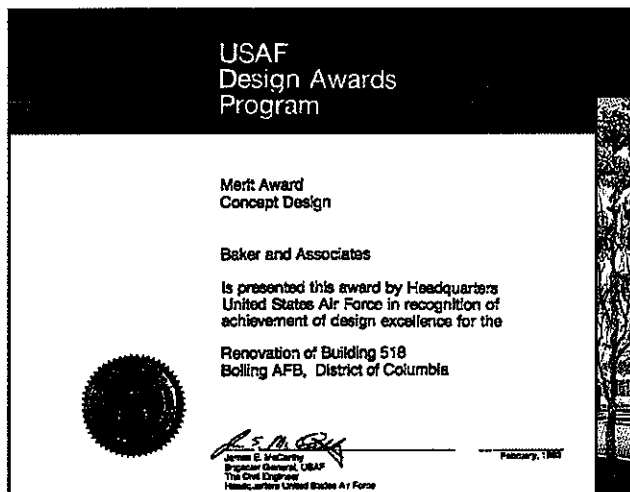
Baker is well equipped to provide the administration and inspection of construction projects. Pre-Construction and regular job-site meetings, as well as shop drawing review, requests for information, pay requests and all other construction-related correspondence will be the responsibility of the Project Manager. Resident inspection services will be conducted

by Baker technicians or staff engineers trained in construction practices and certified, as required, for the particular type of installation (i.e. concrete placement, compaction, asphalt, trenching, etc.). Constant communication between field and office is essential for a successful project.

Project Closeout

Baker will develop the final punch list for incomplete work. Once these items have been completed, we will coordinate a final walk through inspection with representatives of the Owner, Contractor, and Baker to ensure that the facility and project site are complete and in a clean condition prior to releasing the Contractor and ensure the occupants are completely familiar with the systems operation. Baker will collect and deliver to the Office of the Adjutant General, DEF any Operation and Maintenance information, as well as all final documentation for the project.

The one-year warranty period will commence at that time. The Office of the Adjutant General, DEF will be urged to contact the Baker Project Manager during that time should any problems arise at the facility. We will promptly respond with a confirmation site visit and follow-up with the Contractor to ensure compliance.



Air Force Design Award for the Renovation of Building 518, Bolling AFB, Washington, DC, along with rendering of proposed improvements.

Part 6 – Related Prior Experience

The following Project Descriptions illustrate Baker's related prior experience. We have included examples of building facilities used for emergency services, maintenance, training, parking and support functions for both military and civilian clients at various locations across the nation. Many of these projects are LEED® and/or SPiRiT (Sustainable Project Rating Tool) rated. We believe these projects show the depth of our expertise in all aspects of engineering and

architecture. While we propose to conduct activities from our West Virginia operation, these diverse project locations are meant to emphasize our *One Baker* philosophy, which simply means that **the Office of the Adjutant General, DEF will have access to the human resources, expertise, and technology of all Baker locations as particular needs arise.**

Part 7 – References

Each of the Project Profiles found in Part 6 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 Allen, P.E., Deputy State Highway Engineer
(304) 558-3304
- **WV Division of Homeland Security & Emergency Mgmt., 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
- **City of Charleston**
915 Quarrier Street, Suite 5
Charleston, WV 25301-2607
Mr. Chris Knox, City Engineer
(304) 348-8106
- **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

Appendix A – WV Purchasing Division Quotation Forms



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

Request for Quotation

RFQ NUMBER: DEFK11026

PAGE: 1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
 TARA LYLE
 304-558-2544

RFQ COPY
 TYPE NAME/ADDRESS HERE

Baker

MICHAEL BAKER JR., INC.
 5088 West Washington Street
 Charleston, WV 25313

DIV ENGINEERING & FACILITIES
 ARMORY BOARD SECTION

1707 COONSKIN DRIVE
 CHARLESTON, WV
 25311-1099 304-341-6368

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
01/12/2011				

BID OPENING DATE: 02/24/2011 BID OPENING TIME: 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-00-00-001		
<p>ARCHITECT/ENGINEERING SERVICES, PROFESSIONAL</p> <p>EXPRESSION OF INTEREST (EOI)</p> <p>THE WEST VIRGINIA PURCHASING DIVISION FOR THE AGENCY, DIVISION OF ENGINEERING & FACILITIES, WV ARMY NATIONAL GUARD, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ARCHITECTURAL ENGINEERING DESIGN SERVICES FOR A MAINTENANCE COMPLEX FOR THE COONSKIN PARK AREA AT THE CHARLESTON ARMORY COMPLEX, PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS.</p> <p>TECHNICAL QUESTIONS CONCERNING THIS SOLICITATION MUST BE SUBMITTED IN WRITING TO TARA LYLE VIA MAIL AT THE ADDRESS SHOWN IN THE BODY OF THIS EOI, VIA FAX AT 304-558-4115, OR VIA EMAIL AT TARA.L.LYLE@WV.GOV.</p> <p>DEADLINE FOR ALL TECHNICAL QUESTIONS IS 02/07/2011 AT THE CLOSE OF BUSINESS. ANY TECHNICAL QUESTIONS RECEIVED WILL BE ANSWERED BY FORMAL ADDENDUM ISSUED BY THE PURCHASING DIVISION AFTER THE DEADLINE HAS LAPSED.</p> <p>CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICE</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE: *Conrad Hall* TELEPHONE: (304)769-0821 DATE: February 24, 2011

TITLE: Assistant V.P. FEIN: 25-1228638 ADDRESS CHANGES TO BE NOTED ABOVE

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



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

Request for Quotation

RFQ NUMBER
DEFK11026

PAGE
2

ADDRESS CORRESPONDENCE TO ATTENTION OF
**TARA LYLE
 304-558-2544**

RFQ COPY
 TYPE NAME/ADDRESS HERE

Baker

MICHAEL BAKER JR., INC.
 5088 West Washington Street
 Charleston, WV 25313

DIV ENGINEERING & FACILITIES
 ARMORY BOARD SECTION

1707 COONSKIN DRIVE
 CHARLESTON, WV
 25311-1099 304-341-6368

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
01/12/2011				

BID OPENING DATE: **02/24/2011** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	QAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM TO THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN.</p> <p>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THE CONTRACT NULL AND VOID, AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.</p> <p style="text-align: center;">NOTICE</p> <p>A SIGNED BID MUST BE SUBMITTED TO:</p> <p style="text-align: center;">DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130</p> <p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p> <p>SEALED BID</p> <p>BUYER:-----TL/32-----</p> <p>RFQ. NO.:-----DEFK11026-----</p> <p>BID OPENING DATE:-----02/24/2011-----</p> <p>BID OPENING TIME:-----1:30 PM-----</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Kimball Hall</i>	TELEPHONE (304)769-0821	DATE February 24, 2011
TITLE Assistant V.P.	FAX 25-1228638	ADDRESS CHANGES TO BE NOTED ABOVE

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



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

Request for Quotation

RFQ NUMBER
DEFK11026

PAGE
3

ADDRESS CORRESPONDENCE TO ATTENTION OF:
**TARA LYLE
 304-558-2544**

RFQ COPY
 TYPE NAME/ADDRESS HERE

Baker

MICHAEL BAKER JR., INC.
 5088 West Washington Street
 Charleston, WV 25313

DIV ENGINEERING & FACILITIES
 ARMORY BOARD SECTION

1707 COONSKIN DRIVE
 CHARLESTON, WV
 25311-1099 304-341-6368

DATE PRINTED	TERMS OF SALE	SHIP VIA	POB	FREIGHT TERMS
01/12/2011				

BID OPENING DATE: **02/24/2011** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	QAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID: (304)769-0822						
CONTACT PERSON (PLEASE PRINT CLEARLY): Patrick W. Fogarty						
***** THIS IS THE END OF RFQ DEFK11026 ***** TOTAL:						N/A

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Samuel Hall</i>	TELEPHONE (304)769-0821	DATE February 24, 2011
TITLE Assistant V.P.	FEIN 25-1228638	ADDRESS CHANGES TO BE NOTED ABOVE

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



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

Request for Quotation

RFQ NUMBER
DEFK11026

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF
TARA LYLE
304-558-2544

RFQ COPY
TYPE NAME/ADDRESS HERE
Baker
MICHAEL BAKER JR., INC.
 5088 West Washington Street
 Charleston, WV 25313

S H I P T O
DIV ENGINEERING & FACILITIES
ARMORY BOARD SECTION
1707 COONSKIN DRIVE
CHARLESTON, WV
25311-1099 304-341-6368

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
02/14/2011				

BID OPENING DATE: **02/24/2011** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
ADDENDUM NO. 1 1. QUESTIONS AND ANSWERS ARE ATTACHED. 2. ADDENDUM ACKNOWLEDGEMENT IS ATTACHED. THIS DOCUMENT SHOULD BE SIGNED AND RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN DISQUALIFICATION OF YOUR BID. EXHIBIT 10 REQUISITION NO.: DEFK11026 ADDENDUM ACKNOWLEDGEMENT I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC. ADDENDUM NO.'S: NO. 1 X NO. 2 NO. 3 NO. 4 NO. 5 I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS.						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Scott Hall</i>	TELEPHONE (304)769-0821	DATE February 24, 2011
TITLE Assistant V.P.	FEIN 25-1228638	ADDRESS CHANGES TO BE NOTED ABOVE

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



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

Request for Quotation

RFQ NUMBER
DEFK11026

PAGE
2

ADDRESS CORRESPONDENCE TO ATTENTION OF
TARA LYLE
304-558-2544

RFQ COPY
 TYPE NAME/ADDRESS HERE

Baker

MICHAEL BAKER JR., INC.
 5088 West Washington Street
 Charleston, WV 25313

DIV ENGINEERING & FACILITIES
 ARMORY BOARD SECTION

1707 COONSKIN DRIVE
 CHARLESTON, WV
 25311-1099 304-341-6368

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
02/14/2011				

BID OPENING DATE: **02/24/2011** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.</p> <p>..... SIGNATURE Michael Baker Jr., Inc. COMPANY February 24, 2011 DATE</p> <p>NOTE: THIS ADDENDUM ACKNOWLEDGEMENT SHOULD BE SUBMITTED WITH THE BID.</p> <p>REV. 09/21/2009</p> <p>END OF ADDENDUM NO. 1</p>						
0001	1	JB		906-00-00-001		
ARCHITECT/ENGINEERING SERVICES, PROFESSIONAL						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Michael Baker Jr.</i>	TELEPHONE (304)769-0821	DATE February 24, 2011
TITLE Assistant V.P.	FEIN 25-1228638	ADDRESS CHANGES TO BE NOTED ABOVE

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

DEFK11026 – ADDENDUM #1

Question # 1: May we visit the project site and if so, who may we contact with WVANG to schedule the visit that would not violate Section 1.4?

Answer: There will be no site visits for this project.

Question # 2: Will the design of the maintenance complex include items such as lifts, grease wheels, HVAC, and other appurtenances? Or, is the RFQ just seeking the metal building “shell”?

Answer: The maintenance complex could include items such as lifts, grease wheels and other appurtenances, budget permitting. The complex will include office areas and service areas, and these areas will have a heating system and the office area will have a cooling system. Utility design will also be required. The RFQ is not just seeking the metal building “shell.”

Question # 3: Is any more information available such as size of the proposed facility? Are vehicle maintenance and storage part of the facility? Is it just one building or more than one?

Answer: Ultimately, the facility size and configuration will be determined by the design and budget. Vehicle maintenance and storage will be part of the facility. The number of buildings and layout will be determined as part of the design.

CLARIFICATION: *This Expression of Interest (EOI) is to select a firm based on experience and qualifications for similar projects. No details relating to the actual design of this particular project are relevant to the firm's response at this time.*



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

**Request for
 Quotation**

RFQ NUMBER
DEFK11026

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF
**TARA LYLE
 304-558-2544**

RFQ COPY
 TYPE NAME/ADDRESS HERE
Baker
 MICHAEL BAKER JR., INC.
 5088 West Washington Street
 Charleston, WV 25313

DIV ENGINEERING & FACILITIES
 ARMORY BOARD SECTION
 1707 COONSKIN DRIVE
 CHARLESTON, WV
 25311-1099 304-341-6368

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
02/23/2011				

BID OPENING DATE: 03/03/2011 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
ADDENDUM NO: 2						
1. TO MOVE THE BID OPENING DATE FROM 02/24/2011 TO 03/03/2011.						
2. ADDENDUM ACKNOWLEDGEMENT IS ATTACHED. THIS DOCUMENT SHOULD BE SIGNED AND RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN DISQUALIFICATION OF YOUR BID.						
END OF ADDENDUM NO. 2						
0001	1	JB		906-00-00-001		
ARCHITECT/ENGINEERING SERVICES, PROFESSIONAL						
***** THIS IS THE END OF RFQ DEFK11026 ***** TOTAL:						N/A

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Ronald E. Hill</i>	TELEPHONE (304)769-0821	DATE March 3, 2011
TITLE Assistant V.P.	FAX 25-1228638	ADDRESS CHANGES TO BE NOTED ABOVE

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

EXHIBIT 10

REQUISITION NO.: **DEFK11026**

ADDENDUM ACKNOWLEDGEMENT

I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED
ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY
PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.

ADDENDUM NO.'S:

NO. 1 ...**X**...

NO. 2 ...**X**...

NO. 3

NO. 4

NO. 5

I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE
ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS. VENDOR
MUST CLEARLY UNDERSTAND THAT ANY VERBAL
REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY
ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES
AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE
INFORMATION ISSUED IN WRITING AND ADDED TO THE
SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.


.....
SIGNATURE

Michael Baker Jr., Inc.
.....
COMPANY

March 3, 2011
.....
DATE

RFQ No. DEK11096

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

DEFINITIONS:

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

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

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

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

WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: Michael Baker Jr., Inc.

Authorized Signature: [Signature] Date: February 24, 2011

State of West Virginia

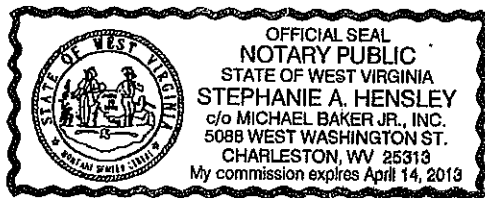
County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 24th day of February, 2011.

My Commission expires 4/14/13, 2013.

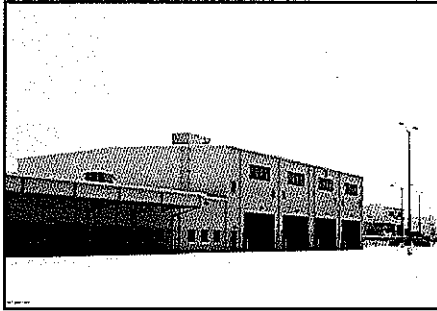
AFFIX SEAL HERE

NOTARY PUBLIC [Signature]



MATOC for Design/Build of Vehicle Maintenance Complexes

Locations within the South Atlantic Division



Baker and design/build partner, Walbridge Aldinger Company, were awarded a Multiple Award Task Order Contract (MATOC) by the U.S. Army Corps of Engineers, Savannah District, for the design and construction of

facilities to be used for the maintenance, repair, overhaul, and storage of military tactical vehicles and equipment. The facilities are typically part of an overall complex centered on a vehicle maintenance bay building and can include the addition of administrative spaces, storage rooms, parts storage, secure communications storage, and wash racks. A major portion of each project includes extensive hardstand and paving and fencing. Development of the complex may also include all associated site development required including site planning, clearing, grubbing, grading, installation of utility infrastructure, and installation of roads, service access, parking, and landscaping.

Task Order 1 – Tactical Equipment Maintenance Facilities at Fort Bragg, North Carolina

Services provided by Baker under Task Order #1 involved the complete architectural and engineering design of six Tactical Equipment Maintenance Facilities (TEMFs) at Fort Bragg, North Carolina. The TEMF facilities provide for the maintenance and repair of vehicles, complete with equipment and parts storage and administrative offices for six battalions housed at Fort Bragg. They are intended to be similar to heavy equipment or motor pool facilities in the private sector community. The maximum gross area for the primary Tactical Equipment Maintenance Facilities under this task order (excluding site storage buildings) was limited to 147,152 square feet spread over 38.5 acres on two sites.

Two of the TEMF complexes are medium-sized, accommodating from 124 to 192 tactical vehicles, providing Organizational Vehicle Parking, Organizational Storage, Distribution Company Storage, and Unmanned Aircraft Vehicle (UAV) maintenance and storage.

Client

Walbridge Aldinger Company
613 Abbott Street
Detroit, MI 48226
Scott Penrod
Vice President
313-442-1365
Scott Stowitts
Project Manager
313-442-1167

Additional References

U.S. Army Corps of Engineers,
Savannah District
100 W. Oglethorpe Avenue
Savannah, GA 31401
James Gehle, P.E.
Resident Engineer and Project
Manager
910-907-1822

Completion Date

2010

Project Costs

\$2,022,613 (Fee)

Baker's Role

- Site Survey
- Site Geotechnical Study
- Fire Suppression / Water Flow Testing
- Site Civil Engineering
- Demolition Design
- Utilities
- Permitting
- Communications Design
- Architecture
- Structural Engineering
- Mechanical Engineering
- Plumbing Engineering
- Fire Protection Engineering
- Electrical Engineering
- Interior SID/CID Furniture System Design

Four of the TEMF complexes are small-sized, accommodating from 124 to 241 tactical vehicles, providing Organizational Vehicle Parking and Organizational Storage.

Project Features

Task Order #1:

- Shop A is used by the 4th BCT, BTB. This medium-sized TEMF can accommodate up to 192 tactical vehicles and has 17,123 square yards of Organizational Vehicle Parking, 4,200 square feet of Organizational Storage, and Unmanned Aircraft Vehicle (UAV) maintenance and storage.
- Shop B is used by the 4th BCT, BSB. This medium-sized TEMF can accommodate up to 124 tactical vehicles and has 31,887 square yards of Organizational Vehicle Parking, 13,650 square feet of Organizational Storage, and Distribution Company Storage.
- Shop C is used by 5 Forward SPT CO, RSTA. This small TEMF can accommodate up to 126 tactical vehicles, and has 20,250 square yards of Organizational vehicle parking and 4,900 square feet of Organizational Storage.
- Shop D is used by 5 Forward SPT CO, ABN INF (1). This small TEMF can accommodate up to 241 tactical vehicles and has 22,139 square yards of Organizational Vehicle Parking, and 7,000 square feet of Organizational Storage.
- Shop E is used by 5 Forward SPT CO, ABN INF (2). This small TEMF can accommodate up to 241 tactical vehicles and has 22,139 square yards of Organizational Vehicle Parking, and 7,000 square feet of Organizational Storage.
- Shop F is used by 5 Forward SPT CO, TOWED STRIKE. This small TEMF can accommodate up to 124 tactical vehicles and has 15,345 square yards of Organizational Vehicle Parking and 2,450 square feet of Organizational Storage.



Combined Regional Maintenance Facility

Fort Dix, New Jersey



Baker provided preliminary (Phase I) and final (Phase II) design services for an estimated \$15 million Combined Regional Maintenance Facility at Fort Dix, New Jersey. The 50,400-square-foot facility is an integrated, consolidated, regional, combined vehicle maintenance shop and mobilization and training equipment site that will provide for the storage, inspection, maintenance, and repair of combat and tactical vehicles and equipment associated with the regional deployment of Army National Guard, Army, Marine and Navy Reserve units.

The facility provides space and equipment to maintain vehicles and associated equipment for all levels of maintenance including storage, inspection, lubrication, preventive maintenance, diagnostic analysis, welding, body work, replacement of direct exchange systems, mobile maintenance team support, replacement of major components, repair of emission control systems, performance of body and frame repairs, sanding, painting, and administration and scheduling of vehicle use and maintenance.

The vehicle maintenance facility meets LEED® certified standards and is ADA-compliant. Supporting facilities included utilities, site improvements with area lighting, pavement, walks, curbs, gutters, non-organizational and handicapped accessible parking, and landscaping. Supporting military equipment parking was also included in the project. Anti-terrorism and force protection (physical security) requirements were incorporated into the design including installation of blast-proof windows and building setbacks using maximum feasible standoff distances from roads, parking areas, and vehicle unloading areas. Berms, heavy landscaping, and bollards were used to prevent access when standoff distances could not be maintained.

The Phase I design consisted of conducting a design charrette, developing conceptual site plans, floor plans, and building elevations, and preparing M-CACES construction cost estimates. The Phase I work was the basis for the project authorization request to Congress and for subsequent programming, planning, design, and construction of the Combined Regional Maintenance Facility. Phase II consisted of the final design utilizing Building Information Modeling (BIM) software by Bentley, and completed the project through the construction phase.

