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RFQ Number:
SBA10033



Proposal:

School Safety and Vulnerability Assessments for All Schools Located in the State of West Virginia

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July 6, 2010

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Subject: RFQ Number SBA10033, School Safety and Vulnerability Assessments

Michael Baker Jr., Inc. (Baker) is pleased to submit our qualifications to provide the Department of Administration and School Building Authority with School Safety and Vulnerability Assessments for all schools located in the State of West Virginia.

Baker is heavily invested in the State of West Virginia and is intimately familiar with the issues facing the school systems statewide. Baker is committed to the State of West Virginia Schools as our Charleston office personnel have children and family members with children in many of the schools statewide.

Following you will find information on the Baker Team qualifications according to the criteria of the RFQ. You will note we have assembled a team of top experts in the field of Data Collection, Emergency Management and Vulnerability Assessments. Details on pricing are in a separate sealed envelope. Signed copies of the required RFQ forms and amendments are also included with this proposal.

Baker is publicly traded on the American Stock Exchange (AMEX: BKR) and is one of the nation's top 50 multi-disciplinary engineering, architectural, environmental, and technology firms; with revenues of \$500 million per year.

We look forward to working with the State of West Virginia on this contract. Please contact me if you have any questions about our qualifications, or if you need additional information.

Sincerely,
Michael Baker Jr., Inc.

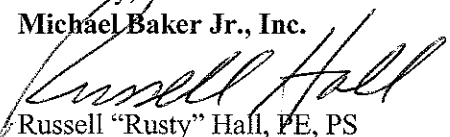

Russell "Rusty" Hall, PE, PS
Project Principal/Assistant Vice President



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INTRODUCTION

Michael Baker Jr., Inc. (Baker) was founded in 1940 and provides professional engineering and consulting services for public and private sector clients worldwide. Baker is consistently ranked by Engineering News-Record among the top 10% of the 500 largest U.S. design firms. Baker will utilize its Charleston, West Virginia office, (established in 1952, currently nearly 40 staff) as the lead project office for this School Safety and Vulnerability Assessment (VA) Program.

As a major force in emergency management preparation and facilities security analysis since 1972, Baker looks forward to working with the School Building Authority (SBA) of West Virginia and the Safe Schools Task Force to enhance the safety and security of all schools in the State of West Virginia and provide first responders at all levels the necessary tools to effectively mitigate, plan for and respond to all types of hazards that may occur at West Virginia schools.

Baker has added a few specialty consultants to strengthen our team. Dr. Ronald Stephens currently serves as the Executive Director of the National School

Safety Center, and will be adding his expertise as technical advisor for this project. He has conducted more than 1,000 school security and safety site assessments throughout the U.S. Dr. Stephens serves as consultant and frequent speaker for school districts, law enforcement agencies and professional organizations worldwide. Brett Kriger, of Allied Independent Consulting will provide his expertise with VAs and site security. Mr. Kriger has over thirty years of domestic and international military and civilian experience in all aspects of VA, risk analysis and site security. He has provided vulnerability and security analysis for infrastructure protection projects in several states. Keith Henson, PE of Mesa Engineering will also assist the VA Team utilizing his engineering background in providing physical protection security measures to various organizations. Neil Vandergroef of ECS Group, Inc. (ECS) will provide field verification surveys for the data collection needs of the project. Mr. Vandergroef coordinates ECS' field verification teams in the surveying of project critical facility and building/site data. He has been project manager on many key projects requiring site surveys and/or database development including elementary, middle and high school districts in New Jersey areas such as Parsippany, Mountain Lakes, Madison, Delbarton, Morristown Beard and Middlesex Borough.

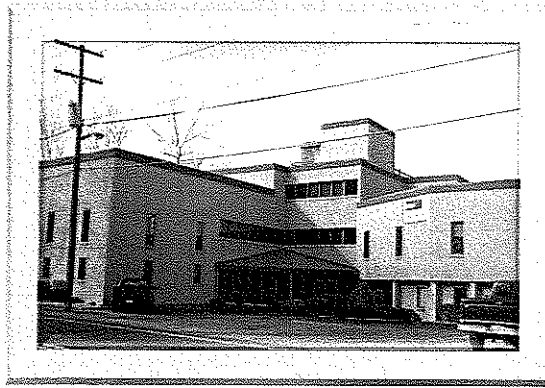
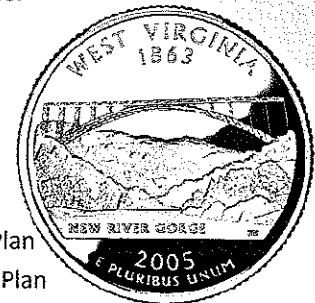


Figure 1. Baker's Charleston, WV office provides local representation to SBA.

Baker in West Virginia

Baker has accomplished hundreds of successful projects for the West Virginia Department of Transportation, the Division of Homeland Security and Emergency Management, and other state and local agencies. A few notable projects include:

- New River Gorge Bridge
- Blennerhassett Bridge
- West Virginia Turnpike
- Statewide Addressing and Mapping Project
- Statewide Hazard Mitigation Plan
- State Capital Complex Master Plan
- Statewide Riverine Flood Analysis using FEMA HAZUS





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It should be noted that many of these subconsultants have worked with Baker on other related projects and have an established track record of success as a team.

The proposed Baker management plan for the West Virginia State School Safety Assessment (SSA) utilizes an emergency planning team that has worked well in several earlier large-scale deployment efforts. The enclosed biographies for the team members reflect each person's strong experience and professional skill fulfilling the requirements of their role within the overall program. No one on the proposed team is new at what they will be doing for the West Virginia SSAs. Most of the team has worked together in similar capacities on other large-scale projects. Baker's skills include the capability to leverage its significant emergency management preparation and facilities security analysis experience with FEMA, the Environmental Protection Agency (EPA), the DOT, and other Federal, State, and local agencies. Baker has organized its program approach around the following core elements:

- Working with the School Board Authority (SBA) and the schools, to understand their missions and identify the single points of failures at each school and for the SBA.
- Teaming with the schools to develop options for consideration based on the criticality, threat, vulnerability, and consequence of an event or action.
- Deploying on a large scale basis skilled technical field survey personnel, according to a well defined deployment plan, who work closely with school leadership teams to understand each school's unique safety and emergency management procedures.
- Utilizing state-of-the-art data gathering technologies deployed with all field teams for cost-effective, accurate capture of Facility Floor Plan, Utility Information, Building Information and Digital Imagery.
- Having experienced emergency management evaluators who utilize Baker's significant data and graphics management capability to deliver customized, timely and well organized, emergency management assessments, vulnerability analyses and recommendations.



SECTION I - STATEMENT OF PROJECT UNDERSTANDING

Project Understanding and Approach

As shown in Figure 2, Baker has organized the project into five tasks. **Task 1** is Project Initiation, which will involve information gathering and strategizing. **Task 2** is Data Collection and includes Sections 3.2 through 3.6 of the RFQ. **Task 3** is Emergency Management Plans (EMPs) and includes Section 3.7. **Task 4** is VAs and Recommendations and includes Section 3.8 of the RFQ. **Task 5** is Constellation/Automated Critical Asset Management System (C/ACAMS) data entry, as required in Section 3.10 of the RFQ. All mandatory and desirable requirements of the RFQ will be performed and are incorporated into the five tasks described in more detail throughout Section 1.

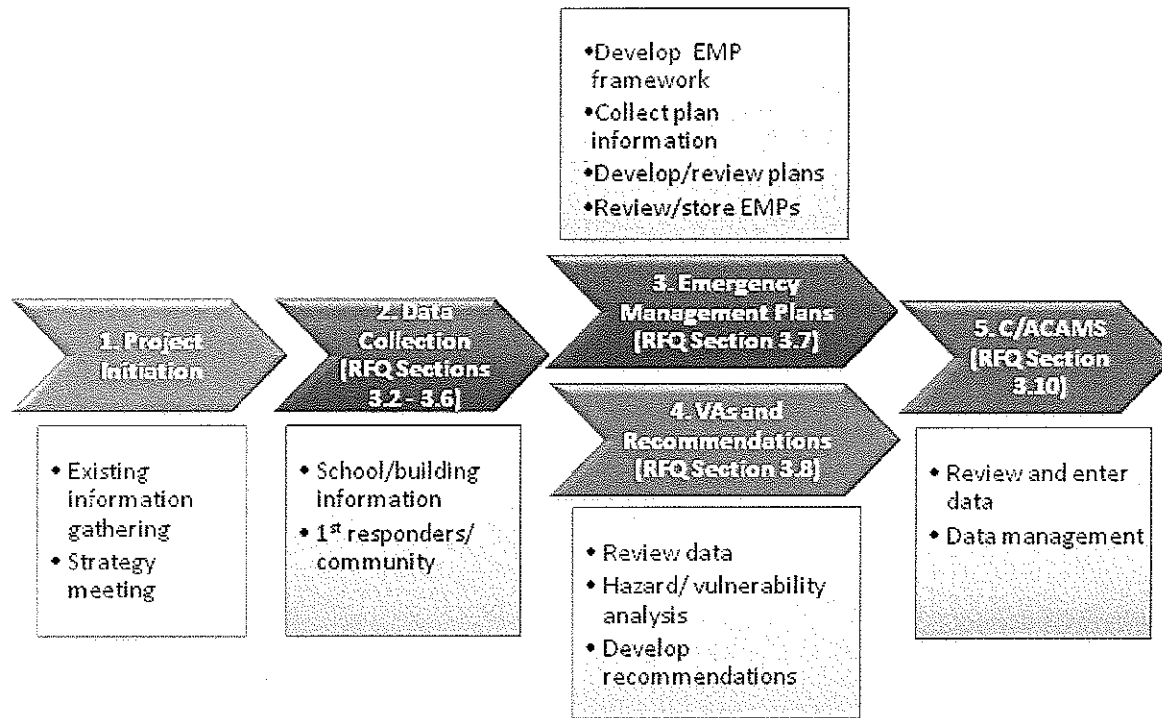


Figure 2. SSA Tasks within the School Safety and VAs project

The statement of work describes the requirements to conduct and complete school safety assessments. This includes collecting data from various agencies; conducting school assessment visits; validating EMPs for the 700+ schools included in the project, and if these do not exist, assisting the schools in developing the EMPs; and conducting VAs and developing recommendations to mitigate them. This information then needs to be recorded in the C/ACAMS. The Baker Team will complete a SSA for each of the public school facilities as described in the RFQ. The SSA comprises:

- A. School physical characteristics
- B. School site



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- C. Emergency management plan
- D. Vulnerability analysis and recommendations

The SSA for each school will provide the source data that in turn will be entered into C/ACAMS.

Given the extent of this project, we propose that the work defined be accomplished in two phases. **The first phase will include identifying a smaller set of schools (nine total – three elementary, three middle and three high schools) that will serve as pilot sites.** By starting out with a set of representative schools, the team will be able to evaluate the effectiveness of the methodology and if needed, make minor adjustments to the approach prior to performing the statewide assessment. The overarching goal is to provide a product that is in alignment with the expectations of the SBA and its stakeholders. On receiving approval from the SBA, Baker will begin work on the second phase that will include completing the SSAs on the remaining schools, including entering all the relevant data into C/ACAMS.

1.1 Task 1 – Project Initiation

On receiving the notice of selection and upon the execution of the contract, Baker will mobilize its team. This will include the development of the list of all the data that is required for this project, including identifying the information required from SBA, the schools, the data to be collected in the field, and the information that will be generated as part of the vulnerability analysis and recommendations. The Baker Team leaders will meet with the SBA project team to kick-off the project. During this first meeting, the project scope, schedule and proposed methodology will be discussed. It will be important to identify the standards required to denote data and information as Protected Critical Infrastructure Information (PCII), the protocol for handling of this, and non-disclosure agreements that may have to be completed by the team members. Also discussed during this meeting will be the requirements for progress reporting, invoicing, risk and change management.



During this period, Baker will setup a central repository for all information that is being collected as part of this project. The central repository will be built using commercial-off-the-shelf (COTS) software based on an Oracle database. The team members, including the SBA stakeholders and our sub-

Team members will have access from remote locations to data stored in a central repository.

consultants, will be able to store, access and use data in this repository from their individual offices. The team will also use this data repository to develop the VAs and recommendations. The use of a database will also help Baker manage and control the data and information that has been marked as PCII. It will also allow for the development of other reports as required for quality assurance/quality control (QA/QC) and project management.

The data received from the SBA and other agencies will be included in this repository. Web-based forms will be developed to display the data that is available for each of the schools and the buildings at the schools. These forms will also be used to assist in the field data collection, both at the site and school levels, and will be one of the methods utilized by Baker for quality assurance on this project.



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1.1.1 Existing Information Gathering

Based on the results of the kickoff meeting, the team will develop and submit a detailed data request form to SBA requesting data and reports determined as relevant to this effort, to include the following.

- GIS data for the school locations within the State of West Virginia.
- List of schools (in an electronic format).
- Point of contact (POC) at each school.
- POCs for other agencies that need to be involved in the project including local police, fire departments, emergency managers, public work organizations, and Homeland Security representatives as appropriate.
- List of buildings at each school.
- Floor plans, in AutoCAD if available, for each of the buildings that are included in the RFQ.

1.1.2 Strategy Meeting

Once the requested data is received, the Baker Team will analyze the information and identify any critical gaps or missing elements. The data will also be reviewed with a focus on fine-tuning the school safety assessment process and can be further explored during the strategy meeting.

The Baker Team will schedule a strategy meeting with the SBA to develop the criteria to undertake and complete the SSA for each of the schools. The intent would be to:

- Identify a small group of nine schools, to be the pilot group of schools, in one of the four counties (Hancock, Marshall, Ritchie, and Tyler) that have currently approved CEFPs;
- Develop a prioritization plan to address the remaining schools;
- Review the data elements, as defined in sections 3.2 to 3.6 of the RFQ, to be collected and field verified;
- Agree on the outlines and content for the EMPs and the components as defined in section 3.7 of the RFQ; and
- Agree on the EMP Outline and content for the VAs and recommendations as required in section 3.8 of the RFQ.

Baker will import the list of schools and any data received from the SBA into the central data repository that will be used to manage the

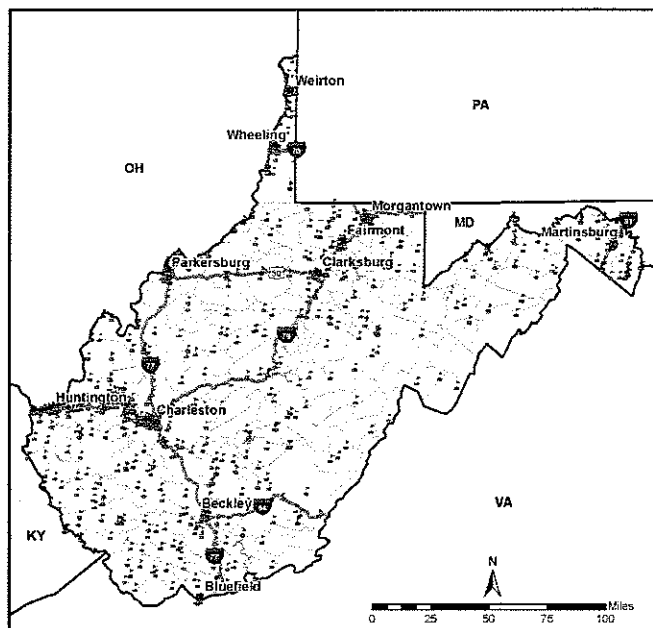


Figure 3. Data will be collected from schools throughout West Virginia.



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information being collected, and track progress. Each school will be assigned a priority sequence number, based on the discussions at the strategy meeting, to be used to schedule the data collection and field surveys.

After the strategy meeting, Baker will document the methodology to be used for the SSA for each of the schools. This will include the process to obtain data from the SBA, local agencies including the American Red Cross, the schools; data collection and verification for the school physical characteristics, school site, and any other information required for conducting the VAs and developing the recommendations; and the outline for the EMPs and the strategy for the VA and Recommendations Report.

Baker will have a task manager coordinating and monitoring the activities on a daily basis as the findings and results from this phase will determine the approach to be used for the remaining schools. We envision that the SBA project team will be very involved in all aspects of the SSAs for these schools. We propose that the SSAs be conducted in two phases. The first phase will be to conduct the SSAs for the schools in the pilot group. The second phase will include all the remaining schools.

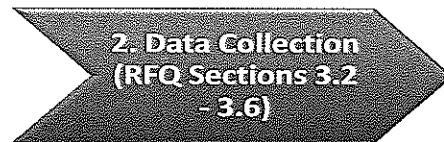
This approach will allow us to review the proposed data collection methodology and the results with the SBA before undertaking this effort for all the schools. This will help identify any issues with data collection, including missing data, the need for SBA's involvement, etc.

On completion of the SSAs for the pilot schools, the project team, SBA and Baker, will meet to assess the results and outcome of the studies at these schools. This will include entering the data into C/ACAMS to confirm that the required information is available in the format that is required for data entry. The processes, VA outline, forms, reports, will be recalibrated as appropriate. On receiving approval from the SBA project manager, Baker will undertake and complete the SSAs for the remaining schools, and upon completion of the SSAs, enter the data into C/ACAMS.

1.2 Task 2 - Data Collection

As defined herein, Task 2 includes Sections 3.2 through 3.6 of the RFQ and incorporates all mandatory and desirable tasks.

Based on experience on several large-scale data collection and management efforts like the West Virginia Safe Schools Initiative, the Baker Team will employ steps to confirm that the significant database generated by this project is well organized to yield accurate VAs and recommendations. The Baker Team will also develop a data management plan that will address issues such as location of data, access to data, and the use of data. This will also help meet the requirements for handling Protected Critical Infrastructure Information (PCII) as defined in section 3.9 of the RFQ.



1.2.1 School and Building Information

The data collection process to obtain the information as described in the RFQ sections 3.2 to 3.5 (facility floor plan, utility information, building information, digital mapping/imagery) is depicted in Figure 4.



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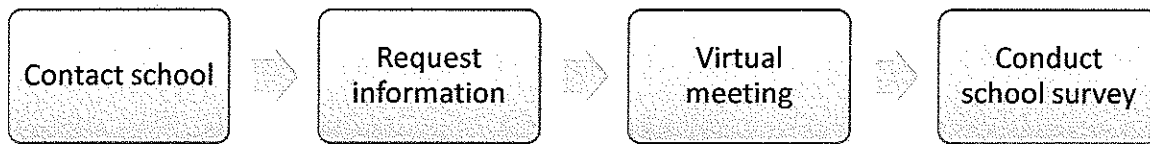


Figure 4. Data Collection Process

It is assumed that the SBA project manager, or their designee, will reach out to the schools and make them aware of this project during the strategy meeting. Each school will be contacted and surveyed based on the priority list developed in the strategy phase of this project. Baker will follow up with the schools, after the initial outreach by SBA via email; providing them with the data that has already been acquired for the school as a result of the pre-survey exercise, including the floor plans. The school will be provided with an electronic list, using Microsoft Office products and PDF files, of all the other data elements that are required for the SSA. This will be followed up with a meeting using web-based collaboration tools (Live Meeting, Webex, etc.), the details being coordinated by Baker. The objective of this meeting will be to gather and confirm the data required under sections 3.2 through 3.6 of the RFQ.

During this meeting, the team will also determine if the school has an existing EMP. If they do not have an EMP, they will be made aware of a readily available EMP outline and the various elements and concepts of the EMP outline will be explained. This in-turn will enable the POC at the school to complete the same.

The site survey team will coordinate with the POC at the school to confirm the local school is aware of the team's travel plans and to validate that all building and school access issues are addressed. After receiving confirmation from the school POC, the Baker Team will conduct a school assessment visit (SAV) to conduct a site "walk-through." During the walk-through, they will validate the data received and complete any missing information for the school, the buildings at the school, the establishment of a Crisis Response Team (CRT) and any data required to complete the EMP. During the SAV, the team will use handheld computing devices to validate existing data and to collect additional information. The data collected will include the location of the features defined in the RFQ including the following:

- Ingress and Egress Points
- Exterior Doors
- Roll-up Doors
- Fire Doors
- Elevators
- Stairwells
- Staging Areas
- Ingress Communication System
- Knox Box
- Video Cameras
- Shower Facilities
- Utility Shut-offs
- Fire Hydrants



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In addition to the items required by the RFQ, the site survey team will also collect information that will be used to conduct the vulnerability analysis and develop recommendations for the school.

The survey teams will use digital cameras to take pictures of the site and facilities as required with prior permission from the school. All the data being collected will be stored in a central repository to support data completeness, maintain an audit trail, and provide real-time status updates on project progress. Upon completing the SAV, the data collected will be reviewed by the Baker Team to validate the completeness of the data. This information is critical to conducting the VAs and developing the recommendations.

1.2.2 First Responder and Community at Large

Each school must develop a CRT, and define responsibilities isolated by position. This will enable the schools to identify resources for the various roles within the CRT.

A CRT is an organized group of people who implement the written plan and operate in unison to take action under extreme stress and to get control of a crisis situation and restore normalcy to the school. Such teams are essential, as a school's response in the first crucial moments of a crisis is, perhaps, the most important. When identifying these individuals, schools must consider the ramifications if personnel are called away from their normal positions to aid in the sustained stages of handling a crisis in a school. Are those who best know the impacted students and staff unavailable to them in this time of need? Will the primary responders in your district be among those most profoundly impacted by this event? All members of the CRT and school administration need to recognize that this work is difficult and they need to provide adequate support for school staff and other CRT response team members.

Once the CRT is in place and their roles and responsibilities identified, the next step is to begin the collaboration process with local, state, regional and federal agencies (before a crisis occurs) to integrate processes and determine what resources may be shared. As an incident escalates, well-aligned response procedures will facilitate a smooth transfer of command, enable the effective activation of additional resources, and promote clear communication among responders, crisis response teams and members of the local community. Through this collaborative effort with Baker support, identification and the development of contact lists and emergency phone numbers will be developed for community agencies, such as:

- Law Enforcement
- EMS
- County/City Government
- Fire Department
- Utilities
- Division of Highways
- Railroad contacts
- American Red Cross
- County Health Department
- County EMA



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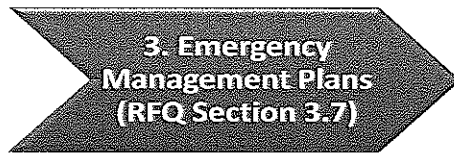
- County Department of Health & Human Resources Office
- National Weather Service
- Poison Control Center

An excellent venue for interaction with local first responders will be the County Local Emergency Planning Committee (LEPC). All West Virginia counties have LEPCs, which are mandated by Federal and state legislation. Although focused on hazardous materials, LEPC membership includes most, if not all of the local agencies that would be involved in a response to any incident affecting schools. Members include elected officials, law enforcement, emergency management, fire, EMS, industry and transportation representatives, hospitals and health agencies, the media, and individual citizens.

1.3 Task 3 - Emergency Management Plans

The purpose of this task is to help all West Virginia schools and school districts achieve comprehensive and consistent EMPs.

As defined herein, Task 3 includes all mandatory and desirable elements listed in Sections 3.7.1 through 3.7.16 as shown in the RFQ.



Baker plans to leverage its significant emergency management planning experience to facilitate smooth and rapid assessment of the EMP for each of the 700+ West Virginia schools covered under this program. Getting all schools' EMPs current and complete must be done accurately and also cost-effectively. In this regard, the Baker Team will deploy its established EMP framework that will minimize travel expenses yet provide accurate, comprehensive EMP assessment by conducting a beta test of nine schools followed by full-scale EMP evaluation state-wide.

Baker's approach to EMP development will include basic information for crisis response teams composed of emergency management professionals (e.g., police, fire and emergency medical services personnel), community partners (e.g., public and mental health professionals) and school-based staff (e.g., facilities and cafeteria managers, nurses, disability specialists, counselors, teachers and administrators). Local, state, regional and federal agencies will also be integrated into the process to confirm complete alignment of all West Virginia emergency response officials.

Emergencies and disasters can happen at any moment - and many occur without warning. When an emergency strikes, immediate safety and prompt recovery will depend on the existing levels of preparedness among faculty, staff, and students. To confirm the safety of students, faculty and staff, schools and school districts statewide, comprehensive all-hazard emergency management plans that focus on the four phases of emergency management (mitigation, preparedness, response and recovery) are needed. All-inclusive plans and well-executed processes will better allow for the continuity of schools' and school districts' daily educational operations in the face of natural and man-made disasters, and criminal activity on school grounds. Each member within the West Virginia school system, regardless of department, has an important role in maintaining the school's emergency preparedness and safety. During a major emergency or disaster, school officials will rely on effective communication between the

Baker's approach for the all-hazards EMP will be flexible enough to guide response to any type of incident that could occur at school.



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various staff. Clearly, EMPs are an essential building block of a school's emergency response to validate basic health and safety.

Schools are vulnerable to a variety of hazards that can impact students, faculty, staff, visitors, the school building and the surrounding community. Schools that develop an all-hazards EMP will be better prepared to prevent, respond to, and recover from these incidents. Figure 5 outlines the approach process.

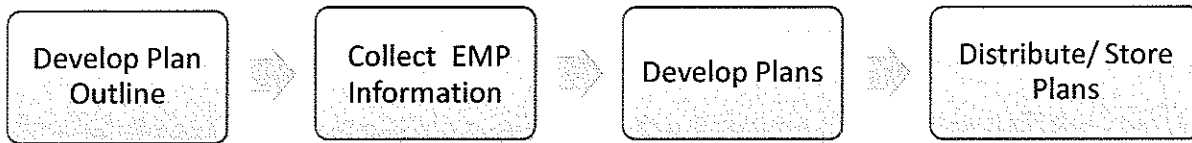


Figure 5. Emergency Management Plans Process

Very few, if any schools and school districts have established EMPs; and for the ones that have prepared, they are often not comprehensive, practiced regularly, or written in collaboration with the local emergency planning community. Baker's approach will allow for schools and school districts to adopt a comprehensive, consistent, well coordinated all-hazard approach to emergency management and work to confirm that their plans take into account the unique needs of the school, any procedures and processes already in place that could be improved, and the benefits of adding structure to identified gaps.