Client

U.S. Army Corps of Engineers,
Louisville District
Room 821
600 Dr. Martin Luther King, Jr. Place
P.O. Box 59
Louisville, KY 40202
Harrison Fox
Project Engineer
502-315-6359

Additional References

U.S. Army, Fort Dix
Department of Public Works
Fort Dix, NJ 08640

Completion Date

Estimated: 2010

Project Costs

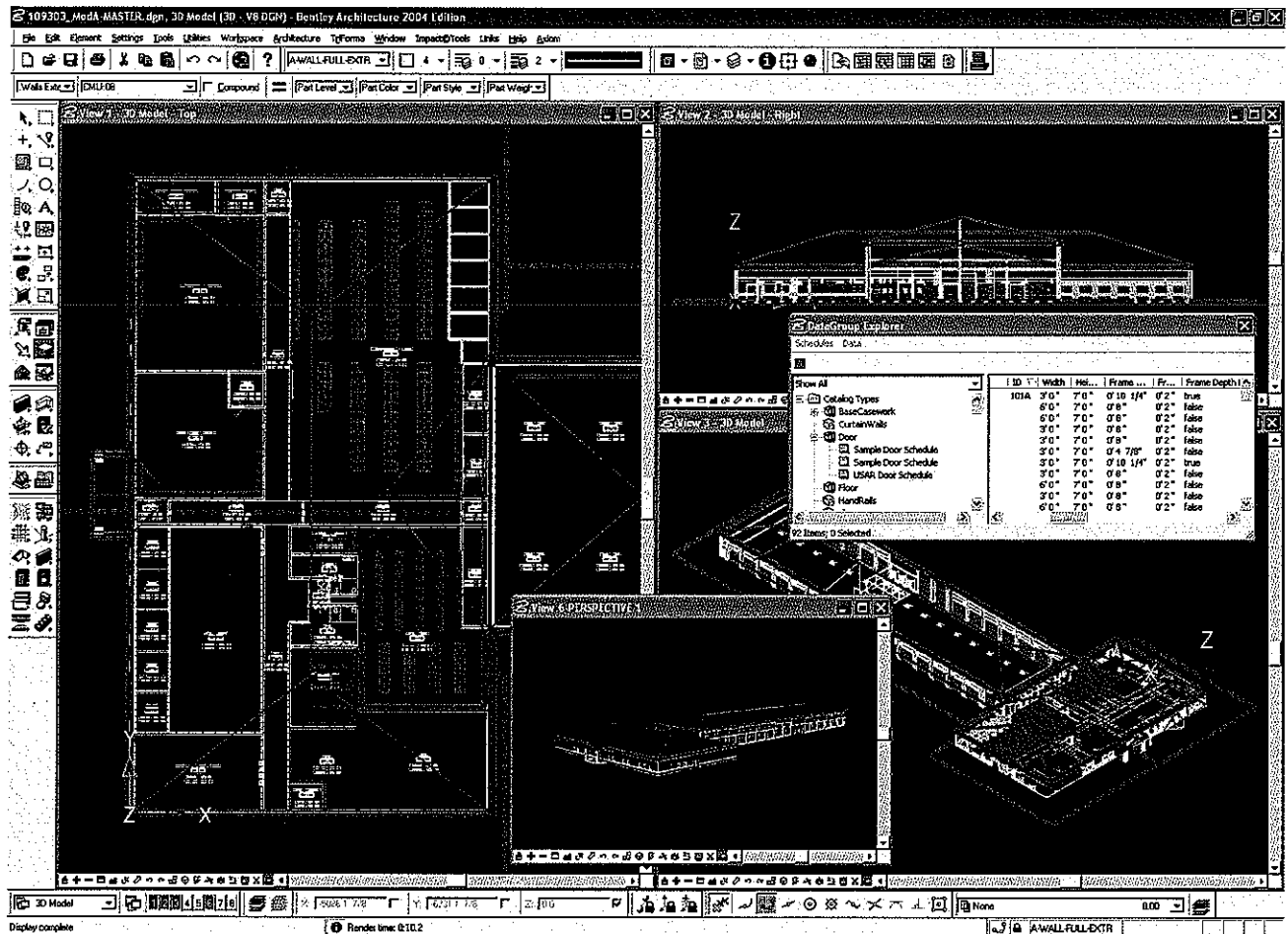
\$11,923,000 (Est. Construction)

Baker's Role

- Design Charrette
- LEED®-certified Level of Sustainable Design
- Building Information Modeling
- Site/Civil Engineering
- Survey
- Geotechnical Engineering
- Landscape Architecture
- Anti-Terrorism/Force Protection
- Environmental Engineering
- Architecture
- Interior Space Planning
- Structural Engineering
- Mechanical Engineering
- Plumbing Engineering
- Fire Protection Engineering
- Electrical Engineering
- M-CACES Cost Estimating

Project Features

- Combined Maintenance Facility for Army National Guard, Army, Marines, and Navy Reserve Units
- LEED® certified Sustainable Design
- M-CACES Construction Cost Estimating
- Anti-Terrorism and Force Protection, and Blast-Resistant Design Measures
- ADA-Compliant Design
- Building Information Modeling
- Project site design was required to be completed in accordance with the New Jersey Pinelands Commission permitting criteria.



Tactical Equipment Maintenance Facility

White Sands Missile Range, New Mexico

The team of Baker and Walbridge Aldinger Company was awarded an Indefinite Delivery/Indefinite Quantity (ID/IQ) Single Award Task Order Contract (SATOC) by the U.S. Army Corps of Engineers' Tulsa District for design/build projects in the Southwest Region of the United States. Projects constructed under this contract include Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF), Unit Operations Facilities, Fire Brigade Facilities, and Combat Aviation Brigade Facilities. TEMFs provide facilities for the purpose of maintaining and repairing vehicles, complete with equipment and parts storage, and administrative offices.

Under the ID/IQ, Task Order No. 0006 is for a TEMF at White Sands Missile Range, NM. The project includes one medium-sized 35,290-square-foot TEMF with a 10-ton bridge crane, to accommodate approximately 437 organizational vehicles. Additional structures that are a part of this facility include a 1,560-square-foot POL storage facility, a 1,560-square-foot building for hazardous materials storage, and an 11,550-square-foot organizational storage building.

The design is required to meet or exceed a Silver LEED® certification and be registered with the U.S. Green Building Council. The building envelope, HVAC systems, service water heating, power and lighting systems are to meet the minimum requirements of ANSI / ASHRAE / IESNA Standard 90.1-2004, so that they may achieve a minimum energy consumption of 30%. Sustainable features include natural lighting and ventilation through the use of operable clerestory windows, energy-efficient HVAC systems using climate zone technology that also meets minimum indoor air quality performance, cool roofing systems, and storage and collection of recyclables. Additionally, a construction waste management plan as well as waste diversion reporting are required to support Army quarterly waste reduction reporting (SWAR) requirements.

TEMFs are composed of two main functional areas: Repair Bays, consisting of repair areas and maintenance areas; and the Core Area.

Repair Bays are single-story, ground-floor, and column-free garage areas used for service and repair of the full range of Army tactical equipment. They contain repair work areas with a central drive lane, a wash bay, data connection points for NIPRNet and SIPRNet, and 10-ton and/or 35-ton traveling-bridge cranes. A wide central drive lane divides repair work areas, providing maintenance and welding areas. A vehicle exhaust evacuation system is housed within the core area that also services each repair work area. Maintenance areas are equipped for inspection, oil changing, and lubrication with POL hose reels for grease, oil, and other

Client

U.S. Army Corps of Engineers, Tulsa District
224 S. Boulder Street
P.O. Box 61
Tulsa, OK 74121

Completion Date

Estimated: 2011

Project Costs

\$15,000,000 (Est. Construction)

\$520,154 (Fee)

Baker's Role

- Planning and Programming
- Sustainable Design
- Site/Civil Engineering
- Anti-terrorism and Force Protection
- Architecture
- Interior Design
- Structural Engineering
- Mechanical Engineering
- Plumbing Engineering
- Fire Protection Engineering
- Electrical Engineering
- Communications Design
- Vehicle Fluid Systems Design
- Design/Build Delivery
- Building Information Modeling (BIM)

lubricants and fluids. A maintenance pit is provided with a removable cover that is capable of supporting pedestrian traffic when the pit is not in use. Emergency stations for eyewash, hand wash, and showers are provided to meet OSHA standards.

The Core Area contains the following functional spaces: administration and shop control office space; training classroom; consolidated bench shop space for electronics, optics, and other gear; tool room and tool box storage area; combat spare parts for storage and issue of Prescribed Load List (PLL) and shop stock items; separate male/female latrine, showers, and locker rooms; break, training and conference room with kitchen and equipment; armory vault for storage of weapons being repaired with intrusion detection system; COMSEC vault for storage of communications / cryptology equipment; non-sensitive secure storage; telecommunications equipment room for voice and data; and common circulation and waiting areas such as janitorial spaces, mechanical and electrical rooms, and fluid distribution room. Extra-large-sized TEMFs are expanded to include administrative office space to accommodate Brigade Logistics Support Team (BLST) personnel.

Site functional areas include: a docking location for specialized permanently-vehicle-mounted communications equipment; concrete-paved vehicle parking areas for military, POL, dead line, and POVs; site storage facilities including hazardous waste storage building, POL storage building, organizational storage building, distribution company storage facility, secure open storage, and storage tanks for waste oil and engine coolant.

Anti-terrorism and force protection measures were required to meet Department of Defense Minimum Antiterrorism Standards for Buildings, UFC 4-010-01, and included the following: providing protection against explosives' effects through blast-resistant windows, frames, anchors, and supports; progressive collapse resistance for any structure three stories or higher; mass notification system; separate HVAC systems for mailrooms that are also sealed off from the rest of the buildings; building set-backs, establishing large standoff distances to parking, roadways, and installation perimeters, or through building hardening; a perimeter fence with clear zones free of vegetation, gates, and perimeter security lighting.

Services include the following: planning, design, estimating, and construction; site planning and site verification; site engineering to include subsurface investigations, laboratory analysis, and final geotechnical report; pavement design; coordination with utility providers, Land Development Engineer, and other product-line contractors; acquisition of all local, state and federal permits; architectural and interior design (CID, SID, and FF&E) to include building exterior and interior, signage, and comprehensive furniture package; design of telecommunications systems and service; lightning protection systems; heating, ventilation, and air conditioning to include building automation systems, testing, adjusting and balancing, and commissioning; energy conservation; fire protection; sustainable design solutions to meet a minimum Silver LEED® criteria in support of the MILCON program; site electrical systems; meetings and design review conferences; design configuration management; quality control systems; safety plans; environmental protection through plans, incorporating protection features, environmental assessment of contract deviations, land resources plans, monitoring water resources, air resource monitoring and control, chemical materials management and waste disposal, recycling and waste minimization, preservation of historical, archaeological, and cultural resources, protection of biological resources, integrated pest management, and post construction clean-up; traffic control plans; scheduling and phasing; preparation of design drawings using AutoCAD and MicroStation; and development of as-built drawings and operation and maintenance manuals.

Design-Build Delivery of Fire Brigade Tactical Equipment Maintenance Facility

Fort Bliss, Texas



Baker was the designer of record for the fast-tracked design-build delivery of an \$11.4 million, 35,158-square-foot tactical equipment maintenance facility (TEMF) complex, consisting of a 7,869-square-foot administrative-training facility and a 27,289-square-foot organizational maintenance shop. Baker's services were provided under an indefinite delivery-indefinite quantity, single-award, task-order contract (SATOC) for design-build projects in the southwestern United States.

Used for military vehicle maintenance and repair, TEMFS include maintenance and repair bays, an overhead bridge crane, equipment and parts storage rooms, a bench repair area, secure arms and Comsec vaults, and administrative support and training areas. This project, which constitutes SATOC Task Order 0003, involves the design-build delivery of a medium-sized TEMF to support the base fire brigade unit at Fort Bliss.

The TEMF consists of two main types of functional areas: repair bays, which include repair and maintenance areas, and a core area. The repair bays are single-story, ground-floor, column-free garage areas used to service and repair the full range of army tactical equipment. They contain maintenance and repair work spaces, separate wash and welding bays, and data connection points for NIPRNet and SIPRNet and for a 10-ton traveling-bridge crane. A vehicle exhaust evacuation system serves each repair work area. Repair and maintenance areas are equipped with hose reels for the dispensing of oil and other lubricants and fluids required during inspection and maintenance procedures. The maintenance pit is designed with a removable cover/grated sections that are in place during periods of nonmaintenance to protect personnel from potential fall hazards, as well as to provide shorter access across the pit for personnel when the pit is not in use. Emergency stations for eye washing, hand washing, and showering that meet OSHA standards are provided.

Core areas contain the following functional spaces: administrative and shop-control office space; a library; a learning center; consolidated bench shop space for electronics, optics, and other gear; a tool room and tool box storage area; a combat spare parts area for the storage and issue of prescribed load list and shop stock

Client

U.S. Army Corps of Engineers, Tulsa District
224 S. Boulder Street
P.O. Box 61
Tulsa, OK 74121

Kevin Weber
CESWT-PP-M
918-669-7060

Completion Date

2009

Project Costs

\$11,415,000 (Est. Construction)

Baker's Role

- Design-build project delivery
- Planning
- Sustainable design
- Site and civil engineering
- Architectural design
- Interior design
- Structural engineering
- Mechanical engineering
- Plumbing engineering
- Fire protection engineering
- Electrical engineering
- Communications design

items; separate latrines, showers, and locker rooms for men and women; a break room, a training room, and a conference room with kitchen and equipment; an armory vault for the storage of weapons being repaired that includes an intrusion detection system; weapons simulator training spaces; a communications security vault for the storage of communications and cryptology equipment; a nonsensitive secure storage room; a telecommunications equipment room for voice and data systems, common circulation and waiting areas; mechanical and electrical rooms; and a fluid distribution room.

Additional structures that are part of the TEMF include a 469-square-foot facility for oil storage and a 469-square-foot storage facility for hazardous materials. All building spaces conform to unseparated-storage occupancy. This project also provides adequate parking for all military and privately owned vehicles.

Baker designed the TEMF to meet LEED® Silver certification. Baker's comprehensive services ranged from site and civil engineering to building architecture and facility engineering, including structural, mechanical, plumbing, fire protection, and electrical and telecommunications systems design, and LEED® certification administration.

Overall Building Construction

The buildings are of permanent construction and include reinforced concrete foundations and concrete floor slabs; structural steel and reinforced concrete masonry units (CMU); mechanical, electrical, and information systems; interior finishes; window systems; standing-seam metal roofing; and exterior finishes consisting of split-faced CMU, insulated metal panels, and aluminum trim. The project included utility connections, storm drainage, communications, electrical connections, HVAC, fire protection, fire alarm and mass notification systems, an intrusion detection system, force protection measures, grading, concrete paving, exterior lighting, and other site improvements.

Exterior Systems

The exterior walls and roof heights for the maintenance building correspond to the high-bay/low-bay configuration required for the building functions. The TEMF exterior building envelope constitutes a pre-engineered building system supported by turn-down perimeter slabs and piers and spread footings that support building columns. The TEMF incorporates a 3' 4"-high band of reinforcing split-faced CMU at the base, with insulated metal building system panels above.

Insulation was designed to comply with Energy Policy Act of 2005 requirements. Roof insulation consists of 6" of fiberglass batt insulation with an effective R-value of 19, placed between the roof purlins and below the roof deck over the maintenance bays. This satisfies the ASHRAE 90.1 R-19 requirement for metal, nonresidential buildings and exceeds the ASHRAE 90.1 R-10 requirement for metal, semiheated buildings. Eight-inch-thick fiberglass batt insulation with an effective R-value of 30 is provided between and over the roof purlins of the second-floor mezzanine.

The exterior wall construction that consists of 8-inch CMUs is considered a "mass" wall and is not required to be insulated in semiheated spaces in the project's climate, per ASHRAE 90.1. In nonresidential spaces, an assembly U-factor of 0.151 is required. For this reason, these spaces are furred out on the inside with 3-5/8" metal studs and gypsum wall board, to provide 3-1/2" R-13 fiberglass insulation. This assembly provides an increase of 4.7 percent, or a U-value of 0.144. The metal building portion of the exterior wall has insulated sandwich panels rated at R-19.6, in comparison to the R-13 required for nonresidential spaces, and R-6 for semiheated spaces.

An air barrier was constructed that encompasses the mezzanine, but excludes the stairwells, which are separated by sealed doors. The air barrier consists of a drywall shell constructed at the exterior walls and the wall at the high-bay area and the roof, and masonry at the stair towers. Windows and other penetrations were

also sealed. The team tested the air barrier when building construction was completed, using the depressurization method. The building performed 25 percent above the minimum client's air barrier requirements.

Heating, Ventilating, and Air Conditioning (HVAC)

The HVAC system includes an array of design solutions to serve a variety of spaces and building functions. Office space for typical administrative functions is served with a variable air volume distribution system. Carbon dioxide (CO₂) sensors are used to vary the outside air quantities based on real-time occupancies for energy savings. The conditioned spaces on the first floor are maintained by constant volume, split-system, indoor air handlers with outdoor heat pump units. Heating, cooling, and ventilation for second-floor offices is regulated by rooftop-mounted heat pump air-handling units.

Classroom and the training-break-conference rooms have been designed with dedicated heat pump blower coil units that can operate independently of the central air-handling units to meet the unique ventilation and conditioning requirements of these spaces, based on actual occupancy, via integral CO₂ control of the unit ventilators.

The repair-maintenance areas include small HVAC systems. Vehicle exhaust hose-reel assemblies are located within all the repair-maintenance bays. Gas-fired heating and ventilating units with associated exhaust fans ventilate the maintenance bays and are controlled with CO/NO_x sensors. General heating of the maintenance bays is achieved using low-intensity, overhead gas-fired heating systems.

Mechanical-Electrical and Fluids Dispensing Rooms.

Wall-mounted outdoor air intake louvers with motorized dampers and associated exhaust fans provide thermostatically controlled ventilation and wall-mounted or ceiling-hung electric unit heaters provide heat for these spaces.

Anti-Terrorism/Force Protection.

An emergency shutdown pull-switch was provided to disable all of the HVAC air distribution systems, in accordance with UFC-4-010, Appendix B-4.3.

The TEMF includes a direct digital-control automatic temperature control system to regulate and monitor all building HVAC systems.

Electrical Distribution System

Electrical distribution includes power, lighting, fire alarm and mass notification, structured cabling raceway, public address, cable television distribution, telecommunications, and security systems. The main switchboard, distribution panelboards, and lighting and appliance panelboards were selected for high reliability, low maintenance, efficiency, and maximum flexibility. Step-down transformers were selected for low-energy loss and short-term overload capability.

Energy conservation was Baker's design priority for interior and exterior building lighting. Systems include occupancy sensors to turn off lights and conserve energy in office areas, corridors, and restrooms. Lighting design incorporates fluorescent fixtures with energy-efficient electronic ballasts and T8 lamps.

Plumbing and Fire Protection

Special features of the building plumbing system include waterless urinals for sustainability.

Domestic hot water is produced by a single gas-fired water heater to reduce maintenance. Hot water is stored at 140 degrees F and reduced to a maximum of 120 degrees F through a mixing valve before being distributed throughout the building.

An industrial water system is provided for the vehicle repair and maintenance bays and is supplied from the domestic water system through a reduced pressure-type backflow preventer feed from the domestic water system

Compressed air and POL distribution systems are provided throughout the maintenance and repair areas.

To fully protect the TEMF in the event of fire, Baker's design integrated an automatic wet pipe sprinkler system, designed in accordance with UFC 3-600-01, NFPA 13 and International Building Code 2006.

Anti-Terrorism/Force Protection Measures

Baker integrated protective measures into the project design that meet anti-terrorism/force protection requirements. These include siting of the TEMF to meet setback requirements, the use of blast-resistant doors and windows, and the incorporation of an emergency shutdown switch to disable all HVAC air distribution systems, as previously described.

Elm Road Maintenance Complex Rehabilitation Study and Design

Baltimore/Washington International, Thurgood Marshall Airport (BWI)

Baltimore, Maryland



This project involved a study to assess improvements to various buildings located in the existing maintenance complex, including a report, recommendations and costs. The improvements included building additions, equipment additions, HVAC



improvements, new buildings, electrical improvements, and site/pavement improvements. This project also involved the preparation of final design contract documents of the facility improvements.

The maintenance complex is comprised of a series of one-story buildings, with access off of the Elm Road service road spur, and has controlled access from the airside. Eight building were identified and included in the programmed Scope-of-Work to receive updates, additions and/or repairs.

Building 115: Baker provided design for partial renovation of an existing warehouse/storage building to be converted into dormitory sleeping space during winter operations.

Building 116: Replacement of existing underground fuel tanks, replacement of the fuel service island control booth, and relocation of the island canopy. In addition, the roof was fully replaced, which included asbestos containing roof material removal.

Building 117 and 118: The installation of exterior perimeter wall insulation systems, as well as heating ventilation and lighting upgrades and new code-required egress doors.

Building 119: This building was slated for demolition and replaced with a new 3-bay pre-engineered equipment building.

Building 121: This building received internal updates for repairs to CNG facilities. Two overhead doors

Client

Maryland Aviation Administration
P.O. Box 8766
Third Floor, Terminal Building
BWI Airport, MD 21240-0766

Benjamin Chin, P.E.
Director, Office of Design
410-859-7093

Completion Date

2006

Project Costs

\$528,957 (Fee)

Baker's Role:

- Architectural and Engineering Planning Design and Construction Administration
- Improvement Recommendations
- Improvement Costs
- Final Design Contract Documents



were combined into one larger 36' repair bay door, construction of a new office/toilet room/breakroom addition to the rear, and vehicle lift removal and relocations.

Building 135: This building was an existing salt dome that received a new asphalt shingle roof system.

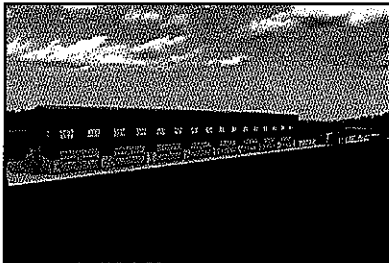
Building 137: The installation of exterior perimeter wall insulation systems, heating, ventilation and lighting upgrades and new exterior egress doors. The building was updated for electrical and heating system for use as a vehicle repair facility and includes a new toilet room and vehicle lift.

Site Work - Vehicle and Field Maintenance: In addition to building upgrades, Baker completed site work within the Vehicle and Field Maintenance Complex area. Task included pavement inspections and recommendations within the complex, landscaping recommendations along Elm Road Service Drive, security fence relocation on the east side of Building #115, and the widening of Security Gate Z.



Design-Build Single-Award Task Order Contract for Military Facilities in the Southwest Region

Various Locations in Southwestern United States



As the designer-of-record, Baker is providing architectural and engineering services for design-build military facilities in the southwestern United States. Baker's services include planning and programming; site-civil engineering; structural, mechanical, plumbing, electrical, and fire protection engineering; architectural and interior design; communications design; building information modeling; antiterrorism and force protection; and sustainable design.

Guided by the U.S. Green Building Council, Baker provides third-party verification that a building or community is designed and

built using strategies aimed at minimizing its environmental impact. Designed to meet or exceed Silver LEED® certification, the project reduces environmental impacts while saving taxpayer money through improved efficiencies. The facilities include green spaces and high recycled content. In addition, the majority of construction waste is collected, organized, and diverted from disposal and recycled or repurposed.

The facilities constructed under this indefinite quantity, indefinite delivery contract include brigade combat team facilities, tactical equipment maintenance facilities, unit operations facilities, fire brigade facilities, and combat aviation brigade facilities. Tactical equipment maintenance facilities are used to maintain and repair vehicles and include equipment and parts storage and administrative offices.

Repair bays are single-story, ground-floor, column-free garage areas used for service and repair of the full range of Army tactical equipment. Each contains repair work areas with a central drive lane, wash bay, data connection points for NIPRNet and SIPRNet, and 10-ton and 35-ton traveling-bridge cranes. A wide central drive lane divides repair work areas, providing maintenance and welding areas. A vehicle exhaust evacuation system is housed within the core area that services each

Client

U.S. Army Corps of Engineers, Tulsa District
224 S. Boulder Street
P.O. Box 61
Tulsa, OK 74121

Kevin Weber
CESWT-PP-M
918-669-7060

Completion Date

Estimated: 2011

Project Costs

\$115,930,000 (Est. Construction)
\$4,271,916 (Fee)

Baker's Role

- Planning and programming
- Sustainable design
- Site/civil engineering
- Anti-terrorism and force protection
- Architecture
- Interior design
- Structural engineering
- Mechanical engineering
- Plumbing engineering
- Fire protection engineering
- Electrical engineering
- Communications design
- Vehicle fluid systems design
- Design/build delivery
- Building Information Modeling (BIM)

repair work area. Maintenance areas are equipped for inspection, oil changing, and lubrication with petroleum, oil, and lubricant hose reels, and include maintenance pits with removable covers that can support pedestrian traffic when the pits are not in use. Emergency stations for eyewash, hand wash, and showers are provided to meet Occupational Safety and Health Administration (OSHA) standards.

Core areas contain administration and shop-control office space; training classrooms; consolidated bench shop space for electronics, optics, and other gear; tool-room and tool- box storage areas; combat spare parts for storage and issue of prescribed load list and shop stock items; separate latrines, showers, and locker rooms for male and female staff; break rooms, training, and conference rooms with kitchens and equipment; armory vaults with intrusion detection systems for storage of weapons that are being repaired; communications security vaults for storage of communications and cryptology equipment; nonsensitive secure storage; telecommunications equipment rooms for voice and data; and common circulation and waiting areas, such as janitorial spaces, mechanical and electrical rooms, and fluid distribution rooms. Extra-large-sized tactical equipment maintenance facilities include administrative office space to accommodate brigade logistics support team personnel.

Site functional areas include docking locations for specialized, permanently vehicle-mounted communications equipment; concrete-paved vehicle parking areas for military, petroleum and oil, dead line, and privately owned vehicles; site storage facilities, including hazardous waste storage buildings, petroleum, oil, and lubricant storage buildings, organizational storage buildings, distribution company storage facilities, secure open storage, and storage tanks for waste oil and engine coolant.

Other typical services include estimating, site planning and site verification; site engineering, including subsurface investigations, laboratory analysis, and final geotechnical reports; pavement design; coordination with utility providers, land development engineers, and other product-line contractors; acquisition of all local, state, and federal permits; architectural and interior design, including structural interior design and furniture, fixtures, and equipment; interior and exterior signage; design of telecommunications systems and service; lightning protection systems; heating, ventilation, and air conditioning, including building automation systems, testing, adjusting and balancing, and commissioning; energy conservation; fire protection; and site electrical systems.

In addition, Baker is responsible for participation in meetings and design review conferences; design configuration management; development of quality control systems and safety plans; preparation of environmental protection plans, incorporation of protection features; environmental assessment of contract deviations; preparation of land resources plans; water resources monitoring; air resource monitoring and control; chemical materials management and waste disposal; recycling and waste minimization; preservation of historical, archaeological, and cultural resources; protection of biological resources; integrated pest management; postconstruction clean-up; traffic control plans; scheduling and phasing; preparation of design drawings using AutoCAD and MicroStation; and development of as-built drawings and operation and maintenance manuals.

Antiterrorism and force protection measures are required to meet Department of Defense minimum antiterrorism standards for buildings, UFC 4-010-01, and include protection against explosives' effects through blast-resistant windows or building hardening, frames, anchors, and supports; progressive collapse resistance for any structure three stories or higher; mass notification systems; separate heating, ventilation, and air conditioning systems for mailrooms that are sealed off from the rest of the buildings; building set-backs, large standoff distances to parking, roadways, and installation perimeters; perimeter fences with clear zones free of vegetation; gates; and perimeter security lighting. Brief descriptions of representative task orders to date follow:

Tactical Equipment Maintenance Facilities at Fort Bliss, El Paso, Texas

Baker provided architectural and engineering design services for a 35,290-square-foot tactical equipment maintenance facility to be shared by five battalions and one company, and a 74,688-square-foot tactical equipment maintenance facility to be shared by the general support battalion, assault battalion, aviation support battalion, and an air traffic service company.

Additional structures that are a part of the 35,290-square-foot facility include a 720-square-foot facility for oil storage and a 720-square-foot storage building for hazardous materials. Additional structures that are a part of the 74,688-square-foot facility include an 8,000-square-foot distribution company storage facility, a 1,620-square-foot facility for oil storage, and a 1,620-square-foot building for hazardous materials storage.

Tactical Equipment Maintenance Facilities for the 31st Air Defense Artillery Brigade at Fort Sill, Oklahoma

This project included 18,000-square-foot, 35,200-square-foot, and 57,031-square-foot tactical equipment maintenance facilities, each with independent hazardous waste storage; petroleum, oil, and lubricant storage, and organizational storage facilities. Baker also designed a 20,000-square-foot supply support activity. Baker designed the facilities to meet or exceed a Silver LEED® certification and to be registered with the U.S. Green Building Council, and to include the building systems that are required to meet the minimum requirements of ANSI; ASHRAE; and IESNA Standard 90.1-2004. Antiterrorism and force protection measures meet Department of Defense minimum anti-terrorism standards for buildings, UFC 4-010-01.

Fire Brigade Tactical Equipment Maintenance Facility at Fort Bliss, El Paso, Texas

This 32,290-square-foot fire brigade tactical equipment maintenance facility includes a 6,300-square-foot organizational storage facility, a 540-square-foot oil storage facility, and a 540-square-foot building for hazardous materials storage. The second floor houses office space and training facilities with a small kitchen for the unit. There are server and telecommunication areas in the building and an elevator and mechanical and electrical equipment rooms. The building is designed to comply with the unified facilities criteria antiterrorism and force protection requirements and is Silver LEED® certified.

Unit Operations Facilities Complex at Fort Bliss, El Paso, Texas

This project includes medium-sized, 32,290-square-foot tactical equipment maintenance facility and a 6,300-square-foot organizational (deployment) storage facility for use by the combined explosive ordnance disposal detachment, military police company operations, and engineer clearance company operations. Additional structures include a 540-square-foot oil storage facility and a 540-square-foot building for hazardous materials storage.

Tactical Equipment Maintenance Facility at White Sands Missile Range, New Mexico

Baker designed a medium-sized, 35,290-square-foot tactical equipment maintenance facility with a 10-ton bridge crane to accommodate approximately 437 organizational vehicles. Additional structures include a 1,560-square-foot petroleum, oil, and lubricant storage facility, a 1,560-square-foot hazardous materials storage building, and an 11,550-square-foot organizational storage building.

A/E IDIQ Contract for Design of Army Reserve & Military Projects

Nationwide

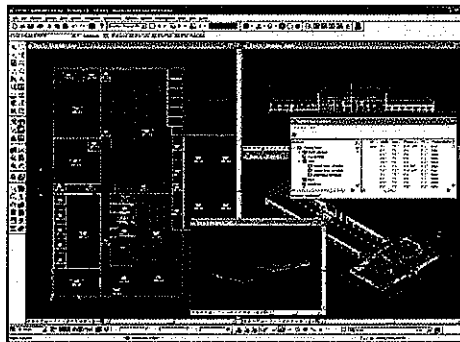
Baker is providing a variety of planning and design services to the USACE, Louisville District under a \$20 million IDIQ contract for the design of Army Reserve and various Military projects. Task orders involve: master plan updates; installation design guides; capital investment strategy; A/E design of Reserve Centers, warehouses, administrative, training, special operations, and vehicle maintenance facilities; site engineering and stormwater management, erosion and sedimentation control; and preparation of design/build RFP documents, as well as traditional design/bid/build delivery. **Design documents have been delivered or are currently in process for 18 Reserve Training Centers, estimated at over \$325M in construction,** including design/build RFP documents and full design and construction documents.

Both U.S. Army Reserve (USARC) and Armed Forces Reserve Centers (AFRC) are being designed under this second consecutive IDIQ contract. Tenants of AFRC projects include National Guard and Army Reserve units, as well as other military branches.

Task orders under our current contract include the following:

- **Combined Regional Maintenance Facility, Phases I and II, Fort Dix, NJ.** Baker provided design services for a Combined Regional Maintenance Facility at Fort Dix. The 50,400-square-foot facility is an integrated, consolidated, regional, combined vehicle maintenance shop and mobilization and training equipment site that provides for the storage, inspection, maintenance, and repair of combat and tactical vehicles and equipment associated with the regional deployment of Army National Guard, Army, Marine, and Navy Reserve units.

In addition to providing black and white and colored elevation renditions, Phase II consisted of final design utilizing Building Information Modeling (BIM) software, and completes the project through the construction phase.



Client

U.S. Army Corps of Engineers,
Louisville District
Room 821
600 Dr. Martin Luther King, Jr. Place
P.O. Box 59
Louisville, KY 40202

Fred Grant

Chief, Reserve Support Branch
502-315-6842

Completion Date

Estimated: 2012

Project Costs

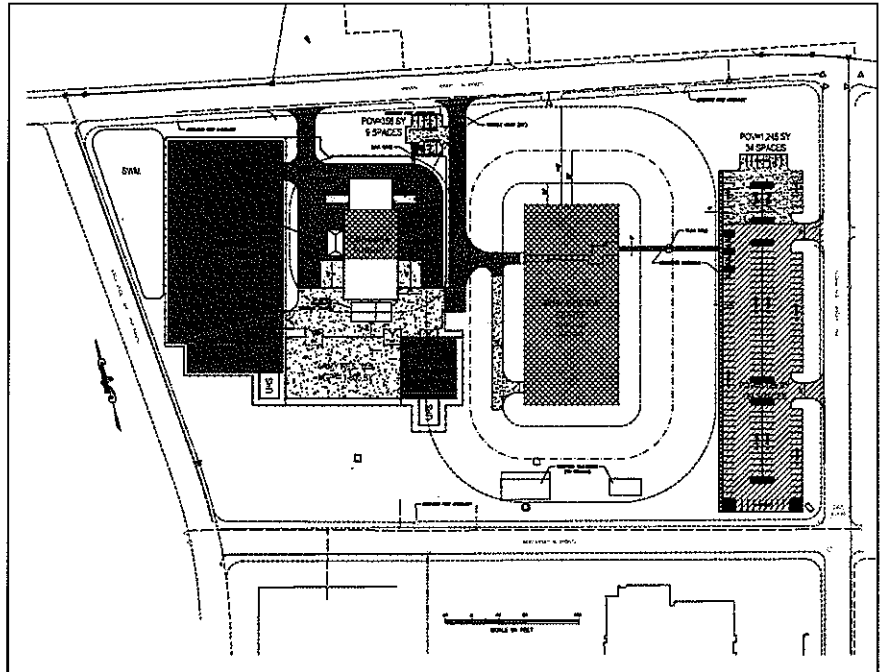
\$16,967,331 (Fee)

Baker's Role

- Design Charrettes
- Design/Build RFP Documents
- Demolition Design
- Asbestos and Lead Paint Investigations
- Environmental Engineering
- Site/Civil Engineering
- Geotechnical Engineering
- Landscape Architecture
- Anti-Terrorism and Force Protection
- Planning
- Architecture
- Interior Space Planning
- Structural Engineering
- Mechanical Engineering
- Plumbing Engineering
- Fire Protection Engineering
- Electrical Engineering
- Sustainable Design
- MCACES Cost Estimating

- **Design/Build RFP Documents were developed for the following projects.** The RFP development consisted of conducting a design charrette, providing a topographical survey and geotechnical investigation, performing a utility survey, developing conceptual site plans, floor plans, and building elevations, developing RFP specifications, preparing DD Form 1354 – Transfer of Real Property, providing a PACES construction cost estimate and engineering feasibility studies and value engineering.

- **Warehouse and Special Purpose Brigade Operations Buildings;** Fort Jackson, Columbia, SC; \$3.5M; 13,090-SF
- **Revitalization of Diamond U.S. Army Reserve Center;** New Orleans, LA; Gold SPiRiT; \$14M; 78,500-SF
- **Armed Forces Reserve Center;** Stewart Newburgh, NY; Silver LEED®; \$20.1M; 102,550-SF
- **Armed Forces Reserve Center;** Lewisburg, PA; Silver LEED®; \$24M; 80,272-SF
- **Armed Forces Reserve Center;** White River Junction, VT; Silver LEED®; \$28M; 109,346-SF
- **Armed Forces Reserve Center;** Willow Grove, PA; Silver LEED®; \$32M; 95,200-SF
- **Armed Forces Reserve Center;** Pease, NH; Silver LEED®; \$6.9M; 21,443-SF
- **Armed Forces Reserve Center;** Williamsport, PA; Silver LEED®; \$18.5M; 79,106-SF
- **Armed Forces Reserve Center;** Rutland, VT; Silver LEED®; \$23M; 122,649-SF
- **Armed Forces Reserve Center;** Bristol, PA; Silver LEED®; \$25M, 106,300-SF
- **Armed Forces Reserve Center;** Scranton, PA; Silver LEED®; \$32M; 161,601-SF
- **Equipment Concentration Site and Warehouse;** Lakehurst, NJ; Silver LEED®; \$27M; 85,663-SF
- **Armed Forces Reserve Center;** Fort A.P. Hill, VA; ; Silver LEED®; \$11M; 41,760-SF



- **Full Design/Bid/Build Documents were prepared for the following projects.** Each project included an OMS/AMSA and Storage/Support.
 - **Armed Forces Reserve Center,** Newport, RI; Silver LEED®; \$18.5M; 64,828-SF
 - **Armed Forces Reserve Center,** Brownsville, TX; Silver LEED®; \$13M; 53,018-SF
 - **Armed Forces Reserve Center,** Chester, PA; Silver LEED®; \$20M; 62,076-SF
 - **Armed Forces Reserve Center,** Roanoke, VA; Silver LEED®; \$14.3M; 53,954-SF
 - **U.S. Army Reserve Center,** Fort Totten, NY; Rehab \$10M, 39,433-SF
 - **U.S. Army Reserve Center,** Harrisburg, PA; Silver LEED®; \$7.6M; 28,567-SF
 - **U.S. Army Reserve Center,** Bethlehem, PA; Silver LEED®; \$15.5M; 45,852-SF

WVARNG Charleston Armory HVAC & Architectural Renovations

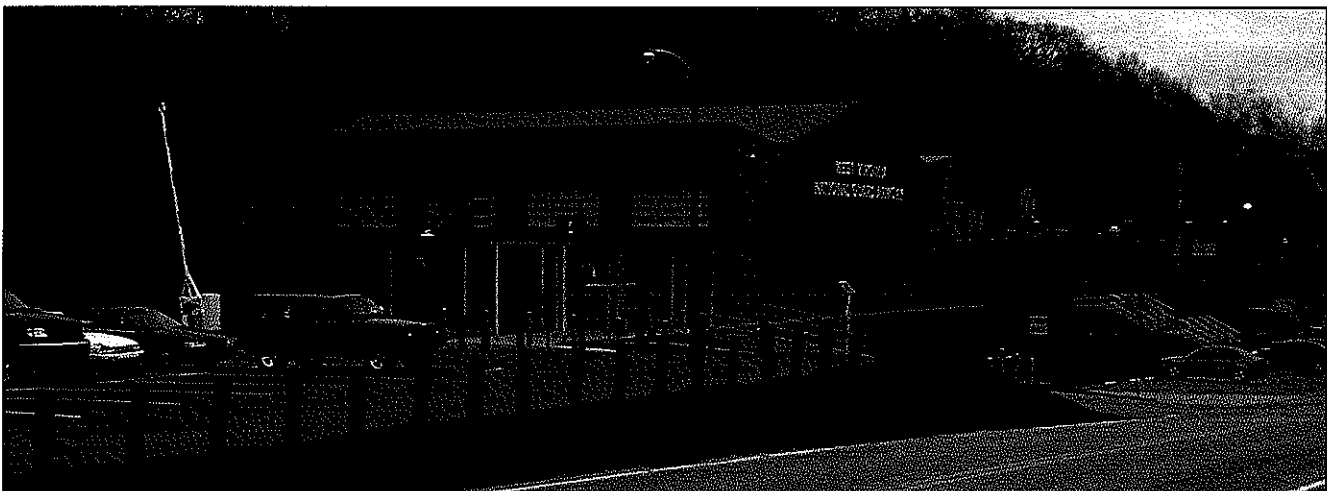
Charleston, West Virginia



Constructed in 1961, the existing facility started as the Coonskin Armory. The Headquarters Building was constructed simultaneously with the Coonskin Armory and occupied the second floor. As a separate structure, also in 1961, the Adjutant General's Wing (TAG

Wing) was constructed nearby. In 1984, the Coonskin Armory/Headquarters Building was physically connected to the TAG Wing with an area of administrative offices. This final major construction project connected all of the buildings into one major facility of over 50,000 square feet, referred to as the Charleston Armory.

The West Virginia Army National Guard (WVARNG) Construction and Facilities Management Office (C&FMO) requested a study be conducted of the consolidated facility, known as the Charleston Armory, to consider such items as the condition of existing HVAC/MEP systems, and proposed improvements or upgrades to those systems; examine the existing building envelope and recommend possible improvements to the envelope; and investigate the requirements of LEED-certification as it relates to the existing buildings.



Client

West Virginia Army National Guard
Division of Engineering and Facilities
1703 Coonskin Drive
Charleston, WV 25311-1085

Major Michael J. Beckner
Armory Facilities Manager
304-561-6333

Completion Date

Estimated: Spring 2010

Project Costs

\$2,990,000 (Estimated Construction)
\$72,100 (Fee)

Baker's Role

- Planning
- Architecture
- Mechanical Engineering
- Civil Engineering
- CADD Drafting
- Bidding
- Construction Administration

Baker offered six potential solutions for the facility's HVAC issues in the Planning Study Report. During the review of the six solutions, Baker needed to determine the Owner's requirements and expectations as well as the level of disruption to the facilities that would be tolerated. These factors were considered in the final system selection. Preliminary discussions quickly reduced the six considered solutions to two systems: a four-pipe hot-water/chilled-water system and a loop pipe water source heat pump system. With fewer pipes and a lower installation cost, the loop pipe water source heat pump system was selected as the best solution.

The water source heat pump system is modular and duct work is much smaller than with other systems. Heat can be moved around the building so that the equipment would not energize during certain outside air conditions. By treating the facility as one, as opposed to three structures, there is a greater opportunity to share energy produced by office equipment and occupants located within the building during off peak hours.

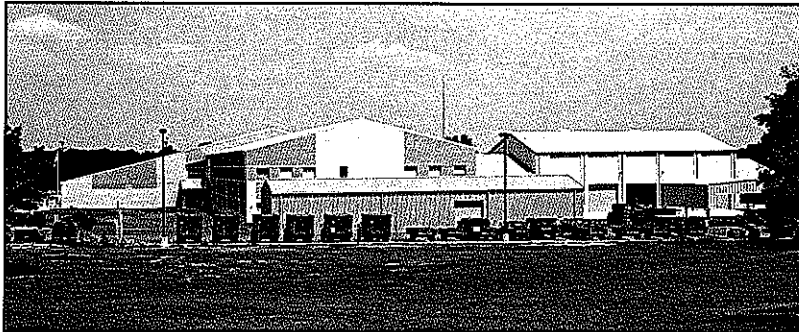


U.S. Army Reserve Center OMS/AMSA/STRG

Greenville, South Carolina

Baker designed a replacement structure for the 1st LT Thomas Kukowski Army Reserve Center (Kukowski ARC). The original facility, built in 1975, was determined to be in poor condition and didn't meet the minimum Department of Defense anti-terrorism/force protection standoff distance requirements for a primary gathering place, rendering the structure inadequate for expansion. Plans included demolishing the older facility and replacing it with a new 88,500-square-foot multi-story Training Center and Organized Maintenance Shop/ Area Maintenance Support Activity (OMS/AMSA), and Unheated Storage (STRG) to accommodate 600 reservists from the consolidation of the Kukowski ARC and two other ARCs.

The new permanent structures were designed with structural steel frames, masonry veneer exterior walls, and standing seam metal roofs. The project included design of the HVAC mechanical, plumbing, fire suppression, electrical, and security systems, and has energy-efficient lighting, and automated building HVAC and lighting system controls. The Training Center and OMS/AMSA is equipped with a fire suppression sprinkling system. Interior design services followed furniture procurement package requirements for Army Reserve Centers, using the USAR Furniture Design Guide and USAR Furniture Standards Knoll Product Criteria.



Client

U.S. Army Corps of Engineers,
Louisville District
Room 821
600 Dr. Martin Luther King, Jr. Place
P.O. Box 59
Louisville, KY 40202

Completion Date

2005

Project Costs

\$13,813,700 (Construction)

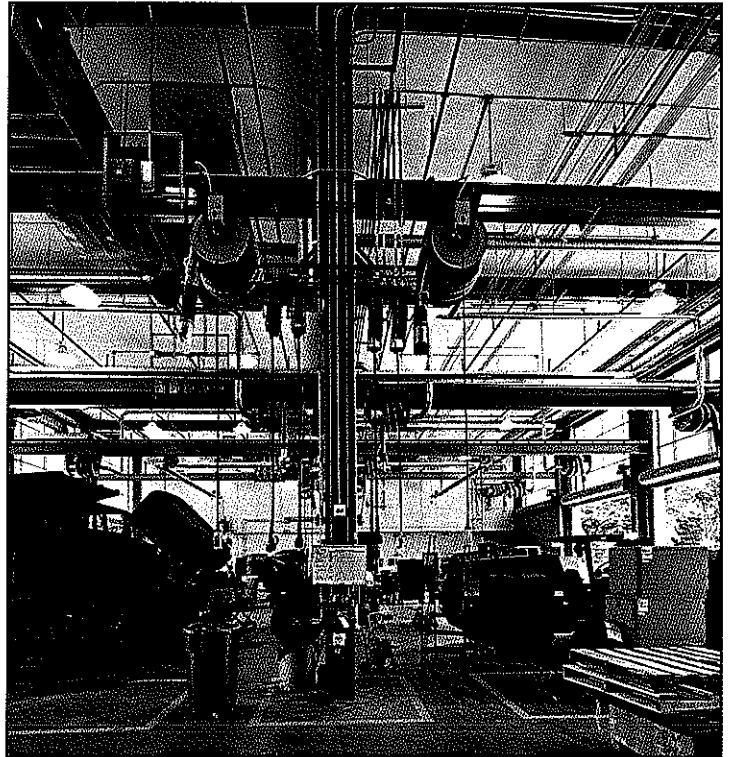
\$1,353,839 (Fee)

Baker's Role

- Planning
- Design charrette
- Site/Civil engineering
- Hydraulics and hydrology
- Stormwater management
- Erosion and sedimentation control
- Permitting
- Utility investigations/relocation design
- Geotechnical engineering
- Anti-Terrorism/force protection
- Architecture
- Life safety and ADA compliance
- Structural engineering
- Mechanical engineering
- Plumbing engineering
- Fire protection engineering
- Electrical engineering
- Environmental engineering
- Scheduling

The OMS/AMSA portion of the building houses office and administrative areas, a medical section that includes office areas and medical examination rooms, tool and parts storage, 10 work bays, one welding bay, controlled and flammable storage, wash bay, and building support functions. One drive-through bay is serviced by an overhead traveling crane. The Training Center houses offices and administrative spaces, caged unit storage, classrooms, library, learning center, weapons simulation room, physical readiness area, engagement skills trainer, a COMSEC training room, an arms vault and armorer's room, an assembly hall, kitchen, and building support functions. The project also included paving design for on-site parking and storage for military vehicles and for privately owned vehicles.