1.3.1 Develop EMP Outline

Information and guidance available on school crisis planning, emergency management and medical emergency response has grown enormously in the past decade. School administrators seeking information to use in developing school EMPs face a daunting task of sorting through dozens of web sites and hundreds of publications that may or may not have practical application for their schools. In many cases, content related to schools is strongly oriented to public safety and/or emergency management personnel and is of lesser practical value to school administrators. Even a highly selective compilation of materials and samples judged to be the best available from the most authoritative sources would likely exceed a thousand pages.

Baker will work with the SBA initially and the final outline will be approved by the SBA prior to distribution to all other schools.

To achieve sufficiency of the information reflected in the plan, Baker proposes to conduct a beta test using up to nine schools for developing the plan outline in a realistic manner. If it is determined through the school district's feedback that certain elements need to be modified, Baker will tailor the outline accordingly.

1.3.2 Collect Plan Information

Once the outline is finalized and approved by the SBA, the Baker Team will contact the schools for any information needed to customize and complete the EMP. Such information will include but not limited to shelter-in-place locations, facility lockdown locations, emergency preparedness personnel contact information, etc. Our approach for the collection of the information will initially be through a



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questionnaire. Additionally, as part of the strategy meeting, any gaps will be discussed. Lastly, as part of the actual site surveys, our team will meet with the school's EMP POC and coordinate the planning effort and collect any additional information as needed.

1.3.3 Develop and Review Plans

The Baker Team will prepare the school plans that will be comprehensive yet user friendly. It should be noted the Baker Team is intimately familiar with the *National Institutes of Health Manual, Chapter 1430, Occupant Evacuation Plan*, and the *National Fire Protection Agency (NFPA) 1600, Standard on Disaster/Emergency Management and Business Continuity Programs*. These national standards present methodologies for defining and identifying risks and vulnerabilities and provide planning guidelines that address protecting the health and safety of personnel. We are also familiar with a variety of school-specific emergency planning guidance issued by the National Clearinghouse for Educational Facilities at the National Institute for Building Sciences and the U.S. Department of Education's Emergency Response and Crisis Management Technical Assistance Center.

The Baker Team recognizes the sensitivity and vulnerabilities of facility locations and personal information. As such, the team will keep the information in strict confidentiality in the development of the plans.

Once completed, the EMP will be distributed back to the school for their final review and comments. Baker will address these comments and return the final EMP to the school for their implementation. The Baker Team will prepare the draft plan to include components addressed in section 3.7 of the RFQ as follows:

Emergency Communications Procedures: The proper reporting of any emergency situation is crucial in assuring the proper response of emergency personnel. Special communications equipment or night call systems used to notify first responders and Crisis Response Team Members are often required. This section will reflect this process.

Current School Emergency Preparedness Personnel: A Crisis Response Team (CRT) is an organized group of people who implement the written plan and operate in unison to take action under extreme stress and to get control of a crisis situation and restore normalcy to the school. This section will identify roles and responsibilities isolated by position.

Off Grounds Evacuation Sites: In a disaster or major emergency, evacuation of a specific school building may be necessary. This section will identify the actual sites. If none exists, it will describe criteria for proper selection of offsite evacuation sites.

Emergency Classifications: Emergency classifications will be described to various classifications such as Minor Standby Notification Alert, Shelter-in-Place, Evacuation. It should be noted evacuation sites should factor in the hazards associated with fire as opposed to explosive devices since both have different evacuation radiuses.

Emergency Preventive Measures: This section will address preventative measures for school buildings and school grounds that factor in the school culture and climate.



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Current Emergency Management Plans: This section will provide a cross-walk that examines the locations and availability of local or county plans such as an Emergency Operations Plan, Fire Marshall Plans, etc.

Early Dismissal/Evacuation: Dismissal may occur before regular scheduled hours due to emergency situations such as inclement weather. This section will address such items as to how parents are notified and how schools arrange for busses to be dispatched earlier.

Shelter-in-Place: One of the threats a school might face is when such events such as hazardous materials are being released into the atmosphere. During these moments the safest approach is to shelter-in-place. This is a precaution aimed to keep students safe while remaining indoors. This section will describe the process for such means as selecting a small, interior room, with no or few windows and taking refuge there.

Fire Drill Procedures: This section will address fire drill procedures and what activities to perform in preparation, e.g. advanced notice, non-advanced notice, etc.

Actual Fire Emergency Procedures: Fire is the most likely threat to life and property that the school will contend with. This section will address responses to common causes of fire including cafeteria cooking equipment, lighting equipment, and heating equipment. It will further address how classes, departments and offices in every building are directed to the locations of the school's Emergency Assembly Points (EAPs) and how information and assistance will be provided.

Bomb Threat/Discovery: Bomb threats are delivered in a variety of ways. Most threats are called in to the target, but they may also be received via mail, email or hand delivered message.

Although most bomb threats do not result in an explosion or discovery of an explosive device. This section will address the reporting aspects of the threat and next steps. This procedure will also include a bomb threat checklist designed to be located at each individual workstation

Natural Disasters: Natural disasters threatening schools can take on various forms and vary regionally. This section will address response procedures to for each specific threat that are unique to West Virginia such as flooding, winter storms, tornados, and landslides.

Chemical Emergency: Chemical emergencies involve the discharge or spill of a chemical substance. Internal incident may occur from activities in a school laboratory, vocational technical area, or maintenance shop. External chemical emergencies often results from an accident involving a train or truck carrying hazardous materials or an explosion or spill at an industrial site. This section will address how the school will respond in such a manner that addresses such actions as emergency washing procedures and even tying back to the Shelter-in-Place Procedure as necessary.

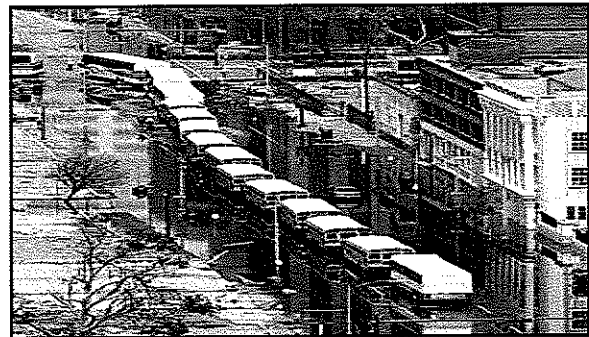


Figure 6. Schools will evacuate from events such as impending floods.



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Utility Emergency: Utility emergencies such as power outages or gas leaks may be the result of either manmade or natural events. This section will address the type of outage and the equipment involved.

Demonstration or Disturbance: A demonstration may be a planned event or may occur without advanced notice. In both cases a demonstration involves a group of people gathering to express an opinion about an issue or cause. In all cases, a demonstration may turn violent and should be closely monitored by a school. This section will address those monitoring activities.

Facility Lockdown: Lockdowns should only be conducted if completely necessary to protect people from physical harm. This section will address emergency lockdown procedures for a school to keep students safely inside if an outside threat hampers the progress of an evacuation.

1.3.4 Collect/Store EMPs

Baker will maintain the final EMPs in a central repository, which will allow for a consolidation of the EMPs statewide.

OPTIONAL SERVICES:

Training, Exercises and Plan Updates. Emergency management training can be developed based on a school and school district's prevention and preparedness efforts, prioritized threats and identified issues. Training sessions can be conducted in conjunction with community partners to capitalize on responders' expertise and validate consistent learning. General crisis training could be provided to all staff (i.e., administrative and custodial staff, teachers, nurses, bus drivers and substitutes) and students. When appropriate, parents and community partners can also receive this training. Baker's PM, Ken Zaklukiewicz is a certified Pro Board Fire Instructor (NFPA 1041) through West Virginia University and has the insight and expertise to train the WV schools in EMP implementation. The development of an EMP is not a one-time task; instead, it is an ongoing process. The plan must be continually updated and tested or it becomes ineffective. Lessons can be learned through the continued use of functional exercises, debriefing meetings, and after-action reports.



Figure 7. Mr. Zaklukiewicz instructing emergency planning

1.4 Task 4. Vulnerability Analysis and Recommendations

The purpose of this task is to assist the SBA, school districts and individual schools in identifying risks potentially affecting their area and developing prospective mitigation measures to reduce or eliminate the negative consequences of these risks - personal, economic, academic and community. This analysis will assist first responders in reacting to incidents at the schools and serve as a consistent, coordinated base for development of capital improvement programs to enhance safety and security. As defined herein, Task 4 includes Element 3.8 in the RFQ and includes all mandatory and desirable requirements.

4. VAs and
Recommendations
(RFQ Section 3.8)



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The Baker Team of security professionals recognizes the unique needs of elementary and secondary schools, along with their differences from other environments when applying security concepts. We understand that educators wish to take a balanced, rational approach to improving security. We understand that security needs and strategies often vary community to community, district to district, and even school to school within a district.

There are a variety of credible vulnerability and risk assessment tools available to conduct the VA and develop risk reduction recommendations, several of which are discussed below. The Baker Team has extensive experience with most of them and recognizes that some are intended strictly for criminal threats, while others address natural and technological disasters. However, school security and safety have a unique set of requirements and concerns that is best addressed by an analysis approach that uses a tool that is custom designed for K - 12 educational facilities. The Baker Team proposes to use an approach recognized nationally and recommended by the National School Safety Center and the National Clearinghouse for Educational Facilities funded by the U.S. Department of Education's Office of Safe and Drug-Free Schools. Using this school safety assessment approach, modified to fit conditions in West Virginia and the scope of the project, the Baker assessment will include the following:

- A facilities audit to determine the condition & safety of the physical building, completed Task 2;
- A review of the school's comprehensive safe school plan and existing emergency management plans, completed in Task 3;
- An analysis of school policies related to student safety and management issues;
- An analysis of existing Crime Prevention through Environmental Design (CPTED) efforts, as well as other security and disaster mitigation measures;
- An analysis of school crime and disorder incidents, as well as disaster history;
- Specific recommendations based on assessment findings; and
- Focus on "common" mitigation measures that may need to be applied universally that will allow economy of scale savings.

Using this tool, the Baker Team will assess the hazards, identify likely consequences, evaluate existing protective measures, and identify potential enhancements. The approach process is shown in Figure 8 below.

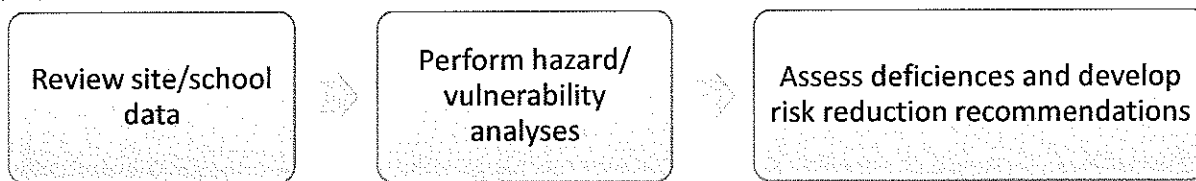


Figure 8. Vulnerability Analysis and Recommendation Process

1.4.1 Review Data

The data collected from each of the schools, including site imagery, floor plans, photographs, written narrative, and EMPs, will be reviewed by the Baker VA Team to identify and develop a list of hazards and vulnerabilities for each of the schools. Working in tandem with the school, the SBA, and any local emergency organizations, the Team will identify deficiencies and develop recommendations to mitigate the vulnerabilities that are identified for each of the schools. Baker has assembled a uniquely qualified



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team of hazard assessment, physical protection, security technology, cost estimation, and natural/technological hazard mitigation subject matter experts to perform the analysis.

The list of hazards, vulnerabilities, and recommendations, will all be stored in the central repository. This will allow the SBA to analyze the information to determine if there are any trends across the entire portfolio, in a county, or at a school.

1.4.2 Develop Hazard/Vulnerability Analysis

Based on past history, the following hazards/threats are the most likely to affect schools in West Virginia:

- **Floods:** Flooding is by far the most common natural disaster occurring in West Virginia. The state's hilly terrain and many watercourses, including major rivers, such as the Ohio, Potomac, Kanawha, and New. Since 1950, there have been over 35 Major Presidential Disaster Declarations for flooding events. Events include both riverine and flash flooding from heavy rains. Among the most destructive floods was the Buffalo Creek Flood of 1972, which resulted from the break in a dam at a coal mine and killed 125 people. Other major recent floods occurred in 1977, 1985, and 2001. Floods can cause site damage through erosion, structural and content damage, saturation, and utility system damage, as well as health threats and death and injuries in the case of a flash flood. Extended school closures can result. Fortunately, floods can often be forecast in enough time to evacuate a school.
- **Landslides and mudslides:** Generally also related to heavy rains and flooding, slides are common in West Virginia. At least 12 of the disaster declarations noted above also included landslides and mudslides. A 1996 survey by the states estimated that 500,000 landslides occur annually, causing more than \$30 million in damage. West Virginia is ranked 13th in the nation for landslide damage costs per capita. Landslides are most likely to cause structural and content damage, although injuries and deaths could result from a fast moving slide.
- **Tornados:** Although not as common in West Virginia as in the Midwest, destructive tornadoes have occasionally struck the state, particularly in the 1974 "Super Tornado" outbreak. One hundred people died in a tornado outbreak in 1944 in a swath from Marion to Randolph Counties. Structural and content damage and deaths and injuries can result.
- **Severe winter storms:** Severe winter storms have caused significant disruption across West Virginia. However, such storms are usually predictable and schools may be closed, eliminating the physical danger to occupants.
- **Fires:** Any school can be affected by a fire, either within the facility itself or a wildfire from external areas.

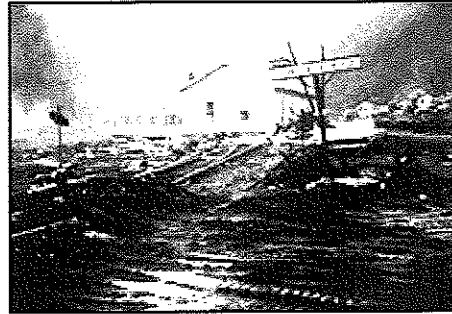


Figure 9. Damage from Buffalo Creek Flooding



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- **Hazardous materials releases:** West Virginia is home to many chemical processing facilities, as well as mines and other installations that use hazardous chemicals. EPA lists tens of thousands of sites that have reportable amounts of hazardous materials throughout the state, including, ironically, many school districts. There are nearly 100 EPA Superfund Sites in the state. In addition to fixed sites, the state's highway and rail networks carry large quantities of hazardous materials. In 2009, there were 38 major highway and 4 major rail incidents involving the release of hazardous materials in West Virginia. Many schools also have internal supplies of hazardous materials that can be released accidentally. Death and injuries from inhalation or contact with the materials would be the most likely effect. In some cases, the safest approach would be to “shelter-in-place” until the hazard has passed, rather than evacuating through a hazardous cloud. This option will be considered in the project.
- **Criminal activities, including shootings, kidnappings, hostage situations, and robberies/burglaries:** No schools can be considered immune to criminal activities, many of which have made national news in recent years. Consequences can be personal and monetary.



Figure 10. Potential risks from chemical plants in West Virginia.

Threats specific to each school will be identified. Prioritization of threats will be done. Obviously, any school can be the site of criminal activities, so all schools will be examined for security measures. Natural disasters are generally more predictable. For example, a mountaintop school may not be subject to floods, but could be affected by a landslide. Proximity to industrial sites or major transportation corridors would make a school more prone to threats from hazardous chemical releases. So, historical records, HAZMAT reports, rail and highway maps, flood maps will be examined to determine the likelihood of an event at a specific site. Local emergency management agencies will also be consulted to assist in characterizing local hazards.

1.4.3 Assess Deficiencies/Develop Risk Reduction Recommendations

Based on the identified hazards for each school, the Baker VA Team will examine existing protective measures in place at the school. This will lead to an assessment of current deficiencies that might be mitigated by additional measures. Note that in some cases these recommendations will be for physical enhancements, while in other cases, procedural and policy changes may be more appropriate. For example, in preparing for protection of students in a nearby hazardous materials release, it may be more effective to validate a procedure for rapidly implementing “shelter in place” is prepared, rather than making modifications to the school building itself.

For criminal threats, we propose to apply the basic concept of Criminal Protection through Environmental Design (CPTED), a widely accepted process in the security community. CPTED involves examining four concepts:

Natural surveillance is the physical ability to see what’s going on in and around a school. Solid walls, tall shrubs, parked cars, outbuildings, sculptures, large signs, and other obstacles can block natural



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surveillance. If there are locations on a campus where problems often occur, are they hidden from view? If so, we will examine ways to increase visibility. Some common approaches include:

- Installing openings or windows in solid walls, to increase visual exposure.
- Replacing solid walls with wrought iron fencing.
- Blocking access to the hidden area entirely.
- Removing any features, such as benches, that draw people into a hidden area for nefarious purposes.
- Strategically positioning landscaping to form natural barriers and boundaries.

Other options to improve surveillance are convex mirrors to provide visibility around corners, electronic surveillance equipment, or increased patrols. The concept of natural surveillance suggests that the more lighting, the better. Paradoxically, it doesn't always work that way. Sometimes good lighting attracts misbehavior, while darkness drives people away. Many schools have gone to darkened campuses for this reason. School resource officers have found that good lighting made schools ideal hangouts after hours, while darkness discouraged kids from congregating.

Within buildings, room and furniture layouts present especially good opportunities for improving security. For example, a receptionist can observe people approaching the building if there are glass doors and a clear line of sight, unobstructed by walls, counters, equipment, etc. If blinds within classrooms are kept closed, teachers can't observe outside activities.

Access control is the ability to identify and decide who gets in and out of the school. Many schools have so many buildings, breezeways, unlocked doors, and open windows that access is essentially unrestricted, despite any rules to the contrary. At most, signs are posted suggesting that visitors report to the office, but nothing compels them to do so. If this is a problem at a school, some options include:

- Re-configuring as many excess entry doors as possible so that they automatically lock when closed and only serve as emergency exits.
- Replacing or re-configuring windows so that they can't be used as entry points for people or contraband.
- In some instances, the HVAC system is a major problem — if people are too hot, they'll open the windows and no policy is likely to stop them. Small windows or windows covered with grates are other possible solutions if they don't need to serve as emergency exits.

Of course, emergency ingress and egress from each room and from the school must always be maintained.

Territoriality refers to creating the feeling of ownership and belonging. Letting the bad guy and the public know that the area is being watched (this can be done through signs that tell people to call report concerns) serves to warn that negative behaviors are likely to be seen, reported and the perpetrator caught. Defining clear borders is another step that reinforces territoriality. A low fence or hedge around the edge of the school property may not physically stop a trespasser, but helps identify where public space ends and school space begins.



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Maintenance - Without proper maintenance safety, security and emergency response measures often become ineffective or even detrimental. Poor maintenance also suggests that school authorities do not care about the school and, therefore, may not care as much about safety and security.

CPTED focuses on simple environmental solutions to enhance security. But technology and physical protective measures, such as fencing, access control, detection portals, alarms, and surveillance cameras, also play a role in enhancing security. So, we will supplement the basic CPTED analysis with a thorough review of existing and desirable technology solutions for each site.

For multi-hazard assessment, the U.S. Department of Homeland Security (DHS) has developed the Risk Analysis and Management for Critical Asset Protection (RAMCAP) process as a standard for assessments across all sectors. A new RAMCAP for Campuses is under development by the American Society of Mechanical Engineers Innovative Technologies Institute (ASMEITI). This methodology should be available by late summer 2010 and will be considered for implementation on the project once evaluated. One advantage to this application is that it has the blessing of DHS. We have already been in touch with the authors of the methodology at ASMEITI.

Another source of guidance for natural disaster mitigation is the Federal Emergency Management Agency's (FEMA) *Building a Disaster Resistant University*, which has equal application to K-12 schools. This "how to" guide is based on the general mitigation planning guidance for state and local agencies published by FEMA, which would also be applied to the project. Similar to other assessment methodologies, the guide call for an assessment of hazards and an inventory and characterization of assets, including buildings and other critical school facilities. Then, a hazard-specific mitigation plan is developed. The mitigation plan identifies appropriate mitigation actions to protect the school's people and facilities. These actions can range from simple and inexpensive, such as securing lab equipment, to complex and expensive, such as structural design improvements for new construction and the retrofitting or relocation of existing structures. A few examples of typical mitigation measures for hazards would be:

- **Fire:** Improvement of sprinkler systems; increased use of fireproofing and/or fire-resistant building materials; training of permanent/and or volunteer staff in firefighting techniques; ensuring adequate water supplies for fire protection; vegetation management; maintaining site setbacks.
- **Floods:** Elevation or flood proofing of buildings; drainage improvements and structural works; moving critical uses (communications, library and other collections, offices) to higher locations within a building; elevation of vulnerable equipment.
- **All Hazards:** Installation or improvement of backup systems (electric generators, computer databases, etc.); implementation of contingency procedures; maintenance of emergency plans; informing school personnel of risks and mitigation strategies; keeping detailed information current regarding hazardous chemicals and biological and radiological agents.

The Baker Team has extensive experience in developing mitigation plans, including the West Virginia State Hazard Mitigation Plan and several county plans in the state. We are also currently updating state



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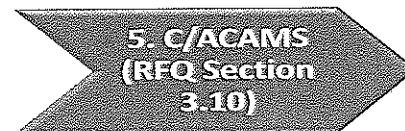
hazard mitigation plans in Pennsylvania and Idaho and performing numerous county mitigation plans. Finally, Baker is currently conducting a hazard analysis for the entire State of West Virginia using the FEMA “HAZUS” tool, the results of which can be seamlessly integrated into the school VA project efficiently and economically.

Recommendations will be prioritized and arranged by short and long term to allow for a staged approach to implementation as funding becomes available.

OPTIONAL SERVICES:

Once the initial assessment is completed, Baker is prepared to return periodically to all or selected school facilities to evaluate measures that have been implemented and make additional recommendations, if appropriate.

1.5 Task 5. C/ACAMS Data Entry



Constellation/Automated Critical Asset Management System (C/ACAMS)

Ultimately, the data collected as part of the VA will then be entered into the DHS C/ACAMS, as appropriate. C/ACAMS is a web-enabled information services portal that helps state and local governments (to include schools) build CIKR protection programs. It’s secure, online database and database management platform is the perfect tool for this project as it will allow for the collection and management of CIKR asset data for the schools and the cataloguing, screening and sorting of this data; and the production of tailored school infrastructure reports useful to strategic and operational planners and tactical commanders.

1.5.1 Review and Enter Data

C/ACAMS provides a set of tools and resources for the Baker Team to manage that will aid WV law enforcement, public safety and emergency response personnel. This may include making preparations for managing buildings, grounds, occupants, and rescue and recovery personnel during and after a crisis. When a crisis occurs, emergency responders will immediately need a great deal of information about a school facility and its grounds. They will need to know the members of the crisis response team, how the site can be accessed, and the location of utility shutoff valves, to name a few. Baker’s management of C/ACAMS will provide for this. Additionally, once the Baker Team enters the collected data, the output will assist these users in pre-incident prevention and protection, as well as post incident responses at schools. Data entered into C/ACAMS by our team can also be used to create Buffer Zone Plans and customized reports, for example.

C/ACAMS has recently been upgraded from version 2.3 to version 3 on June 21, 2010. The Baker Team sees the timing of the release of this version could not have been better since it truly benefits this WV School Project. The newly released version now has Asset Type Feature with Specific Asset Type Attributes for schools (as well as Police and Fire Departments and Hospitals). Version 3 also has an improved user interface for data grouping for the schools with minimal steps.



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It should be noted that Baker became intimately familiar with the new specific attributes and how it applies to schools. Most recently, key proposed project team members from Baker attended orientation sessions for C/ACAMS version 3 at the DHS sponsored CIKR Asset Protection Technical Assistance Program (CAPTAP) Conference in Orlando Florida June 23-24, 2010. These sessions were conducted by members of WV's National Guard to include 1Lt William Hargis and SFC Milford "Zig" Zeigler who duties include providing direction and guidance for the C/ACAMS program. Since Baker proposes to have a full complement of team members formally trained (approximately two day sessions) and with such close proximity, travel costs for future team training, if awarded, could be minimized if conducted locally at the WV National Guard facility at Coonskin Park in Charleston. The DHS Office of Infrastructure Protection, in collaboration with FEMA's National Preparedness Directorate (NPD), does in fact authorize and provides instruction on C/ACAMS through the CIKR CAPTAP. The CAPTAP service assists state and local law enforcement, emergency responders, emergency managers, other homeland security officials, and firms such as Baker understand the steps necessary to develop and implement comprehensive CIKR protection programs using C/ACAMS as a tool to support these programs. Once formally trained, the Baker Team will then input the school infrastructure asset data through a guided process.

Baker is well aware of the sensitivity of the stored data and will employ a rigorous Information Security approach.

1.5.2 Data Management

Baker recognizes information security is vital in maintaining trust with the schools. To put the schools at ease, the Baker Team will inform the school officials that all data collected (as part of the VA in task 4) will be properly protected. Baker will develop protocols for trained personnel to practice proper use, handling, and storage of the school information. Although not mandatory, two of Baker's key personnel, John Porco and Ken Zaklukiewicz currently possess secret security clearances through the DHS. Additionally, all proposed personnel for this project have passed background checks for their current employment. As such, we are confident our proposed team will pass any future background checks as needed for this project. Should for any reason background checks are not passed, our team depth will allow for a replacement as necessary.

Crisis planning includes making preparations for managing school buildings, grounds, occupants, and rescue and recovery personnel during and after a crisis. When a crisis occurs, emergency responders will immediately need a great deal of information about a school campus. They will need to know the members of the crisis response team, how the site can be accessed, and the location of utility shutoff valves, to name a few.

By leveraging C/ACAMS, Baker can compile site information and post this information on the secure C/ACAMS site that responders can access from laptops at the scene. As required by Section 3.9 of the RFQ, the material, data and information created as a result of this procurement is considered sensitive and must be controlled. The PCII Program requirements must be met.



Quality Management

The commitment to deliver quality services and products has long been integral to Baker's business philosophy. In keeping with its service orientation, Baker has streamlined and standardized its project management approach to improve the project delivery process and enhance client service. All Project Managers are trained in Baker's manual, *Project Management – The Baker Way*, which presents the approach and the tools that support Quality Management, integrating quality planning practices at all levels of management, as a means of ensuring continuous improvement.

Quality Management is not something that occurs at the end of the project, but rather a process that begins with the project. It is the development and use of processes by which project work is assigned, performed, checked and reviewed, to optimize Baker's ability to meet the client's requirements and applicable professional standards for technical quality.

Managing the gathered schools data, EMPs, VAs and recommendations across the West Virginia schools necessitates a comprehensive Quality Management Program for quality assurance and quality control to provide consistency in quality. Quality Management is the responsibility of all employees, requiring commitment and participation from top management as well as from all project team members. We will identify clients' program requirements, determine which quality standards apply, and determine what will be done to satisfy these program requirements. The main components of Quality Management include Quality Assurance, Quality Control, and Quality Audit.

Baker's Quality Policy

Baker is committed to completing projects that meet our clients' requirements with respect to scope, schedule, budget and technical quality. Each project has a Project-Specific Quality Plan in place. Baker is committed to the following quality goals:

- To satisfy specific criteria and requirements in all phases of a project.
- To recognize, learn and practice standards applicable to each type of project, and to provide constructive input towards the improvement of practices.
- To involve all project staff in delivery of quality products.
- To recognize productive employee contributions towards establishing a professional, interactive work environment that fosters teamwork, achievement and quality awareness.
- To maintain and support Project-Specific Quality Management Plans (PSQMPs) for use by all project team members, including the client and subconsultants.
- To continually improve the effectiveness of the quality management system.



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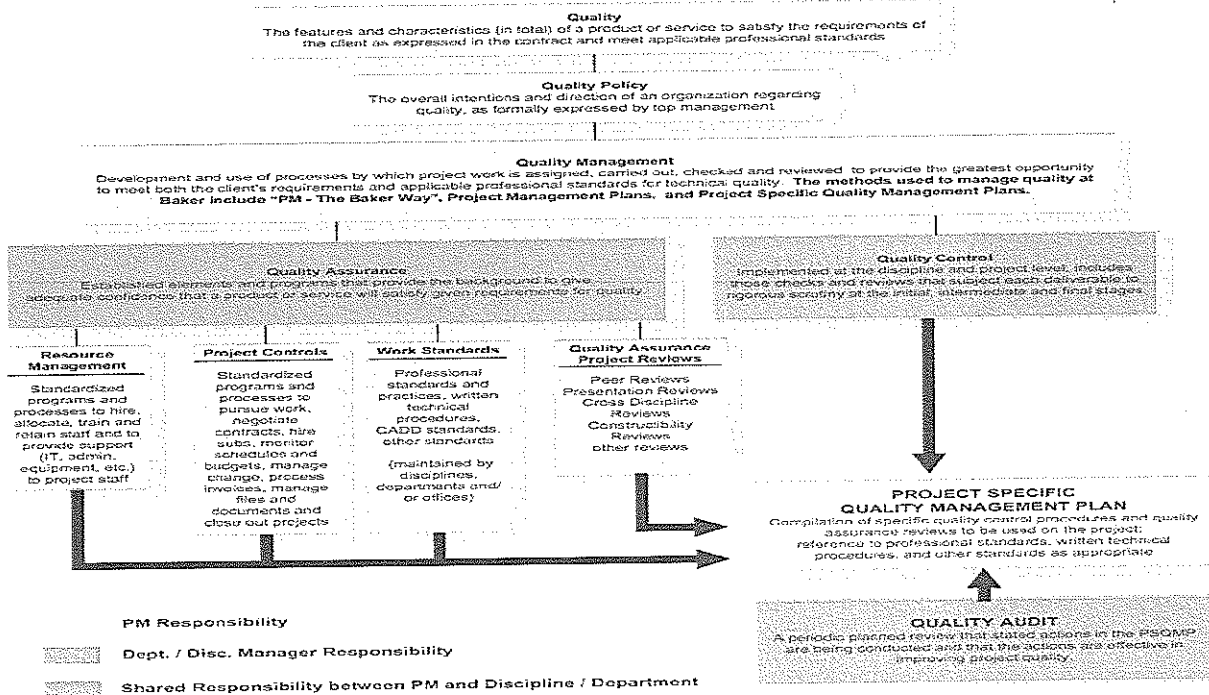


Figure 11. Components of Baker's Quality Management System.

Quality Assurance – Established elements and programs that provide adequate background information to promote confidence in the ability of a product or service to satisfy requirements for quality. At the project level, Quality Assurance consists of specific types of high-level reviews of project submittals, such as:

- Cross-Discipline Review by technical staff from each individual discipline (including subconsultant firms) of the designs of all other disciplines, to achieve consistency and continuity, and avoid conflicts.
- Independent Technical Review performed by qualified and experienced individuals independent of the project. One or more appropriately skilled individuals will perform an independent technical review of the documents on a discipline-by-discipline basis. Each discipline checks data completeness, responses, floor plan annotations, text and analysis for accuracy as well as consistency. The objectives are to evaluate the product according to the client's requirements and objectives; spot-check key values, if appropriate; verify completeness and correctness; and confirm that the product meets professional practice requirements.
- Presentation Review of the entire submittal for overall presentation, format, readability, uniformity, consistency, and completeness.

Quality Control - Implemented at the discipline and project levels, Quality Control includes checks and reviews deemed most appropriate for a specific discipline and the project. Its purpose is to subject each deliverable to rigorous scrutiny at the initial, intermediate, and final stages of development. Quality Control measures proposed as part of our technical response include:

- Implementation of a pilot project program to assess and refine data collection; methodology, EMP development and VA analysis and recommendations;



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- Use of web-based forms for data collection;
- Review of SAV data for completeness; and
- Use of a central repository for tracking and management of all data elements.

Quality Audit – A periodic planned review to confirm that actions identified in the quality management plan developed for a particular project are being performed and are effective in improving project quality.

All electronic documents and files (including field data for all 705 schools, meeting minutes, transmittals, drawings, etc.) will be stored on Baker's project server using a pre-established file structure directory. All team members are familiar with this process, which allows for organized and quick access and retrieval of information. All submissions are also saved on CDs so that an accurate record of the project is kept. The material, data and information created by the Baker Team as a result of this West Virginia Safe Schools Program is considered sensitive and must be controlled. The Protected Critical Infrastructure Information Program (PCIIP) requirements will be met at all times by the Baker Team. For this project computer security will be a very important concern, and one which Baker takes a very active role. In this regard, Baker will follow these established Computer Security and Anti-Virus Policies. These security measures safeguard the integrity and confidentiality of the West Virginia schools' information.

Internet Security. Michael Baker Corporation utilizes one central Data Center location where our Intranet (Internal Network) connects to the Internet. We utilize multiple layers of Security including High Available Firewalls, Intrusion Detection Sensors, Virtual Private Network (VPN), and other monitoring. We use the rule of least privilege when it comes to allowing access through our network and access is only granted after a review by the Security team to validate the Security Impact.

Security Policies/Procedures. Michael Baker Corporation has Security Policies/Procedures that outline a framework to confirm the necessary steps are in place to secure the data of our customers. We utilize the rule of least privilege in granting access to data. Along with Security Policies/Procedures, we provide Security Awareness Training to our employees to confirm that they take the necessary steps in handling and securing their data.

Security Audits. Michael Baker Corporation contracts with an external Security partner to perform a security assessment on a regular basis. This includes Penetration testing of our network, review of Policies/Procedures, Operations review, etc. This allows us to provide the highest level of Security for our customers. Internally we perform periodic audits of our operations in between external assessments to continuously improve on our security posture. In addition, all of Baker's computers are fitted with anti-virus software and our network servers are scanned on a rigid schedule. Also, we maintain an "Alert Management Server" that sends out automatic e-mails in the event that a virus is detected. This helps to confirm that the information we transmit to our customers is free of computer viruses.



SECTION 2 – TIMELINE FOR COMPLETION

Aspects of the project including key activities and tasks are shown on the project timeline in Figure 12.

ID	Task Name	1st Half					2nd Half		
		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	Task 1 - Project Mobilization								
2	Project Initiation								
6	Information Gathering								
9	Strategy Meeting								
12	Data Store Setup								
23	Task 2 - Data Collection								
24	Data questionnaires								
30	Contact School - Pilot Schools								
32	Virtual Meeting - Pilot Schools								
38	School Assessment Visit - Pilot Schools								
40	Assess Results & Recalibrate Methodology								
45	Contact School - Remaining Schools								
49	Virtual Meeting - Remaining Schools								
53	School Assessment Visit - Remaining Schools								
57	Task 3 - Emergency Management Plans								
58	Develop Emergency Management Plan								
61	EMP - Pilot Schools								
65	Assess Results & Recalibrate Methodology								
70	EMP - Remaining Schools								
78	Task 4 - Vulnerability Analyses and Recommendations								
77	Develop Vulnerability Analysis report								
80	VA - Pilot Schools								
83	Assess Results & Recalibrate Methodology								
88	VA - Remaining Schools								
91	Task 5 - C/A/CAMS - Entry								
92	C/A/CAMS - Pilot Schools								
94	C/A/CAMS - Remaining Schools								
98	Task 6 - Project Management								

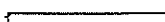

Project: Baker-Project Timeline Date: Fri 7/2/10	Task	
	Split	

Figure 12. West Virginia School Safety and Vulnerability Assessm



SECTION 3 – TEAM EXPERIENCE

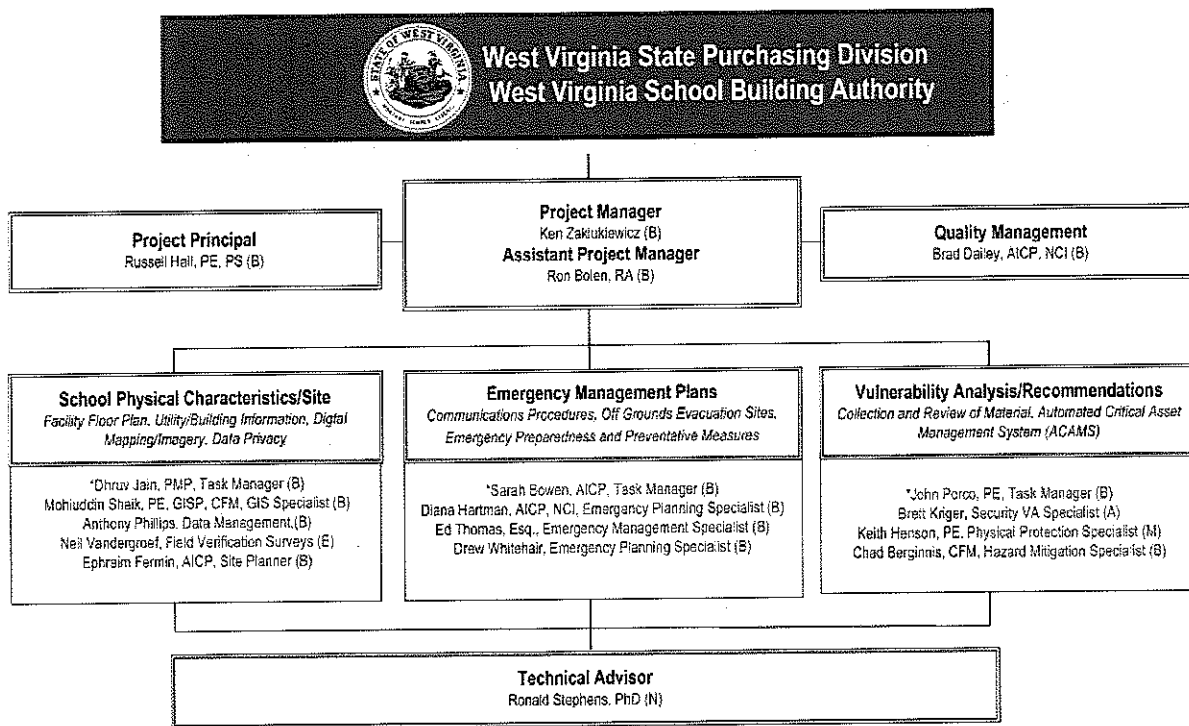
Baker has assembled a team with career experience in large-scale assessments of multiple facilities, school surveys, emergency management and VAs to effectively and efficiently carry out this project. Key personnel and their roles are identified in Figure 13 below. Baker has over 2,300 employees worldwide that serve as additional resources to support the key team members on an as-needed basis if needed.

Staffing Plan

The in-school assessment teams will comply with the security requirements outlined in the RFQ. Furthermore, the assessment teams will be trained in using the data collection technology and tools, including all data collection forms. The proposed pilot group approach discussed in Section 1 and illustrated in Section 2 facilitates a common understanding of the values for the data being collected (e.g., similarities in scoring, measurements, descriptions of assets, etc.) providing consistency in data and interpretation across all schools.

Team Qualifications

Below is an organization chart of our team. Brief summaries of the team members’ qualifications follow. Full resumes are included in the appendix.



Michael Baker, Jr., Inc (B); ECS Group (E), Allied Independent Consulting (A), Mesa Engineering (M), National School Safety Center (N)

Figure 13. Organization Chart of Proposed Team



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Project Manager – Ken Zaklukiewicz: As Senior Program Manager within Baker's Emergency Management Services Division, Mr. Zaklukiewicz has developed crisis management plans, emergency operations plans and programs, evacuation plans, and Continuity of Operations (COOP) plans; conducted VAs and mitigation planning; and conducted exercises for both private and public sector clients. He manages a team comprised of the top specialists in the field that specializes in threat and vulnerability assessment and counter-terrorism measures. Mr. Zaklukiewicz has extensive experience in emergency operation plans development and hands-on experience in emergency response operations in coordinating the efforts of fire, HAZMAT, bomb disposal, law enforcement, and other emergency management disciplines. Mr. Zaklukiewicz conducts key infrastructure vulnerability and threat assessments utilizing his extensive Chemical, Biological, Nuclear, and Explosive expertise. He has worked within the local, state, federal emergency management community, military, and private industry and designs tailored exercises. Prior to joining Baker, he was the Exercise Director for the Center for National Response in Gallagher, West Virginia. He is also a certified Pro Board Fire Instructor (NFPA 1041) through West Virginia University. Mr. Zaklukiewicz will have responsibility for all project tasks.

Assistant Project Manager – Ron Bolen, RA: Mr. Bolen brings over 35 years of design and project coordination experience to the project. From the early planning stages to the construction implementation, he provides project management in plan development, costing, implementation and evaluation. Mr. Bolen has provided oversight on numerous design and construction projects involving elementary, middle and high schools throughout West Virginia. He has been a Registered Architect in West Virginia for over 10 years.

Project Principal – Rusty Hall, PE, PS: Mr. Hall currently serves an 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 22 years. He also has over nine years of office management experience with responsibilities that include financial oversight and accountability for a staff of over 40 engineers, scientists, and administrative personnel. His major strengths include organizing and managing a project team, quality control and quality assurance and problem resolution. He has served as Principal-in-Charge on numerous projects for various agencies in West Virginia, including the Division of Homeland Security and Emergency Management, Department of Transportation, Regional Airport Authority and other local municipalities. Mr. Hall is very proud of the fact that he has been able to spend his entire career in West Virginia working to address the State of West Virginia's needs. Mr. Hall will provide executive level support to the project, including allocation of additional staff resources from throughout the company.

Quality Management - Brad Dailey, AICP, NCI: Mr. Dailey manages Baker's Federal Planning Practice firm-wide. He is an accomplished planner with over 26 years of experience and a leader in the integration of spatial technologies (GIS, remote sensing, and computer mapping) for solving multi-faceted spatial problems. With his many years of professional experience, he is able to capitalize on first-hand knowledge of planning related technologies in the context of security assessments. Mr. Dailey has provided QA/QC for emergency management and planning projects for the US-VISIT, Department of Homeland Security (DHS); Pennsylvania Emergency Management Agency (PEMA); Metropolitan Washington Council of Governments (MWCOG) and Mid-Ohio Regional Planning Commission (MORPC).



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School/Site Task Manager - Dhruv Jain, PMP: Mr. Jain has 16 years of experience specializing in the development and implementation of information technology systems related to asset management. His experience ranges from planning and data management for large land areas such as military bases and university campuses, to data management for discrete facilities and elements of infrastructure. Prior to joining Baker, Mr. Jain was the GIS Program Manager with the University of Virginia Facilities Management Department, where he was responsible for GIS maintenance and enhancement for a large University campus. While at Baker Mr. Jain has served as Project Manager/Database Developer for the USACE's Domestic Dependent Elementary and Secondary Schools (DDESS) System-wide Connectivity and the Smithsonian Institution Electronic Document Management System. Mr. Jain will be responsible for managing all data collection efforts on the project.

GIS Specialist– Mohiuddin Shaik, PE, GISP, CFM: Mr. Shaik has over 10 years experience as a GIS Specialist in the Charleston, WV office of Baker. He is a registered professional Civil Engineer, certified GIS Professional and Certified Floodplain Manager in West Virginia. His experience covers numerous studies involving steady, unsteady, and multi-dimensional numerical models of rivers using advanced geospatial techniques. Representative projects include hydrologic studies of watersheds, FEMA flood insurance studies and map revisions, floodplain management studies, hydraulic design and scour evaluation of bridges and design of hydraulic structures. He has provided GIS expertise on projects for the West Virginia Department of Administration and West Virginia Division of Homeland Security and Emergency Management. His expertise includes flood risk assessment and loss estimation using FEMA's HAZUS software. Currently he is leading the WV Statewide HAZUS project, which includes the flood risk assessment and loss estimations at census block level of all Critical Infrastructure (Including Schools) in the state of West Virginia.

Data Management - Anthony Phillips: Mr. Phillips has 20 years of experience in the design, development and implementation of hardware and software systems. His experience ranges from planning and process improvements for large financial institutions and university campuses, to application development for discrete facilities and elements of infrastructure. He has developed and supported software solutions and data management for confidential projects for the Federal Bureau of Investigation and the Smithsonian Institution.

Field Verification Surveys – Neil Vandergroef: Mr. Vandergroef has over 31 years experience working with CAD, CAFM and Field Verification technologies. He coordinates ECS' field verification teams in the surveying of project critical facility and building/site data. Mr. Vandergroef was the manager of a U.S. bank project representing 657 buildings in 36 states totaling approximately nine million gross square feet (gsf). He has been project manager on many key projects requiring site surveys and/or database development including elementary, middle and high school districts in New Jersey areas such as Parsippany, Mountain Lakes, Madison, Delbarton, Morristown Beard and Middlesex Borough.

Site Planner – Ephraim Fermin, AICP: Mr. Fermin is an architect and urban planner with many years of diversified professional experience in master planning, urban design, design studies, architecture, interior design, education, landscape and subdivision planning. His work has included large-scale planning projects and security/force protection assessments, as well as facilities planning. In addition, his work has concentrated in the areas of strategic planning, space programming, facilities adaptive reuse,



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condition assessments and site planning. Mr. Fermin has been a planner on numerous task orders for site surveys, VAs and improvements to schools under the DDESS contract.

EMP Task Manager - Sarah Bowen, AICP: Ms. Bowen is a Senior Planner with a specialty in planning for human needs in a disaster. She assisted extensively in Baker's project to develop an evacuation Planning Guide for the National Capital Region and a special needs evacuation project in Columbus, Ohio and served as Assistant Technical Manager for Baker's Pittsburgh CBD evacuation planning project. She also manages a team of planners and engineers to assist FEMA Region 3 with mitigation through the National Flood Insurance Program (NFIP). She leads her team to apply federal regulations to communities that are having their flood maps updated. She clearly outlines the steps communities are required to take to continue participating in the NFIP in letters, brochures, meetings, and other outreach materials. Her team also works with the FEMA Region 3 staff to track studies, train mapping partners, and complete research helpful in planning studies. Ms. Bowen came to Baker with extensive disaster preparedness and response planning working at the American Red Cross in Philadelphia. She worked with numerous public agencies to plan for effective response to both natural and human-made disasters. Ms. Bowen will be responsible for managing all emergency planning tasks on the project.

Emergency Management Planner – Diana Hartman, AICP, NCI: Ms. Hartman is a certified planner with several years of diversified professional experience. She has represented Baker at "Antiterrorism/Force Protection (AT/FP) Doing It By The Book," the 2003 ANG CEC Conference, where she was a panel member and presenter. Her experience also includes conducting Phase I Environmental Site Assessments for various commercial/industrial properties, writing comprehensive master plans, creating conceptual site plans for property development purposes, and designing initial subdivision layouts. Ms. Hartman's experience includes leading efforts for the Special Mobility Needs Evacuation Planning for MORPC, Sheltering and Evacuation Guide and Resource Database for the MWCOG and Computer Aided Facility Management (CAFM) Implementation for the U.S. Department of Justice.

Emergency Planning Specialist – Edward Thomas, Esq.: Mr. Thomas is an attorney and author, as well as a program manager, project manager, team leader, and motivator. His particular skill is outreach to varied stakeholder groups to achieve consensus on controversial issues. Before joining Baker, he served for more than 30 years at the Federal Emergency Management Agency. He was Director, Disaster Assistance Program Division for FEMA Region I and as Chief of Operations for FEMA's National Capital Region Emergency Response Team. Mr. Thomas has published dozens of articles and other publications and lectured nationally on disaster related matters. He has also worked as a Flood Insurance Specialist and Multi-family Housing Representative for the Department of Housing and Urban Development, where he coordinated HUD Housing Programs throughout New England. At Baker, Mr. Thomas serves as Senior Policy Advisor, managing Baker's efforts to assist FEMA in reengineering the Cooperating Technical Partners Program and increase partnerships at all levels of government.

Emergency Planning Specialist – Drew Whitehair: Mr. Whitehair has experience in various aspects of emergency management at both the state and local level. Drew has worked through numerous federal disaster declarations and assisted in implementing various programs as a result involving hazard mitigation, public assistance and individual assistance. Drew has particular expertise in hazard mitigation having developed and managed projects in communities small and large, rural and urban. He is the lead



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planner on the COOP/continuity-of-government project for Pickaway County, OH. He is also serving as an emergency planner on the Mid-Ohio Regional Planning Commission Assisted Evacuation Plan that will improve emergency preparedness, disaster response and recovery for populations with specific transportation needs in seven counties in Ohio.

VA Task Manager – John Porco, PE: Mr. Porco has more than 30 years of experience in emergency planning, response, recovery, and mitigation at national and regional levels, involving all hazards - natural and technological disasters, terrorism, and national security emergencies. Mr. Porco serves as Senior Director in Baker's Homeland Security Services unit, which provides all-hazard mitigation and response planning services to a variety of clients at the Federal, State, and local levels, as well as the private sector. He has led Baker's vulnerability assessment projects for water, transportation, and building infrastructures. He is a licensed instructor for the Sandia Risk Assessment Methodology for Water (RAM-W) and for Communities (RAM-C) and developed a Security Practices Primer for water utilities nationally. Mr. Porco has been quoted in the media as an "infrastructure security expert." He has also developed emergency response plans for a variety of clients, as well as hundreds of emergency training sessions and exercises. Mr. Porco will manage all hazard assessment and vulnerability analysis tasks on the project, as well as supervise the development of recommendations for enhancements.

Security VA Specialist – Brett Kriger: Mr. Kriger has over 30 years of domestic and international military and civilian experience in all aspects of vulnerability assessment, risk analysis and site security. He has provided vulnerability assessment and security analysis for infrastructure protection projects in several states and served on the Executive Board of the National Institute of Urban Search and Rescue helping to focus the organization's efforts on developing an integrated communications infrastructure. He is licensed in conducting the Sandia National Laboratories Risk Assessment Methodology (RAM) for vulnerability assessments specified by federal agencies. The RAM-W methodology provides for threat assessment, consequence evaluation, site security characterization, physical security system assessment, intrusion detection analysis, and developing system enhancements to reduce risk.

Physical Protection Specialist – Keith Henson, PE: Mr. Henson has over 30 years of experience in engineering, with a background in facility security. He is a member of the American Society for Industrial Security. He has designed security systems on a national level for the U.S. Department of Energy plant locations and the Aeronautics and Space Administration shuttle launch sites. On a local level he has worked with power companies in SC, TN, VA, AZ and CA conducting threat and vulnerability assessments for their sites. Mr. Henson conducted a vulnerability assessment for the 200-acre campus of 93 buildings on the University of North Carolina in Greensboro, where security of the campus is a challenge due to its' close proximity to the city.

Hazard Mitigation Specialist – Chad Berginnis, CFM: Mr. Berginnis has 16 years of experience in various aspects of natural hazards management, flood loss reduction and land use planning/programs. In these roles, he has designed and implemented various programs including subdivision review/permitting, floodplain management and hazard mitigation. He managed these programs at both the state and local level. Mr. Berginnis has performed various functions from local zoning inspector, to floodplain administrator, to State of Ohio Hazard Mitigation Officer- working with communities small and large,



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rural and urban. He has particular expertise in public outreach and communications, having conducted several hundred of meetings throughout his career.