The physical training portion of this project contains a 1,600-square-foot fitness center outfitted with a full complement of various athletic equipment including treadmills, exercise bikes, steppers, nautilus machines, and free weights. Much of the equipment provided is human-powered, thereby reducing energy costs and eliminating any outside power requirements. The designs employ sound-absorbing building materials throughout and soft, absorbent flooring which reduces user fatigue and protects floor substrates. To enhance the user's experience, cable television is provided as well as appropriate lighting and outside views. Supporting men's and women's showers and locker rooms are also included.



Supporting facilities include site preparation, stormwater management plan, paving, fencing, security lighting, site signage, wash racks, storm drainage, and extension of utilities. Force protection measures were incorporated by using the maximum feasible standoff distances from roads, parking areas, and vehicle unloading areas, as well as barriers, walls, and other reinforced building components. Gold SPiRiT sustainable features included highly-efficient mechanical systems, recycled content materials, low-VOC materials, and efficient site usage.

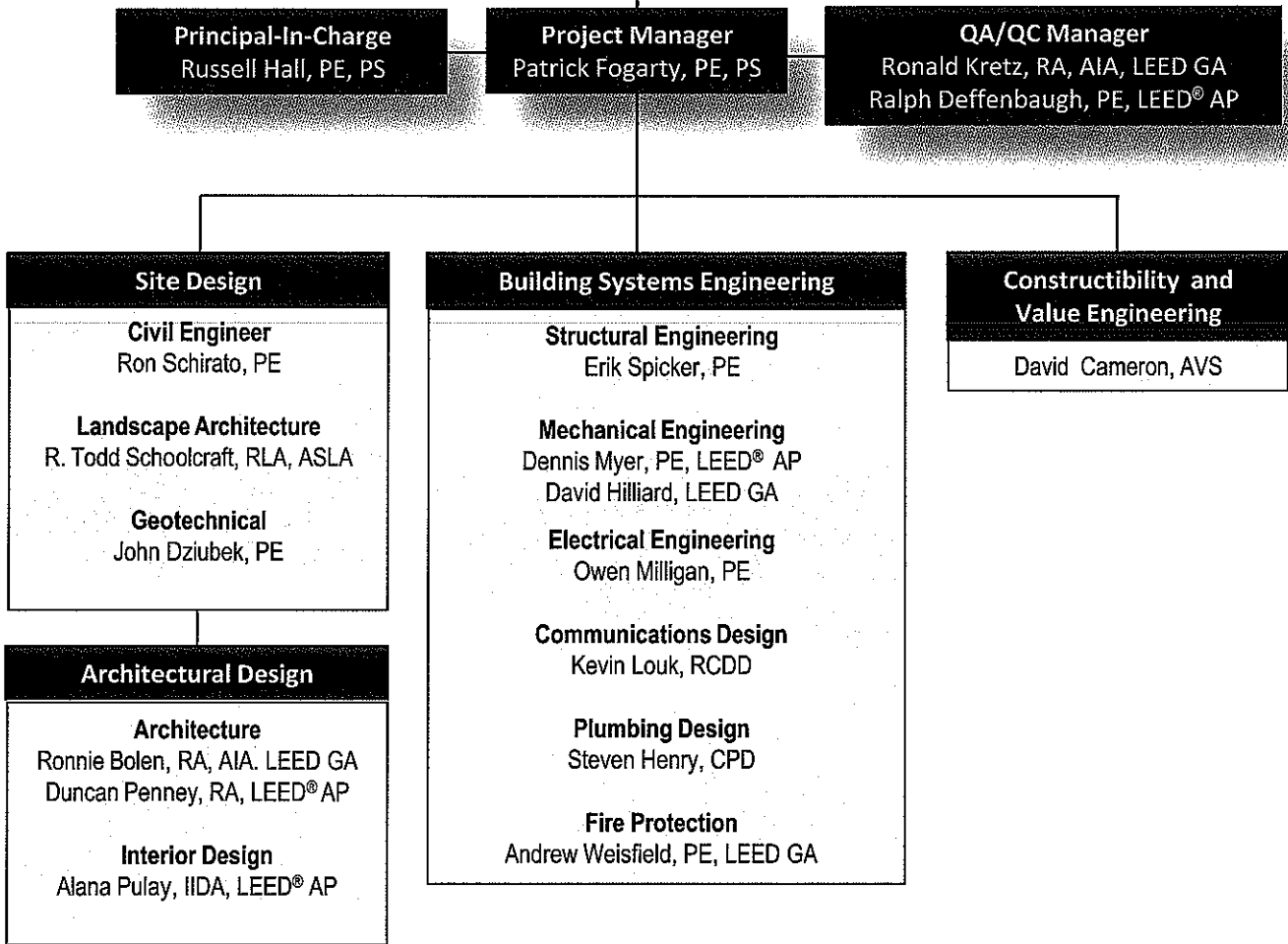
Although asbestos and lead dust surveys had previously been performed by the government, Baker's state-accredited inspectors and environmental engineers took samples of suspected asbestos containing materials for testing at a NVLAP-accredited laboratory. An on-site inspection was also performed to identify potential PCB-containing equipment (e.g., transformers, light ballasts) to identify the extent of on-site hazardous materials requiring proper removal and disposal prior to demolition.

This project is a Task Order under an Indefinite Delivery Indefinite Quantity Contract with the client. Professional services range from conducting a design charrette to preparing construction bid documents, to performing construction administration. A complete design, including plans and specifications that meet a Gold SPiRiT rating, seismic analysis, bid schedule, an order of work clause, construction contractor submittal register, quantity and cost estimates, M-CACES construction cost estimates, proposed construction schedule, design analysis and calculations, design documentation report, and engineering considerations and instructions reports, as well as preparation of DD Form 1354 (Transfer of Real Property) are components of this project.

Management Organization Chart

Baker

Maintenance Complex
Requisition # DEFK11026



Baker has a staff of approximately 2,900 total professionals and technical personnel, in all disciplines, available nationwide.

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

Assistant Vice President, Principal-In-Charge

General Qualifications

Mr. Hall currently serves as Assistant Vice President of Michael Baker Jr., Inc., as well as Office Manager of our Charleston, WV office. He 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 also has over nine years of office management experience. His office management responsibilities include financial oversight and accountability for a staff of over 40 engineers, scientists, and administrative personnel for Baker's Charleston office. His major strengths include organizing and managing a project team, quality control and quality assurance, and problem resolution. He provides overall direction and maintains direct communications with all clients.

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

West Virginia Army National Guard - TAG Wing Improvement, Charleston, West Virginia. *State Army National Guard Headquarters.* Principal-In-Charge. Responsible for oversight of Project Management. Baker performed complete planning, design, and construction management services for renovations to the Office of the Adjutant General at the State Army National Guard Headquarters in Charleston, West Virginia. Project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, several new wall partitions, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal. Baker provided Construction Administration and inspection services as well as periodic site review during construction.

On-Call Engineering/Architectural Services, Yeager Airport (CRW), Charleston, West Virginia. *Central West Virginia Regional Airport Authority.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker provided multi-discipline, on-call services to the Central West Virginia Regional Airport Authority (CWVRAA), which owns and operates Yeager Airport (CRW). Baker provided a full range of services to CWVRAA on an "On-Call/As-Needed" basis, including architecture, civil, structural, mechanical, electrical and environmental engineering, general engineering administration, surveying, and construction management.

WV Enhanced Hazard Mitigation Plan, Charleston. *West Virginia Division of Homeland Security and Emergency Management.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker prepared an Enhanced Hazard Mitigation plan for the state of West Virginia to comply with the requirements of the Disaster Mitigation Act of 2000 (DMA 2000) and 44 CFR 201-5.

Years with Baker: 7

Years with Other Firms: 18

Education

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

Licenses/Certifications

Professional Engineer, West Virginia, 1990

Professional Surveyor, West Virginia, 1996

Independence Coal Company-Falcon Surface Mine, Boone County. *Independence Coal Company.* Principal-In-Charge. Responsible for oversight of Project Management. Baker analyzed and assessed data and studies that were completed for and included in SMCRA mine permit application for the Falcon Surface Mine to complete Individual 401 Water Quality Certification applications, Individual 404 Permit applications, and Environmental Information Documents (EID) for each of these two projects for submittal to the U.S. Army Corps of Engineers, Huntington District. In conjunction with the 404 Permit, Baker evaluated the project area and receiving watershed for the development of a Compensatory Mitigation Plan to offset impacts to waters of the U.S.

Blennerhassett Island Bridge, Appalachian Corridor D, Washington County, Ohio and Wood County, West Virginia. *West Virginia Department of Transportation, Division of Highways.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker provided project management, environmental and location studies, permitting, preliminary and final design as well as construction phase services for this 878-foot 6-inch long network tied arch that is ranked as the longest of its type in the United States and one of the longest in the world.

Spruce Mine No. 1 Mountaintop Mining EIS, Logan County, West Virginia. *Arch Coal, Inc.* Principal-In-Charge. Responsible for oversight of Project Management. Spruce Mine No. 1 is the first mountaintop-mining project requiring an Environmental Impact Statement (EIS) by the U.S. Army Corps of Engineers (USACE). Baker was responsible for all aspects of the project, including agency and public scoping, and the production of the Draft EIS. Baker analyzed and assessed data and studies that were completed for and included in the SMCRA mine permit application.

Central WV Regional Airport Authority-Extend Runway 5-23, Charleston, West Virginia. *Central West Virginia Regional Airport Authority.* Principal-In-Charge. Responsible for oversight of Project Management. Baker performed complete planning, design, and construction management services for the 500-foot extension of Runway 5-23 for the Central West Virginia Regional Airport Authority at Yeager Airport in Charleston, West Virginia. The work was coordinated with the contractor for the grading operations for the ongoing Runway 23 Safety Area project, and FAA Airways Facilities for retrofit of the ALSF 1 approach light system. Nighttime closure of the runway was required for construction with no impacts to air service.

NPDES Permit Review, Confidential Location, West Virginia. *Confidential Client.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker developed a geologic model in SurvCADD, utilizing the core hole data provided by the client for the approximately 11,500 acre project area and completed a reserve analysis for the entire area. In addition, Baker developed a general mine plan and layout for a variety of permitting options for the client and subsequently completed an overall AOC+ spoil optimization for the initial permit area to be developed by the client.

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

Project Manager

General Qualifications

Mr. Fogarty is an asset to the Baker team with over 24 years of project design and 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.

Experience

West Virginia Army National Guard - TAG Wing Improvement, Charleston, West Virginia. *State Army National Guard Headquarters.* Project Manager. Engineer of Record responsible for the coordination of all activities. Baker performed complete planning, design, and construction management services for renovations to the Office of the Adjutant General at the State Army National Guard Headquarters in Charleston, West Virginia. Project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, several new wall partitions, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal. Baker provided Construction Administration and inspection services as well as periodic site review during construction.

A/E Services for the Office of the Adjutant General, West Virginia Army National Guard, Division of Engineering and Facilities, Charleston, West Virginia. *State Army National Guard Headquarters.* Project Manager. Responsible for the management and coordination of all activities. 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 a lump sum/fixed fee contract for architectural and engineering services. Baker was selected by the Division of Engineering and Facilities

Years with Baker: 6

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

Coursework, Business Administration, Heriot-Watt University, Edinburgh College of Art

Licenses/Certifications

Professional Engineer:

- Civil/Structural, West Virginia, 1990
- Kentucky, 2000
- Virginia, 2002
- Pennsylvania, 2003
- Ohio, 1996
- North Carolina, 2008

Professional Surveyor:

- West Virginia, 1993
- Kentucky, 2001
- Ohio, 1996

Construction Documents Technologist, 1996

FAA, Eastern Region Laboratory Procedures Manual Certificate (P-401), 1992

Asphalt Paving Technician, West Virginia, 1991

Concrete Technician, West Virginia, 1991

Soils Compaction, West Virginia, 1991

Aggregate Sampling Inspector, West Virginia, 1991

to provide complete design and construction administration services for the renovation of the first floor of the entire wing of the Office of the Adjutant General (TAG). The Owner requested the need for modernization of approximately 12,000 square feet of existing outdated office.

West Virginia State Capitol Restroom Renovations. *State of WV General Services Division.* Project Manager. Responsible for the overall management of the project including the coordination of the subconsultant. Baker is leading a planning study for the renovation of 31 restrooms in the historic West Virginia Capitol Building. The planning study will assess the facilities and their conformance to current code requirements and code-required capacities, compliance with Americans with Disabilities Act (ADA) requirements, quantification of the building occupancy during normal and peak periods, and an evaluation of gender distribution of restrooms within the capitol. Baker will provide design, construction sequence, and scheduling recommendations. Upon approval of the design, Baker will prepare construction documents and provide construction administration services for the renovation of three restrooms on the basement level.

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

Lost Creek Train Depot Rehabilitation, Lost Creek, West Virginia. *Town of Lost Creek.* Project Manager. Responsible for the management and coordination of all activities as well as all engineering design. The Town of Lost Creek retained Baker for the planning and design of the rehabilitation of a historic train depot adjacent to the Harrison County Rail Trail. Baker prepared a plan to raise the structure, make repairs to the deteriorated timber, excavate and place the concrete foundation system, then lower the structure to rest on the new foundation. Baker provided construction administration and inspection services as well as periodic site review during construction.

Non-Baker Project Experience

Central West Virginia Regional Airport Authority, CFR and Maintenance Facility, Charleston, West Virginia. *Yeager Airport.* Project Manager and Lead Designer. Provided Planning, Surveying, Design and Inspection Services on a 4,500 s.f. pre-engineered building to house crash/fire/rescue equipment and to serve as an auxiliary maintenance facility.

130Airlift Wing West Virginia Air National Guard, Squad Opps Facility. *Yeager Airport, Charleston, West Virginia.* Project Manager and Lead Designer. Provided planning, design, and construction administration services for a 2,000 s.f. addition to the Squadron Operations Building.

Raleigh County Airport Authority, Maintenance Facility. *Raleigh County Memorial Airport, Beckley, West Virginia.* Project Manager and Lead Designer. Provided Planning, Surveying, Design and Inspection Services on a 3,000 s.f. pre-engineered building to house snow removal equipment and to serve as a maintenance facility.

Elkins-Randolph County Airport Authority, Maintenance Facility. *Randolph County Airport, Elkins, West Virginia.* Project Manager and Lead Designer. Provided Planning, Surveying, Design and Inspection Services on a 2,500 s.f. pre-engineered building to house snow removal equipment and to serve as a maintenance facility.

Ronald W. Kretz, R.A., A.I.A., LEED Green Associate

QA/QC Manager

General Qualifications

Mr. Kretz is a registered architect with over 20 years of experience as project manager, designer, and principal. As Operations Manager of Baker's North Region Facilities Group, he has direct management responsibility over all architectural and building engineering personnel, project designs, and office functions, as well as serving as project manager for design projects. Mr. Kretz's project experiences includes various building types for military, educational, institutional, commercial, health care, aviation, transit, and housing clients in public and private sector facilities. Building types include readiness training centers and classrooms with sophisticated telecommunication systems, fitness centers, airport facilities, vehicle maintenance and intermodal transit facilities, warehouses, parking garages, and rail stations. Mr. Kretz is well versed in a variety of project delivery systems including fast-tracked designs, traditional design/bid/build, design/build RFP documents, design/build delivery as a member of the contractor's team, bridging documents, and site adapt designs.

Years with Baker: 12

Years with Other Firms: 9

Education

B.Arch., 1990, Architecture,
University of Cincinnati

Licenses/Certifications

Registered Architect:

Pennsylvania, 1993

Ohio, 2010

Maryland, 2010

Delaware

Washington D.C., 2010

Michigan

Florida, 1995

Colorado, 1997

LEED Green Associate

Experience

Design/Build AFQ/RFP Development for Statewide

Construction Program, PAARNG Stryker Brigade Combat Team, Statewide, Pennsylvania. *US Property and Fiscal Office for Pennsylvania.* Architect. Responsibilities included providing design assistance and performing document QA/QC reviews. Baker provided services under numerous National Guard Bureau IDIQ contracts to support the Pennsylvania Army National Guard (PAARNG) in implementing a \$167,000,000 statewide construction program for the Stryker Brigade Combat Team conversion of numerous PAARNG facilities. The program included the design of new soldier Readiness Centers (RC) and vehicle Field Maintenance Shops (FMS), as well as facility additions. Baker performed all aspects of design/build RFP implementation, from providing significant architectural, structural, geotechnical, civil engineering, and other technical input for RFP Project Definition Documents, to developing the application form used to evaluate potential design/build contractor teams, to providing client support during the actual design/build team selection process. The sustainable design goal is for each finished facility to qualify for either a Gold SPiRiT or Silver LEED® Certified rating. Baker's task orders include the following sites: Erie – a new Readiness Center and a new Field Maintenance Shop; Philadelphia – a new Readiness Center and Field Maintenance Shop; Elizabethtown – a new Readiness Center and a new Field Maintenance Shop; and Bradford and Huntingdon – new Readiness Centers. Additionally, Baker has developed Design/Build RFP documents for the additions and alterations to Readiness Centers in Lewistown, Punxsutawney, Butler, Hanover, Lebanon, Huntingdon, and Hollidaysburg.

A/E Services Contract for the Pennsylvania National Guard, 171st Air Refueling Wing, Pittsburgh International Airport (PIT), Coraopolis, Pennsylvania. *Pennsylvania Dept. of Military and Veterans (formerly Departments of the Army and the Air Force).* Architect. Responsibilities included providing architectural design and construction assistance on facility projects. The United States Property and Fiscal Office (USPFO) and the 171st Air Refueling Wing (ARW) selected Baker for an Indefinite

Delivery/Indefinite Quantity (IDIQ) contract for architectural and engineering services. Task orders contracted under this Indefinite Delivery/Indefinite Quantity (IDIQ) Contract include: a 129,634-square-foot Combined Support Maintenance Shop; a 3,000-gross-square-foot, \$920,000 Crew Readiness Center; a \$200,000 Base Marquee; a \$405,000 upgrade to the West Apron Lighting for the Pennsylvania Air National Guard; a Deicing Collection Study for the 171st ARW; and Phase One services in support of the conversion of the Pennsylvania Army National Guard's 56th Brigade to a Stryker Brigade Combat Team (SBCT) at various locations throughout the state.

MATOC for Design/Build of Vehicle Maintenance Complexes, Locations within the South Atlantic Division. *Walbridge Aldinger Company.* QA/QC. Provided design oversight and supervision to the architectural team. Baker and design/build partner, Walbridge Aldinger Company, were awarded a Multiple Award Task Order Contract (MATOC) by the U.S. Army Corps of Engineers, Savannah District, for the design and construction of facilities to be used for the maintenance, repair, overhaul, and storage of military tactical vehicles and equipment. The facilities are typically part of an overall complex centered on a vehicle maintenance bay building and can include the addition of administrative spaces, storage rooms, parts storage, secure communications storage, and wash racks. A major portion of each project includes extensive hardstand and paving and fencing. Development of the complex may also include all associated site development required including site planning, clearing, grubbing, grading, installation of utility infrastructure, and installation of roads, service access, parking, and landscaping.

1957 Elm Road Maintenance Complex Rehabilitation Study and Design, Baltimore/Washington International, Thurgood Marshall Airport (BWI), Baltimore, Maryland. *Maryland Aviation Administration.* Architect. Responsible for the design and construction documents for additions and renovations to the buildings that comprise the maintenance complex. This project involved a study to assess improvements to buildings located in the maintenance complex. The improvements included building additions, equipment additions, HVAC improvements, new buildings, electrical improvements, and site/pavement improvements.

Tactical Equipment Maintenance Facilities, MATOC Task Order No. 1, Fort Bragg, North Carolina. *Walbridge Aldinger Company.* QA/QC. Provided design oversight and supervision to the architectural team. Baker was the designer of record for the design-build delivery of six tactical equipment maintenance facilities at Fort Bragg. The project was performed under a multiple-award task-order contract for the design and construction of facilities to be used for the maintenance, repair, overhaul, and storage of military tactical vehicles and equipment.

U.S. Army Reserve Center OMS/AMSA/STRG, Greenville, South Carolina. *U.S. Army Corps of Engineers, Louisville District.* Architect. Responsibilities included architectural design and detailing assistance for the final construction documents. Baker designed a new 88,500-square-foot multi-story Training Center, Organized Maintenance Shop/Area Maintenance Support Activity (OMS/AMSA), and unheated storage (STRG) to accommodate 600 reservists. The new structures consist of structural steel frames, masonry veneer exterior walls, and standing seam metal roofs. The OMS/AMSA houses office and administrative areas, tool and parts storage, 10 work bays, one welding bay, controlled and flammable storage, wash bay, and building support functions. One drive-through bay is serviced by an overhead traveling crane. The Training Center houses offices and administrative spaces, caged unit storage, classrooms, library, learning center, weapons simulation room, physical readiness area, engagement skills trainer, a COMSEC training room, an arms vault and armorer's room, an assembly hall, kitchen, and building support functions. The project also included paving design for on-site parking and storage for military vehicles and for privately owned vehicles. An integrated design approach was used to achieve a Gold SPiRiT sustainability rating.

Ralph T. Deffenbaugh, P.E., LEED AP

QA/QC Manager

General Qualifications

Mr. Deffenbaugh, Director of Facilities Engineering for Baker, provides leadership for project quality and interdisciplinary coordination for the engineering group. In his wide-ranging experience, he has provided oversight of the engineering efforts focusing on integration of systems, development of energy reduction strategies, and detailed quality assurance reviews of various types of facilities for military, government, commercial, public, and private clients. His experience includes serving as project manager, lead structural engineer, resident structural engineer, or project/design engineer for various types of facilities, including tactical equipment maintenance facilities, vehicle maintenance facilities, barracks, military facilities, administrative/office buildings, bus maintenance facilities, manufacturing plants, fabrication facilities, utility buildings, clean rooms, administrative facilities, transit stations and park-n-rides, water storage, and water/wastewater treatment facilities. In 2007, Mr. Deffenbaugh received his LEED® accreditation from the U.S. Green Building Council.

Experience

Tactical Equipment Maintenance Facilities, MATOC Task Order No. 1, Fort Bragg, North Carolina. *Walbridge Aldinger Company.* Technical Manager. Responsibilities included

providing direction and support to the engineering team, the packaging of the construction documents, and coordinating the project schedule and budget with the contractor. Baker was the designer of record for the design-build delivery of six tactical equipment maintenance facilities at Fort Bragg. The project was performed under a multiple-award task-order contract for the design and construction of facilities to be used for the maintenance, repair, overhaul, and storage of military tactical vehicles and equipment.

Two Tactical Equipment Maintenance Facilities, SATOC TO #1, Fort Bliss, El Paso, Texas. *U.S. Army Corps of Engineers, Tulsa District.* Technical Manager. Responsibilities involved coordinating subconsultant scopes and fees, monitoring and maintaining the project design schedule with the contractor, and packaging of construction documents. Projects constructed under this task order include Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF). TEMFs provide facilities for the purpose of maintaining and repairing vehicles, complete with equipment and parts storage, and administrative offices. Task Order No. 0001 was for the design/build delivery of a two TEMFs to be shared by five Battalions and one Company, an 8,000-square-foot distribution company storage facility, a 1,620-square-foot facility for oil storage, and a 1,620-square-foot building for hazardous materials storage.

A/E Services for the Office of the Adjutant General, West Virginia Army National Guard, Division of Engineering and Facilities, Charleston, West Virginia. *State Army National Guard Headquarters.* QA/QC. Responsibilities included coordinating the quality assurance reviews for architectural, mechanical, and electrical drawings. 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 a

Years with Baker: 5

Years with Other Firms: 26

Education

B.A.E., 1980, Architectural Engineering (Structural Design Option), The Pennsylvania State University

Licenses/Certifications

Professional Engineer:

West Virginia, 2004

Pennsylvania, 1991

Ohio, 2004

Maryland, 1996

Louisiana, 2009

Virginia, 1991

Kentucky, 2004

Massachusetts, 1992

NCEES Certified, 1986

LEED Accredited Professional, 2007

lump sum/fixed fee contract for architectural and engineering services. Baker was selected by the Division of Engineering and Facilities to provide complete design and construction administration services for the renovation of the first floor of the entire wing of the Office of the Adjutant General (TAG). The Owner requested the need for modernization of approximately 12,000 square feet of existing outdated office space - 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 and asbestos removal.

U.S. Army Reserve Center, Willow Grove, Pennsylvania. *U.S. Army Corps of Engineers, Louisville District. QA/QC.* Responsibilities included quality assurance reviews for civil, structural, architectural, mechanical, electrical drawings and specifications. Baker developed Design/Build RFP Documents for a new 800-member U.S. Army Reserve Center (USARC) with Organized Maintenance Shop and an Unheated Storage building. The USARC provides administrative, educational, assembly, library, learning center, vault, weapons simulator, physical fitness areas, and adequate MEP and POV parking.

U.S. Army Reserve Center OMS/AMSA/STRG, Greenville, South Carolina. *U.S. Army Corps of Engineers, Louisville District. QA/QC.* Responsibilities included review of the anti-terrorism/force protection upgrade approach. Baker designed a new 88,500-square-foot multi-story Training Center, Organized Maintenance Shop/Area Maintenance Support Activity (OMS/AMSA), and unheated storage (STRG) to accommodate 600 reservists. The new structures consist of structural steel frames, masonry veneer exterior walls, and standing seam metal roofs. The OMS/AMSA houses office and administrative areas, tool and parts storage, 10 work bays, one welding bay, controlled and flammable storage, wash bay, and building support functions. One drive-through bay is serviced by an overhead traveling crane. The Training Center houses offices and administrative spaces, caged unit storage, classrooms, library, learning center, weapons simulation room, physical readiness area, engagement skills trainer, a COMSEC training room, an arms vault and armorer's room, an assembly hall, kitchen, and building support functions. The project also included paving design for on-site parking and storage for military vehicles and for privately owned vehicles. An integrated design approach was used to achieve a Gold SPiRiT sustainability rating.

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

Stewart Newburgh Armed Forces Reserve Center, Newburgh, New York. *U.S. Army Corps of Engineers, Louisville District. QA/QC Engineer.* Performed a detailed interdisciplinary review of the design/build RFP documents. Baker developed Design/Build RFP Documents for an integrated, consolidated, regional 84,000-square-foot training facility, 16,200-square-foot vehicle maintenance shop, and 2,350-square-foot unheated storage building at Stewart Newburgh, New York. The center accommodates training and mobilization and provides for the storage, inspection, maintenance, and repair of combat and tactical vehicles and equipment associated with the regional deployment of Army National Guard and Army Reserve units.

Ronald M. Schirato, P.E., LEED AP

Senior Civil Engineer

General Qualifications

Mr. Schirato is a civil engineer with a broad range of experience in environmental permitting and engineering for site development on commercial and military and residential properties. He has extensive experience in stormwater management, best management practices, utility infrastructure design, engineering for transportation (roadways), computerized hydrology and hydraulics, and management.

Experience

Design/Build AFQ/RFP Development for Statewide Construction Program, PAARNG Stryker Brigade Combat Team, Statewide, Pennsylvania. *US Property and Fiscal Office for Pennsylvania.* Civil Engineer. Responsibilities included preparing of the civil engineering component of the design-build Request for Proposal (RFP), participating in multi-day design Charrette meetings, processing plans through the local municipality, attending public hearings, utility coordination, site layout and parking geometrics, grading, earthwork calculations, and supervising the erosion and sediment pollution control design, stormwater management design, environmental permitting and landscaping design. Also responsible for interpreting and applying current Department of Defense Anti-Terrorism Standards for Buildings into site layout and building locations. Managed site surveying and geotechnical services required for all projects. Baker provided services under numerous National Guard Bureau IDIQ contracts to support the Pennsylvania Army National Guard (PAARNG) in implementing a \$167,000,000 statewide construction program for the Stryker Brigade Combat Team conversion of numerous PAARNG facilities. The program included the design of new soldier Readiness Centers (RC) and vehicle Field Maintenance Shops (FMS), as well as facility additions. Baker's task orders include the following sites: Erie – a new Readiness Center and a new Field Maintenance Shop; Philadelphia – a new Readiness Center and Field Maintenance Shop; Elizabethtown – a new Readiness Center and a new Field Maintenance Shop; and Bradford and Huntingdon – new Readiness Centers.

Combined Regional Maintenance Facility, Fort Dix, New Jersey. *U.S. Army Corps of Engineers, Louisville District.* Civil Engineer. Responsibilities included providing technical design consultations to the core team members and conducting interdisciplinary technical quality reviews of the design. Baker provided design services for a Combined Regional Maintenance Facility at Fort Dix, New Jersey. The 50,400-square-foot facility is an integrated, consolidated, regional, combined vehicle maintenance shop and mobilization and training equipment site that provides for the storage, inspection, maintenance, and repair of combat and tactical vehicles and equipment associated with the regional deployment of Army National Guard, Army, Marine, and Navy Reserve units. Building Information Modeling (BIM) was used in the design process that aided in identifying any potential space conflicts, as well as being a maintenance tool for the facility.

Combined Support Maintenance Shop, Pittsburgh International Airport (PIT), Coraopolis, Pennsylvania. *Pennsylvania Depart. of Military and Veterans (formerly Departments of the Army and the*

Years with Baker: 7

Years with Other Firms: 7

Education

B.S.C.E.T., 1997, Civil Engineering Technology, University of Pittsburgh, Johnstown Campus

Master's Certificate, 2009, Project Management, University of Pittsburgh, Katz Graduate School of Business

Licenses/Certifications

Professional Engineer, Pennsylvania, 2002

New York, 2009

North Carolina, 2010

Oregon, 2008

NCEES Certified, 2008

NCI Charrette System Certificate

LEED Accredited Professional, 2009

Air Force). Civil Engineer. Prepared the civil engineering preliminary design components of this project. Participated in multi-day design Charrette meetings, utility coordination, site layout and parking geometrics, preliminary grading, earthwork calculations. Also responsible for interpreting and applying current Department of Defense Anti-Terrorism Standards for Buildings into site layout and building locations. Prepared multiple conceptual site layouts and design analysis to support Department of Defense 1391 cost projections.

Tactical Equipment Maintenance Facilities, MATOC Task Order No. 1, Fort Bragg, North Carolina. *Walbridge Aldinger Company*. Civil engineer of record for this design/build project. Prepared conceptual site layout and participated in multi-day Charrette to shape the design of this site from a civil engineering perspective. Charrette phase work included a preliminary site layout developed in accordance with current Department of Defense Anti-Terrorism/Force Protection Measures for Buildings, grading and engineering design analysis. Final design included civil engineering construction drawings and specifications for the proposed site. Engineering work included coordination and permitting with local and state agencies, demolition plan development, geometric site layout, utility infrastructure design, erosion and sediment control design, stormwater pollution prevention plan development, NPDES permit coverage, site grading and earthwork analyses, stormwater management design, coordination of landscape plan development. Participated in project design review meetings. Responsible for managing geotechnical and surveying subconsultants. Baker was the designer of record for the design-build delivery of six tactical equipment maintenance facilities at Fort Bragg.

Two Tactical Equipment Maintenance Facilities, SATOC TO #1, Fort Bliss, El Paso, Texas. *U.S. Army Corps of Engineers, Tulsa District*. Civil Engineer. Civil engineer of record for this design/build project. Prepared conceptual site layout and participated in multi-day Charrette to shape the design of this site from a civil engineering perspective. Charrette phase work included a preliminary site layout developed in accordance with current Department of Defense Anti-Terrorism/Force Protection Measures for Buildings, grading and engineering design analysis. Final design included civil engineering construction drawings and specifications for the proposed site. Engineering work included coordination and permitting with local and state agencies, geometric site layout, utility infrastructure design, erosion and sediment control design, stormwater pollution prevention plan development and site grading. Participated in project design review meetings. Responsible for managing geotechnical and surveying subconsultants. Projects constructed under this task order include Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF).

Tactical Equipment Maintenance Facility, White Sands Missile Range, New Mexico. *U.S. Army Corps of Engineers, Tulsa District*. Design Review Manager. Provided technical design consultations to the core team members and conducting interdisciplinary technical quality reviews of the design. Under a design/build ID/IQ SATOC, Task Order No. 0006, the team of Baker and Walbridge Aldinger Company is delivering a Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF) at White Sands Missile Range, NM. The project includes one medium-sized 35,290-square-foot TEMF with a 10-ton bridge crane, to accommodate approximately 437 organizational vehicles. Additional structures that are a part of this facility include a 1,560-square-foot POL storage facility, a 1,560-square-foot building for hazardous materials storage, and an 11,550-square-foot organizational storage building.

Site Development for New Bus Maintenance Facility, Butler Township, Pennsylvania. *Butler Transit Authority Office*. Project Manager. Responsible for managing civil engineering for the project. Managed the preparation of civil engineering construction and project specifications. Engineering work included coordination and permitting with local and state agencies, demolition plan development, geometric site layout, utility infrastructure design, erosion and sediment control design, stormwater pollution prevention plan development, NPDES permit coverage, site grading and earthwork analyses, coordination of landscape plan development. Participated in project design review meetings with client and owner. As a subconsultant to Camp Dresser & McKee, Inc., Baker provided site development, grading, erosion and sedimentation, signing, utility, paving, and landscaping plans, and NPDS permitting for a new three-bay bus maintenance garage, bus wash, and office complex.

R. Todd Schoolcraft, R.L.A., A.S.L.A.

Landscape Architect

General Qualifications

Mr. Schoolcraft has over 19 years of experience in the fields of landscape architecture and land planning, with over 27 years of experience in the building and construction industry. Mr. Schoolcraft has extensive experience managing complex projects and leading multi-disciplined teams of professionals resulting in the successful delivery of numerous quality projects on-time and on-budget. Major areas of specialty include commercial development, military installation design, land planning, public development, site planning and design, park and recreation design, trails and greenways, streetscape design and urban planning, and residential subdivision layout. Mr. Schoolcraft is a retired U.S. Army Officer, holding the rank of Major, with over 23 years of time in service in the U.S. armed forces. In the last years of service, he held the position of Operations Officer with the newly formed Chemical, Biological, Radiological, Nuclear or High Yield Explosive Enhanced Response Force Package Team (CERFP Team) with the West Virginia Army National Guard. Prior to this, he was a combat engineer with the Design Section of the 111th Engineer Group, West Virginia Army National Guard. The 111th Engineer Group served in the Middle East in support of Operation Iraqi Freedom and Operation Enduring Freedom. During that time, Mr. Schoolcraft was awarded the Bronze Star Medal for meritorious service associated with a multitude of engineering and architectural projects in Kuwait and Iraq. Mr. Schoolcraft has been appointed to the West Virginia State Board of Landscape Architects by Governor Joe Manchin, and currently serves as Secretary of the Board.

Years with Baker: 4

Years with Other Firms: 16

Education

B.S., 1991, Landscape Architecture,
West Virginia University

Licenses/Certifications

Registered Landscape Architect,
West Virginia, 1995

Registered Landscape Architect,
North Carolina, 2008

Registered Landscape Architect,
Ohio, 2002

West Virginia Army National Guard - TAG Wing Improvement, Charleston, West Virginia. *State Army National Guard Headquarters.* Project Manager. Responsible for design and document quality oversight. Baker performed complete planning, design, and construction management services for renovations to the Office of the Adjutant General at the State Army National Guard Headquarters in Charleston, West Virginia. Project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, several new wall partitions, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal. Baker provided Construction Administration and inspection services as well as periodic site review during construction.

A/E Services for the Office of the Adjutant General, West Virginia Army National Guard, Division of Engineering and Facilities, Charleston, West Virginia. *State Army National Guard Headquarters.* Landscape Architect. Responsible for design and document quality oversight. The Facilities Management Officer (FMO) for the State of West Virginia, Division of Engineering and Facilities (DEF), West Virginia Army National Guard (WVARNG) selected Baker for a lump sum/fixed fee contract for architectural and engineering services. Baker was selected by the Division of Engineering and Facilities to provide complete design and construction administration services for the renovation of the first floor of the entire wing of the Office of the Adjutant General (TAG). The Owner requested the need for modernization of approximately 12,000 square feet of existing outdated office space - 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 and asbestos removal.

Campus Master Planning and Architectural and Engineering Services for State Capitol Complex, Charleston, West Virginia. *State of WV General Services Division.* Landscape Architect. Responsible for master planning guidance, design, community meeting assistance, and document generation. Baker is providing comprehensive master planning services, plans and construction specifications, and construction administration for improvements to the historic West Virginia state capitol campus. Master planning services include plans for expansion, location of new buildings, pedestrian and traffic circulation, landscaping, utilities, and site security. Baker is also providing construction plans and contract administration services for some of the security and landscaping improvements.

Non-Baker Project Experience

Alloy Armory Berm Repair, West Virginia Army National Guard, Alloy, West Virginia. *State of West Virginia, Division of Engineering and Facilities.* Project Manager. Responsible for site-civil design and document quality oversight. The existing facility had been home to various armored cavalry units of the West Virginia Army National Guard (WVARNG) over the years, and the armory and motorpool was situated directly in front and adjacent to a large stream susceptible to high-water events. During a recent flood event, the berm protecting the facility was severely damaged. A new berm was designed with gabion basket reinforcing, and a new concrete-lined trapezoidal channel was proposed to safely redirect the stream flow away from the armory and motorpool.

Parking Lot Expansion and ADA Accessibility Upgrade, Fixed Wing Army Aviation Training Site (FWAATS), Benedum Airport, Bridgeport, West Virginia. *State of West Virginia, Division of Engineering and Facilities.* Project Manager. Responsible for site-civil design, construction document preparation and construction administration. Conceptual and final detailed design services were provided to expand the main parking area, maintain Section 504 ADA compliance, and improve site drainage and landscaping. Recommendations for improvements to the traffic flow at the loading dock and plans for pavement striping were also developed.

Robert E. Rooney Marshalling Yard and Final Rinse Facility, Port Ash Shuaybah, Kuwait *US Army Corp of Engineers.* Project Manager. Responsibilities included leading a design team with the 111 Engineer Group, West Virginia Army National Guard (WVARNG) in the development a master plan, final construction documents, bidding assistance, and construction oversight. This project involved the development of a Sea Port of Embarkation (SPOE) Sterile Storage Area and Final Rinse Facility in the Persian Gulf area for use by Coalition Forces during Operation Iraqi Freedom. The improvements proposed included installation and construction of a rinse facility capable of serving all categories of military vehicles, trailers, towed equipment and storage containers for final rinse before being loaded onto transport vessels. The area also included sterile storage areas for redeployment and temporary storage areas for deployment operations.

Various Military Installation Improvements, Camp Arifjan, Kuwait. *Directorate of Public Works, Post Engineer.* Project Manager. While on deployment in the Middle East with the 111 Engineer Group, West Virginia Army National Guard (WVARNG) was tasked to perform various improvements to Camp Arifjan through the Directorate of Public Works (DPW) and the Post Engineer. Projects included the Camden Yard Engineer Troop Wash Point; DPW Morale, Welfare and Recreation (MWR) Restroom Facility; DPW Third Country Nationals (TCN) Restroom Additions; and many other improvements.

Building 5 Command Group Renovations, Zone II, Camp Arifjan, Kuwait. *Third Army, United States Army Central (USARCENT), Coalition Forces Land Component Command (CFLCC).* Project Manager. Project responsibilities included site surveying and base map preparation, site civil and architectural plan preparation, detailing, bidding, and construction administration for renovations required by CFLCC C-7 for the Command Group move from Camp Doha, Kuwait, to Camp Arifjan, Kuwait.

John A. Dziubek, P.E.

Geotechnical Project Manager

General Qualifications

Mr. Dziubek has performed and managed geotechnical engineering and design projects for more than 40 years. The projects range from subsurface investigations, including building, industrial, and heavy and highway foundations, and site closures at industrial facilities, to remedial design and remedial action at Superfund sites. He also has managed public and private sector projects for the U.S. Army Corps of Engineers, U.S. Navy, state departments of transportation, and major industrial clients. Larger projects range from \$1,000,000 to \$10,000,000 and have required civil, geotechnical, mining and environmental engineering expertise.

Experience

U.S. Army Reserve Center OMS/AMSA/STRG, Greenville, South Carolina. *U.S. Army Corps of Engineers, Louisville District.*

Task Manager. Responsible for management of the geotechnical investigation for assembly, storage and maintenance units. Seven test borings were drilled and laboratory testing was performed to evaluate spread foundations and subgrade conditions for entry roads and parking areas. Recommendations were made for stabilizing soft clays in subgrade. Baker designed a new 88,500-square-foot multi-story Training Center, Organized Maintenance Shop/Area Maintenance Support Activity (OMS/AMSA), and unheated storage (STRG) to accommodate 600 reservists. The new structures consist of structural steel frames, masonry veneer exterior walls, and standing seam metal roofs. The OMS/AMSA houses office and administrative areas, tool and parts storage, 10 work bays, one welding bay, controlled and flammable storage, wash bay, and building support functions. The project also included paving design for on-site parking and storage for military vehicles and for privately owned vehicles. An integrated design approach was used to achieve a Gold SPiRiT sustainability rating.

Design/Build AFQ/RFP Development for Statewide Construction Program, PAARNG Stryker Brigade Combat Team, Statewide, Pennsylvania. *US Property and Fiscal Office for Pennsylvania.* Geotechnical Engineer. Provided geotechnical management and quality assurance reviews for geotechnical investigation. Developed test boring plan and lab testing program. Provided sufficient information for the design-build contractor to develop additional subsurface investigation, geotechnical recommendations for shallow and deep foundations, earthwork, pavement design, and storm water management. Baker provided services under numerous National Guard Bureau IDIQ contracts to support the Pennsylvania Army National Guard (PAARNG) in implementing a \$167,000,000 statewide construction program for the Stryker Brigade Combat Team conversion of numerous PAARNG facilities. The program included the design of new soldier Readiness Centers (RC) and vehicle Field Maintenance Shops (FMS), as well as facility additions. Baker performed all aspects of design/build RFP implementation, from providing significant architectural, structural, geotechnical, civil engineering, and other technical input for RFP Project Definition Documents, to developing the application form used to evaluate potential design/build contractor teams, to providing client support during the actual design/build team selection process. The sustainable design goal is for each finished facility to qualify for either a Gold SPiRiT or Silver LEED® Certified rating. Baker's task orders include the following sites: Erie – a new Readiness Center and a new Field Maintenance Shop; Philadelphia – a new Readiness Center and Field Maintenance Shop; Elizabethtown – a new Readiness Center and a new Field

Years with Baker: 28

Years with Other Firms: 17

Education

M.S.C.E., 1966, Civil Engineering,
Purdue University

B.S.C.E., 1964, Civil Engineering,
University of Pittsburgh

Licenses/Certifications

Professional Engineer:
West Virginia, 1990
Pennsylvania, 1969
Ohio, 1991
Virginia, 2010

Maintenance Shop; and Bradford and Huntingdon – new Readiness Centers. Additionally, Baker has developed Design/Build RFP documents for the additions and alterations to Readiness Centers in Lewistown, Punxsutawney, Butler, Hanover, Lebanon, Huntingdon, and Hollidaysburg.

Louisville District IDIQ for Various Civil and Military Projects, Great Lakes and Ohio River Division, Louisville, Kentucky. *U.S. Army Corps of Engineers, Louisville District.* Task Manager. Responsible for the management of the geotechnical investigation for assembly, storage and maintenance units of the U.S. Army Reserve Center OMS/AMSA/STRG. Seven test borings were drilled and laboratory testing was performed to evaluate spread foundations and subgrade conditions for entry roads and parking areas. Recommendations were made for stabilizing soft clays in subgrade. A variety of planning and design services were provided under an Indefinite Delivery Contract. Delivery Orders including master plan updates, capital investment strategies, installation design guides, and facility designs for an Army Reserve Center, Battalion Operations Facility, and an Army Base High School.

Readiness Centers and Field Maintenance Shops for PAARNG Stryker Brigade Combat Team, Erie (Cambridge Springs) and, Philadelphia, Pennsylvania. *US Property and Fiscal Office for Pennsylvania.* Geotechnical Engineer. Responsible for performing quality assurance reviews of foundation reports. Recommendations included allowable foundation pressures, earthwork specifications and pavement design. Baker developed the conceptual design and Design/Build RFP documents for the conversion of PAARNG's 56th Brigade to a Stryker Brigade Combat Team (SBCT). Key program components include two building types: Readiness Centers (RC) for the training of SBCT Soldiers and Field Maintenance Shops (FMS) for the maintenance and storage of a variety of military vehicles, including the Stryker military vehicle. The new Cambridge Springs (Erie) Armory included a 73,173-square-foot RC and 20,549-square-foot FMS with eight maintenance bays; together with the associated site development, the facilities were designed to house all elements of a 421-personnel unit. For consolidation of the Philadelphia units, a new site co-located a new 25,315-square-foot FMS with ten maintenance bays with a 75,078-square-foot RC.