Technical Advisor - Ronald Stephens, PhD: Dr. Stephens currently serves as Executive Director of the National School Safety Center. His past experience includes service as a teacher, assistant superintendent and school board member. Administrative experience includes serving as a chief school business officer, with responsibilities over school safety and security, and as Vice President of Pepperdine University. Dr. Stephens holds the California teaching credential, administrative credential, and the Certificate in School Business Management. Dr. Stephens has conducted more than 1000 school security and safety site assessments throughout the U.S. He was described by the Denver Post as “the nation’s leading school crime prevention expert.” Dr. Stephens serves as consultant and frequent speaker for school districts, law enforcement agencies and professional organizations worldwide. He is the author of numerous articles on school safety as well as the author of *School Safety: A Handbook for Violence Prevention*.

Project Experience

Our team has worked on a broad range of projects that have involved the safety and security of our communities and infrastructure. Table 1 below is an overview of how our team’s project are relevant in regard to the RFQ. Following are summaries of those projects.

Table 1. Baker Team Project Experience in Relation to Scope Requirements

Project	Data Collection and Management	Emergency Management Plans	Vulnerability Assessments
School Safety Assessments, Various School Districts; Nationwide	X	X	X
Occupant Emergency Continuity of Operations and Pandemic Influenza Plan, Department of Homeland Security; Nationwide	X	X	X
Sheltering and Evacuation Resource Guide; National Capitol Region (NCR)	X	X	
West Virginia Statewide Hazard Mitigation Plan; Statewide, WV	X	X	X
Disaster Response, Recovery and Continuity of Operations Plan, Kanawha Valley Regional Transportation Authority (KRT); Charleston, WV	X	X	X
All-hazard Emergency Response Plan (ERP); Arizona Department of Transportation (ADOT)	X	X	X
Local and State Hazard Mitigation Planning and Program Management Support; Pennsylvania Emergency Management Agency (PEMA)	X	X	X
Santa Clara Valley Water District (SCVWD) Security Assessment and Enhancement Design; San Jose, CA	X	X	X
General Architect Engineer Services, DODEA Facilities at DODDS-Worldwide and DDESS U.S.-Based School Facilities	X		
West Virginia Riverine Flood Analysis, HAZUS-MH; Statewide, WV	X		X
Small Building Drawing Conversions, U.S. Based Banks, Nationwide	X		



SCHOOL SAFETY AND VULNERABILITY ASSESSMENTS

School Safety Assessments, Various School Districts; Nationwide - The National School Safety Center has conducted strategic evaluations and facilities audits to identify emerging and potential school safety problems. During an assessment, key factors were examined to ascertain their direct impact on the educational mission, student and staff safety, school climate, school attendance and overall campus security. The SSAs highlighted and reinforced what each school was doing right to keep students safe, and provided direction in the areas that needed improvement. They typically consisted of:

- A facilities audit;
- A review of your school's comprehensive safe school plan;
- A review of existing plans for crisis response and disaster mitigation;
- A review of student codes of conduct;
- An analysis of district policies related to student safety and management issues and their compliance with federal and state law;
- An analysis of crime prevention through environmental design efforts ;
- Student input;
- Discussions with key administrative personnel and local law enforcement;
- A review of recent media activity;
- An analysis of recent school crime and disorder incidents; and
- Commendations for effective practices and programs.

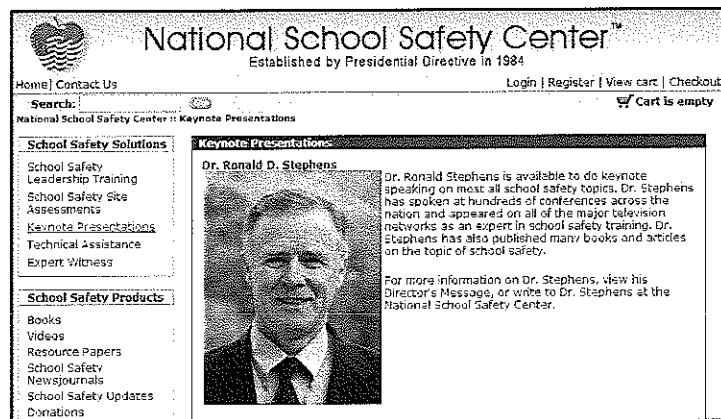


Figure 14. Dr. Ron Stephens, proposed Technical Advisor for the WV SSA project, serves as Executive Director of the National School Safety Center.

The National School Safety Center is the only professional school safety organization that has been in continuous operation for over 19 years. Recent SSAs have been conducted for the following:

- New York City Public Schools
- Denver Public Schools
- Atlanta Public Schools
- Dallas Independent School District
- Oakland Public Schools
- Fort Smith, Arkansas Public Schools
- Heath High School, Paducah Kentucky
- Pearl High School, Pearl Mississippi
- Fairbanks Public Schools, Fairbanks Alaska
- Broward County Public Schools
- University of Chicago Laboratory School
- DeKalb County Public Schools
- Charlotte County Public Schools
- Phoenix Country Day School
- St. Margaret's Episcopal School



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Occupant Emergency Continuity of Operations and Pandemic Influenza Plan, Department of Homeland Security; Nationwide - The US-VISIT Program is part of the Department of Homeland Security and is responsible for the technology and strategy that confirms the integrity of the U.S. immigration system. Baker was selected to support GSA and developed an Occupant Emergency Plan (OEP) Continuity of Operations Plan (COOP) and a Pandemic Influenza Outbreak Operational Plan. In the OEP development, Baker researched applicable regulations/guidance for proper compliance which answered such questions as: Can Rally Points cross roadways? What is the required distance away from the building? How handicapped employees are properly managed during an evacuation? Some examples of publications included the National Institute of Health Manual, Chapter 1430, Occupant Evacuation Plan and the National Fire Protection Agency (NFPA) 1600, Standard on Disaster/Emergency Management and Business Continuity Programs. These national standards present methodologies for defining and identifying risks and vulnerabilities and provide planning guidelines that address protecting the health and safety of personnel. In the development of the OEP, Baker also developed an Occupant Emergency Organization (OEO) and defined their duties. As part of the OEP, quick reaction checklists were developed for each assigned position, e.g. stairwell attendant, special needs attendants, OEO coordinator, etc. Baker then



developed and executed OEP Training. The purpose of the training was twofold: The first was to confirm all members of the OEO were clear on their duties and can execute them during an occupant emergency. The second part was a “Train the Trainer” so others may deliver training to new employees in the form of a Newcomer’s Orientation Briefing. This will allow new employees are aware of emergency information, e.g. rally point locations, local threats, etc. Lastly, Baker developed a COOP and Pandemic Plan that assures capability to continue essential US-VISIT functions during a wide range of emergencies. Essential functions are those that enable an agency to provide vital services with no or minimal disruption, exercise civil authority, maintains the safety of the general public and sustains the industrial/economic base during an emergency.

Relevance to SBA Project:

- Development of response plans
- Emergency operations



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Sheltering and Evacuation Resource Guide; National Capitol Region (NCR) - Metropolitan Washington Council of Governments (MWCOG) is composed of 20 local governments surrounding the Nation's capital, including the State of Maryland, the Commonwealth of Virginia, and the District of Columbia. The MWCOG jurisdiction covers a land area of 3,020 square miles and serves a population of over four million people. Baker worked with MWCOG agencies and other stakeholders to implement a program that included development of:



Figure 15. The NCR project coordinated with 20 local governments on emergency management issues.

- A profile for identified evacuation routes and an assessment of capacity and traffic management techniques to enhance capabilities;
- An inventory of vehicles and drivers to be used for evacuation;
- Common profiles for transfer/pickup points, including pickup of special needs populations
- Common profiles for hospitals, assisted living facilities, senior living facilities, prisons, and nursing homes;
- Assessments of current shelters/destination points, including special needs and pet shelters, along with an assessment of resources needed to support the shelter population;
- Community profiles, including population, demographics, potential sheltering demands, etc.; and
- Leveraging of mass transit and alternative forms of evacuation to facilitate evacuation.

Through Congressional mandate, the planning process included coordination with the states of West Virginia and Pennsylvania. The complexity of the NCR required an especially intensive stakeholder outreach process.

Relevance to SBA Project:

- Large scale data gathering effort
- Development of response plans
- Coordination with state/ local officials and stakeholders



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West Virginia Statewide Hazard Mitigation Plan; West Virginia Office of Emergency Services - Baker developed a Standard State All-Hazards Mitigation Plan for the West Virginia Office of Emergency Services to comply with the requirements of the DMA 2000, which requires states to have both a State-adopted and FEMA approved plan as a condition of disaster assistance. This plan will enable West Virginia's state, local and other public agencies to qualify for Hazard Mitigation Grant Program project grants from FEMA, which will reduce the effects of disasters on the lives and property of the State's citizens.

Baker initially conducted a Statewide Risk Assessment from natural hazards such as floods, winter storms, tornadoes, and wild fires. The risk assessment was based on extensive research of past disasters and their effects on life and property. The risk assessment included profiles of a variety of hazards, vulnerability assessments, and preparation of loss estimates. Spatial and aspatial (non-spatial) hazard datasets were compiled into a GIS database using ESRI's ArcGIS 8.3 and Microsoft Access software. The GIS database was used to make projections of future risks to the State's critical infrastructure and to create maps of areas vulnerable to specific hazards. The results of the risk assessment allowed hazards to be ranked based on frequency of occurrence and potential consequences.

Baker coordinated the statewide planning process by organizing stakeholder meetings for over 100 different stakeholders in all levels of government, private enterprise, non-profits, and individual citizens. The stakeholders helped identify hazard mitigation goals, strategies, and projects. The statewide plan also incorporated the results from 55 local jurisdictional hazard mitigation plans prepared by the County governments.

Baker also facilitated the identification and prioritization of 22 mitigation strategies by the stakeholders, for the highest ranked hazards. An assessment of the state's capabilities to implement these strategies was conducted, including an evaluation of existing programs. Potential funding sources to implement the strategies were also identified. Further, lead and facilitating agencies were identified for implementing each strategy. Baker finally developed a plan maintenance process for monitoring progress of the plan, the implementation of the strategies, and a periodic assessment of their effectiveness in reducing risks. Newly emerging risks affecting West Virginia and strategies for their mitigation will also be identified when the plan is updated every three years.

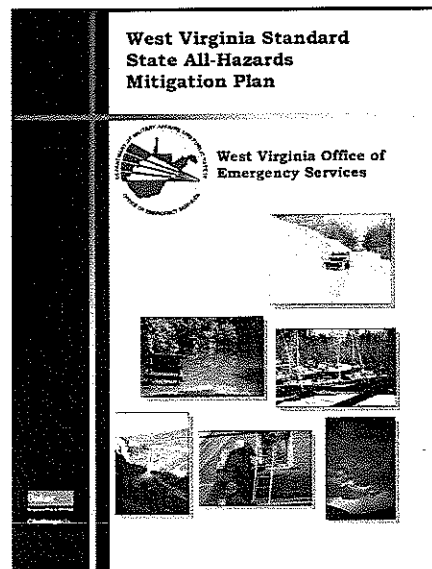


Figure 16. WV Mitigation Plan enabled agencies to qualify for grants from FEMA.

Relevance to SBA Project:

- Knowledge of West Virginia and its hazards
- Large scale data gathering effort
- Develop hazard mitigation recommendations



SCHOOL SAFETY AND VULNERABILITY ASSESSMENTS

Disaster Response, Recovery and Continuity of Operations Plan, Kanawha Valley Regional Transportation Authority (KRT); Charleston, WV - Natural disasters, crime, accidents and industrial spills challenge the capabilities of transit systems to provide safe, reliable, efficient and cost-effective service in metropolitan areas. In addition, the tragic events of September 11, 2001, the bombings of rail stations, trains and buses in Madrid and London, and the on-going bus bombings in Israel serve as poignant reminders that public transportation can be an attractive target in the global war on terror.

As part of KRT's commitment to local disaster response and recovery, the Board of Members requested the development and implementation of a Disaster Response and Recovery Plan consistent with the Authority's objectives. The Baker Team developed the plan for the purpose of protecting passengers, employees, and assets of the authority and communities in Kanawha County. The plan allows KRT the ability to employ appropriate mitigation and response techniques; utilize sound policy and procedures, and partner with each and every passenger and employee as well as the community at large. The plan provides for KRT's transit system to provide safe, reliable, efficient and cost-effective service even during natural disasters, crime, accidents and industrial spills that challenges KRT.

As part of this project, a Continuity of Operations (COOP) Plan was designed for KRT that includes plans and procedures that delineate business critical functions; specify succession to office and the emergency delegation of authority; provide for the safekeeping of vital records and databases; identify alternate operating facilities; and provide for interoperable communications. Initiation of the KRT COOP operations may be required to support any all-hazard event that renders their Primary Facility located at in Charleston, WV unsafe.

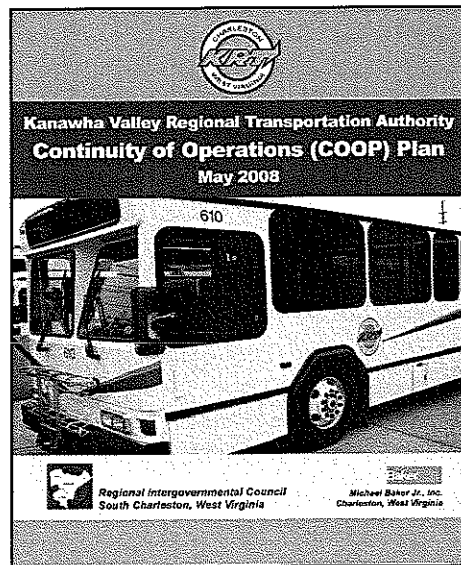


Figure 17. COOP Plan provided KRT's transit system with safe and reliable service during disaster challenges.

Relevance to SBA Project:

- **Conduction of hazard assessment**
- **Development of all hazards ERP**
- **Knowledge of West Virginia hazards**



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All-hazard Emergency Response Plan (ERP) and VA: Arizona Department of Transportation

(ADOT) - Baker designed and developed ADOT's ERP that included specific annexes for Natural Disasters, Hazardous Materials, and Terrorism. Baker reviewed existing plans, procedures, checklists, and interviewed ADOT key staff to obtain procedures and clarified defined roles and responsibilities relevant to the ERP development, and assessed their adequacy in addressing the threats identified in the VA. The ERP incorporated procedures for staffing levels, coordination and notification procedures, resource management, communications, security, terrorist threat assessment procedures, public affairs, and general emergency response operational procedures.

ATF	VEHICLE DESCRIPTION	MAXIMUM EXPLOSIVE CAPACITY	LETHAL AIR BLAST RANGE	MINIMUM EVACUATION DISTANCE	FALLING GLASS HAZARD
	COMPACT SEDAN	600 Pounds 227 Kilos (in Tank)	109 Feet 33 Meters	1,800 Feet 467 Meters	1,250 Feet 381 Meters
	FULL SIZE SEDAN	1,600 Pounds 455 Kilos (in Tank)	125 Feet 38 Meters	1,750 Feet 534 Meters	1,750 Feet 534 Meters
	PASSENGER VAN OR CARGO VAN	4,600 Pounds 1,619 Kilos	201 Feet 61 Meters	2,780 Feet 859 Meters	2,750 Feet 838 Meters
	SMALL BOX VAN (14 FT BOX)	10,000 Pounds 4,545 Kilos	300 Feet 91 Meters	3,750 Feet 1,143 Meters	3,750 Feet 1,143 Meters
	BOX VAN OR WATER/FUEL TRUCK	30,000 Pounds 13,635 Kilos	400 Feet 121 Meters	5,500 Feet 1,682 Meters	5,500 Feet 1,682 Meters
	SEMI-TRAILER	45,000 Pounds 20,273 Kilos	600 Feet 183 Meters	7,000 Feet 2,134 Meters	7,000 Feet 2,134 Meters

Figure 18. Stand off distances to protect facilities from bomb effects.

Baker conducted a validation exercise involving ADOT Headquarters and field personnel and state law enforcement agencies. The exercise resulted in modifications to the final plan. Two scenarios were presented, a terrorist attack on a major tunnel system in Phoenix and a hazardous materials incident in Flagstaff. The participants were given an opportunity for extensive examination and discussion of each scenario, applying the new ERP. Emphasis was placed on verifying the practicality of the procedures from the perspective of those who must implement them. Resource requirements were also explored. The Baker staff developed and facilitated the exercise and prepared a summary report on the exercise.

Baker also conducted a comprehensive risk and vulnerability assessment of critical highway infrastructure throughout the state. The first step was a workshop of key ADOT stakeholders from Headquarters and field offices. At the workshop, the ADOT team and Baker used the TSA Vulnerability Self Assessment tool to validate and refine ADOT's original list of priority bridges and tunnels developed using the AASHTO methodology. The group also agreed on a design basis threat. Baker and representatives of ADOT's Bridge Design Group then conducted field inspections of critical bridge and tunnel facilities to identify specific threats to the facility, ascertain vulnerabilities in critical structural components, and evaluate current security measures. Finally, Baker developed a security countermeasures mitigation plan for each of the most critical facilities, as well as a general mitigation plan for common types of structures. These mitigation plans included a range of potential countermeasures, including structural retrofit, physical security measures (fences, lighting, surveillance, etc.), and operational enhancements, such as pre-staging of recovery resources and better coordination with law enforcement.

Relevance to SBA Project:

- Conduct hazard assessment and VA
- Develop security mitigation measures
- Field inspections to identify deficiencies
- Develop all hazards ERP



SCHOOL SAFETY AND VULNERABILITY ASSESSMENTS

Local and State Hazard Mitigation Planning and Program Management Support: Pennsylvania Emergency Management Agency (PEMA)

- Baker is currently contracted with PEMA for completion of two projects. Baker has been contracted to provide comprehensive local hazard mitigation planning and program management support services for PEMA. From a program management perspective, Baker was tasked with

developing consistent standards for County Hazard Mitigation Plans (HMPs) in Pennsylvania by developing a Standard Operating Guide (SOG) that is written in accordance with the Disaster Mitigation Act of 2000 and requirements of 44 CFR Part 201. The SOG provides a consistent process for Pennsylvania communities to develop and update mitigation plans and provides a template for a consistent format. This will assist the program managers in the “roll-up” of local plan data for the state plan. Baker is working with 14 Pennsylvania counties to update their HMPs to comply with the developed standards and SOG. Another task is the design and construction of the Pennsylvania All-Hazard Mitigation Tool (PA Tool) which includes a Plan Builder and a Project Catalog. The Plan Builder is a web-based tool that communities will use to create and store their HMPs. The Project Catalog allows users to enter and track information related to mitigation projects and associated properties. PEMA will use these tools to assist local communities for integrating local HMPs and tracking projects and information.



Figure 19. State planning team meeting at the Mitigation Solutions Workshop.

Baker has performed a significant amount of community outreach work under this project, including the coordination and facilitation of more than 50 meetings, workshops, forums and trainings involving approximately 550 local communities and many public and private stakeholders. Mitigation project tracking will enable the state to measure the effectiveness of particular mitigation strategies and enhance local projects' access to FEMA mitigation grants. In addition, Baker is responsible for delivering an extensive training program on the use of the hazard mitigation tools.

Baker contracted with PEMA to complete an update to the Pennsylvania All-Hazard Mitigation Plan. As part of this planning effort, Baker effectively reconvened the Commonwealth's Hazard Mitigation State Planning Team, working with PEMA to bring together more than 50 representatives from federal and state agencies, academia and other organizations. Baker developed training materials and facilitated workshops needed to adequately assess the Commonwealth's vulnerability to 25 natural and human-made hazards and develop a valuable strategy for mitigating the associated risks. A key phase of the state plan update identified inefficiencies in the organization of historical information related to HMA programs in Pennsylvania. Baker is assisting the State Planning Team in developing actions which will improve future tracking of this information. In combination with enhanced hazard mitigation project tracking through the PA Tool, these actions will significantly increase the benefits provided by hazard mitigation funds allocated across Pennsylvania.

Relevance to SBA Project:

- **Assessment of statewide and county hazards**
- **Large scale data collection effort**
- **Development of hazard mitigation recommendations**
- **Extensive coordination with state/local officials and stakeholders**



SCHOOL SAFETY AND VULNERABILITY ASSESSMENTS

Security Assessment and Enhancement Design, Santa Clara Valley Water District (SCVWD):

San Jose, CA - Baker performed a security assessment of the SCVWD's major facilities. Shortly after the events of 9/11, Baker initially conducted a rapid security review of all major SCVWD facilities, including treatment plants, pumping stations, and dams. Recommendations for immediate, short term security improvements to quickly improve the protection of these most critical facilities were provided.

Baker later provided conceptual designs for enhancements to the SCVWD Headquarters Campus in San Jose. The campus includes eight separate buildings, including the Headquarters Building and main warehouse. Baker recommended architectural changes to building entrance areas to enhance access control and overall security for the entire Complex. Recommendations were also made for relocation of public access functions within the buildings to consolidate them on the first floor to allow security for the remainder of the Complex.

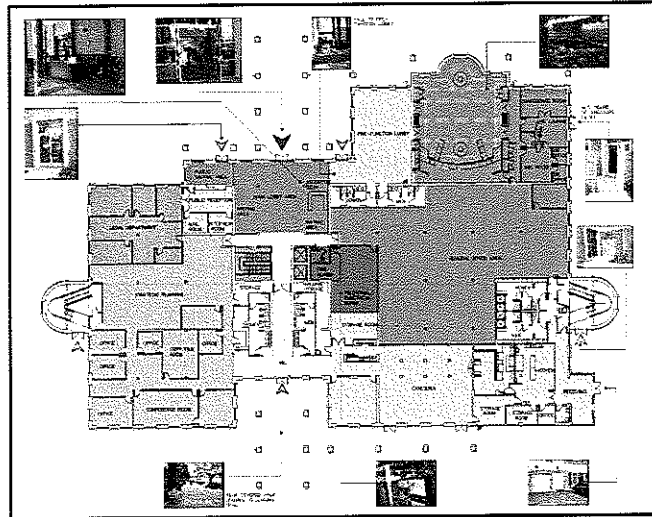


Figure 20. SCVWD (Almaden Campus) Facility Vulnerability Assessment functional zoning.

In addition to security enhancement recommendations, Baker provided conceptual designs and cost estimates for fencing, cameras, lighting, alarms, and access control. A blast assessment of the Headquarters Campus was also performed. The final recommendation made by Baker was for the establishment of a centralized alarm station for the entire Campus, as well as the total water system security system covering all District facilities. A security assessment of new construction plans for new laboratory building and day care center was also performed. Baker made recommendations for incorporation into the final design of these two key District facilities. Baker also conducted a review of the District's existing security response plans, including guard post orders for the entire Complex.

Relevance to SBA Project:

- Conduction of vulnerability analysis for multi-building campus
- Acquiring data and create security-related floor plans
- Developing security mitigation recommendations



SCHOOL SAFETY AND VULNERABILITY ASSESSMENTS

General Architect Engineer Services for Domestic Dependents Elementary and Secondary Schools (DDESS) U.S.-Based School Facilities; Department of Defense Dependents Schools (DODDS) - This Indefinite Delivery Indefinite Quantity (IDIQ) contract DACA 78-98-D-0006 was awarded to Baker as the most highly qualified among 26 competing full-service architectural/engineering/environmental firms. It provides DODEA (Department of Defense Education Activity) with broad-based planning, design, and consulting services pertaining to all of its DODDS facilities at 184 locations in 14 overseas countries, and all of its DDESS facilities at 16 military bases in the U.S., Puerto Rico and Guam.

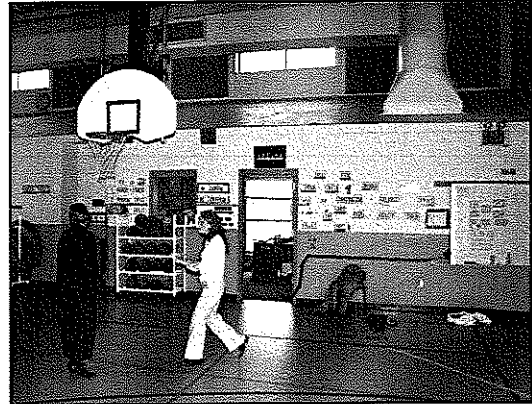


Figure 21. A Baker recreational planning specialist examines suitability of instructional spaces in a school.

Highlights of services included in the scope are:

- Facility, site, and location planning; civil, site, utilities, and landscape design
- Full-service architectural and engineering design
- Condition assessments, facility utilization, and space planning
- Environmental assessments, remediation design, and oversight
- General consultation regarding safety, health/hygiene, regulatory requirements
- Project and program management assistance
- Interior design and installation assistance, computer communications
- Cost estimating and value engineering and training programs
- GIS/CADD/database management system design
- Asbestos management services

Relevance to SBA Project:

- Consultation of safety and regulatory requirements
- Acquiring data for multiple location schools
- GIS/database management design



SCHOOL SAFETY AND VULNERABILITY ASSESSMENTS

West Virginia Riverine Flood Analysis, HAZUS-MH: Statewide, WV - Baker is providing an analysis of potential riverine flood hazards throughout the state, using Hazards U.S. Multi-Hazard (HAZUS-MH) MR3. HAZUS-MH is standardized software, developed by FEMA for estimating potential losses from earthquakes, hurricane winds, and floods. It uses ArcGIS software to map and display hazard data and the results of damage and economic loss estimates for buildings and infrastructure. It also allows users to estimate the impacts of earthquakes, hurricane winds and floods on populations. The current version of the software is MR3.