U.S. Armed Forces Reserve Center, Bristol, Pennsylvania. *U.S. Army Corps of Engineers, Louisville District.* Geotechnical Engineer. Responsible for providing internal quality reviews of geotechnical investigations. Reviewed description of subsurface soils for agreement with geotechnical parameters used for design and also reviewed reasonableness of geotechnical recommendations for allowable bearing pressure, lateral earth pressures, selection of foundation type, pavement design and earthwork recommendations. Baker developed Design/Build RFP Documents for a new 600-member Armed Forces Reserve Center with Organized Maintenance Shop (OMS) and an Unheated Storage (UHS) building that realigns Army Reserve and Marine Reserve units as directed by BRAC 05. The facility will provide administrative, educational, assembly, library, learning center, vault, weapons simulator, and physical fitness areas for eight Army Reserve units and three Marine units, as well as provide adequate parking for all military and privately-owned vehicles. A 94,500-square-foot training building (AFRC), an 8,900-square-foot Maintenance Shop (OMS), and a 2,900-square-foot unheated storage (UHS) building was included in the RFP package.

Stewart Newburgh Armed Forces Reserve Center, Newburgh, New York. *U.S. Army Corps of Engineers, Louisville District.* Geotechnical Engineer. Responsible for QA of Preliminary Geotechnical Characterization Report describing subsurface conditions and seismic soil coefficients. Reviewed pavement design and compaction procedures provided by the design-build team. Baker developed Design/Build RFP Documents for an integrated, consolidated, regional 84,000-square-foot training facility, 16,200-square-foot vehicle maintenance shop, and 2,350-square-foot unheated storage building at Stewart Newburgh, New York. The center accommodates training and mobilization and provides for the storage, inspection, maintenance, and repair of combat and tactical vehicles and equipment associated with the regional deployment of Army National Guard and Army Reserve units.

Ronnie Lee Bolen, R.A., A.I.A., LEED Green Associate

Architect

General Qualifications

Mr. Bolen brings over 36 years of design and project coordination experience to the project. 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, from the early planning stages to the construction implementation. Increasingly, Mr. Bolen's facilities have become the result of collaborative problem solving with other design professionals and our clients.

Experience

A/E Services for the Office of the Adjutant General, West Virginia Army National Guard, Division of Engineering and Facilities, Charleston, West Virginia. *State Army National Guard Headquarters.* Architect. Responsibilities included providing a complete design and construction

administration services for architectural improvements of the first floor of the Office of the Adjutant General (TAG), and to provide MEP and HVAC design improvements for the entire TAG Wing, Headquarters Building, and Armory/Drill Floor. 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 a lump sum/fixed fee contract for architectural and engineering services. Baker was selected by the Division of Engineering and Facilities to provide complete design and construction administration services for the renovation of the first floor of the entire wing of the Office of the Adjutant General (TAG). The Owner requested the need for modernization of approximately 12,000 square feet of existing outdated office space - 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 and asbestos removal.

West Virginia Army National Guard - TAG Wing Improvement, Charleston, West Virginia. *State Army National Guard Headquarters.* Architect. Provided complete design and construction administration services for architectural improvements of the first floor of the Office of the Adjutant General (TAG), and provided MEP and HVAC design improvements for the entire TAG Wing, Headquarters Building, and Armory/Drill Floor. Baker performed complete planning, design, and construction management services for renovations to the Office of the Adjutant General. Project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, several new wall partitions, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal. Baker provided Construction Administration and inspection services as well as periodic site review during construction.

Little Kanawha Bus Facility, Calhoun County, West Virginia. *WV Division Of Public Transit.* Architect. Responsibilities include providing a complete design and detailed construction administration services include the construction of a pre-engineered metal and brick construction, sited on the available property allowing for future expansion needs. Baker is providing architectural and engineering services, landscape architecture, and construction-phase support for a new, 10,000-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The 4,500-square-foot administrative area will include offices, a conference room, a money-counting room, and a driver-training room, and the 5,500-square-foot

Years with Baker: 3

Years with Other Firms: 36

Education

B.S., 1980, Architectural Design,
Parkersburg Community College

Licenses/Certifications

Registered Architect, West Virginia,
1999

LEED Green Associate, 2010

bus maintenance area will include storage for seven buses. The facility will be ADA-compliant and is being designed to achieve LEED® certification. Services include site survey and design, geotechnical testing, environmental compliance, utility coordination, bid documents, bid-phase support, and as-built drawings.

Non-Baker Project Experience

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

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

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

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

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

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

Classroom and Outdoor Training Facility Upgrades, Camp Atterbury, Columbus, Indiana. *Directorate of Public Works, Post Engineer.* Project Architect. Project responsibilities included site surveying and base map preparation, site civil and architectural plan preparation, detailing, bidding, and construction administration for renovations required by the Post Engineer, Camp Atterbury, Indiana.

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

Duncan M. Penney, A.I.A., C.C.S., C.C.C.A., LEED AP, DBIA

Architect

General Qualifications

Mr. Penney's exceptional technical, analytical, and architectural skills reflect more than 29 years of experience in architectural design and project management. His achievements include delivering multi-million dollar projects on time and within construction budget. Mr. Penney has performed project design, project management, design charrettes, feasibility studies, construction administration, and specification writing. A Certified Construction Specifier (CCS), he is skilled in producing construction documents. Mr. Penney is also a U.S. Green Building Council, LEED® accredited professional, with recent experience on over a dozen Pennsylvania Army National Guard Readiness Centers, statewide, for the Stryker Brigade Combat Teams, and Silver LEED®-certified U.S. Army Reserve Center projects for the Louisville District, U.S. Army Corps of Engineers. He is a skilled team facilitator and is adept in providing cross-functional team leadership. He maintains close liaison with clients.

Experience

Combined Support Maintenance Shop, Pittsburgh International Airport (PIT), Coraopolis, Pennsylvania.

Pennsylvania Department of Military and Veterans (formerly Departments of the Army and the Air Force). Architect. Served as Baker's Lead Facilitator and Senior Architect for a multi-disciplined Project Planning Document Charrette. Served as technical advisor and contributor to technical planning documentation. Baker conducted site assessments and a two-day Project Planning Document Charrette (PPDC), performed a utilities study, confirmed land use and zoning requirements, identified pertinent ordinance requirements of the municipality such as zoning, stormwater development, and land development as well as rights-of-way and easements that impact the project, and provided drawings of the initial building and an unheated storage facility, access drive, and parking orientation, grading plans, and stormwater features as well as cost estimates.

Tactical Equipment Maintenance Facilities, MATOC Task Order No. 1, Fort Bragg, North Carolina.

Walbridge Aldinger Company. Architect. Responsibilities included serving as LEED® Project Administrator, along with being an advisor to the review team for sustainability and LEED® design and construction issues. Baker was the designer of record for the design-build delivery of six tactical equipment maintenance facilities at Fort Bragg. The project was performed under a multiple-award task-order contract for the design and construction of facilities to be used for the maintenance, repair, overhaul, and storage of military tactical vehicles and equipment.

Two Tactical Equipment Maintenance Facilities, SATOC TO #1, Fort Bliss, El Paso, Texas. *U.S. Army Corps of Engineers, Tulsa District.* Architect. Responsibilities included serving as LEED® Project

Years with Baker: 8

Years with Other Firms: 21

Education

B.Arch., 1979, Architecture,
Carnegie Mellon University

A.D., 1975, Fine Arts, Cape Cod
Community College

Licenses/Certifications

Registered Architect, Pennsylvania,
1986

Construction Documents
Technologist, 2002

LEED Accredited Professional, 2003

NCARB, 1990

Certified Construction Specifier,
2001

Certified Construction Contract
Administrator, 2004

NCI Charrette System Certificate,
2006

Design-Build Professional, 2010

Administrator, along with being an advisor to the review team for sustainability and LEED® design and construction issues. Projects constructed under this task order include Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF). TEMFs provide facilities for the purpose of maintaining and repairing vehicles, complete with equipment and parts storage, and administrative offices. Task Order No. 0001 was for the design/build delivery of a two TEMFs to be shared by five Battalions and one Company, an 8,000-square-foot distribution company storage facility, a 1,620-square-foot facility for oil storage, and a 1,620-square-foot building for hazardous materials storage. Facility designs are required to meet or exceed a Silver LEED® certification.

Design/Build AFQ/RFP Development for Statewide Construction Program, PAARNG Stryker Brigade Combat Team, Statewide, Pennsylvania. *US Property and Fiscal Office for Pennsylvania.* Task Manager. Served as Lead Facilitator and Senior Architect for Baker Team Design Charrette. Responsibilities included architectural specifications and building code review. Also served as Technical Advisor and contributor for coordination of disciplines for technical documentation and Task Manager for architectural design/build RFP Documents. Baker provided services under numerous National Guard Bureau IDIQ contracts to support the Pennsylvania Army National Guard (PAARNG) in implementing a \$167,000,000 statewide construction program for the Stryker Brigade Combat Team conversion of numerous PAARNG facilities. The program included the design of new soldier Readiness Centers (RC) and vehicle Field Maintenance Shops (FMS), as well as facility additions. Baker performed all aspects of design/build RFP implementation, from providing significant architectural, structural, geotechnical, civil engineering, and other technical input for RFP Project Definition Documents, to developing the application form used to evaluate potential design/build contractor teams, to providing client support during the actual design/build team selection process. The sustainable design goal is for each finished facility to qualify for either a Gold SPiRiT or Silver LEED® Certified rating. Baker's task orders include the following sites: Erie – a new Readiness Center and a new Field Maintenance Shop; Philadelphia – a new Readiness Center and Field Maintenance Shop; Elizabethtown – a new Readiness Center and a new Field Maintenance Shop; and Bradford and Huntingdon – new Readiness Centers. Additionally, Baker has developed Design/Build RFP documents for the additions and alterations to Readiness Centers in Lewistown, Punxsutawney, Butler, Hanover, Lebanon, Huntingdon, and Hollidaysburg.

Combined Regional Maintenance Facility, Fort Dix, New Jersey. *U.S. Army Corps of Engineers, Louisville District.* Architect. Responsibility included serving as a technical advisor to architectural staff for the construction documents, as well as providing a quality assurance/control review of the documents. Baker provided design services for a Combined Regional Maintenance Facility at Fort Dix, New Jersey. The 50,400-square-foot facility is an integrated, consolidated, regional, combined vehicle maintenance shop and mobilization and training equipment site that provides for the storage, inspection, maintenance, and repair of combat and tactical vehicles and equipment associated with the regional deployment of Army National Guard, Army, Marine, and Navy Reserve units. Building Information Modeling (BIM) was used in the design process that aided in identifying any potential space conflicts, as well as being a maintenance tool for the facility.

Design-Build Delivery of Fire Brigade Tactical Equipment Maintenance Facility, Fort Bliss, Texas. *U.S. Army Corps of Engineers, Tulsa District.* Architect. Responsibilities included serving as LEED® Project Administrator, along with being an advisor to the review team for sustainability and LEED® design and construction issues. Baker was the designer of record for the fast-tracked design-build delivery of an \$11.4 million, 35,158-square-foot tactical equipment maintenance facility (TEMF) complex, consisting of a 7,869-square-foot administrative-training facility and a 27,289-square-foot organizational maintenance shop. The TEMF was designed to meet LEED® Silver certification. Baker's comprehensive services ranged from site and civil engineering to building architecture and facility engineering, including structural, mechanical, plumbing, fire protection, and electrical and telecommunications systems design, and LEED® certification administration.

Alana S. Pulay, IIDA, LEED® AP

Interior Designer

General Qualifications

Ms. Pulay is a professional interior designer with comprehensive knowledge of architecture and the design industry with over 9 years of experience in commercial and residential design, project budgeting, specifications writing, bid preparation and contract negotiations, construction job site scheduling, and green building design. Ms. Pulay has led and managed numerous interior design projects where she was responsible for the design, development, and coordination of all interior elements of the projects, including selection of all finishes, furnishings, and equipment.

Ms. Pulay also teaches junior level interior design studio classes for the University of Charleston, which included syllabus preparation and development of the course interior design project for the semester. She also mentors senior interior design students.

Ms. Pulay is a well organized professional who enjoys a challenge and is committed to lifelong self-improvement. She is an effective team player with proven listening, interpersonal, and communications skills. Ms. Pulay is proficient in AutoCAD, SketchUp, Adobe Photoshop, MS Word, MS Excel, and MS PowerPoint.

Experience

Little Kanawha Bus Facility, Grantsville, Calhoun County, West Virginia. *West Virginia Division of Public Transit.* Interior Designer. Baker is providing architectural and engineering services, interior design, landscape architecture, and construction-phase support for a new 10,000-square foot pre-engineered metal and brick bus maintenance and transit operations facility. The 4,500-square-foot administrative area will include offices, a conference room, a money-counting room, and a driver-training room, and the 5,500-square-foot bus maintenance area will include storage for seven buses. The facility will be ADA-compliant and is being designed to achieve LEED® certification. Services include site survey and design, geotechnical testing, environmental compliance, utility coordination, bid documents, bid-phase support, and as-built drawings.

West Virginia State Capitol Restroom Renovations, Charleston, West Virginia. *State of West Virginia, General Services Division.* Interior Designer. Ms. Pulay is currently providing the State of West Virginia General Services Division interior design support for a comprehensive restroom renovation and upgrade effort for Building 1 of the West Virginia Capitol. Working in conjunction with the Owner and a team of specialized sub-consultants, Ms. Pulay is currently assisting the MEP effort to replace and update the plumbing and lighting fixtures in all the restrooms to meet new ADA standards, yet remain sympathetic to the original and historic Cass Gilbert original design.

Non-Baker Project Experience

Lincoln County High School, Hamlin, West Virginia, *Lincoln County Board of Education.* Interior Designer. Prepared complete construction drawings for entire project interior. Lincoln County High School combines four existing high schools into one school. Completed in August 2006, the new \$31.4 million facility provides 217,000 SF for 950 enrolled students. To formulate a more comprehensive approach to this

Years with Baker: 2

Years with Other Firms: 7

Education

M.S. Architecture Specializing in Interior Design, University of Nebraska, 2010

B.S., Interior Design, The Ohio State University, 2003

Registrations

NCIDQ, 2005

LEED AP, 2008

Professional Affiliations

International Interior Design Association

project, the Owner also added the vocational school's curriculum to broaden students' learning opportunities. Students can now attend regular curriculum classes and vocational classes under one roof. The classrooms themselves provided a showcase for state-of-the-art technology. By simply observing how automatic lighting controls enhance natural day lighting in their classrooms, students are able to visualize sustainable design, energy conservation, and technology working in tandem. A full integrated computer system allows students and faculty computer access throughout the entire facility and in every typed of classroom. The interior design combines concepts from "green" design and bright colors to make a dynamic environment for the students in the shared common areas. The classrooms were designed in neutral color palette for an optimized learning environment. Linoleum flooring was selected along with carpet tiles to help achieve a sustainable design.

Wayne Elementary School, Wayne, West Virginia, *Wayne County Board of Education.* Interior Designer. Prepared complete construction drawings for entire project interior. The new 48,276 SF Wayne Elementary School replaces an outdated facility on a more centrally located site. This school included new kindergarten rooms, classrooms, art instruction studio, music room, separate dining and physical education spaces, a state of the art media center, and other academic areas. This project was funded mostly by a West Virginia School Building Authority grant. The outstanding use of color throughout the building creates a bright, exciting environment for learning. The interior design for this project included creating the interior floor pattern, selection of finishes and furnishings, developing the construction documents and following through with the final punch list after completion of construction. The color scheme was developed as a collaborative effort with the school's "Color Committee". This group consisted of teachers, parents, community members, and faculty who are involved within the school system. There was also collaboration with the project architect to align architectural elements with the floor pattern. Total project cost: \$7,132,429.00. Completion date: Fall, 2006.

Erma Byrd Higher Education Center, Beaver, Raleigh County, West Virginia. *Southern West Virginia Community and Technical College.* Project Interior Designer. Responsible for space planning and the selection of finishes and furnishings. This project provides a central location for classroom and administrative space to be shared by six different colleges and universities. It is the first building of a planned campus environment comprised of other classroom buildings and research facilities. The project consists of 29,700 SF on the main level and 3,300 SF of mechanical mezzanine. Being a teaching facility the building itself is designed to be a teaching tool. Day lighting is incorporated throughout the building and the mechanical equipment is designed to be viewed and monitored by students in a learning environment. Using data collected by various sensors, the control system can graphically display how all systems react to changes in environmental conditions. The design concept was based on "green" principles. Fritz tile, linoleum flooring, and low VOC paints were specified to complete the design. Total project cost: \$7.5 million. Completion date: September 2007.

Gene Spadaro Juvenile Center, Mt. Hope, West Virginia, *West Virginia Division of Corrections.* Interior Designer. Prepared complete construction drawings for entire project interior. This is a prototype juvenile center design evolving from a hardware-secured correctional institution to a staff-secured, rehabilitative center for at risk youths. Completed in October 2004, the building is constructed of load-bearing masonry walls with brick and natural stone veneer. The interior steel structure is exposed and painted. Innovative color schemes were used to create stimulating variety in the spaces. Lighting was carefully designed to supplement natural sunlight and ensure comfortable lighting levels. The shift to staff-secured programming required even greater levels of observation, communication and control, and the open layout of the plan meets these objectives. To offset the comfortable spaces of the shared areas, sleeping quarters resemble those in more institutional facilities, thus educating the youth about what their future could be if efforts to turn them away from delinquency and crime are ignored.

Erik P. Spicker, P.E.
Structural Engineer

General Qualifications

Mr. Spicker is a structural engineer with experience in the design of military, governmental, commercial, industrial, transit, educational, and residential design and construction. He is experienced in fast-tracked projects where substructure and foundation packages are released early and separately to contractors to allow early construction start.

Experience

Combined Support Maintenance Shop, Pittsburgh International Airport (PIT), Coraopolis, Pennsylvania.

Pennsylvania Depart. of Military and Veterans. Structural Engineer. Responsible for providing structural engineering support for the preparation of the requirements documents.

Baker conducted site assessments and a two-day Project Planning Document Charrette (PPDC), performed a utilities study, confirmed land use and zoning requirements, identified pertinent ordinance requirements of the municipality such as zoning, stormwater development, and land development as well as rights-of-way and easements that impact the project, and provided drawings of the initial building and an unheated storage facility, access drive, and parking orientation, grading plans, and stormwater features as well as cost estimates.

Design/Build AFQ/RFP Development for Statewide Construction Program, PAARNG Stryker Brigade Combat Team, Statewide, Pennsylvania.

US Property and Fiscal Office for Pennsylvania. Structural Engineer. Responsibilities included performing technical QA/QC reviews of the structural engineering designs. Baker provided services under numerous National Guard Bureau IDIQ contracts to support the Pennsylvania Army National Guard (PAARNG) in implementing a \$167,000,000 statewide construction program for the Stryker Brigade Combat Team conversion of numerous PAARNG facilities. The program included the design of new soldier Readiness Centers (RC) and vehicle Field Maintenance Shops (FMS), as well as facility additions. Baker performed all aspects of design/build RFP implementation, from providing significant architectural, structural, geotechnical, civil engineering, and other technical input for RFP Project Definition Documents, to developing the application form used to evaluate potential design/build contractor teams, to providing client support during the actual design/build team selection process. Baker's task orders include the following sites: Erie – a new Readiness Center and a new Field Maintenance Shop; Philadelphia – a new Readiness Center and Field Maintenance Shop; Elizabethtown – a new Readiness Center and a new Field Maintenance Shop; and Bradford and Huntingdon – new Readiness Centers.

Tactical Equipment Maintenance Facilities, MATOC Task Order No. 1, Fort Bragg, North Carolina.

Walbridge Aldinger Company. QA/QC. Responsible for performing a technical QA/QC of the structural engineering design. Baker was the designer of record for the design-build delivery of six tactical equipment maintenance facilities at Fort Bragg. The project was performed under a multiple-award task-order contract for the design and construction of facilities to be used for the maintenance, repair, overhaul, and storage of military tactical vehicles and equipment.

Years with Baker: 8

Years with Other Firms: 8

Education

B.S.C.E., 1995, Civil Engineering,
University of Akron

Licenses/Certifications

Professional Engineer:

Pennsylvania, 2000

New Jersey, 2008

Connecticut, 2008

Oklahoma, 2008

NCEES Certified, 2008

Two Tactical Equipment Maintenance Facilities, SATOC TO #1, Fort Bliss, El Paso, Texas. *U.S. Army Corps of Engineers, Tulsa District.* QA/QC Engineer. Responsible for reviewing structural foundation documents. Projects constructed under this task order include Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF). TEMFs provide facilities for the purpose of maintaining and repairing vehicles, complete with equipment and parts storage, and administrative offices. Task Order No. 0001 was for the design/build delivery of a two TEMFs to be shared by five Battalions and one Company, an 8,000-square-foot distribution company storage facility, a 1,620-square-foot facility for oil storage, and a 1,620-square-foot building for hazardous materials storage. Facility designs are required to meet or exceed a Silver LEED® certification.

Design-Build Tactical Equipment Maintenance Facilities, 31st ADA Brigade, Fort Sill, Oklahoma. *U.S. Army Corps of Engineers, Tulsa District.* QA/QC Engineer. Responsible for providing QA/QC of structural systems. Baker is providing design services the design-build delivery of three tactical equipment maintenance facilities for the 31st ADA Brigade. The project includes 18,000-square-foot, 35,200-square-foot, and 57,031-square-foot facilities, each with independent hazardous waste storage; petroleum, oil, and lubricant storage; and organizational storage facilities. Baker also designed a 20,000-square-foot supply support activity facility.

West Ox Bus Operations Facility, Fairfax, Virginia. *County of Fairfax.* Structural Engineer. Responsibilities included leading the design phase structural engineering for the maintenance facility. The West Ox Bus Operations Facility can accommodate operations and maintenance for a combined fleet of up to 300 Washington Metropolitan Area Transit Authority (WMATA) and Fairfax Connector buses, including approximately 26 maintenance bays, provide fuel, wash, and body shop facilities. Baker was responsible for planning, architecture, mechanical engineering, electrical engineering, structural engineering, and transportation engineering in the design of this facility.

Combined Regional Maintenance Facility, Fort Dix, New Jersey. *U.S. Army Corps of Engineers, Louisville District.* Structural Engineer. Responsibilities included providing a preliminary structural analysis for the conceptual design. Baker provided design services for a Combined Regional Maintenance Facility at Fort Dix, New Jersey. The 50,400-square-foot facility is an integrated, consolidated, regional, combined vehicle maintenance shop and mobilization and training equipment site that provides for the storage, inspection, maintenance, and repair of combat and tactical vehicles and equipment associated with the regional deployment of Army National Guard, Army, Marine, and Navy Reserve units. Building Information Modeling (BIM) was used in the design process that aided in identifying any potential space conflicts, as well as being a maintenance tool for the facility.

Tactical Equipment Maintenance Facility, White Sands Missile Range, New Mexico. *U.S. Army Corps of Engineers, Tulsa District.* QA/QC Engineer. Responsible for reviewing the structural foundation design documents. Under a design/build ID/IQ SATOC, Task Order No. 0006, the team of Baker and Walbridge Aldinger Company is delivering a Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF) at White Sands Missile Range, NM. The project includes one medium-sized 35,290-square-foot TEMF with a 10-ton bridge crane, to accommodate approximately 437 organizational vehicles. Additional structures that are a part of this facility include a 1,560-square-foot POL storage facility, a 1,560-square-foot building for hazardous materials storage, and an 11,550-square-foot organizational storage building.

U.S. Army Reserve Center OMS/AMSA/STRG, Greenville, South Carolina. *U.S. Army Corps of Engineers, Louisville District.* Structural Engineer. Responsibilities included leading the structural engineering design and providing construction phase support services. Baker designed a new 88,500-square-foot multi-story Training Center, Organized Maintenance Shop/Area Maintenance Support Activity (OMS/AMSA), and unheated storage (STRG) to accommodate 600 reservists. The new structures consist of structural steel frames, masonry veneer exterior walls, and standing seam metal roofs.

Dennis E. Myer, P.E., LEED AP

Mechanical Engineer

General Qualifications

Mr. Myer is a mechanical engineer with extensive experience in designing HVAC systems for military, education, transit, aviation, industrial, commercial, and institutional applications. HVAC design experience includes hot and chilled water central plants, variable air volume (VAV) systems, as well as specialty HVAC applications such as maintenance garages, commercial kitchens, and vehicle tunnels. Mr. Myer has in depth expertise in public as well as military specific design standards including ASHRAE standards 90.1 and 62.1 as well as Military Unified Facilities Criteria (UFC's) including Anti-terrorism / Force Protection Standards (UFC 4-010-01). He has experience with numerous U.S. Army Corps of Engineers, NAVFAC as well as USCG projects, and has on-site experience at dozens of bases, domestic and overseas.

Experience

Tactical Equipment Maintenance Facilities, MATOC Task Order No. 1, Fort Bragg, North Carolina. *Walbridge Aldinger Company.* Mechanical Engineer. Provided independent, internal technical review of the project mechanical design, interdisciplinary coordination and adherence to Unified Facilities Design Criteria and other building design codes and standards. Baker was the designer of record for the design-build delivery of six tactical equipment maintenance facilities at Fort Bragg. The project was performed under a multiple-award task-order contract for the design and construction of facilities to be used for the maintenance, repair, overhaul, and storage of military tactical vehicles and equipment.

Tactical Equipment Maintenance Facility, White Sands Missile Range, New Mexico. *U.S. Army Corps of Engineers, Tulsa District.* Mechanical Engineer. Provided ITR (internal technical review) of mechanical systems design. Under a design/build ID/IQ SATOC, Task Order No. 0006, the team of Baker and Walbridge Aldinger Company is delivering a Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF) at White Sands Missile Range, NM. The project includes one medium-sized 35,290-square-foot TEMF with a 10-ton bridge crane, to accommodate approximately 437 organizational vehicles. Additional structures that are a part of this facility include a 1,560-square-foot POL storage facility, a 1,560-square-foot building for hazardous materials storage, and an 11,550-square-foot organizational storage building.

MATOC for Design/Build of Vehicle Maintenance Complexes, Locations within the South Atlantic Division. *Walbridge Aldinger Company.* Mechanical Engineer. Provided independent Technical QA/QC review of the project mechanical systems design. Baker and design/build partner, Walbridge Aldinger Company, were awarded a Multiple Award Task Order Contract (MATOC) by the U.S. Army Corps of Engineers, Savannah District, for the design and construction of facilities to be used for the maintenance, repair, overhaul, and storage of military tactical vehicles and equipment. The facilities are typically part of an overall complex centered on a vehicle maintenance bay building and can include the addition of administrative spaces, storage rooms, parts storage, secure communications storage, and wash racks. A major portion of each project includes extensive hardstand and paving and fencing. Development of the complex

Years with Baker: 14

Years with Other Firms: 3

Education

M.B.A., 2000, Business Administration, Robert Morris University

B.M.E., 1993, Mechanical Engineering, Gannon University

Licenses/Certifications

Professional Engineer:

Pennsylvania, 1999

Oklahoma, 2008

Mechanical, Oregon, 2008

LEED Accredited Professional BD+C, 2006

may also include all associated site development required including site planning, clearing, grubbing, grading, installation of utility infrastructure, and installation of roads, service access, parking, and landscaping.

Unit Operations Facilities, SATOC TO #4, Fort Bliss, El Paso, Texas. *U.S. Army Corps of Engineers, Tulsa District.* Mechanical Engineer. Provided ITR (internal technical review) of mechanical systems design. Projects constructed under this task order include Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF). TEMFs provide facilities for the purpose of maintaining and repairing vehicles, complete with equipment and parts storage, and administrative offices. Task Order No. 0004 was for the design/build delivery of a medium-sized, 32,290-square-foot TEMF, a 6,300-square-foot Organizational (Deployment) Storage facility, a 540-square-foot oil storage facility, and a 540-square-foot building for hazardous materials storage.

U.S. Army Reserve Center OMS/AMSA/STRG, Greenville, South Carolina. *U.S. Army Corps of Engineers, Louisville District.* Mechanical Engineer. Responsibilities included the complete mechanical (HVAC) design of an Army Reserve Center as the DOR (designer of record), supervising mechanical designers and drafters. Mechanical systems included a central hydronic hot and chilled water plant with primary and secondary piping systems. Baker designed a new 88,500-square-foot multi-story Training Center, Organized Maintenance Shop/Area Maintenance Support Activity (OMS/AMSA), and unheated storage (STRG) to accommodate 600 reservists. The new structures consist of structural steel frames, masonry veneer exterior walls, and standing seam metal roofs.

U.S. Army Reserve Center OMS/AMSA/STRG, North Canton, Ohio. *U.S. Army Corps of Engineers, Louisville District.* Assistant Project Manager. Responsibilities as Assistant Project Manager during design included in-house interdisciplinary coordination activities including drawing interference coordination, specification generation using SpecsIntact, internal administration of Dr. Checks review process, and packaging and coordination of deliverable packages. Project management role during the construction administration phase included acting as the day-to-day point of contact for all CA activities requiring designer input, including RFI's, shop drawing review, and interdisciplinary coordination and regular site visits to assist in resolution of construction related issues. Mechanical engineering responsibilities included the complete mechanical (HVAC) design of an Army Reserve Center as the DOR (designer of record), supervising mechanical designers and drafters. Mechanical design included central hydronic hot and chilled water plant with primary and secondary piping systems. The U.S. Army Reserve required a Training Center and Organizational Maintenance Shop/Area Maintenance Support Activity (OMS/AMSA) facility for the 88th Reserve Support Command.

U.S. Armed Forces Reserve Center, Bristol, Pennsylvania. *U.S. Army Corps of Engineers, Louisville District.* Mechanical Engineer. Developed the mechanical and energy performance related sections of the Request for Proposal. Baker developed Design/Build RFP Documents for a new 600-member Armed Forces Reserve Center with Organized Maintenance Shop (OMS) and an Unheated Storage (UHS) building that realigns Army Reserve and Marine Reserve units as directed by BRAC 05. The facility will provide administrative, educational, assembly, library, learning center, vault, weapons simulator, and physical fitness areas for eight Army Reserve units and three Marine units, as well as provide adequate parking for all military and privately-owned vehicles. A 94,500-square-foot training building (AFRC), an 8,900-square-foot Maintenance Shop (OMS), and a 2,900-square-foot unheated storage (UHS) building was included in the RFP package. The buildings will be permanent construction with reinforced concrete foundations, concrete floor slabs, and will include mechanical, electrical, and information systems including SIPRNET rooms, as required. Supporting facilities will include site preparation, paving, fencing, and extension of utilities to serve the project. The facility was designed to meet Silver LEED® standards and be ADA compliant.

David J. Hilliard, LEED Green Associate

Mechanical Engineering Technician

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. He has continued his education and professional development through his involvement with ASHRAE and other pertinent organizations.

Years with Baker: 2

Years with Other Firms: 19

Education

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

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

Licenses/Certifications

LEED Green Associate, West Virginia, 2010

Experience

West Virginia Army National Guard - TAG Wing Improvement, Charleston, West Virginia. *State Army National Guard Headquarters.* Mechanical Designer. 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 performed complete planning, design, and construction management services for renovations to the Office of the Adjutant General at the State Army National Guard Headquarters in Charleston, West Virginia. Project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, several new wall partitions, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal. Baker provided Construction Administration and inspection services as well as periodic site review during construction.

A/E Services for the Office of the Adjutant General, West Virginia Army National Guard, Division of Engineering and Facilities, Charleston, West Virginia. *State Army National Guard Headquarters.* Mechanical Designer. 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 a lump sum/fixed fee contract for architectural and engineering services. Baker was selected by the Division of Engineering and Facilities to provide complete design and construction administration services for the renovation of the first floor of the entire wing of the Office of the Adjutant General (TAG). The Owner requested the need for modernization of approximately 12,000 square feet of existing outdated office space - 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 and asbestos removal.

Campus Master Planning and Architectural and Engineering Services for State Capitol Complex, Charleston, West Virginia. *State of WV General Services Division.* Planner. 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, currently providing programming, cost estimating and facilities planning support. Services included HVAC Loads as well as utility evaluation and planning for future growth. Baker is providing comprehensive master planning services, plans and construction specifications, and construction administration for improvements to the historic West Virginia state capitol campus. Master planning services include plans for expansion, location of new buildings, pedestrian and traffic circulation, landscaping, utilities, and site security. Baker is also providing construction plans and contract administration services for some of the security and landscaping improvements.

West Virginia State Capitol Restroom Renovations. *State of WV General Services Division.* Plumbing Engineer. Currently providing the State of West Virginia General Services Division a comprehensive plumbing plan for the renovation and renovation of the 33 restrooms of the West Virginia State Capitol Building. Baker is leading a planning study for the renovation of 31 restrooms in the historic West Virginia Capitol Building. The planning study will assess the facilities and their conformance to current code requirements and code-required capacities, compliance with Americans with Disabilities Act (ADA) requirements, quantification of the building occupancy during normal and peak periods, and an evaluation of gender distribution of restrooms within the capitol. Baker will provide design, construction sequence, and scheduling recommendations. Upon approval of the design, Baker will prepare construction documents and provide construction administration services for the renovation of three restrooms on the basement level.

Little Kanawha Bus Facility, Calhoun County, West Virginia. *WV Division Of Public Transit.* Mechanical Designer. Responsible for the Mechanical, Electrical and Plumbing Design, MEP Document Preparation, and Construction Administration for a new bus maintenance and office facility for Gilmer County. Duties include the design of the vehicle storage, cleaning and maintenance mechanical systems, as well as oil pumping and collection systems. The design of an energy efficient HVAC system for the entire building is also part of his responsibilities. Baker is providing architectural and engineering services, landscape architecture, and construction-phase support for a new, 10,000-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The 4,500-square-foot administrative area will include offices, a conference room, a money-counting room, and a driver-training room, and the 5,500-square-foot bus maintenance area will include storage for seven buses. The facility will be ADA-compliant and is being designed to achieve LEED® certification. Services include site survey and design, geotechnical testing, environmental compliance, utility coordination, bid documents, bid-phase support, and as-built drawings.

Owen Milligan, P.E.

Senior Electrical Engineer

General Qualifications

Mr. Milligan is an electrical engineer who is experienced working with consulting engineering firms in the study and design of electric distribution and control systems, emergency power for process plants and facilities, water/wastewater treatment plants, government and commercial projects, ASHRAE energy-efficient building design, coordination with vendor and contractors, and approval of vendor drawings. He has a strong knowledge of distribution equipment and designs, motor control center layouts and design, and start-up and services during construction. He is capable of handling multiple projects from conception to final design, working as a team member toward meeting project goals. His work includes providing technical advice to designers and coordinating design and construction work with engineers, contractors, vendors, and clients. Mr. Milligan has participated in five-step SAVE International Process value engineering studies.

Years with Baker: 4

Years with Other Firms: 19

Education

B.S., 1988, Electrical Engineering,
Gannon University

Licenses/Certifications

Professional Engineer:
Pennsylvania, 1999
Kentucky, 2005
Montana, 2001
California, 2003

Experience

Tactical Equipment Maintenance Facilities, MATOC Task Order No. 1, Fort Bragg, North Carolina. *Walbridge Aldinger Company.* Electrical Engineer. Performed electrical engineering design and coordination for site utilities, power distribution, lighting, site communications, interior communications, hard stand power and communications, ground and lightning protection, and fire alarm/mass notifications. Designs were required to meet UFC and military design standards. Baker was the designer of record for the design-build delivery of six tactical equipment maintenance facilities at Fort Bragg. The project was performed under a multiple-award task-order contract for the design and construction of facilities to be used for the maintenance, repair, overhaul, and storage of military tactical vehicles and equipment.

Two Tactical Equipment Maintenance Facilities, SATOC TO #1, Fort Bliss, El Paso, Texas. *U.S. Army Corps of Engineers, Tulsa District.* Electrical Engineer. Provided design assistance to the electrical engineering subconsultant, and performed a technical quality review of the construction documents. Electrical systems included lighting, lightning protection and grounding, power distribution, telecommunications, fire alarm, and unique voltage and frequency requirements. Designs were required to meet UFC and military design standards. Projects constructed under this task order include Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF). TEMFs provide facilities for the purpose of maintaining and repairing vehicles, complete with equipment and parts storage, and administrative offices. Task Order No. 0001 was for the design/build delivery of a two TEMFs to be shared by five Battalions and one Company, an 8,000-square-foot distribution company storage facility, a 1,620-square-foot facility for oil storage, and a 1,620-square-foot building for hazardous materials storage. Facility designs are required to meet or exceed a Silver LEED® certification.

MATOC for Design/Build of Vehicle Maintenance Complexes, Locations within the South Atlantic Division. *Walbridge Aldinger Company.* Electrical Engineer. Performed electrical engineering design and coordination for site utilities, power distribution, lighting, site communications, interior communications, hard stand power and communications, ground and lightning protection, and fire alarm/mass notifications.

Designs were required to meet UFC and military design standards. Baker and design/build partner, Walbridge Aldinger Company, were awarded a Multiple Award Task Order Contract (MATOC) by the U.S. Army Corps of Engineers, Savannah District, for the design and construction of facilities to be used for the maintenance, repair, overhaul, and storage of military tactical vehicles and equipment. The facilities are typically part of an overall complex centered on a vehicle maintenance bay building and can include the addition of administrative spaces, storage rooms, parts storage, secure communications storage, and wash racks. A major portion of each project includes extensive hardstand and paving and fencing. Development of the complex may also include all associated site development required including site planning, clearing, grubbing, grading, installation of utility infrastructure, and installation of roads, service access, parking, and landscaping.

Design/Build Armed Forces Reserve Center, Bell, California. *U.S. Army Corps of Engineers, Louisville District.* Electrical Engineer. Provided design consultation services to the core team including site lighting, power distribution, power to partitioned furniture locations, and ground fault protection issues. Designs were required to meet UFC and military design standards. Baker was the designer-of-record, working with the design/build contractor and the client, for the design/build delivery of a 238,500-square-foot Armed Forces Reserve Center complex, comprised of a 179,000-square-foot Administrative/Training facility, 44,000-square-foot Organizational Maintenance Shop, and a 15,500-square-foot Unheated Storage facility (AFRC/OMS/UHS) with all site features. The facility achieved LEED® NC v2.2 Silver Certified rating from the U.S. Green Building Council. Services provided include architecture, Structural Interior Design (SID) and Comprehensive Interior Design (CID), site/civil, all building engineering, and value engineering.

Design/Build U.S. Army Reserve Center, Fort Lewis, Washington. *U.S. Army Corps of Engineers, Louisville District.* QA/QC. Provided design consultation to the electrical subconsultant and performed a technical quality review of the electrical construction documents. Systems included lighting, power distribution, lightning protection and grounding, telecommunications, security, and fire alarm. Designs were required to meet UFC and military design standards. As designer-of-record, Baker, partnered with the design/build contractor and the client for a new 1,000-member 119,425-square-foot U.S. Army Reserve Center (USARC) on a 17-acre site. The USARC is comprised of a Training Center, Unit Storage Building, and an Organizational Maintenance Shop/Area Maintenance Support Activity (OMS/AMSA). Functional spaces were provided for classrooms, offices spaces, assembly hall, kitchen, lockers, toilets, janitor rooms, shower rooms, library and reading room, learning center, network operations, telephone room, IT rooms, electrical rooms, mechanical rooms, mail room, weapons simulator and control rooms, maintenance bays, battery room, OMS and AMSA office, tools and parts storage, battery room, sprinkler room, unit storage, and armory and vault. The facility was designed to meet the Gold SPiRiT sustainability level.

Stewart Newburgh Armed Forces Reserve Center, Newburgh, New York. *U.S. Army Corps of Engineers, Louisville District.* QA/QC. Performed an independent interdisciplinary technical review of the electrical design that was required to meet UFC and military design standards. Baker developed Design/Build RFP Documents for an integrated, consolidated, regional 84,000-square-foot training facility, 16,200-square-foot vehicle maintenance shop, and 2,350-square-foot unheated storage building at Stewart Newburgh, New York. The center accommodates training and mobilization and provides for the storage, inspection, maintenance, and repair of combat and tactical vehicles and equipment associated with the regional deployment of Army National Guard and Army Reserve units.

U.S. Armed Forces Reserve Center, Williamsport, Pennsylvania. *U.S. Army Corps of Engineers, Louisville District.* Electrical Engineer. Provided technical narrative relating to the electrical engineering design for inclusion in the design/build RFP documents. Designs are required to meet UFC and military design standards. Baker developed Design/Build RFP Documents for a new 300-member Armed Forces Reserve Center (AFRC) with Organized Maintenance Shop (OMS) and an Unheated Storage (UHS) building that realigns Army Reserve and National Guard units as directed by BRAC 05.

Kevin W. Louk, R.C.D.D./N.T.S./O.P.S., LEED AP BD+C

Communications Designer / RCDD

General Qualifications

Mr. Louk has a diversified electrical background with over 15 years of experience, including over 8 years in electrical design and over 7 years in electrical construction and maintenance. He has lead electrical design projects for military installations, higher and secondary education, telecommunications buildings, medical facilities, commercial buildings, restaurants, and large-scale retail. A licensed master electrician, Mr. Louk's design and installation experience has been in the specialized areas of hazardous locations, clean rooms, and data centers. In addition to electrical design, he has performed construction administration duties and specification writing for his projects.

Experience

Tactical Equipment Maintenance Facilities, MATOC Task Order No. 1, Fort Bragg, North Carolina. *Walbridge Aldinger Company.* Electrical Designer. Responsible for performing design and preparing specifications for the lighting, power, telecommunication, fire alarm, mass notifications and intrusion detection systems (IDS) systems. Baker was the designer of record for the design-build delivery of six tactical equipment maintenance facilities at Fort Bragg. The project was performed under a multiple-award task-order contract for the design and construction of facilities to be used for the maintenance, repair, overhaul, and storage of military tactical vehicles and equipment.

Two Tactical Equipment Maintenance Facilities, SATOC TO #1, Fort Bliss, El Paso, Texas. *U.S. Army Corps of Engineers, Tulsa District.* Electrical Designer. Responsible for performing design and preparing specifications for the telecommunications system including voice, data, and public address systems. Projects constructed under this task order include Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF). TEMFs provide facilities for the purpose of maintaining and repairing vehicles, complete with equipment and parts storage, and administrative offices. Task Order No. 0001 was for the design/build delivery of a two TEMFs to be shared by five Battalions and one Company, an 8,000-square-foot distribution company storage facility, a 1,620-square-foot facility for oil storage, and a 1,620-square-foot building for hazardous materials storage. Facility designs are required to meet or exceed a Silver LEED® certification.

Combined Support Maintenance Shop, Pittsburgh International Airport (PIT), Coraopolis, Pennsylvania. *Pennsylvania Depart. of Military and Veterans (formerly Departments of the Army and the Air Force).* Electrical Designer. Responsible for the preparation of the design analysis for lighting, power, telecommunication, public address, and intrusion detection system (IDS) systems for Charrette documents.

Years with Baker: 4

Years with Other Firms: 7

Education

Certificate, 1998, Electrical Occupations, Professional Career Development Institute

Certificate, 1994, Electrical Maintenance, US Navy Electrician 'A' School

Licenses/Certifications

Master Electrician:

West Virginia, 2000

Master Electrician, Virginia, 1999

RCDD/Outside Plant Specialist (OSP), 2008

Registered Communications Distribution Designer, 2008

RCDD/Network Transport Systems Specialist (NTS), 2008

ICC and IAEI Electrical Plans Examiner, 2003

ICC and IAEI Commercial Electrical Inspector, 2003

ICC and IAEI Electrical Inspector, 2003

LEED Accredited Professional, 2008

LEED Accredited Professional BD+C, 2010

Baker conducted site assessments and a two-day Project Planning Document Charrette (PPDC), performed a utilities study, confirmed land use and zoning requirements, identified pertinent ordinance requirements of the municipality such as zoning, stormwater development, and land development as well as rights-of-way and easements that impact the project, and provided drawings of the initial building and an unheated storage facility, access drive, and parking orientation, grading plans, and stormwater features as well as cost estimates.

Design-Build Delivery of Fire Brigade Tactical Equipment Maintenance Facility, Fort Bliss, Texas. *U.S. Army Corps of Engineers, Tulsa District.* Electrical Designer. Responsible for performing design and preparing specifications for the telecommunications system including voice, data, and public address systems. Baker was the designer of record for the fast-tracked design-build delivery of an \$11.4 million, 35,158-square-foot tactical equipment maintenance facility (TEMF) complex, consisting of a 7,869-square-foot administrative-training facility and a 27,289-square-foot organizational maintenance shop. The TEMF was designed to meet LEED® Silver certification. Baker's comprehensive services ranged from site and civil engineering to building architecture and facility engineering, including structural, mechanical, plumbing, fire protection, and electrical and telecommunications systems design, and LEED® certification administration.

Tactical Equipment Maintenance Facility, White Sands Missile Range, New Mexico. *U.S. Army Corps of Engineers, Tulsa District.* Electrical Designer. Responsible for performing design and preparing specifications for the telecommunications system including voice, data, and public address systems. Under a design/build ID/IQ SATOC, Task Order No. 0006, the team of Baker and Walbridge Aldinger Company is delivering a Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF) at White Sands Missile Range, NM. The project includes one medium-sized 35,290-square-foot TEMF with a 10-ton bridge crane, to accommodate approximately 437 organizational vehicles. Additional structures that are a part of this facility include a 1,560-square-foot POL storage facility, a 1,560-square-foot building for hazardous materials storage, and an 11,550-square-foot organizational storage building.