Baker is establishing study regions for each county in the state, and then analyzing selected streams at the watershed level. Baker is preparing digital elevation models, developing stream networks with drainage areas of at least 10 square miles and performing hydrologic analyses, using 10-year, 25-year, 50-year and 100-year flow events. Baker will delineate floodplains based on this data.

Baker will perform a hydraulic analysis using flow estimates from the hydrologic analyses and develop a full damage analysis for each scenario. Baker will develop and submit a map book for the entire state, containing floodplain delineation, building losses, contents losses, total damages, shelter requirements, total debris and depth grid for the 10-, 25-, 50-, and 100-year return periods.

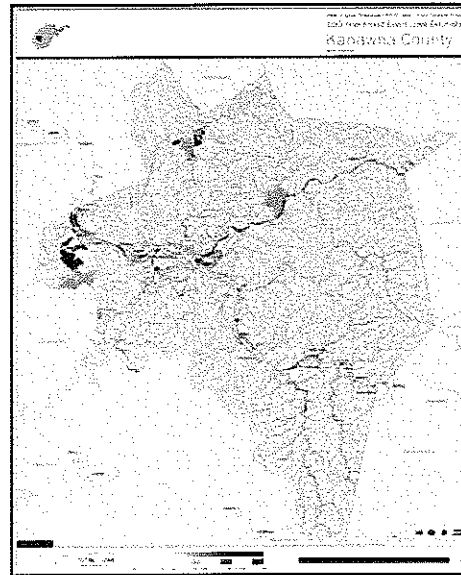


Figure 22. Total losses (100-yr flood risk) at census block level for Kanawha Cty

Relevance to SBA Project:

- Knowledge of West Virginia and its hazards
- GIS data collection
- Critical Infrastructure (Including Schools) Flood Risk Assessment
- Critical Infrastructure (Including Schools) Loss Estimation



Small Buildings Drawing Conversions, U.S. Based Banks, Nationwide. ECS' Field Verification Teams surveyed 657 buildings and developed polylined "as-existing" floor plans with associated CAFM data. In-house support personnel coordinated access dates and times with building contacts as well as arranging for lodging, travel schedules and routes. Field survey information and digital pictures were uploaded daily to ECS' project FTP site in order to expedite turnaround. In September 2009, ECS was awarded a project by the Bank to field verify and develop "as-existing" plans and associated CAFM data for 142 sites in the southeast region representing over two million gsf. ECS' project performance was such that the Bank expanded our project scope to 657 sites totaling nine million gsf in 31 states throughout the U.S. from Maine to Florida to California and Washington State.

Relevance to SBA Project:

- Large scale data gathering effort
- Confidential information

Bank of America



In addition to developing "as-existing" floor plans, the project required the collection of CAFM data including Cost Centers aka Departments; Tenanted Areas; Room Type Codes; Occupancy Status Codes and Group Zones. The survey teams used the latest state-of-the-art laser surveying equipment, tablet computers, and Bluetooth technology.

The surveyed plans, photos and data were uploaded daily to ECS' FTP site. In-house project staff edited the drawings, polylined the plans and attached the drawings/data while working directly on the client's CAFM platform via secured VPN's. VPN access was somewhat limited thereby requiring staffing on all 3 shifts including weekends.



SECTION 4 – MANDATORY AND DESIRABLE REQUIREMENTS

Table 2. RFQ Mandatory and Desirable Items Checklist

Criteria FROM RFP	Proposal Section Covered in
Mandatory Elements	
Section 3.1 – School Safety Assessments	1.1-1.4
<ul style="list-style-type: none"> A. School Physical Characteristics B. School Site C. Emergency Management Plan D. Vulnerability Analysis and Recommendations 	
Section 3.2 – Facility Floor Plans	1.1-1.2
<p>Vendor shall provide a detailed floor plan for each facility including information regarding:</p> <ul style="list-style-type: none"> • Ingress and Egress points • Locations of gates and/or barriers • Location of any Underground Access Points • Location of Access Doors and door swing direction, including roof access • Location of Fire Doors & door swing direction • Location of Windows • Location of Stairwells • Location of Elevator shafts • Location of Staging Areas on floor • Location of Shower Facilities • Location of Video Cameras • Location of Elevator Control Room 	
Section 3.3 – Utility Information	1.1-1.2
<p>The vendor shall identify the following:</p> <ul style="list-style-type: none"> • Name and an emergency contact phone number • Location of the Natural Gas and Electrical shutoffs • Location of Fire hydrants and Fire Department connections • Location and type of facility Fire Suppression/Fire Protection Systems • Location of Telephone, Television Internet and Intercom shutoffs • Location of Back-up Power 	
Section 3.4 - Building Information	1.1-1.2
<p>The vendor shall identify the following:</p> <ul style="list-style-type: none"> • Building Name or identifier • Building Address including GPS coordinates • Building Characteristics including square feet, physical exterior dimensions, number of floors, type of construction and roof type • Maximum capacity of the facility • Work Hours of the Facility Population differentiated by Day vs Evening 	



SCHOOL SAFETY AND VULNERABILITY ASSESSMENTS

<ul style="list-style-type: none">• Identification of Hazardous Materials including storage locations, storage methods and amounts• Utility Ownership for each utility including entity	
Section 3.5 - Digital Mapping Imagery	1.1-1.2
<p>Vendor shall provide the following digital images and text explanations:</p> <ul style="list-style-type: none">• Building images and text explanations for each side of the building with orientation identified including both fire and police tactical floor/side definitions• Restricted and Sensitive area images and text explanations of each• Knox Box images and text explanations of each• Security Alarm and Alarm Panel images and text explanations of each• Classroom images and text explanations of each• Administrative area images and text explanations of each• Ingress and Egress point images and text explanations of each• Access road images and text explanations of each• Barricades and Fence images and text explanations of each• Relevant Geographical information images and text images of each• Closed Circuit TV system images and text explanations of each	
Section 3.6 - First Responder and Community at Large	1.2.2
<p>School Site Information relating to First Responders and other community related agencies must be identified as detailed below:</p> <ul style="list-style-type: none">• School Crisis Response Team Roles including responsibilities isolated by position held in the school• Community agencies and their associated emergency phone numbers. This must include, at a minimum and as appropriate:<ol style="list-style-type: none">a. Law Enforcementb. EMSc. County/City Governmentd. Fire Departmente. Utilitiesf. Division of Highwaysg. Railroad contact	
Section 3.7 - Emergency Management Plan Elements	1.3.1-1.3.4
<ul style="list-style-type: none">• Research current school Emergency Communications Procedures and to identify those procedures.	



SCHOOL SAFETY AND VULNERABILITY ASSESSMENTS

<ul style="list-style-type: none"> • Research current school Emergency Preparedness Personnel and to identify these positions and their related responsibilities. • Research currently identified Off Grounds Evacuation Sites for the total school population. • Research current definitions for Emergency Classifications (i.e. Minor, Standby Notification Alert, Shelter-in-Place, Evacuation, etc.) and the proper response to each classification for school personnel and to identify those classifications • Research current facility Emergency Preventive Measures and to identify those measures • Research current Emergency Management Plans and identify those plans by: <ul style="list-style-type: none"> a. Staff position b. Early Dismissal/Evacuation c. Shelter-in-Place d. Fire Drill Procedures e. Actual Fire Emergency Procedures f. Bomb Threat/Discovery g. Natural Disasters h. Chemical Emergency i. Utility Emergency j. Demonstration or Disturbance k. Facility Lockdown 	
Section 3.8 - Vulnerability Analysis and Recommendations	1.4.1-1.4.3
<ul style="list-style-type: none"> • It is mandatory to provide a list of vulnerabilities identified in the collection and review of the preceding material • It is mandatory to provide a set of recommendations of actions and/or acquisitions that will aid in the reduction of identified vulnerabilities 	
Section 3.9 - Data Privacy Requirements	1.1-1.5
<ul style="list-style-type: none"> • Control the material, data and information created as a result of this procurement as it is considered sensitive • Meet the Protected Critical Infrastructure Information Program requirements 	
Section 3.10 - Automated Critical Asset Management System	1.5.1-1.5.2
<ul style="list-style-type: none"> • Enter all data created as a result of this procurement into the Automated Critical Asset Management System (C/ACAMS). • Verify staff certification in the used of C/ACAMS and employ personnel that can meet the guidelines for access to Protected Critical Infrastructure Information (PCII) as referenced in 3.9. 	



SCHOOL SAFETY AND VULNERABILITY ASSESSMENTS

Desirable Elements	
Section 3.6 - First Responder and Community at Large	1.2.2
<p>It is desirable that Emergency contact information, including the community agencies and their associated emergency phone numbers, be provided for other service resource entities included, but not limited to:</p> <ul style="list-style-type: none"> • American Red Cross • County Health Department • County Emergency Management Agency • County Department of Health & Human Resources Office • National Weather Service • Poison Control Center 	
Section 3.7 - Emergency Management Plan Elements	1.3.1-1.3.4
<p>It is desirable that if no such information exists, the vendor assist the School/county personnel in identifying such information:</p> <ul style="list-style-type: none"> • Staff position • Early Dismissal/Evacuation • Shelter-in-Place • Fire Drill Procedures • Actual Fire Emergency Procedures • Bomb Threat/Discovery • Natural Disasters • Chemical Emergency • Utility Emergency • Demonstration or Disturbance • Facility Lockdown 	
Section 3.8 - Vulnerability Analysis and Recommendations	This element was eliminated by the state, so is not addressed.
<ul style="list-style-type: none"> • It is desirable that the vendor identify costs associated with the implementation of the above recommendations 	



SCHOOL SAFETY AND VULNERABILITY ASSESSMENTS

SECTION 5 – COSTS ASSOCIATED WITH REQUESTED SERVICES

We have included a separate sealed envelope for our cost proposal information, as requested in the RFQ.



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
SBA10033

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
**KRISTA FERRELL
 304-558-2596**

VENDOR

RFQ COPY
 TYPE NAME/ADDRESS HERE
**Michael Baker Jr., Inc.
 5088 West Washington Street
 Charleston, WV 25313**

SHIP TO

**SCHOOL BUILDING AUTHORITY
 2300 KANAWHA BOULEVARD EAST
 CHARLESTON, WV
 25311 304-558-2541**

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
05/07/2010				

BID OPENING DATE: **06/30/2010** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		906-78		
<p>SCHOOL SAFETY & VULNERABILITY ASSESSMENTS</p> <p>REQUEST FOR PROPOSAL (RFP)</p> <p>THE WEST VIRGINIA STATE PURCHASING DIVISION FOR THE AGENCY, THE WEST VIRGINIA SCHOOL BUILDING AUTHORITY, IS SOLICITING PROPOSALS FOR SCHOOL SAFETY AND VULNERABILITY ASSESSMENTS FOR ALL SCHOOLS LOCATED IN THE STATE OF WEST VIRGINIA PER THE ATTACHED SPECIFICATIONS.</p> <p>A MANDATORY PRE-BID WILL BE HELD ON JUNE 2, 2010 AT 10:30 AM IN THE CONFERENCE ROOM OF BUILDING #15 LOCATED AT 2019 WASHINGTON STREET EAST IN CHARLESTON, WV. ALL INTERESTED PARTIES ARE REQUIRED TO ATTEND THIS MEETING. FAILURE TO ATTEND THE MANDATORY PRE-BID SHALL RESULT IN DISQUALIFICATION OF THE BID. NO ONE PERSON MAY REPRESENT MORE THAN ONE BIDDER.</p> <p>AN ATTENDANCE SHEET WILL BE MADE AVAILABLE FOR ALL POTENTIAL BIDDERS TO COMPLETE. THIS WILL SERVE AS THE OFFICIAL DOCUMENT VERIFYING ATTENDANCE AT THE MANDATORY PRE-BID. FAILURE TO PROVIDE YOUR COMPANY AND REPRESENTATIVE NAME ON THE ATTENDANCE SHEET WILL RESULT IN DISQUALIFICATION OF THE BID. THE STATE WILL NOT ACCEPT ANY OTHER DOCUMENTATION TO VERIFY ATTENDANCE. THE BIDDER IS RESPONSIBLE FOR ENSURING THEY HAVE COMPLETED THE INFORMATION REQUIRED ON THE ATTENDANCE</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS			
SIGNATURE <i>D.M. Mc</i>	TELEPHONE 412-269-6300	DATE 6-25-10	
TITLE Senior VP	FEN 25-1228638	ADDRESS CHANGES TO BE NOTED ABOVE	

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

GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

1. Awards will be made in the best interest of the State of West Virginia
 2. The State may accept or reject in part, or in whole, any bid
 3. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
 4. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods this Purchase Order/Contract becomes void and of no effect after June 30.
 5. Payment may only be made after the delivery and acceptance of goods or services
 6. Interest may be paid for late payment in accordance with the *West Virginia Code*
 7. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
 8. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
 9. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
 10. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern the purchasing process.
 11. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
 12. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.
 13. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at www.state.wv.us/admin/purchase/vrc/hipaa.htm and is hereby made part of the agreement. Provided that the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
 14. **CONFIDENTIALITY:** The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf>.
 15. **LICENSING:** Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, and the West Virginia Insurance Commission. The vendor must provide all necessary releases to obtain information to enable the director or spending unit to verify that the vendor is licensed and in good standing with the above entities.
 16. **ANTITRUST:** In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the State of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.
- I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, or person or entity submitting a bid for the same material, supplies, equipment or services and is in all respects fair and without collusion or Fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division. Complete all sections of the quotation form.
2. Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Unit prices shall prevail in case of discrepancy. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
4. All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130
5. Communication during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited (W. Va. C.S.R. §148-1-6.6).



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
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Request for Quotation

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SBA10033

PAGE
2

ADDRESS CORRESPONDENCE TO ATTENTION OF
**KRISTA FERRELL
 304-558-2596**

RFQ COPY
 TYPE NAME/ADDRESS HERE

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

SCHOOL BUILDING AUTHORITY
 2300 KANAWHA BOULEVARD EAST

**CHARLESTON, WV
 25311 304-558-2541**

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB.	FREIGHT TERMS
05/07/2010				

BID OPENING DATE: **06/30/2010** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>SHEET. THE PURCHASING DIVISION AND THE STATE AGENCY WILL NOT ASSUME ANY RESPONSIBILITY FOR A BIDDER-S FAILURE TO COMPLETE THE PRE-BID ATTENDANCE SHEET. IN ADDITION, WE REQUEST THAT ALL POTENTIAL BIDDERS INCLUDE THEIR E-MAIL ADDRESS AND FAX NUMBER.</p> <p>ALL POTENTIAL BIDDERS ARE REQUESTED TO ARRIVE PRIOR TO THE STARTING TIME FOR THE PRE-BID. BIDDERS WHO ARRIVE LATE, BUT PRIOR TO THE DISMISSAL OF THE TECHNICAL PORTION OF THE PRE-BID WILL BE PERMITTED TO SIGN IN. BIDDERS WHO ARRIVE AFTER CONCLUSION OF THE TECHNICAL PORTION OF THE PRE-BID, BUT DURING ANY SUBSEQUENT PART OF THE PRE-BID WILL NOT BE PERMITTED TO SIGN THE ATTENDANCE SHEET.</p> <p>TECHNICAL QUESTIONS CONCERNING THIS SOLICITATION MUST BE SUBMITTED IN WRITING TO KRISTA FERRELL IN THE WEST VIRGINIA STATE PURCHASING DIVISION VIA MAIL AT THE ADDRESS SHOWN IN THE BODY OF THIS RFP, VIA FAX AT 304-558-4115, OR VIA EMAIL AT KRISTA.S.FERRELL@WV.GOV. QUESTIONS WHICH VENDORS WISH TO HAVE ADDRESSED DURNING THE PRE-BID MEETING MUST BE SUBMITTED NO LATER THAN FRIDAY, MAY 28, 2010 AT THE CLOSE OF BUSINESS. AFTER THE PRE-BID MEETING VENDORS MAY SUBMIT ADDITIONAL QUESTIONS. ALL TECHNICAL QUESTIONS MUST BE SUBMITTED NO LATER THAN JUNE 9, 2010 AT THE CLOSE OF BUSINESS. TECHNICAL QUESTIONS RECEIVED BOTH PRIOR TO AND AFTER THE PRE-BID MEETING WILL BE ANSWERED BY FORMAL ADDENDUM ISSUED BY THE PURCHASING DIVISION AFTER THIS DEADLINE HAS LAPSED.</p> <p>EXHIBIT 10</p> <p>REQUISITION NO.:</p> <p>ADDENDUM ACKNOWLEDGEMENT</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS			
SIGNATURE <i>D.M. MGA</i>	TELEPHONE 412-269-6300	DATE 6-25-10	
TITLE Senior VP	FEIN 25-1228638	ADDRESS CHANGES TO BE NOTED ABOVE	

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



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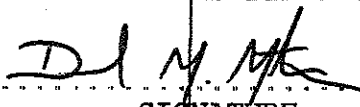
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LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.</p> <p>ADDENDUM NO.'S:</p> <p>NO. 1 X</p> <p>NO. 2 X</p> <p>NO. 3</p> <p>NO. 4</p> <p>NO. 5</p> <p>I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF TH ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS.</p> <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 style="text-align: center;">  SIGNATURE Michael Baker Jr., Inc. COMPANY June 25, 2010 DATE </p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE 	TELEPHONE 412-269-6300	DATE 6-25-10
TITLE Senior VP	FERN 25-1228638	ADDRESS CHANGES TO BE NOTED ABOVE

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<p>NOTE: THIS ADDENDUM ACKNOWLEDGEMENT SHOULD BE SUBMITTED WITH THE BID.</p> <p>REV. 09/21/2009</p> <p>EXHIBIT 3</p> <p>LIFE OF CONTRACT: THIS CONTRACT BECOMES EFFECTIVE ON AWARD AND EXTENDS FOR A PERIOD OF THREE (3) YEARS OR UNTIL SUCH "REASONABLE TIME" THEREAFTER AS IS NECESSARY TO OBTAIN A NEW CONTRACT OR RENEW THE ORIGINAL CONTRACT. THE "REASONABLE TIME" PERIOD SHALL NOT EXCEED TWELVE (12) MONTHS. DURING THIS "REASONABLE TIME" THE VENDOR MAY TERMINATE THIS CONTRACT FOR ANY REASON UPON GIVING THE DIRECTOR OF PURCHASING 30 DAYS WRITTEN NOTICE.</p> <p>UNLESS SPECIFIC PROVISIONS ARE STIPULATED ELSEWHERE IN THIS CONTRACT DOCUMENT, THE TERMS, CONDITIONS AND PRICING SET HEREIN ARE FIRM FOR THE LIFE OF THE CONTRACT.</p> <p>RENEWAL: THIS CONTRACT MAY BE RENEWED UPON THE MUTUAL WRITTEN CONSENT OF THE SPENDING UNIT AND VENDOR, SUBMITTED TO THE DIRECTOR OF PURCHASING THIRTY (30) DAYS PRIOR TO THE EXPIRATION DATE. SUCH RENEWAL SHALL BE IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE ORIGINAL CONTRACT AND SHALL BE LIMITED TO TWO (2) ONE (1) YEAR PERIODS.</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 SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>D.M. Mc</i>	TELEPHONE 412-269-6300	DATE 6-25-10
TITLE Senior VP	FAX 25-1228638	ADDRESS CHANGES TO BE NOTED ABOVE

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BID OPENING DATE: 06/30/2010 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>TO THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN.</p> <p>QUANTITIES: QUANTITIES LISTED IN THE REQUISITION ARE APPROXIMATIONS ONLY, BASED ON ESTIMATES SUPPLIED BY THE STATE SPENDING UNIT. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACT SHALL COVER THE QUANTITIES ACTUALLY ORDERED FOR DELIVERY DURING THE TERM OF THE CONTRACT, WHETHER MORE OR LESS THAN THE QUANTITIES SHOWN.</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>THE TERMS AND CONDITIONS CONTAINED IN THIS CONTRACT SHALL SUPERSEDE ANY AND ALL SUBSEQUENT TERMS AND CONDITIONS WHICH MAY APPEAR ON ANY ATTACHED PRINTED DOCUMENTS SUCH AS PRICE LISTS, ORDER FORMS, SALES AGREEMENTS OR MAINTENANCE AGREEMENTS, INCLUDING ANY ELECTRONIC MEDIUM SUCH AS CD-ROM.</p> <p>REV. 05/26/2009</p> <p>WORKER'S COMPENSATION: VENDOR IS REQUIRED TO PROVIDE A CERTIFICATE FROM WORKER'S COMPENSATION IF SUCCESSFUL.</p> <p>INSURANCE: THE VENDOR SHALL FURNISH PROOF OF COMMERCIAL LIABILITY INSURANCE PRIOR TO ISSUANCE OF THE CONTRACT. THE AMOUNT FOR SAID INSURANCE IS A MINIMUM OF \$1,000,000.00.</p> <p>BONDS:</p> <p>BID BOND: A BID BOND IN THE AMOUNT OF \$50,000.00 PAYABLE TO THE STATE OF WEST VIRGINIA, SHALL BE</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>D. M. M...</i>	TELEPHONE 412-269-6300	DATE 6-25-10
TITLE Senior VP	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

RFO NUMBER:
 SBA10033

PAGE:
 6

ADDRESS CORRESPONDENCE TO ATTENTION OF:
 KRISTA FERRELL
 304-558-2596

PROPERTY

RFQ COPY

TYPE NAME/ADDRESS HERE

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

SHIP TO

SCHOOL BUILDING AUTHORITY
 2300 KANAWHA BOULEVARD EAST
 CHARLESTON, WV 25311
 304-558-2541

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
05/07/2010				

BID OPENING DATE:

06/30/2010

BID OPENING TIME

01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>SUBMITTED WITH EACH BID AS A BID BOND. THE SUCCESSFUL VENDOR SHALL ALSO FURNISH A PERFORMANCE BOND FOR \$1,000,000.00. BONDS MAY BE PROVIDED IN THE FORM OF A CERTIFIED CHECK, IRREVOCABLE LETTER OF CREDIT, OR BOND FURNISHED BY A SOLVENT SURETY COMPANY AUTHORIZED TO DO BUSINESS IN THE STATE OF WEST VIRGINIA. A LETTER OF CREDIT SUBMITTED IN LIEU OF A BOND WILL ONLY BE ACCEPTED FOR PROJECTS UNDER \$100,000.00. PERSONAL OR BUSINESS CHECKS ARE NOT ACCEPTABLE IN LIEU OF THE BID BOND OR PERFORMANCE BOND REQUIRED.</p> <p>NOTICE</p> <p>A SIGNED PROPOSAL MUST BE SUBMITTED TO:</p> <p>DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130</p> <p>THE PROPOSAL SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE PROPOSAL MAY NOT BE CONSIDERED.</p> <p>SEALED PROPOSAL</p> <p>BUYER: KRISTA FERRELL-FILE 21</p> <p>RFP. NO.: SBA10033</p> <p>TECHNICAL PROPOSAL OPENING DATE: 06/30/2010</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>D/M</i>	TELEPHONE 412-269-6300	DATE 6-25-10
TITLE Senior VP	FBN 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
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 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
SBA10033

PAGE
7

ADDRESS CORRESPONDENCE TO ATTENTION OF
**KRISTA FERRELL
 304-558-2596**

RFQ COPY
 TYPE NAME/ADDRESS HERE
**Michael Baker Jr., Inc.
 5088 West Washington Street
 Charleston, WV 25313**

SCHOOL BUILDING AUTHORITY
 2300 KANAWHA BOULEVARD EAST
**CHARLESTON, WV
 25311 304-558-2541**

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
05/07/2010				

BID OPENING DATE: **06/30/2010** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
TECHNICAL PROPOSAL OPENING TIME: 1:30 PM COST PROPOSAL OPENING WILL BE SCHEDULED AFTER THE EVALUATION OF THE TECHNICAL PROPOSALS. VENDORS WILL BE NOTIFIED OF THIS DATE AND TIME. PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR PROPOSAL: ----- 304-769-0822 (fax) 304-769-0821 (phone) ----- CONTACT PERSON (PLEASE PRINT CLEARLY): ----- Russell "Rusty" Hall, PE, PS ----- Michael Baker Jr., Inc. 5088 West Washington Street Charleston, WV 25313						
***** THIS IS THE END OF RFQ SBA10033 ***** TOTAL:						refer to sealed cost proposal

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>D. M. M.</i>	TELEPHONE 412-269-6300	DATE 6-25-10
TITLE Senior VP	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
SBA10033

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
KRISTA FERRELL
304-558-2596

RFQ COPY
 TYPE NAME/ADDRESS HERE

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

SCHOOL BUILDING AUTHORITY
 2300 KANAWHA BOULEVARD EAST
 CHARLESTON, WV 25311
 304-558-2541

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B	FREIGHT TERMS
06/16/2010				

BID OPENING DATE: **07/07/2010** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UQP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
ADDENDUM NO. 1						
THIS ADDENDUM IS ISSUED TO:						
1.) EXTEND THE OPENING DATE OF THE TECHNICAL PROPOSAL,						
PROPOSAL OPENING DATE IS EXTENDED TO: 07/06/2010						
PROPOSAL OPENING TIME REMAINS: 1:30 PM						
2.) PROVIDE A COPY OF THE MANDATORY PRE-BID ATTENDEE LIST,						
3.) PROVIDE ANSWERS TO ALL TECHNICAL QUESTIONS PRE AND POST MANDATORY PRE-BID MEETING IN ACCORDANCE WITH THE PROVISIONS OF RFP SBA10033,						
4.) PROVIDE CHANGES TO THE SPECIFICATIONS,						
5.) PROVIDE A COPY OF THE US DEPARTMENT OF HOMELAND SECURITY INITIAL ASSET VISIT FOR REFERENCE,						
6.) PROVIDE A COPY OF REVISED MASTER LIST OF SCHOOLS 2009-2010 (ATTACHEMENT A), AND						
7.) PROVIDE A COPY OF THE STATE'S STANDARD PERFORMANCE BOND FORM REFERENCED IN THE ANSWERS TO THE TECHNICAL QUESTIONS.						
***** END ADDENDUM NO. 1 *****						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>D.M. Miller</i>	TELEPHONE 412-269-6300	DATE 6-25-10
TITLE Senior VP	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
SBA10033

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF
**KRISTA FERRELL
 304-558-2596**

RFQ COPY
 TYPE NAME/ADDRESS HERE

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

SHIP TO

SCHOOL BUILDING AUTHORITY
 2300 KANAWHA BOULEVARD EAST
 CHARLESTON, WV
 25311 304-558-2541

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
06/22/2010				
BID OPENING DATE: 07/07/2010		BID OPENING TIME 01:30PM		

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
				ADDENDUM NO. 2		
				TO CLARIFY THE TECHNICAL PROPOSAL OPENING DATE:		
				TECHNICAL PROPOSAL OPENING DATE IS 07/07/2010		
				TECHNICAL PROPOSAL OPENING TIME IS 1:30 PM		
				***** END ADDENDUM NO. 2 *****		
0001	1	LS		906-78		
				SCHOOL SAFETY & VULNERABILITY ASSESSMENTS		
				***** THIS IS THE END OF RFQ SBA10033 ***** TOTAL:		refer to sealed cost proposal

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE D.M. M... TELEPHONE 412-269-6300 DATE 6-25-10

TITLE Senior VP 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, WEST VIRGINIA 25305-0130
10/06/2009

RECEIVED
OCT 10 2009

MICHAEL BAKER
CORPORATION

OFFICE MANAGER
MICHAEL BAKER JR INC
5088 W WASHINGTON ST 2ND FLR

CHARLESTON WV 25313

THIS IS TO CONFIRM RECEIPT OF YOUR VENDOR REGISTRATION FEE. PAYMENT OF THE FEE ENABLES YOU TO PARTICIPATE IN THE PURCHASING DIVISION'S COMPETITIVE BID PROCESS AND ENTITLES YOU TO A ONE-YEAR SUBSCRIPTION TO THE WEST VIRGINIA PURCHASING BULLETIN. A NEW ISSUE OF THE WEST VIRGINIA PURCHASING BULLETIN IS POSTED ON OUR WEB SITE EACH WEEK. BID OPPORTUNITIES ESTIMATED AT \$25,000 OR MORE ARE ADVERTISED IN THIS PUBLICATION. WE ENCOURAGE YOU TO LOG ON AND VIEW THE BULLETIN EVERY FRIDAY SO AS NOT TO MISS IMPORTANT BIDDING OPPORTUNITIES. OUR WEB ADDRESS IS:

[HTTP://WWW.STATE.WV.US/ADMIN/PURCHASE](http://www.state.wv.us/admin/purchase)

IN ORDER TO ACCESS THE WEST VIRGINIA PURCHASING BULLETIN, YOU WILL NEED YOUR VENDOR NUMBER, GROUP NUMBER (IF ANY), AND YOUR PASSWORD WHICH ARE PRINTED BELOW. YOUR ACCESS WILL BECOME EFFECTIVE ON THE FIRST MONDAY AFTER 10/06/2009, STATE HOLIDAYS EXCLUDED.