U.S. Armed Forces Reserve Center, Lewisburg, Pennsylvania. *U.S. Army Corps of Engineers, Louisville District.* Electrical Designer. Responsibilities included answering request for information (RFI) from electrical contractor. Baker developed Design/Build RFP Documents for a new 400-member Armed Forces Reserve Center (AFRC) with Organized Maintenance Shop (OMS) and an Unheated Storage (UHS) building that realigns Army Reserve and National Guard units as directed by BRAC 05.

U.S. Armed Forces Reserve Center, Bristol, Pennsylvania. *U.S. Army Corps of Engineers, Louisville District.* Electrical Designer. Responsibilities included answering request for information (RFI) from electrical contractor. Baker developed Design/Build RFP Documents for a new 600-member Armed Forces Reserve Center with Organized Maintenance Shop (OMS) and an Unheated Storage (UHS) building that realigns Army Reserve and Marine Reserve units as directed by BRAC 05. The facility will provide administrative, educational, assembly, library, learning center, vault, weapons simulator, and physical fitness areas for eight Army Reserve units and three Marine units, as well as provide adequate parking for all military and privately-owned vehicles. A 94,500-square-foot training building (AFRC), an 8,900-square-foot Maintenance Shop (OMS), and a 2,900-square-foot unheated storage (UHS) building was included in the RFP package. The buildings will be permanent construction with reinforced concrete foundations, concrete floor slabs, and will include mechanical, electrical, and information systems including SIPRNET rooms, as required. Supporting facilities will include site preparation, paving, fencing, and extension of utilities to serve the project. The facility was designed to meet Silver LEED® standards and be ADA compliant.

Steven K. Henry, C.P.D.

Plumbing Designer

General Qualifications

Mr. Henry is experienced in the design of plumbing and fire protection systems, field surveys, and code interpretation. His project experience includes tenant space fit-outs and designs for shell buildings for both new and renovated government, military, vehicle maintenance, aviation, commercial, light industrial, data/communication, educational, institutional, high-rise apartments and hotels, and health care facilities. Mr. Henry is proficient with Intergraph MicroStation and AutoCAD design software.

Years with Baker: 6

Years with Other Firms: 12

Education

A.S.T., 1993, Drafting and Design Technology/Computer Graphics/Arch. CADD, Pittsburgh Technical Institute

Licenses/Certifications

Certified Plumbing Designer, 2002

Experience

Combined Regional Maintenance Facility, Fort Dix, New Jersey. *U.S. Army Corps of Engineers, Louisville District.* Designer. Responsibilities for Phase I included writing technical narrative and performing preliminary calculations for the plumbing and fire protection systems. Baker provided design services for a Combined Regional Maintenance Facility at Fort Dix, New Jersey. The 50,400-square-foot facility is an integrated, consolidated, regional, combined vehicle maintenance shop and mobilization and training equipment site that provides for the storage, inspection, maintenance, and repair of combat and tactical vehicles and equipment associated with the regional deployment of Army National Guard, Army, Marine, and Navy Reserve units. Building Information Modeling (BIM) was used in the design process that aided in identifying any potential space conflicts, as well as being a maintenance tool for the facility.

Two Tactical Equipment Maintenance Facilities, SATOC TO #1, Fort Bliss, El Paso, Texas. *U.S. Army Corps of Engineers, Tulsa District.* Designer. Served as the lead plumbing designer for oily waste, sanitary waste, and vent, and domestic water. Design also included compressed air system and POL fluid distribution system. Projects constructed under this task order include Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF). TEMFs provide facilities for the purpose of maintaining and repairing vehicles, complete with equipment and parts storage, and administrative offices. Task Order No. 0001 was for the design/build delivery of a two TEMFs to be shared by five Battalions and one Company, an 8,000-square-foot distribution company storage facility, a 1,620-square-foot facility for oil storage, and a 1,620-square-foot building for hazardous materials storage.

Design/Build AFQ/RFP Development for Statewide Construction Program, PAARNG Stryker Brigade Combat Team, Statewide, Pennsylvania. *US Property and Fiscal Office for Pennsylvania.* Designer. Responsibilities included preliminary design and technical approach narrative for the plumbing and fire protection systems. Baker provided services under numerous National Guard Bureau IDIQ contracts to support the Pennsylvania Army National Guard (PAARNG) in implementing a \$167,000,000 statewide construction program for the Stryker Brigade Combat Team conversion of numerous PAARNG facilities. The program included the design of new soldier Readiness Centers (RC) and vehicle Field Maintenance Shops (FMS), as well as facility additions. Baker performed all aspects of design/build RFP implementation, from providing significant architectural, structural, geotechnical, civil engineering, and other technical input for RFP Project Definition Documents, to developing the application form used to evaluate potential design/build contractor teams, to providing client support during the actual design/build team selection process. The sustainable design goal is for each finished facility to qualify for either a Gold SPiRiT or Silver LEED® Certified rating. Baker's task orders include the following sites: Erie – a new Readiness Center and

a new Field Maintenance Shop; Philadelphia – a new Readiness Center and Field Maintenance Shop; Elizabethtown – a new Readiness Center and a new Field Maintenance Shop; and Bradford and Huntingdon – new Readiness Centers. Additionally, Baker has developed Design/Build RFP documents for the additions and alterations to Readiness Centers in Lewistown, Punxsutawney, Butler, Hanover, Lebanon, Huntingdon, and Hollidaysburg.

Stewart Newburgh Armed Forces Reserve Center, Newburgh, New York. *U.S. Army Corps of Engineers, Louisville District.* Designer. Responsibilities included providing plumbing and fire protection Design/Build RFP documents and performing a compliance review of the construction documents. Baker developed Design/Build RFP Documents for an integrated, consolidated, regional 84,000-square-foot training facility, 16,200-square-foot vehicle maintenance shop, and 2,350-square-foot unheated storage building at Stewart Newburgh, New York. The center accommodates training and mobilization and provides for the storage, inspection, maintenance, and repair of combat and tactical vehicles and equipment associated with the regional deployment of Army National Guard and Army Reserve units.

U.S. Armed Forces Reserve Center, Bristol, Pennsylvania. *U.S. Army Corps of Engineers, Louisville District.* Designer. Provided plumbing and fire protection Design/Build RFP documents. Baker developed Design/Build RFP Documents for a new 600-member Armed Forces Reserve Center with Organized Maintenance Shop (OMS) and an Unheated Storage (UHS) building that realigns Army Reserve and Marine Reserve units as directed by BRAC 05. The facility will provide administrative, educational, assembly, library, learning center, vault, weapons simulator, and physical fitness areas for eight Army Reserve units and three Marine units, as well as provide adequate parking for all military and privately-owned vehicles. A 94,500-square-foot training building (AFRC), an 8,900-square-foot Maintenance Shop (OMS), and a 2,900-square-foot unheated storage (UHS) building was included in the RFP package. The buildings will be permanent construction with reinforced concrete foundations, concrete floor slabs, and will include mechanical, electrical, and information systems including SIPRNET rooms, as required. Supporting facilities will include site preparation, paving, fencing, and extension of utilities to serve the project. The facility was designed to meet Silver LEED® standards and be ADA compliant.

Aviation Maintenance Hangar, FBO AvCenter, Pittsburgh International Airport (PIT), Moon Township, Pennsylvania. *AvPorts.* Designer. Responsibilities included a site visit and preparation of technical narrative for plumbing and fire protection systems for this design/build project. Baker provided the conceptual design and development of Design/Build RFP Documents for a new aviation hangar for the FBO AvCenter at Pittsburgh International Airport.

West Ox Bus Operations Facility, Fairfax, Virginia. *County of Fairfax.* Designer. Responsibilities included plumbing and fire protection specifications, product and fixture selections, natural gas system design, and other tasks. The West Ox Bus Operations Facility can accommodate operations and maintenance for a combined fleet of up to 300 Washington Metropolitan Area Transit Authority (WMATA) and Fairfax Connector buses, including approximately 26 maintenance bays, provide fuel, wash, and body shop facilities. Baker was responsible for planning, architecture, mechanical engineering, electrical engineering, structural engineering, and transportation engineering in the design of this facility.

New Haven Bus Maintenance Facility, Hamden, Connecticut. *Connecticut Department of Transportation.* Designer. Responsibilities included assisting in the design and specification writing of plumbing and fire protection systems. Baker designed a 290,000-square-foot bus maintenance, storage, and administrative facility, which will incorporate state-of-the art equipment for the repair and maintenance of a 150-bus fleet and 20 support vehicles. The new facility includes money-handling security; controlled room access; an energy-efficient exhaust system for a high level of diesel operation; vehicle wash bays; detail and fueling bays; vehicle maintenance and body repair bays; and parts storage.

Andrew F. Weisfield, P.E., LEED Green Associate

Fire Protection Engineer

General Qualifications

Mr. Weisfield is a licensed professional fire protection engineer with over 12 years of experience in the fire and life safety industry. His experience includes over five years in fire protection engineering with consulting and engineering design firms and seven years working with a fire alarm and fire suppression system contractor. While working with the engineering and consulting firms, Mr. Weisfield performed fire alarm and sprinkler designs, including pipe sizing, water supply analysis, system layouts, and specifications. He has been in responsible charge of several designs while directing additional engineers in performance of the work. Mr. Weisfield has prepared fire hazard, code, and life safety analyses that included review of code requirements, egress analyses, construction type requirements, and fire dynamics analyses for various applications. His seven years of experience working with a fire alarm and sprinkler contractor involved the evaluation of facilities for sprinkler requirements, preparation of cost estimates, project management of system design and installation, and supervising and managing service businesses to trouble shoot fire protection system issues and to assist customers in maintaining systems in compliance with manufacturer, NFPA, IBC, and local code requirements.

Years with Baker: 2

Years with Other Firms: 12

Education

B.S., 1996, Fire Protection Engineering, University of Maryland, College Park Campus

M.B.A., 2003, Business (Finance), University of Pittsburgh, Katz Graduate School of Business

Licenses/Certifications

Professional Engineer, Pennsylvania, 2001

California, 2000

Idaho, 2010

LEED Green Associate, 2010

Experience

Little Kanawha Bus Facility, Calhoun County, West Virginia. *WV Division Of Public Transit.* Fire Protection Engineer. Provided review of the fire alarm system in the new bus maintenance facility. Performed code review and analysis to eliminate the fire protection sprinkler system in the facility. Baker is providing architectural and engineering services, landscape architecture, and construction-phase support for a new, 10,000-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The 4,500-square-foot administrative area will include offices, a conference room, a money-counting room, and a driver-training room, and the 5,500-square-foot bus maintenance area will include storage for seven buses. The facility will be ADA-compliant and is being designed to achieve LEED® certification.

U.S. Armed Forces Reserve Center, Bristol, Pennsylvania. *U.S. Army Corps of Engineers, Louisville District.* Fire Protection Engineer. Provided design review services for fire protection, fire alarm and life safety drawings provided by the design build team. Baker developed Design/Build RFP Documents for a new 600-member Armed Forces Reserve Center with Organized Maintenance Shop (OMS) and an Unheated Storage (UHS) building that realigns Army Reserve and Marine Reserve units as directed by BRAC 05. The facility will provide administrative, educational, assembly, library, learning center, vault, weapons simulator, and physical fitness areas for eight Army Reserve units and three Marine units, as well as provide adequate parking for all military and privately-owned vehicles. A 94,500-square-foot training building (AFRC), an 8,900-square-foot Maintenance Shop (OMS), and a 2,900-square-foot unheated storage (UHS) building was included in the RFP package. The facility was designed to meet Silver LEED® standards and be ADA compliant.

U.S. Armed Forces Reserve Center, Scranton, Pennsylvania. *U.S. Army Corps of Engineers, Louisville District.* Fire Protection Engineer. Provided design review services for fire protection, fire alarm and life safety drawings provided by the design build team. Baker developed Design/Build RFP Documents for a new 650-member Armed Forces Reserve Center with Organized Maintenance Shop (OMS) and an Unheated Storage (UHS) building that realigns Army Reserve and National Guard units as directed by BRAC 05. The facility provides administrative, educational, assembly, library, learning center, vault, weapons simulator, and physical fitness areas for eight Army Reserve units and four Pennsylvania Army National Guard units, as well as provides adequate MEP and POV parking. A 166,000-square-foot training building (AFRC), a 7,300-square-foot multi-use classroom, a 6,400-square-foot Organized Maintenance Shop (OMS), and a 1,700-square-foot unheated storage (UHS) building was included in the RFP package. The buildings are permanent construction with reinforced concrete foundations, concrete floor slabs, and include mechanical, electrical, and information systems including SIPRNET rooms, interior finishes, window systems, roof decks with 50-year asphalt shingles, and exterior finishes.

U.S. Army Reserve Center, Willow Grove, Pennsylvania. *U.S. Army Corps of Engineers, Louisville District.* Fire Protection Engineer. Provided review services for drawings, specifications and design analysis created by the design build firm. Review included all fire protection, fire alarm and life safety drawings. Drawings were reviewed for compliance with applicable codes and the RFP. Baker developed Design/Build RFP Documents for a new 800-member U.S. Army Reserve Center (USARC) with Organized Maintenance Shop and an Unheated Storage building.

Architectural and Engineering Design Services for the Army Reserve 1222nd Engineer Company Readiness Center, Mechanicsburg, Pennsylvania. *U.S. Army Corps of Engineers, Louisville District.* Fire Protection Engineer. Responsible for the design of the fire protection sprinkler systems and fire alarm systems for the Army Reserve Center. In addition, responsible for the fire protection and fire and life safety code review of the various facilities on site. Baker is providing architectural and engineering services for a 100-member, 26,855-square-foot U.S. Army Reserve Center. The new 23.8-acre site includes two structures: readiness training center, and organizational maintenance shop with an integral unheated storage area. Baker is providing sustainable design and development and Energy Policy Act of 2005 features to meet the Silver LEED® level. Designed to maximize energy efficiency, the readiness center exceeds current energy standards by as much as 30 percent. Featuring water-efficient landscaping that maximizes open space, this structure is designed to reduce its ecological footprint. In addition, many recycled, low-emitting materials and finishes help keep the interior healthy for occupants and the planet.

Engineering Services, 2007-2010, Chippewa Twp., Big Beaver Borough & South Beaver Twp., Beaver Falls, Pennsylvania. *Chippewa Township Sanitary Authority.* Fire Protection Engineer. Performed a code and life safety evaluation for some new and existing facilities on the site. Specifically, an evaluation to determine allowable area and the required exterior wall ratings for the facilities to assist in code reviewer approval of the plans and site. Since 2007, Baker has provided retainer-type consulting engineering services to support the on-going operations of CTSA's sanitary sewerage system, including collection, conveyance, pumping, and treatment components.

New Haven Bus Maintenance Facility, Hamden, Connecticut. *Connecticut Department of Transportation.* Fire Protection Engineer. Assisted in review of shop drawings for fire protection systems and submittals for the new facility. Baker designed a 290,000-square-foot bus maintenance, storage, and administrative facility, which will incorporate state-of-the art equipment for the repair and maintenance of a 150-bus fleet and 20 support vehicles. The new facility includes money-handling security; controlled room access; an energy-efficient exhaust system for a high level of diesel operation; vehicle wash bays; detail and fueling bays; vehicle maintenance and body repair bays; and parts storage. Baker's services included architectural design and structural; heating, ventilation, and air conditioning; electrical; plumbing; fire protection; and industrial equipment engineering.

David J. Cameron, A.V.S.

Constructability and Value Engineering

General Qualifications

Mr. Cameron has direct responsibility for the implementation of Baker's facilities construction management program. In addition to managing specific projects, his responsibilities include oversight project management, providing design and construction phase services to both internal and external clients. Services provided include project/program planning, design management, value analysis/engineering, budgeting, cost estimating, construction scheduling, project phasing and logistics, bid phase services, subcontractor coordination, inspection, forensic investigation, claims mitigation, litigation support, and overall construction administration of Baker's facility construction management practice. In addition to his client service responsibilities, Mr. Cameron also serves as the liaison between the office and field staff, ensuring appropriate coordination and communication among all parties involved with the projects. Well versed in general contracting, design-build and construction management-At Risk & for Fee contracting services, Mr. Cameron has worked for a variety of public and private sector clients including military, judicial/corrections, commercial, government (non DoD), educational, transit, hospitality, aviation, health care, and recreational. As a project manager, he is responsible for the successful completion of individual projects ranging in value from \$1 million to \$800 million.

Years with Baker: 26

Years with Other Firms: 10

Education

A.S., 1980, Construction Management, Community College of Allegheny County

Licenses/Certifications

Associate Value Specialist, 2007

Experience

A/E Services Contract for the Pennsylvania National Guard, 171st Air Refueling Wing, Pittsburgh International Airport (PIT), Coraopolis, Pennsylvania. *Pennsylvania Depart. of Military and Veterans (formerly Departments of the Army and the Air Force).* Technical Advisor. Provided logistics, constructibility, and estimating consultation on an as needed basis. The United States Property and Fiscal Office and the 171st Air Refueling Wing selected Baker for an IDIQ contract for architectural and engineering services. Task orders contracted under this IDIQ Contract include: a 129,634-square-foot Combined Support Maintenance Shop; a 3,000-gross-square-foot, \$920,000 Crew Readiness Center; a \$200,000 Base Marquee; a \$405,000 upgrade to the West Apron Lighting for the Pennsylvania Air National Guard; a Deicing Collection Study for the 171st ARW; and Phase One services in support of the conversion of the Pennsylvania Army National Guard's 56th Brigade to a Stryker Brigade Combat Team (SBCT) at various locations throughout the state.

Design/Build AFQ/RFP Development for Statewide Construction Program, PAARNG Stryker Brigade Combat Team, Statewide, Pennsylvania. *US Property and Fiscal Office for Pennsylvania.* Project Manager. Responsibilities included overseeing the development of program requirements and the Project Definition Document bid packages in concert with both established and new State requirements. Also responsible for facilitating and documenting meetings and reports, interfacing with the clients, and providing support during procurement of the design/build teams. Mr. Cameron is currently managing Baker's task order for sites in Erie, Philadelphia, Lewistown, Elizabethtown, Bradford, Punxsutawney, Butler, Hanover, Lebanon, Huntingdon, and Hollidaysburg. Baker provided services under numerous National Guard Bureau IDIQ contracts to support the Pennsylvania Army National Guard (PAARNG) in implementing a \$167,000,000 statewide construction program for the Stryker Brigade Combat Team conversion of numerous PAARNG facilities. The program included the design of new soldier Readiness Centers (RC) and vehicle Field Maintenance Shops (FMS), as well as facility additions. Baker performed all aspects of design/build

RFP implementation, from providing significant architectural, structural, geotechnical, civil engineering, and other technical input for RFP Project Definition Documents, to developing the application form used to evaluate potential design/build contractor teams, to providing client support during the actual design/build team selection process. The sustainable design goal is for each finished facility to qualify for either a Gold SPiRiT or Silver LEED® Certified rating.

Tactical Equipment Maintenance Facility, White Sands Missile Range, New Mexico. *U.S. Army Corps of Engineers, Tulsa District.* Technical Advisor. Responsibilities included providing assistance to Baker's Project Manager related to lessons learned on similar SATOC TEMF projects, and efforts related to working with both internal staff and the DBC team. Under a design/build ID/IQ SATOC, Task Order No. 0006, the team of Baker and Walbridge Aldinger Company is delivering a Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF) at White Sands Missile Range, NM. The project includes one medium-sized 35,290-square-foot TEMF with a 10-ton bridge crane, to accommodate approximately 437 organizational vehicles. Additional structures that are a part of this facility include a 1,560-square-foot POL storage facility, a 1,560-square-foot building for hazardous materials storage, and an 11,550-square-foot organizational storage building.

Two Tactical Equipment Maintenance Facilities, SATOC TO #1, Fort Bliss, El Paso, Texas. *U.S. Army Corps of Engineers, Tulsa District.* Project Manager. Responsibilities included oversight of all contracted design and coordination with the Design/Build Contractor. In addition to the overall management responsibilities, design phase tasks included: conducting site and facility reviews and investigation, facilitating design charrettes and internal and external design review meetings, constructibility reviews, value analysis, preparation of Division 1 specifications, maintenance and updating of the design schedule. Construction phase tasks included: administrative oversight (and reviewing and/or responding to) shop drawing and RFI submissions, site inspections for review of DBC's work for general conformance with the construction documents, design support to DBC during construction, final inspection of work and preparation of record drawings. Projects constructed under this task order include Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF). TEMFs provide facilities for the purpose of maintaining and repairing vehicles, complete with equipment and parts storage, and administrative offices.

Design-Build Tactical Equipment Maintenance Facilities, 31st ADA Brigade, Fort Sill, Oklahoma. *U.S. Army Corps of Engineers, Tulsa District.* Technical Advisor. Responsibilities included providing assistance to Baker's Project Manager related to lessons learned on similar SATOC TEMF projects, and efforts related to working with both internal staff and the DBC team. Baker is providing design services the design-build delivery of three tactical equipment maintenance facilities for the 31st ADA Brigade. The project includes 18,000-square-foot, 35,200-square-foot, and 57,031-square-foot facilities, each with independent hazardous waste storage; petroleum, oil, and lubricant storage; and organizational storage facilities. Baker also designed a 20,000-square-foot supply support activity facility. Designed to meet or exceed a Silver LEED® certification, this facility is more than 30 percent more energy efficient than comparable buildings.

Design-Build Delivery of Fire Brigade Tactical Equipment Maintenance Facility, Fort Bliss, Texas. *U.S. Army Corps of Engineers, Tulsa District.* Project Manager. Responsibilities included oversight of all contracted design and coordination with the Design/Build Contractor. In addition to the overall management responsibilities, design phase tasks included: conducting site and facility reviews and investigation, facilitating design charrettes and internal and external design review meetings, constructibility reviews, value analysis, preparation of Division 1 specifications, maintenance and updating of the design schedule. Construction phase tasks included: administrative oversight (and reviewing and/or responding to) shop drawing and RFI submissions, site inspections for review of DBC's work for general conformance with the construction documents, design support to DBC during construction, final inspection of work and preparation of record drawings. Baker was the designer of record for the fast-tracked design-build delivery of an \$11.4 million, 35,158-square-foot tactical equipment maintenance facility (TEMF) complex, consisting of a 7,869-square-foot administrative-training facility and a 27,289-square-foot organizational maintenance shop. The TEMF was designed to meet LEED® Silver certification.