HELPFUL TIPS: YOUR COMPUTER-GENERATED VENDOR NUMBER BEGINS WITH AN ASTERISK, BUT DO NOT USE THE ASTERISK WHEN LOGGING IN. ALSO, OUR LOGIN SCRIPT IS CASE SENSITIVE. THEREFORE, IF YOUR VENDOR NUMBER CONTAINS A CHARACTER LIKE A, B, OR C, PLEASE TYPE IT IN UPPER CASE.

IF YOU HAVE QUESTIONS, FEEL FREE TO CONTACT US AT 304-558-2311 OR JEANNE.B.BARNHART@WV.GOV. THANK YOU.

SINCERELY YOURS,

VENDOR REGISTRATION

VENDOR NUMBER : *709015418
GROUP NUMBER : 02
PASSWORD : 10120

Russell E. "Rusty" Hall, P.E., P.S.

Project Principal

General Qualifications

Mr. Hall currently serves as an 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 22 years. His project management responsibilities involve overseeing staff from project inception through completion, and ensuring that the clients' needs and requirements are met.

He 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

KVRTA-Disaster Response & Recovery Plan, Charleston, West Virginia. *Kanawha Valley Regional Transportation Authority.* Principal-In-Charge. Responsible for oversight of Project Management. Baker developed a disaster response and recovery plan for the Kanawha Valley Regional Transportation Authority (KVRTA), West Virginia's largest transit bus service provider. Baker facilitated stakeholder meetings to assess KVRTA's capabilities with regard to their anticipated role in regional emergency response plans. The new plan also includes Continuity of Operations Plan (COOP) elements and is compliant with the National Incident Management System (NIMS) and National Response Plan (NRP) objectives.

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.

Flood Protection Options Report-Bonham Elementary School, Kanawha County. *West Virginia Division of Homeland Security and Emergency Management.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker was retained by the West Virginia Division of Homeland Security and Emergency Management to prepare a report to address flood protection options for Bonham Elementary School in Kanawha County, West Virginia.

Years with Baker: 6

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

Kenneth Zaklukiewicz

Project Manager

General Qualifications

As Senior Program Manager within Baker's Emergency Management Services Division, Mr. Zaklukiewicz has developed crisis management plans, emergency operations plans and programs, evacuation plans, and Continuity of Operations (COOP) plans; conducted vulnerability assessments and mitigation planning; and conducted exercises for both private and public sector clients. He manages a team comprised of the top specialists in the field that specializes in threat and vulnerability assessment, counter-terrorism measures, evacuation planning, emergency response planning, training and exercises.

As an Emergency Manager, Mr. Zaklukiewicz has extensive experience in emergency operation plans development and hands on experience in emergency response operations in coordinating the efforts of fire, HAZMAT, bomb disposal, law enforcement, and other emergency management disciplines. Mr. Zaklukiewicz conducts key infrastructure vulnerability and threat assessments utilizing his extensive Chemical, Biological, Nuclear, and Explosive (CBRNE) expertise. He has worked within the local, state, federal emergency management community, military, and private industry and designs tailored exercises.

Experience

Occupant Emergency Plan (OEP) and Continuity of Operations (COOP) Plan. *Department of Homeland Security, United States Visitor and Immigrant Status Indicator Technology (US-VISIT) Program.* Mr. Zaklukiewicz developed an OEP and COOP with a Pandemic Influenza Annex to ensure US-VISIT can continue its mission essential functions across a wide range of emergencies that involve their primary facility in the National Capital Region and for and its staff. He also developed and executed OEP Training. The purpose of the training was twofold: The first was to ensure all members of responsible members were clear on their duties and can execute them during an occupant emergency. The second part was a TtT so others may deliver training to new employees to ensure all new employees are aware of emergency information.

Disaster Response and Recovery and COOP) Plan. *Kanawha Valley Regional Transportation Authority (KRT), Charleston, WV.* Mr. Zaklukiewicz developed a plan for the purpose of protecting passengers, employees, and assets of the authority and communities in Kanawha County. The plan provides for KRT's transit system to provide safe, reliable, efficient and cost-effective service even during natural disasters, crime, accidents and industrial spills that challenges. He also developed a COOP Plan designed for KRT that includes plans and procedures that delineate business critical functions; specify succession to office and the emergency delegation of

Years with Baker: 6

Years with Other Firms: 24

Education

M.S., 1997, Business Organizational Management, University of La Verne

B.S., 1994, Occupational Education, Wayland Baptist University

A.S., 1991, Disaster Preparedness, Community College of the Air Force

Licenses/Certifications

NFPA Pro Board Fire Instructor I, West Virginia, 2003

HAZMAT Training Certification, Texas, 2001

Specialized Training

USAF Disaster Preparedness/ Emergency Management

Nuclear, Biological and Chemical Defense

Incident Command System (ICS 100-300)

Clearance

Secret

authority; provide for the safekeeping of vital records and databases; identify alternate operating facilities; and provide for interoperable communications.

Security Vulnerability Assessment. *Henrico County, VA.* Mr. Zaklukiewicz provided security consulting services, vulnerability assessments to security risk, and threat assessment services for General Government facilities in Henrico County, VA. He assessed the risk/threat faced at the facilities and prepared reports summarizing the areas of vulnerability. He evaluated contingency plans for the Emergency Operations Center, existing Security Services protocols including Standard Operating Procedures and made recommendations to develop effective management and security policies to mitigate potential and existing threats to the employees, customers, and assets.

Sheltering and Evacuation Guide, *National Capital Region.* Mr. Zaklukiewicz served as the Project Manager and as the subject matter expert. He was responsible for developing timelines for the project; coordinating with stakeholders that include state and local representatives from emergency management, transportation, sheltering, and special needs groups; providing logistical support for meetings, conducting stakeholder interviews; and technical writing. The project also identified and resolved issues with the coordination between traffic management systems and evacuation plans at jurisdictional borders as well as outward migration scenarios for West Virginia, Pennsylvania, and Delaware.

Evacuation and Sheltering Plan. *Pittsburgh, PA.* Mr. Zaklukiewicz served as the senior planner in the development of an Evacuation and Sheltering Plan for the Pittsburgh Central Business District. His expertise was utilized in the establishment of a Plan Methodology, determining available resources and capabilities, the conduct of a Needs Assessment, and the plan development. The plan will ensure Allegheny County as well as the City of Pittsburgh can respond to various types of both man-made and natural disasters that could impact the Central Business District. The plan will address various types and stages of evacuation.

Evacuation and Sheltering Plan. *Cuyahoga County (Greater Cleveland), Ohio.* Mr. Zaklukiewicz developed an evacuation plan, applicable to all types of evacuation planning such as man-made events as well as weather related evacuations, to reduce the potential of injury or death to over 1,000,000 county citizens while providing for the safety of people through the process of evacuation. He included in the planning the evacuation of citizens, commuters and/or visitors from their homes, offices, schools, municipal government buildings, hospitals, hotels and other building structures during an emergency that requires a coordinated effort among several agencies.

Evacuation Plan, Mid-Ohio Regional Planning Commission, Regional Assisted Evacuation Plan, *Columbus, Ohio.* Mr. Zaklukiewicz is currently the Project Manager for the development of an evacuation plan to create a seven-county regional emergency preparedness and evacuation plan that will improve emergency preparedness, disaster response, and disaster recovery for populations with specific mobility needs in the central Ohio region. The project is being funded by the Federal Transit Administration to be used as a model for the entire country.

Post Storm Recovery Plan. *Northrop Grumman Newport News Shipyard.* Mr. Zaklukiewicz developed a post storm recovery plan for the Northrop Grumman Newport News, Virginia Shipyard facility. The Post Storm Recovery Plan is intended to meet challenges by guiding essential recovery operations in the immediate post-storm period. He also revised the planning document "Preparations for Hurricanes and Other Severe Storms". This plan directs mitigation and protective actions when a storm is imminent. The plan is designed to protect personnel, ships, equipment, and plant property to the maximum extent practicable, most notably from a storm surge.

Transportation Emergency Response Plan. *Arizona Department of Transportation.* Mr. Zaklukiewicz developed an all-hazard Emergency Response Plan (ERP) for the Arizona Department of Transportation

(ADOT) that included specific annexes for Natural Disasters, Hazardous Materials, and Terrorism. He led a team that reviewed existing plans, procedures, checklists, and interviewed ADOT key staff to obtain procedures and clarified defined roles and responsibilities relevant to the ERP development, and assessed their adequacy in addressing the threats identified in the Vulnerability Assessment

Center for National Response, Titan Corporation. Gallagher, WV. Exercise Director.

Mr. Zaklukiewicz designed, developed, and executed first responder training and exercises and managed a program in a uniquely suited multipurpose exercise highway tunnel facility designed to meet a wide range of WMD and counterterrorism requirements for the DOD, Federal, State, and local organizations. He oversaw the tunnel's physical configuration and venues which included post blast rubble area with hazards and vehicles, subway train and station for chemical attacks, three chemical, biological, and drug laboratories at different levels of sophistication, and highway WMD/HazMat wreck incident configured with a wide variety of chemical, biological, and radiological sources. He prepared military and civilian response teams to meet future threats and challenges by providing ideal exercises and a realistic environment where emergency response teams can readily practice their response techniques. He led Mobile Training Teams in major metropolitan area exercises and managed a fulltime staff of 15 Exercise Planners.

United States Air Force- *Disaster Preparedness*

Mr. Zaklukiewicz 's 22-year military career included duties in Emergency Management and Nuclear, Biological, and Chemical (NBC) Defense which was critical in the development of air base vulnerability assessments and protective measures. . He gained immeasurable experience in designing numerous emergency response plans and developed exercises and drills to exercise plan changes. He was a key member of the USAF Exercise Evaluation Program and Headquarter Inspector General teams. He served as a disaster coordinator for emergency response and Emergency Operations Center operations. He annually trained over 1500 personnel in Disaster Preparedness.

Ron Bolen, R.A.
Assistant Project Manager

General Qualifications

Mr. Bolen brings over 35 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.

Years with Baker: 2

Years with Other Firms: 36

Education

B.S., 1980, Architectural Design,
West Virginia University

Licenses/Certifications

Registered Architect, West Virginia,
1999

Experience

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

- Nicholas County Board of Education
- Cabell Co. Board of Education
- Wetzel County Board of Education
- Raleigh County Board of Education (required update) Comprehensive Education Facilities Plans (CEFP) 2000-2010

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

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

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

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

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

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

A/E Services for Cheat Lake Elementary and Middle School. *Monongahela County Board of Education.* Mr. Bolen was Project Job Captain through Pre Design and all phases of Document Preparation, Consultant Coordination, and Client Relations. Design for a major addition / renovation to the existing facility to replace four existing schools with new facility within the required state guidelines. The two schools shared the dining / kitchen facilities.

A/E Services for Lincoln County High School. *Lincoln County Board of Education.* Project Architect. Ron provided services through Contract Document Preparation. Design for a new 216,500 square foot facility serving grades 9 through 12, completed in 2006 to replace two existing schools with new facility within the required state guidelines. This project included new administration, kitchen / dining, gymnasium – seating 840, auditorium – seating 300, library, classrooms and labs. The project included sustainable design, LAN cabling system, integrated classroom intercom telephone and program system, closed circuit television, and perimeter security system. The project was a silver LEED (Leadership in Energy & Environmental Design) designed project with classroom day-lighting, high efficiency HVAC equipment, and reduced storm water runoff.

A/E Services for St. Albans High School. *Kanawha County Board of Education.* Project Architect. Ron provided services through Contract Document Preparation. Design for the renovation / addition to the existing facility to renovated the existing schools within the required state guidelines. This project included new administration, food service / dining, gymnasium, auditorium, library, classrooms and labs. The renovated and new school of 124,000 square feet new construction and 172,596 total square feet houses 1050 students, grades 9 through 12. The facility design was completed in 2003, included distance learning with duplex teleconferencing, and a media center with state of the art technology distribution throughout the entire facility.

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

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

Brad L. Dailey, AICP, N.C.I. Quality Management

General Qualifications

Mr. Dailey is an accomplished planner and leader in the integration of spatial technologies (GIS, remote sensing, and computer mapping) for solving multi-faceted spatial problems. With his many years of professional experience, he is able to capitalize on first-hand knowledge of GIS technology as related to complex land planning and design projects. His diverse experience in land use planning, resource management, urban design, visual analysis, military planning, facilities planning, space planning, and the use of GIS tools make him an invaluable resource for demanding projects requiring the latest in technological innovation.

Mr. Dailey received his Master's degree in Geography, with special emphasis on Remote Sensing and GIS applications from one of the country's leading GIS programs. Mr. Dailey's expertise in the use of Geographic Information Systems (GIS) has been invaluable in providing innovative techniques for the assessment and analysis of complex land planning issues.

In the past, Mr. Dailey has led efforts to utilize GIS technology both as tool for analysis and an opportunity for application development in support of core business planning and design. He was responsible for all phases of consultation services from proposal writing to product delivery.

Years with Baker: 10

Years with Other Firms: 17

Education

M.S., 1995, Geography and
Geographic Information Systems,
University of South Carolina

B.L.A., 1981, Environmental
Planning/Landscape Architecture,
Warsaw University, Poland

B.L.A., 1981, Landscape
Architecture, Michigan State
University

Licenses/Certifications

NCI Charrette System Certificate

American Institute of Certified
Planners, Virginia, 2002

Experience

Sheltering and Evacuation Guide and Resource Database, National Capital Region. *Metropolitan Washington Council of Governments (MWCOC).* QA/QC. Responsible for quality control. Baker developed an integrated evacuation and sheltering plan for the National Capital Region, focused on catastrophic events. Each jurisdiction in the region has evacuation and sheltering plans, but these plans lacked uniformity and coordination between jurisdictions. Baker researched and evaluated routes, transportation resources, population profiles, infrastructure, and other current data and provided a regional evacuation and shelter plan to coordinate local emergency plans and combine all critical elements into a single plan using a common format.

Smithsonian Institution - CAFM Implementation, Washington, DC. *Smithsonian Institution.* Project Manager. Responsible for delivering project on time and on budget. Baker was responsible for updating and rectifying floor plans for various Smithsonian museums in and around Washington D.C. Other responsibilities included collecting space attributes and using them in CAFM system implementation.

Emergency Planning Services, City of Pittsburgh, Pennsylvania. *City of Pittsburgh, Pennsylvania.* Senior Planner. Responsibilities included preparation of business process diagram that inputs, decision points, and outputs of factors related to evacuation. Baker developed an evacuation plan for the City of Pittsburgh's Central Business District (CBD), which has been incorporated into the city's Emergency Operations Plans. Baker developed the study methodology, prepared a needs and available resources

summary report, performed traffic modeling using CUBE Avenue software, coordinated with nearly 50 key stakeholders through a series of public meetings, and prepared an implementation plan for communicating the plan's existence to the general population.

Pennsylvania Emergency Management Agency Table Top Exercises, Harrisburg, Pennsylvania.

Pennsylvania Emergency Management Agency. Senior Planner. Responsibilities included quality control and meeting facilitation. FEMA exercise directives for fixed nuclear power facilities require that each fixed nuclear facility site in Pennsylvania must include an ingestion pathway exercise at least once every six-years. These exercises are managed by the Pennsylvania Emergency Management Agency. As a subcontractor to General Physics Corp., Baker assisted in the development and conduct of a tabletop exercise for the Susquehanna Steam Electric Station to satisfy that regulatory requirement. Baker staff assisted in development of the scenario and developed a series of PowerPoint presentations to train the PEMA and local responders on the exercise scenario and to introduce the exercise to participants. A training presentation for the State Recovery Task Force was also developed. This required a thorough understanding of the FEMA/NRC exercise guidelines, the Protective Action Guides, and the scenario. During the exercise itself, Baker staff provided evaluation of the participants' actions and state and local procedures and assisted in writing the final report.

Public Safety Center Security Enhancements, Alexandria, Virginia. *City of Alexandria, Virginia.* Senior Planner. Responsible for performing site assessment and preliminary security recommendations. When the U.S. Department of Justice made the decision to try suspected terrorists associated with the September 11 attacks at the new Federal Courthouse in Alexandria, the City of Alexandria was faced with holding some of the most dangerous detainees in the world. In keeping with the increased threat, the City moved rapidly to enhance security at its Public Safety Center, which is located near the Federal Courthouse. An intensive study was performed to identify potential threats and determine how the existing facility could best be fortified to withstand those very real threats. Baker then provided design and construction administration services on an extremely accelerated basis. Improvements to the facility included new barriers, guard gates, fencing, a new parking lot, new security checkpoint station, closed-circuit television cameras, and electronic access control features.

Special Mobility Needs Evacuation Planning, Seven-County Mid-Ohio Region, Ohio. *Mid Ohio Regional Planning Commission (MORPC).* Principal-In-Charge. Responsible for delivering project on time and on budget. Baker is developing a coordinated, regional, disaster and evacuation plan for populations with special mobility needs. The project includes demographic research, GIS mapping, stakeholder outreach, and public involvement.

Continuity of Operations Plan (COOP) for Homeland Security, Nationwide. *Department of Homeland Security, US-VISIT.* QA/QC. Responsible for quality control. Baker developed a Continuity of Operations Plan (COOP) and a Pandemic Influenza Outbreak Operational Plan to assure the client's capability to continue essential functions during a wide range of all-hazards emergencies, including a pandemic event. Baker also revised an Occupant Emergency Plan and developed and executed a Train-the-Trainer Program on the COOP. These plans supported services for the client pertaining to property, data, equipment, staff, and functions. The project was performed under Baker's Program and Project Management Services Indefinite Delivery Indefinite Quantity (IDIQ) contract.

CAFM Needs Assessment, Walter Reed Army Medical Center, Washington, DC. *U.S. Army Corps of Engineers, Baltimore District.* Principal-In-Charge. Responsible for the development of the project team (including subconsultants), contract implementation, and design quality control. Baker was contracted to perform a CAFM needs assessment. Per the needs assessment, a CAFM system was recommended. The system allows for real-time space utilization reporting. Electronic floor plans were updated and space attribute data was collected.

Dhruv Jain, PMP

School/Site Task Lead

General Qualifications

Mr. Jain has 16 years of experience specializing in the development and implementation of GIS and information technology systems. His experience ranges from planning and data management for large land areas such as military bases and university campuses, to data management for discrete facilities and elements of infrastructure. Prior to joining Baker, Mr. Jain was the GIS Program Manager with the University of Virginia Facilities Management Department, where he was responsible for GIS maintenance and enhancement for a large University campus.

Years with Baker: 9

Years with Other Firms: 9

Education

B.S., 1992, Electronic Engineering,
Bangalore University, India

Licenses/Certifications

Project Management Professional
(PMP), 2005

Experience

Smithsonian Institution - CAFM Implementation, Washington, DC. *Smithsonian Institution.* Project Manager. Responsible for project delivery including project performance, client satisfaction, quality control, and project schedule. Coordinated with client and project team. Baker was responsible for updating and rectifying floor plans for various Smithsonian museums in and around Washington D.C. Other responsibilities included collecting space attributes and using them in CAFM system implementation.

Sheltering and Evacuation Guide and Resource Database, National Capital Region. *Metropolitan Washington Council of Governments (MWCOG).* GIS Specialist. Responsible for setting up the standards to be used for developing GIS data, metadata, and maps. Performed analysis using GIS tools and prepared presentation material using the data and map products. Baker developed an integrated evacuation and sheltering plan for the National Capital Region, focused on catastrophic events. Each jurisdiction in the region has evacuation and sheltering plans, but these plans lacked uniformity and coordination between jurisdictions. Baker researched and evaluated routes, transportation resources, population profiles, infrastructure, and other current data and provided a regional evacuation and shelter plan to coordinate local emergency plans and combine all critical elements into a single plan using a common format.

Law Enforcement Driver Training Academy and Emergency Vehicle Operations Center, Nokesville, Virginia. *Northern Virginia Criminal Justice Training Academy.* Team Member. Assisted the project manager with review of contracts, fee proposals, scope of work, and internal technical review standards. Baker performed architectural design and provided bid phase assistance and construction administration services to develop a state-of-the-art, joint-use law enforcement driver training academy and emergency vehicle operations complex in Prince William County, Virginia.

Various Environmental and Safety Services, Williamsburg, Virginia. *Confidential Client.* GIS Specialist. Responsible for setting up the standards to be used for developing GIS data, metadata, and maps. Performed analysis using GIS tools and prepared presentation material using the data and map products. Baker performed various environmental and safety services for this confidential client including asbestos and lead-based paint assessments, development constraints analysis, and area development master plan.

Smithsonian Institution - Electronic Document Management System, Washington, DC. *U.S. Army Corps of Engineers, Vicksburg District.* Project Manager. Responsible for project delivery including project performance, client satisfaction, quality control, and project schedule. Coordinated with client and project

team. Baker provided technical expertise, resources, and fully installed document management software. This included establishing a relational database, start up administration for product quality assurance and knowledge transfer to Smithsonian staff members.

DDESS System-wide Connectivity Construction Administrative Support, Nationwide. *U.S. Army Corps of Engineers, Fort Worth District.* Database Developer. Assisted with the development of databases to track and link information to the plans and reports. Also used the database for report generation. This project was completed for the U.S Army Corps of Engineers, Fort Worth District on behalf of the Department of Defense Domestic Dependents Elementary and Secondary Schools. Baker provided AE support for specification and active component selection as well as installation and configuration support for T1 lease lines recently procured for the DDESS System to provide interconnectivity for all North American campuses. Services included shop drawing and proposal reviews and onsite inspections.

CAFM Needs Assessment, Walter Reed Army Medical Center, Washington, DC. *U.S. Army Corps of Engineers, Baltimore District.* Project Manager. Responsible for project delivery including project performance, client satisfaction, quality control, and project schedule. Coordinated with client and project team. Baker was contracted to perform a CAFM needs assessment. Per the needs assessment, a CAFM system was recommended. The system allows for real-time space utilization reporting. Electronic floor plans were updated and space attribute data was collected.

Montgomery County Police Security Assessments, Bethesda, Maryland. *Montgomery County, Department of Environmental Protection.* Project Manager. Responsible for project delivery including project performance, client satisfaction, quality control, and project schedule. Coordinated with client and project team. Montgomery County's Police Department Headquarters in Rockville and its 2nd District - Bethesda facility are both located in urbanized areas, where "standoff" distances from adjacent activities are less than optimum. This creates the potential for disruption of critical police functions. Both buildings provide activities essential to police operations including central communications and dispatch, interview rooms, temporary detention, squad rooms, meeting rooms, locker rooms, and offices. Baker performed a Security Assessment Study of both facilities, and made recommendations to enhance security. Both exterior and interior threats were studied, as well as the existing security, surveillance, and fire protection systems. Areas of focus included strategies to protect police property and vehicles, recommendations to increase night visibility, safety during witness and suspect transfers, and safety for the general public.

Mohiuddin Shaik, P.E., CFM, GISP

GIS/Hazard Mitigation Specialist

General Qualifications

Mr. Mohiuddin Shaik has over 10 years experience as a GIS Specialist in the Charleston, West Virginia office of Michael Baker Jr., Inc. He is adept in Geographic Information Systems (GIS) with a technical background in Water Resources and Transportation Engineering. Mr. Shaik also offers a background in Major/Minor Drainage and Highway Design. He is a registered professional civil engineer, certified GIS Professional, certified floodplain manager and has successfully completed the FEMA's HAZUS Advanced Flood Vendor Training and have made several conference and seminar presentations on the HAZUS at SAME Regional Conference and other venues. He has been actively involved in local training workshops as presenter for WVDOH and other agencies on floodplain related topics.

Experience

Flood Protection Options Report-Bonham Elementary School, Kanawha County, West Virginia. *WV Division of Homeland Security and Emergency Management.* GIS Specialist. Provided GIS Support and supervised the mapping and GIS analysis. Baker was retained by the West Virginia Division of Homeland Security and Emergency Management to prepare a report to address flood protection options for Bonham Elementary School in Kanawha County, West Virginia.

HAZARD IDENTIFICATION AND RISK ASSESSMENT

HAZUS-MH MR3 Statewide County Level Flood Risk Analysis. *West Virginia Division of Homeland Security and Emergency Management, Sr. HAZUS Specialist/ Project Manager.* Baker was recently selected to complete the HAZUS-MH MR3 Level I analysis for the state of West Virginia. The project analyses the flood risk for all the major flow events. A component of the project requires custom reporting and mapping to be developed. It's anticipated to be completed by end of 2010. Also, includes some value added application development and training. Involves application of hydraulic engineering principles and GIS sciences.

CAMC Risk Assessment and Flood Protection Study. *Charleston Area Medical Center/BSA Life Structures, Charleston, WV.* Water Resources Engineer/GIS Specialist. Completed the Hydrology and Hydraulic studies of the Veneble branch watershed and developed the flood risk assessment report with recommendations for Interim and long-term flood protection measures to protect the hospital premises from the various flood events. Duties included detailed hydrologic modeling with hydraulic analysis and coming up with flood protection plans. Baker completed the H&H studies as part of the PDM grant application to FEMA for this project. Ongoing project.

Years with Baker: 9

Years with Other Firms: 1

Education

M.S., 1999, Engineering Science,
Louisiana State University

B.E., 1997, Civil Engineering,
Osmania University, India

Graduate Studies, Business
Administration, Marshall University

Licenses/Certifications

Professional Engineer, West
Virginia, 2004, 16213

ASFPM Certified Floodplain
Manager, 2005, US-05-01626

GIS Professional, West Virginia,
2006, 00054674

FEMA Authorized HAZUS Advanced
Flood Vendor, 2006

FEMA FLOOD INSURANCE STUDIES AND MAP REVISIONS

Technical Reviews of MT-2 Letter of Map Revision Requests, Map-Mod Project. *Federal Emergency Management Agency.* Water Resources Engineer/GIS Specialist. Responsible for review of the H&H analysis submitted as part of CLOMR/LOMR by the requestors from various States of FEMA Regions 1, 2 and 3. Supervise a team of GIS Analyst and Junior Engineers on the detailed technical reviews of H&H, Creating the digital map attachments to update the FIRMS using the various GIS software's and tools available including the DFIRM tools developed for FEMA.

GIS ANALYSIS AND DEVELOPMENT

West Virginia Enhanced State Hazard Mitigation Plan. *West Virginia Office of Emergency Services.* GIS Specialist. Project examined hazards including floods, wildfires, structural fires, dam failures, drought, winter storms, landslides, hurricanes, wind, earthquakes, and man-made hazards. Plan was among the first FEMA approved State Plans in the United States. The plan was prepared in compliance with the Disaster Mitigation Act (DMA) of 2000 which enables states to receive hazard mitigation grant funding from FEMA. Plan elements included identification of hazards, facilitating the formation of a state hazard mitigation council, conducting risk assessments and hazards ranking, conducting a vulnerability assessment and loss estimates, holding large planning council meetings to develop planning goals and strategies, prioritizing the strategies and developing a strategy implementation plan, conducting a state capability assessment, investigating funding sources, integrating local planning efforts, assisting with state plan adoption, and the development of an advanced GIS database containing both spatial and aspatial data for hazard mitigation planning. ESRI's ArcGIS 9.1 and Microsoft Access 2002 computer programs were used to build the GIS database.

HYDROLOGIC AND HYDRAULIC DESIGN AND FLOODPLAIN STUDIES

CAMC Risk Assessment and Flood Protection Study. *Charleston Area Medical Center/BSA Life Structures, Charleston, WV.* Water Resources Engineer/GIS Specialist. Completed the Hydrology and Hydraulic studies of the Veneble branch watershed and developed the flood risk assessment report with recommendations for Interim and long-term flood protection measures to protect the hospital premises from the various flood events. Duties included detailed hydrologic modeling with hydraulic analysis and coming up with flood protection plans. Baker completed the H&H studies as part of the PDM grant application to FEMA for this project. Ongoing project

South Carolina Floodplain Mapping Program, Technical Review. *Federal Emergency Management Agency.* Water Resources Engineer/GIS Specialist. Performed and Supervised the Engineering Review of the detailed and approximate floodplain studies.

TECHNICAL MANUAL DEVELOPMENT

WVDOH Drainage Manual. *West Virginia Department of Transportation, Division of Highways.* Water Resources Engineer/GIS Specialist. Helped in Certain chapters of the drainage manual involving GIS data for Map and Charts creation. Quality control of some chapters.

Professional Affiliations

American Society of Civil Engineers (ASCE): Member, Charleston Section, West Virginia.
Association of State Floodplain Managers (ASFPM): Member.
West Virginia Association of Geospatial Professionals (WVAGP): By Laws Committee Member.

Anthony Phillips

Data Management

General Qualifications

Mr. Phillips is a certified TRIRIGA professional with 20 years experience in the design, development, and implementation of electronic hardware and software systems. Since 1999, he has specialized in Enterprise application development and implementation of service request, space management, and project management solutions. He is a TRIRIGA Certified Platform Developer. His experience ranges from planning and process improvements for large financial institutions and university campuses, to application development for discrete facilities and elements of infrastructure.

Years with Baker: 3

Years with Other Firms: 21

Education

B.S., 1998, Computer Science,
University of Alabama, Huntsville

A.A.S., 1986, Electronics, Wallace
State College

Experience

TRIRIGA Projects Upgrade and Implementation, State College, Pennsylvania. *The Pennsylvania State University.* Technical Manager. Responsible for supporting a software solution based on the Tririga application, which provides PSU the ability to manage and track their service providers.

Implementation Support for BMIS, Fairfax, Virginia. *United State Department of State, Overseas Buildings Operations (OBO).* Senior Designer. Responsible for designing and developing a software solution based on the Tririga application, which provided the State Department the ability to electronically submit and track change requests against embassy design standards.

FBI SIRS. *U.S. Army Corps of Engineers, Vicksburg District.* Technical Manager. Responsible for developing software design document and managing the development of the modifications.

FBI Onsite Support. *FBI.* Technical Specialist. Responsible for analyzing data and modifying the Tririga application to correct data problems discovered by on-site support team.

Master Plan, Ft. Bragg, North Carolina. *U.S. Army Corps of Engineers, Savannah District.* Technical Specialist. Responsible for analyzing data (interviews, reports, and standards) in order to provide recommendations.

Department of Justice TRIRIGA F8i Security Management Information System (SMIS) Facilities Certification & Accreditation (FC&A). Application Developer. The FC&A application was developed using FC8i capabilities to track security related items and facilitate the certification and accreditation process. This application was designed, developed, tested, and delivered for use on the TRIRIGA FC8i platform.

Computer Aided Facility Management (CAFM) Implementation. *Texas Children's Hospital, Houston, Texas.* Project Manager. Developed and provided training for the process managers (train-the-trainer). The hospital had a desire to automate and improve their facilities maintenance and service management processes. An automated process was designed and the improvements were implemented using Tririga's TRIRIGA 9 application. The system was loaded with the client's facilities, personnel, and various facility assets data. The challenge was overcome automating the assignment of work based on hospital's criteria of location (building, floor, and/or zone), skill or trade, priority and shift.

Neil Vandergroef

Field Verification Surveys

General Qualifications

Mr. Vandergroef brings over 31 years experience working with CAD, CAFM and Field Verification technologies to this project. Mr. Vandergroef coordinates ECS' field verification teams in the surveying of project critical facility and building/site data. Most recently Mr. Vandergroef was the project manager of ECS' Bank of America project representing 657 buildings in 36 states totaling approximately 9 million gross square feet.

Years Experience: 31

Education

A.S., Business Administration

Licenses/Certifications

Certification, Mechanical Design and Drafting

Experience

Neil has been the project manager on many key projects requiring site surveys and/or database development including the following projects.

Corporate Projects

- Prudential Insurance
- Bank of America
- Merck
- Hoffmann La-Roche
- Internal Revenue Service (IRS)
- Bristol Myers Squibb (BMS)
- AT&T
- Citibank
- Time Warner
- Federal Aviation Administration (FAA)

Education Projects

- University of Medicine & Dentistry of NJ (UMDNJ)
- Penn State
- Montclair State University
- Virginia Tech
- Rowan University
- New Jersey City University
- Middlesex Borough NJ Schools District (K thru 12)
- Delbarton (grades 7 to 12)
- Morristown Beard (grades 6 to 12)
- Parsippany NJ School District (K thru 12)
- Mountain Lakes NJ School district (K thru 12)
- Madison NJ School District (K thru 12)
- Yale University Divinity School

Ephraim K. Fermin, AICP

Site Planner

General Qualifications

Mr. Fermin is an architect and urban planner with many years of diversified professional experience in master planning, urban design, design studies, architecture, interior design, education, landscape and subdivision planning and golf course community design in Hong Kong and the Philippines. In the Philippines, he worked with multi-disciplinary teams of professionals in major areas of planning work, both within the context of major studies for National and Local Government Units, funding agencies such as the Asian Development Bank and the World Bank, and in the preparation and promotion of large-scale development proposals for the private sector. His work in the Michael Baker Corporation has included work on large-scale planning projects and security/force protection assessments, as well as facilities planning within military installations. In addition, his work with local governments have concentrated in the areas of strategic planning, space programming, facilities adaptive reuse, condition assessments, and site planning.

Experience

Security and Vulnerability Assessment, San Jose, Arizona.

Santa Clara Valley Water District. Planner. Responsible for conducting a physical facility vulnerability assessment for the two campus locations of the SCVWD. Helped develop force protection strategies for the two campus locations and recommended measures to reduce building vulnerability by means of facility renovation, fixture upgrades, and the installation of force protection elements. Also co-developed cost estimates for the facility improvements. Baker conducted a security vulnerability assessment and an assessment of certain response plans for the main headquarters campus and warehouse complex. An assessment of the SCADA IT system and a disaster recovery plan was also conducted. The internal and external vulnerability assessment focused on the identification and protection of critical assets; potential intruder path and established acceptable risk management levels as well as an operations plan and policy assessment.

DDESS Master Plans, Various Schools. DDESS - Domestic Dependent Elementary and Secondary Schools.

Planner. Team member responsible for site surveys and site suitability ranking. Co-developed demographic analysis models to predict school enrollment; co-developed expansion master plans for various school sites and co-authored the master plan report and a facility report to the principals. Due to the BRAC and RCI Initiatives, enrollment at many DDESS schools was increasing rapidly. The age and poor condition of the schools, however, was limiting the school's potential for growth. Baker provided Master Planning services for DDESS schools at five installations in Puerto Rico.

Sheltering and Evacuation Guide and Resource Database, National Capital Region. *Metropolitan Washington Council of Governments (MWCOC).* Planner. Responsibilities included developing the process flow diagram that details the responses in case of an emergency. Co-developed the condition analysis as well as recommendations that pertain to emergency response and evacuation. Baker developed an integrated evacuation and sheltering plan for the National Capital Region, focused on catastrophic events. Each

Years with Baker: 9

Years with Other Firms: 13

Education

B.Arch., 1988, Architecture,
University of the Philippines

M.A., 1998, Urban Design,
University of Hong Kong

Coursework, 1992,
Architecture/Urban Planning,
University of the Philippines

Certificate, 1988, Geography and
Asian Studies, Sophia University,
Tokyo, Japan

Licenses/Certifications

Certified Planner, Virginia, 2006

Registered Environmental Planner,
Philippines, 2001

jurisdiction in the region has evacuation and sheltering plans, but these plans lacked uniformity and coordination between jurisdictions. Baker researched and evaluated routes, transportation resources, population profiles, infrastructure, and other current data and provided a regional evacuation and shelter plan to coordinate local emergency plans and combine all critical elements into a single plan using a common format.

Ft. Knox Schools Master Plan, Fort Knox, Kentucky. *DDESS - Domestic Dependent Elementary and Secondary Schools.* Planner. Team member responsible for site surveys and site suitability ranking; co-developed demographic analysis models to predict school enrollment; co-developed expansion master plans for various school sites and co-authored the master plan report and a facility report to the principals. Baker formed a redevelopment plan to furnish a "road map" for the school construction, operations, and maintenance programs that will accommodate current facility conditions, future enrollment projections, and shifts in population centers in the Fort Knox Community.

Fort Stewart Schools Master Plan, Fort Stewart, Georgia. *DDESS - Domestic Dependent Elementary and Secondary Schools.* Planner. Team member responsible for site surveys and site suitability ranking; co-developed demographic analysis models to predict school enrollment; co-developed expansion master plans for various school sites, and co-authored the master plan report and a facility report to the principals. Baker formed a redevelopment plan to furnish a "road map" for the school construction, operations, and maintenance programs in order to accommodate current facility conditions, future enrollment projections, and shifts in population centers in the Fort Stewart area.

Puerto Rico Schools Master Plan, Puerto Rico. *DDESS - Domestic Dependent Elementary and Secondary Schools.* Planner. Team member responsible for site surveys and site suitability ranking; co-developed demographic analysis models to predict school enrollment; co-developed expansion master plans for various school sites; and co-authored the master plan report and a facility report to the principals. Due to the BRAC and RCI Initiatives, enrollment at many DDESS schools was increasing rapidly. The age and poor condition of the schools, however, was limiting the school's potential for growth. Baker provided Master Planning services for DDESS schools at 5 installations in Puerto Rico.

Dover AFB Schools Master Plan, Dover Air Force Base, Delaware. *DDESS - Domestic Dependent Elementary and Secondary Schools.* Planner. Team member responsible for site surveys and site suitability ranking; co-developed demographic analysis models to predict school enrollment; co-developed expansion master plans for various school sites; and co-authored the master plan report and a facility report to the principals. Due to the BRAC and RCI Initiatives, enrollment at many DDESS schools was increasing rapidly. The age and poor condition of the schools, however, was limiting the school's potential for growth. Baker provided Master Planning services for DDESS schools at 2 installations at Dover Air Force Base.

Laurel Bay Schools Master Plan, Beaufort, South Carolina. *DDESS - Domestic Dependent Elementary and Secondary Schools.* Planner. Team member responsible for site surveys and site suitability ranking; co-developed demographic analysis models to predict school enrollment; co-developed expansion master plans for various school sites; and co-authored the master plan report and a facility report to the principals. Due to the BRAC and RCI Initiatives, enrollment at many DDESS schools was increasing rapidly. The age and poor condition of the schools, however, was limiting the school's potential for growth. Baker provided Master Planning services for DDESS schools at 3 installations at Laurel Bay.

Quantico Schools Master Plan, Quantico Marine Base, Quantico. *DDESS - Domestic Dependent Elementary and Secondary Schools.* Planner. Team member responsible for site surveys and site suitability ranking; co-developed demographic analysis models to predict school enrollment; co-developed expansion master plans for various school sites; and co-authored the master plan report and a facility report to the principals. Due to the BRAC and RCI Initiatives, enrollment at many DDESS schools was increasing rapidly.

The age and poor condition of the schools, however, was limiting the school's potential for growth. Baker provided Master Planning services for DDESS schools at 4 installations at Quantico Marine Base.

Fort Benning Schools Master Plan, Fort Benning, Georgia. *DDESS - Domestic Dependent Elementary and Secondary Schools.* Planner. Team member responsible for site surveys and site suitability ranking; co-developed demographic analysis models to predict school enrollment; co-developed expansion master plans for various school sites; and co-authored the master plan report and a facility report to the principals. Due to the BRAC and RCI Initiatives, enrollment at many DDESS schools was increasing rapidly. The age and poor condition of the schools, however, was limiting the school's potential for growth. Baker provided Master Planning services for DDESS schools at 7 installations at Fort Benning.

Master Plan for Ft. Bragg Schools, Fayetteville, North Carolina. *U.S. Army Corps of Engineers, Fort Worth District.* Planner. Team member responsible for site surveys and site suitability ranking. Co-developed demographic analysis models to predict school enrollment; co-developed expansion master plans for various school sites; and co-authored the master plan report and a facility report to the principals. Baker provided Engineering and Design Services as necessary to prepare a redevelopment plan for the installation of community schools. The redevelopment plan was used as a "road map" to program school construction in the community in order to accommodate current facility conditions, future enrollment projections, and shifts in population centers.

GTMO Schools Master Plan, Guantanamo Bay. *DDESS - Domestic Dependent Elementary and Secondary Schools.* Planner. Team member responsible for site surveys and site suitability ranking; co-developed demographic analysis models to predict school enrollment; co-developed expansion master plans for various school sites; and co-authored the master plan report and a facility report to the principals. Due to the BRAC and RCI Initiatives, enrollment at many DDESS schools was increasing rapidly. The age and poor condition of the schools, however, was limiting the school's potential for growth. Baker provided Master Planning services for DDESS schools at installations in Guantanamo Bay, Cuba.

DDESS Schools Documentary, Various DDESS Locations. *U.S. Army Corps of Engineers, Fort Worth District.* Planner. Provided input in the development of the script for the video documentary highlighting the sad state of DDESS schools, and the urgent need to fund improvements. The Department of Defense Dependent Elementary and Secondary Schools (DDESS) needed to develop a video documentary and pamphlet to assist in presenting the existing conditions and financial support needs for the 16 DDESS schools. Baker and Video Solutions created video documentation on site at various DDESS locations, reviewed and edited scripts for the video, and produced an accompanied summary booklet. The video documentary and pamphlet were used as a visual aid for justification at the MiLCON 2006.

DoDEA Schools Capac Analysis, various DoDEA schools nationwide. *U.S. Army Corps of Engineers, Fort Worth District.* Planning Associate. Responsible for developing initial capacity models and validating facility space requirements for DDESS schools. Baker analyzed the advantages and disadvantages of 4 different capacity analysis methods and selected the most effective methodology to predict any school's capacity. The selection was accompanied by a variety of recommendations for further consideration and enhancement to the model.

Ft. Rucker Schools Master Plan, Various installations in the Fort Worth District, Texas. *DDESS - Domestic Dependent Elementary and Secondary Schools.* Planner. Team member responsible for site surveys and site suitability ranking. Co-developed demographic analysis models to predict school enrollment; co-developed expansion master plans for various school sites; and co-authored the master plan report and a facility report to the principals. Due to the BRAC and RCI Initiatives, enrollment at many DDESS schools was increasing rapidly. The age and poor condition of the schools, however, was limiting the school's potential for growth. Baker provided Master Planning services for Ft. Rucker schools at Fort Worth, TX.

Sarah K. Bowen, AICP, CFM

EMP Task Lead

General Qualifications

Ms. Bowen manages a team of planners and engineers to assist FEMA Region 3 with mitigation through the National Flood Insurance Program (NFIP). She leads her team to apply federal regulations to communities that are having their flood maps updated. She clearly outlines the steps communities are required to take to continue participating in the NFIP in letters, brochures, meetings, and other outreach materials. Her team also works with the FEMA Region 3 staff to track studies, train mapping partners, and complete research helpful in planning studies.

Ms. Bowen recently co-authored *The Patchwork Quilt- A Creative Strategy for Safe and Long Term Post-Disaster Rebuilding*. This paper was presented at the National Floodproofing Conference in November 2008 the Association of State Floodplain Managers Annual Conference in June 2009. This paper is a tool for communities to match hazard mitigation and re-building funds with projects that will improve community safety during disaster.

Ms. Bowen came to Baker with extensive disaster preparedness and response planning working at the American Red Cross in Philadelphia. She worked with numerous public agencies to plan for effective response to both natural and human-made disasters. She has all worked on a variety of planning projects that include an Environmental Impact Statement for the Philadelphia International Airport, Transportation Corridor Planning, and Smart Growth Planning. She also was the co-editor of *International Careers in Urban Planning* published by the American Planning Association.

Experience

Multi-Hazard Flood Map Modernization (Map Mod) - Year 5, Nationwide. *FEMA.* Program Manager. Responsible for managing a team of planners and engineers to assist FEMA Region 3 with community outreach and project management. This task order is the fifth year of a five-year, \$500M program. The major points of this program are to establish and maintain a premiere data collection and delivery system; achieve effective program management; build and maintain mutually beneficial partnerships; and expand and better inform the user community.

Provide Emergency Planning Services to the City of Pittsburgh. *City of Pittsburgh, Pennsylvania.* Assistant Technical Manager. Responsible for consolidating information from various sources into a plan that exceeds national and state standards and integrates into the City of Pittsburgh's existing response structure. Led outreach effort to engage partner organizations in the plan development and review. Development of a plan incorporating varying stages of integrated evacuation and shelter-in-place plans with an all-hazards integrated evacuation plan, with the goal of reducing the potential of injury or death while providing for the safety of people through the process of evacuation.

Years with Baker: 3

Years with Other Firms: 12

Education

M.S., 2000, Urban Planning,
Columbia University

B.A., 1996, Art History and Political
Science, Rutgers University

Licenses/Certifications

American Institute of Certified
Planners, Pennsylvania, 2007,
196486

Certified Floodplain Manager, 2006,
761805

PEMA Fiscal Year 2007 Grant Program Support. *Pennsylvania Emergency Management Agency.* Assistant Technical Manager. Worked with the Southeastern Pennsylvania Task Force to development Investment Justifications for Homeland Security Urban Area Security Initiative funding. Emergency management is a vital part of the Department of Homeland Security's preparedness mission and EMPG directly supports the Nation's emergency management community. The FY 2007 EMPG Program provides \$194 million in critical assistance to sustain and enhance state and local emergency management capabilities.

Sheltering and Evacuation Resource Guide, National Capital Region (NCR). *Metropolitan Washington Council of Governments (MWCOC).* Assistant Technical Manager. Conducted shelter surveys for recreation centers in Montgomery County, Maryland. Baker developed an integrated evacuation and sheltering plan for the NCR, focused on catastrophic events. The plan ensured that current local emergency evacuation and shelter plans are coordinated and all the critical elements are combined into a single plan using a common format. The plan established a process and structure for the efficient, coordinated, and effective delivery of assistance to a jurisdiction in times of public emergencies. The plan also outlined how the NCR will work in a collaborative manner both among themselves and with their federal partners.

Disaster Response Plan, Southeastern Pennsylvania Chapter. *American Red Cross.* Program Manager. Led Emergency Services Staff to write a comprehensive plan for disaster response in Southeastern Pennsylvania's Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties. The plan addresses all the functions that compose response including mass care, shelter operations, health services, disaster mental health, and damage assessment. Annexes to the plan address specific hazard responses including flooding, fires, and terrorism.

Peach Bottom Atomic Power Station Plan, Southeastern Pennsylvania Chapter. *American Red Cross.* Program Manager. Wrote a disaster response plan for an incident at the Peach Bottom Atomic Power Station. The plan led Red Cross volunteers and staff through the steps necessary to establish maintain and close shelters for evacuees from the 10 mile Emergency Planning Zone in accordance with the local emergency management and the Nuclear Regulatory Commission.

Homeland Security Grant Application, Southeastern Pennsylvania Chapter. *American Red Cross.* Program Manager. Worked with team to design and write a proposal to successfully be awarded \$323,000 by the Corporation for National and Community Service to help build and strengthen the disaster response volunteer base in Southeastern Pennsylvania.

Training

American Red Cross: Introduction to Disaster Services, Mass Care Overview, Shelter Operations, Damage Assessment, Emergency Assistance I and II, Liaison I, Emergency Operations Center, Exercise Design Workshop, Mitigation Workshop, Liaison for Emergency Support Function 6- Mass Care, and Serving the Diverse Community.

PEMA: Multi-Hazards Safe Schools Course.

FEMA: Managing Floodplain Development Through the National Flood Insurance Program Course.

Diana L. Hartman, AICP, N.C.I.

Emergency Planning Specialist

General Qualifications

Ms. Hartman is a certified planner with several years of diversified professional experience. She has worked on a wide range of projects including antiterrorism/force protection (AT/FP) planning for military bases. She has represented Baker at "Antiterrorism/Force Protection AT/FP Doing It By The Book," the 2003 ANG CEC Conference. Her experience also includes writing comprehensive master plans, creating conceptual site plans for property development purposes, and designing initial subdivision layouts. Ms. Hartman has completed "Crisis Preparedness Planning for School Administrators" through West Virginia University.

Years with Baker: 7

Years with Other Firms: 9

Education

B.S., 1994, Landscape Architecture,
Pennsylvania State University

Licenses/Certifications

American Institute of Certified
Planners, Virginia, 2007

NCI Charrette System Certificate

Experience

Special Mobility Needs Evacuation Planning, Seven-County Mid-Ohio Region, Ohio. *Mid Ohio Regional Planning Commission.* Planner. Responsible for review of proposal and fee estimate for content, quality, and consistency. Also compiled the project schedule and milestones in Microsoft Project. Edited and produced Existing Conditions Matrix that was a gap analysis of existing plans. Compiled, edited, and produced planning framework document. Baker is developing a coordinated, regional, disaster and evacuation plan for populations with special mobility needs. The project includes demographic research, GIS mapping, stakeholder outreach, and public involvement.

Sheltering and Evacuation Guide and Resource Database, National Capital Region. *Metropolitan Washington Council of Governments.* Planner. Responsible for compilation of Evacuation and Sheltering Plan and design of accompanying resource database. Also responsible for quality control, content, and consistency. Baker developed an integrated evacuation and sheltering plan for the National Capital Region, focused on catastrophic events. Each jurisdiction in the region has evacuation and sheltering plans, but these plans lacked uniformity and coordination between jurisdictions. Baker researched and evaluated routes, transportation resources, population profiles, infrastructure, and other current data and provided a regional evacuation and shelter plan to coordinate local emergency plans and combine all critical elements into a single plan using a common format.

AT/FP Study and Design for the U.S. Air Force Expeditionary Center, McGuire Air Force Base. *U.S. Air Force.* Planner. Conducted facility compliance survey for the Expeditionary Center complex at McGuire AFB. Recommended various alternatives and developed preferred design alternatives to guide future construction programming, brought facilities into compliance with AT/FP standards, and reduced the risk of loss. Baker conducted a professional engineering survey, analysis, design, and cost estimate in accordance with DoD AT/FP standards. Baker also developed recommendations for bringing other facilities at the base into compliance with the standards.

Risk Management Plans. *Confidential Client.* Project Manager. Under the authority of section 112(r) of the Clean Air Act, the Chemical Accident Prevention Provisions require facilities that produce, handle, process, distribute, or store certain chemicals to develop a Risk Management Program, prepare a Risk Management Plan (RMP), and submit the RMP to EPA. Prepared and submitted Risk Management Plans for supply chain warehouse distribution facilities in five states, including NJ, PA, GA, TN, and MO on behalf of a world-wide

manufacturer of household cleaning products. The plans included an assessment of the facilities and an off site consequence analysis to assess the potential regional consequences of an accidental chemical release.

Edward A. Thomas, Esq.

Emergency Management Specialist

General Qualifications

Mr. Thomas is an attorney, an author as well as a program manager, project manager, team leader, and motivator. He has nearly 40 years of experience in achieving results in government organizations, and he has managed staffs ranging in size from a few people to a few hundred. Mr. Thomas has published dozens of articles and other publications and lectured nationally on disaster related matters.

Experience

Sheltering and Evacuation Guide and Resource Database, National Capital Region. *Metropolitan Washington Council of Governments (MWCOC).* Senior Advisor. Responsible for assisting in the design of a multi-state, multi-jurisdiction response plan for the Metropolitan Washington DC area for reaction to a terrorist incident. Baker developed an integrated evacuation and sheltering plan for the National Capital Region, focused on catastrophic events. Each jurisdiction in the region has evacuation and sheltering plans, but these plans lacked uniformity and coordination between jurisdictions. Baker researched and evaluated routes, transportation resources, population profiles, infrastructure, and other current data and provided a regional evacuation and shelter plan to coordinate local emergency plans and combine all critical elements into a single plan using a common format.

Department of Homeland Security, Federal Emergency Management Agency, Region I. Senior Policy Advisor, Special Assistant to the Regional Director. Managed congressional relations, policy development, and external relations with business, industry and government. Served as Chief of Operations for the Department of Homeland Security National Capital Emergency Response Team. Managed the team of national experts who developed the plan for the response to a catastrophic disaster in the National Capital Region. Served as the Chief of Operations for the FEMA National Capital Region Emergency Response Team. Made numerous speeches and presentations to regional audiences on behalf of the Regional Director. Served as the Deputy Federal Coordinating Officer for several Presidentially Declared Emergencies.

Department of Housing and Urban Development. Multi-family Housing Representative. Coordinated HUD Housing Programs throughout New England. Independently worked with community officials, bankers, developers, citizens, architects and the media to promote the housing programs. Responsible for housing site selection, environmental review, and resolution of conflicts that prevented or delayed construction. Also responsible for management and budget allocation as part of the College Housing Program in Massachusetts and Rhode Island. Area of work produced more HUD sponsored housing in three years than in the previous forty years and the following six years combined. Housing produced was recognized locally and regionally for excellence of design and concept. Served as permanent member of the HUD Disaster Cadre, working on disaster assignments following floods and a fire. Appointed principal coordinator for HUD Area Office activities following the Chelsea Fire. Managed the budgeting and development activities of college housing valued in excess of \$300 million. Established the basic application processing system used by the Boston Area Office and recommended for use throughout the country by HUD Central Office. Received letter of commendation for disaster work and other official duties.

Years with Baker: 6

Years with Other Firms: 34

Education

J.D., 1986, Law, New England School of Law

B.A., 1969, History, Fordham University

Licenses/Certifications

Licensed Attorney, Massachusetts, 1986

Drew L. Whitehair

Emergency Planning Specialist

General Qualifications

Mr. Whitehair has experience in various aspects of emergency management at both the state and local level. Drew has worked through numerous federal disaster declarations and assisted in implementing various programs as a result involving hazard mitigation, public assistance and individual assistance. Drew has particular expertise in hazard mitigation having developed and managed projects in communities small and large, rural and urban. Mr. Whitehair also has expertise in benefit-cost analysis and long-term recovery having conducted countless post-disaster briefings and serving on several damage assessment teams for both the public and individual FEMA assistance programs. Drew has participated on national research/focus groups for both FEMA's benefit-cost analysis tool and Severe Repetitive Loss grant program.

Years with Baker: 1

Years with Other Firms: 5

Education

B.S., 2004, Emergency Management, University of Akron

A.A.S., 2004, Forensic Science/Criminal Justice, University of Akron

Experience

COOP/COG Plan, Pickaway County. *State of Ohio.* Mr. Whitehair is currently serving as lead planner in developing the methodology to create a continuity-of-operations/continuity-of-government that will ensure that Pickaway government and community services continue in the face of any hazard.

Special Mobility Needs Evacuation Planning, Seven-County Mid-Ohio Region, Ohio. *Mid Ohio Regional Planning Commission.* Mr. Whitehair is currently serving as an emergency planner for the development of an evacuation plan to create a 7-county regional emergency preparedness and evacuation plan that will improve emergency preparedness, disaster response, and disaster recovery for populations with specific transportation needs in the central Ohio region. The counties included in the plan will be Franklin, Delaware, Licking, Fairfield, Pickaway, Madison, and Union Counties

Risk MAP TO#3 Baker/AECOM. *FEMA.* Technical Specialist. Responsibilities included starting, maintaining, and completing HAZUS-MH flood model scenarios throughout the project on simultaneous computers. Additionally, Mr. Whitehair performed troubleshooting, daily progress reporting, and assured that all fifty computers were processing at maximum capacity.

Hazard Mitigation Plan Updates, Douglas & Liberty County. *State of Georgia.* Mr. Whitehair is currently serving as the lead planner in facilitating a comprehensive update for two countywide plans performing activities such as meeting facilitation, data research, and plan writing, and general oversight.

Hazard Mitigation Plan Update, Crawford County. *Commonwealth of Pennsylvania.* Planner. Responsible for facilitating a comprehensive update of a countywide plan including 51 jurisdictions performing activities such as meeting facilitation, data research, and plan writing. Additionally, he has assisted in the development of the Standard Operating Guide for the update of Pennsylvania hazard mitigation plans.

John W. Porco, P.E.

VA Task Lead

General Qualifications

Mr. Porco has 30+ years of government and private sector experience in emergency planning, response, recovery, security, and mitigation at the national, regional, and local levels, involving all hazards – natural and technological disasters, terrorism and national security emergencies. He served for 32 years in the U.S. Department of Transportation, 15 of that in the Office of Emergency Transportation, rising to the position of Deputy Director of Emergency Transportation. There, he directed a multi-million dollar Federal program to plan for, respond to, and provide transportation support and infrastructure recovery in a variety of emergencies. This experience has produced a sound foundation in roles of and relationships among Federal, State, local, tribal, international, volunteer, and private sector constituents and the disaster response process.

Mr. Porco currently serves as *Senior Director for Baker Homeland Security Services* providing all-hazard mitigation and response planning services to a variety of clients, Federal, state, county, and local, as well as in the private sector. Mr. Porco has spoken on water infrastructure security and emergency management at more than 20 meetings sponsored by professional associations, including American Water Works Association, Association of Metropolitan Water Agencies, American Public Works Association, Waterworks Operators of Pennsylvania, University of Colorado, and the Floodplain Management Association. He is trained on NIMS and ICS. He has been quoted in the media as a "security expert." **He has a SECRET security clearance.**

Years with Baker: 11

Years with Other Firms: 32

Education

Graduate Studies, 1976, Public Administration, University of Southern California

B.S., 1966, Civil Engineering, Drexel University

Licenses/Certifications

Professional Engineer - Civil, Arizona, 1998

AwwaRF/Sandia Risk Assessment Methodology for Water, Licensed Instructor

Experience

Arizona Department of Transportation. Served as Project Manager for the development of a Homeland Security Needs Study for ADOT. The project included a review of the Department's communications interoperability, vulnerability assessments and protection of facilities, IT security, COOP plans, response plans, evacuation plans, interagency and intra-agency coordination, training, and exercises. As a second phase, Baker developed a complete all-hazards emergency response plan. Baker also conducted a full security vulnerability assessment of the ADOT system using a TSA methodology. The project assessed the threats to and vulnerability of ADOT's bridges and tunnels and developed a representative security mitigation plan for each type of facility (tunnel, highway interchange, arch bridge, railway overpass, traffic operations centers, etc.).

American Water Works Association Research Foundation (AwwaRF), Denver, Colorado. Served as Principal Researcher/Technical Manager for AwwaRF and EPA to develop the *Security Practices Primer for Water Utilities*, published to accolades in February 2004. This was among the first water security guidance directed to utilities. The Primer focused on policy and procedures best practices related to security against all terrorist threats, including employee screening and training, protection of sensitive information, media and public relations, water system emergency response, and coordination with law enforcement and health officials. The project involved intensive document, periodical, and website research; contact with 100 water utilities, water professional organizations, and federal and state agencies; and an expert workshop.

East Bay Municipal Utility District, Oakland, California. Served as Project Manager for the EBMUD Security Vulnerability Assessment Project, valued at more than a half million dollars, supervising all project tasks. This project involved the development of a security policy and strategy for the District to guide a major capital investment program (\$25 million), a vulnerability assessment, onsite security evaluations of nearly 100 District wastewater and water facilities (including pipelines, buildings, and yards), and development of recommendations and conceptual designs for security mitigation enhancements. This project involved more than a dozen planning workshops with EBMUD staff and external stakeholders.

Glendale Utilities Department (GUD), Glendale, AZ. Served as Project Manager for a vulnerability assessment of the Glendale Water Department's water system. The VA was based on the full application of the Sandia RAM-W process. The project included several workshops; a short version of the Sandia risk assessment training; on-site inspections of all water facilities, which included both surface and ground water sources; development of risk reduction measures; review of response plans; and a water contamination monitoring review. Baker then completed a second phase of the project to update GUD's emergency response plans and conduct security awareness training for utility employees.

Santa Clara Valley Water District, CA: Served as Project Manager on a security project for one of the largest water wholesalers in California. Baker conducted a security review of the District's headquarters complex in San Jose, a review of headquarters security plans, and a security assessment of the business information technology system. The final report outlined specific security enhancements recommended for the complex, including architectural and interior floor plan changes, alarms, CCTV, and central monitoring.

Olympic Security and Response Plans, Salt Lake City Department of Public Utilities (DPU). Served as Senior Technical Analyst/Assistant Project Manager, responsible for developing security and operating plans for the 2002 Winter Olympics for DPU. The project involved assessing the security of DPU's wastewater, water, and stormwater facilities; developing recommended improvements; and preparing a terrorism operations plan for the Olympic period. He conducted extensive coordination with city, county, and State emergency management agencies and the public safety community, developed a document security plan, and prepared a Training and Exercise Plan. Prior to the Olympics, Mr. Porco managed the conduct of 6 intensive simulation exercises and supervised the preparation and testing of a media relations plan for the DPU.

Continuity of Operations and Pandemic Flu Plans, U.S. Visit Program, U.S. DHS. Served as Technical Expert for a project to develop an emergency COOP Plan for the U.S. VISIT (USV) Program, which is part the Department of Homeland Security. He developed an interview guide for senior USV staff to help them determine essential functions of the agency and led several workshops of senior executives to refine these functions. He assisted in drafting the planning template. Recently, USV asked Baker to develop a Pandemic Flu annex to the COOP plan, coordinated with DHS and White House guidance.

Mr. Porco also served as Project Principal for six other large water system vulnerability assessments, providing executive level support to the Baker project team.

Professional Affiliations

National Emergency Management Association
International Association of Emergency Managers
American Society of Civil Engineers
American Society for Industrial Security (ASIS International)
American Water Works Association (Member, Emergency Preparedness and Security Committee)
Transportation Research Board (Affiliate Member and Member, Critical Infrastructure Protection Committee and Evacuation Subcommittee)
California and Arizona Emergency Services Associations
Colorado, Virginia, and New Mexico Emergency Management Associations
Keystone Emergency Management Association (PA)

Brett Kriger

Security VA Specialist

General Qualifications

Mr. Kriger has over thirty years of domestic and international military and civilian experience in all aspects of vulnerability assessment, risk analysis and site security. For two decades he served as a Security Police Commander for the US Air Force. Mr. Kriger was also the Deputy Director for the Louisiana Office of Emergency Preparedness for seven years. He has provided vulnerability assessment and security analysis for infrastructure protection projects in several states and served on the Executive Board of the National Institute of Urban Search and Rescue helping to focus the organization's efforts on developing an integrated communications infrastructure.

Mr. Kriger is licensed in conducting the Sandia National Laboratories Risk Assessment Methodology (RAM) for vulnerability assessments specified by federal agencies. The RAM methodology provides for threat assessment, consequence evaluation, site security characterization, physical security system assessment, intrusion detection analysis, and developing system enhancements to reduce risk. He has also been licensed by Sandia National Laboratories to provide instruction in the Sandia Risk Assessment Methodology – Water (RAM-W) for vulnerability assessments in compliance with the EPA grant program.

Years Experience: 42

Education

B.S., Industrial Psychology, Louisiana State University

Training/Certifications

Department of Defense Industrial Security Institute, Defense Training Center

FEMA National Emergency Training Center Superintendent's "Honorary Professor" Award

RAM Certification, Sandia National Laboratories

Experience

Vulnerability Assessments, Multiple Locations, Nationwide. Security Team Leader for Vulnerability Assessments of the East Bay Municipal District Water and Wastewater system in Oakland, Ca.; Santa Clara Valley Water District, San Jose, Ca; Virginia Beach Department of Public Utilities, Virginia Beach, Va.; Prince William County Service Authority, Va.; Chesterfield County Water System, Richmond, Va.; and six utilities in the Salt Lake Valley including: Salt Lake City Department of Public Utilities, Weber Basin Water Conservancy District, Sandy City Department of Utilities, Central Utah Water Conservancy District, Provo City Department of Utilities, and Jordan Valley Water Conservancy District.

Vulnerability Assessment and Security Upgrade Planning For The East Baton Rouge Parish, Louisiana, District Courthouse. Team Leader to complete a building and grounds assessment of all security risks to include access control, prisoner movement, courtroom security, and critical utilities. Provided a security upgrade plan for risk reduction prioritized by cost/benefit factors.

Security Assessment for US Army Top Secret Special Facility. Granted a Top Secret Security Clearance by the National Security Agency in order to conduct a vulnerability assessment and risk analysis of critical infrastructure components at a special site used by the National Command Authority. Produced a Top Secret Security Upgrade Report for the site commander.

Terrorist Threat for the Mile Shakedown / Mirage Gold. Subject Matter Expert for a terrorist vulnerability exercise conducted by the FBI, Department of Energy, Department of Defense, and FEMA in preparation for the Atlanta Olympics.

Keith Henson, P.E.
Physical Protection Specialist

General Qualifications

Mr. Henson has over 35 years of experience in security advisement, with a background in electrical engineering. He has current Department of Energy and Nuclear Regulatory Commission clearances and is a member of the American Society for Industrial Security.

Years Experience: 35

Education

B.S., 1975, Electrical Engineering,
Clemson University

Licenses/Certifications

Registered Professional Engineer

Experience

Tennessee Valley Authority, Fire Alarm/Emergency

Evacuation Study, Knoxville, TN. Developed study of existing fire alarm/emergency evacuation for TVA's Knoxville Office Complex. Developed performance specification for new integrated system to upgrade system and to comply with requirements of the American Disabilities Act.

National Aeronautics and Space Administration, Shuttle Launch Site Security, Vandenberg, CA, and Cape Canaveral, FL. Prepared intermediate specification for security for NASA space shuttle launch sites at Vandenberg and Cape Canaveral. Facilities had unique security and environmental criteria.

Duke Power Company, Personnel Access Portal Modeling, McGuire Nuclear Station, NC. Modeled personnel flow-through badge readers, metal detectors, X-ray machine radiation detectors, and turnstiles at personnel access portal at Duke Power's McGuire Nuclear Power Plant.

Maytag Customer Service Center, Vulnerability Assessment (VA), Cleveland, TN. Project Manager for VA and follow-up specification for access control and intrusion detection system. The VA examined Maytag's assets, threats to those assets, and analyzed findings to produce a report that included mitigative measures. The subsequent design included detailed functional system specifications and sketches. Services following the design included bid evaluation and installation inspection. Also, Project Manager for upgrade of Maytag's main customer lobby to enhance security and protection to receptionist while integrating new access control system. Architectural improvements included bullet-resistant glazing, doors, and integrated panels into walls. Modifications were integrated in such a manner as to avoid upsetting the current lobby aesthetics.

Los Alamos National Laboratory (LANL), Nuclear Materials Safeguards and Security Upgrades, Los Alamos, NM. Project Manager, under subcontract to Fluor Daniel, Inc., for the conceptual design of a multi-million dollar security system to replace the existing systems at LANL. Provided the security expertise and support engineering for telecommunications, networking, electrical, structural, and architectural portions for the Phase I effort. Also provided estimating and scheduling expertise. The work involved the conceptual design of a computer-integrated exterior and interior intrusion detection, access control, and closed-circuit television assessment system; the design of facilities to house host computers and operator consoles; the incorporation of special electrical, HVAC, structural, and interior space layout requirements; and the design of a dual path, fiber-optic network.

Water/Wastewater Threat and Vulnerability Assessments – AZ, CA, UT, VA. As Lead Security Engineer, under subcontract to Michael Baker Corp., provided system assessment input, then provided conceptual design, and pricing for mitigative measures for ten major municipal water and waste water systems. The sites consisted of office buildings, maintenance yards, reservoirs, dams, water/waste water treatment plants, pump stations, storage tanks, and pipelines. Recommendations included physical barriers,

access control, interior and exterior intrusion detection, CCTV, lighting, signal transmission systems, and alarm stations.

East Bay Municipal Utility District, Oakland, CA – Water/Wastewater & Related Service Centers and Pipelines. Established a Security Strategy Report, conducted an Existing System Assessment Report, conducted a Market Survey, and specified a system for this major water/wastewater supplier. The system specified consisted of 6 water treatment plants, a wastewater treatment plant and hundreds of support facilities, distribution stations, and collection lines. Security control and monitoring were distributed via an existing network to 1 master and 6 regional alarm stations.

Brushy Mountain State Penitentiary, Security Upgrades, Petros, TN. Designed security upgrades for prison that houses up to 495 inmates and provides maximum security detention for the state of Tennessee. The upgrade included site assessment, interface to existing systems, perimeter escape detection, access control and interface to a central alarm system. Intrusion detection was added to guard towers, cell block buildings, administration buildings, and an associated weapons storage building. Sally-port control was designed for vehicle access. The system interfaced with new security fencing and high-mast lighting for the secured compound.

U.S. Department of Energy (DOE), Tri-site GDP Security Upgrades, Oak Ridge, TN, Piketon, OH, and Paducah, KY. Designed perimeter intrusion detection and assessment systems (PIDAS), command center consoles, and transmission systems at DOE's Oak Ridge, Portsmouth, and Paducah Gaseous Diffusion Plants. Additionally, the supply water line at Portsmouth was protected against sabotage, and the Oak Ridge plant included a new command facility.

Westinghouse Savannah River Company, Site-wide Security Upgrade, Aiken, SC. Conceptual design of interior and perimeter intrusion detection systems, communications, signal transmission, alarm centers, and consoles for several areas at DOE's Savannah River Site.

Chad M. Berginnis, CFM

Hazard Mitigation Specialist

General Qualifications

Mr. Berginnis has 16 years of experience in various aspects of natural hazards management, flood loss reduction, and land use planning/programs at the state and local level. In these roles, Chad has designed and implemented various programs including subdivision review/permitting, floodplain management, hazard mitigation (including developing, managing and implementing a Hazard Mitigation Grant Program project for a small village), and also managed these programs at both the state and local level. Chad has had to perform various functions from local zoning inspector, to floodplain administrator, to State of Ohio Hazard Mitigation Officer, working with communities small and large, rural and urban. Chad has particular expertise in all aspects of floodplain management and hazard mitigation; program development and management; public outreach / communications; and conducting public meetings having conducted several hundred of them throughout his career. Mr. Berginnis also has expertise in long term recovery and hazard mitigation following flood events having developed/conducted damage assessment training, developed cost-effective hazard mitigation grant program projects, developed efficient processes for developing and submitting mitigation grant program project applications (statewide) for funding, and managing hazard operations at a FEMA/state Joint Field Office for three Federally declared disasters.

Years with Baker: 2

Years with Other Firms: 16

Education

B.S., 1994, Natural Resources and Environmental Science, Ohio State University

Licenses/Certifications

Certified Floodplain Manager, 2000

Mr. Berginnis is a recognized national expert in floodplain management and hazard mitigation, having participated on national research / focus groups, providing agency (FEMA, USACE, OMB, CRS, IG, CBO, others) and Congressional testimony, and even having been selected to participate on an advisory panel to the Chinese Government on the development of a national floodplain management strategy. He has contributed to *Hazard Mitigation: Integrating Best Practices into Planning*, published by APA Planning Advisory Service.

Experience

Liberty County Hazard Mitigation Plan, Liberty County, Georgia. *Liberty County, GA.* Project Manager. Responsible for overall management of the project and served as subject matter expert and assisted task leads in the various aspects of updating the local hazard mitigation plan. Additionally served as QA/QC reviewer to ensure plan was consistent with the FEMA local mitigation plan update crosswalk. Baker is providing geospatial, analysis, and public involvement services to update the county's hazard mitigation plan, in compliance with the National Flood Insurance Act and the most recent Federal Emergency Management Agency (FEMA) Local Multi-Hazard Mitigation Planning Guidance.

Douglas County Multi-Jurisdictional Hazard Mitigation Plan, Douglas County, Georgia. *Douglas County, GA.* Project Manager. Responsible for overall management of the project and served as subject matter expert and assisted task leads in the various aspects of updating the local hazard mitigation plan. Additionally served as QA/QC reviewer to ensure plan was consistent with the FEMA local mitigation plan update crosswalk. Baker is providing geospatial, analysis, and public involvement services to update the county's hazard mitigation plan, in compliance with the National Flood Insurance Act and the most recent Federal Emergency Management Agency (FEMA) Local Multi-Hazard Mitigation Planning Guidance.

Hazard Mitigation Plan, Village of Vinton, Ohio. Project Manager/Lead Facilitator/Co-Author. As part of the Appalachian Flood Risk Reduction Initiative, led the core planning group made up of village officials, stakeholders, and concerned citizens, facilitated meetings, conducted research on hazards and mitigation strategies, and served as co-author and technical reviewer of the plan document. Also facilitated the state's review of the plan for compliance with FEMA planning requirements and FEMA's ultimate approval of the plan.

Ohio Natural Hazard Mitigation Planning Guidebook, Statewide, Ohio. Project Manager, Co-Author, Reviewer, and Researcher of this document necessitated by the passage of the Federal Disaster Mitigation Act of 2000. The project involved development of an easy-to-read and practical guidebook for Ohio communities to use when developing local hazard mitigation plans.

Ohio Floodplain Regulation Criteria, Statewide, Ohio. Project Manager, Co-Author, Reviewer, and Researcher of this comprehensive update to Ohio's model flood damage reduction regulations. The fourth and fifth editions included innovative model "higher" regulatory standards that described the standard, reviewed the advantages and disadvantages of each, and provided specific model language that could be easily inserted into a community's regulations. Also, the document incorporates the Association of State Floodplain Managers No Adverse Impact philosophy.

Flood Mitigation Project, Village of Corning, Ohio. Project Manager. Developed the project concept, authored the funding application, and managed this comprehensive flood mitigation project funded under FEMA's Hazard Mitigation Grant Program (HMGP). In 1998 a devastating flood damaged nearly one-third of all buildings. Mr. Berginnis assisted village officials immediately after in developing a recovery strategy, conducting damage assessments and convening a volunteer group to assist with the development of the HMGP project application. The FEMA approved application involved the mitigation of fifty-eight structures, including the acquisition / demolition of 29 structures, the elevation of 7 structures, and the retrofitting of 22 structures. As part of the project development and implementation processes, Mr. Berginnis led the volunteer group, facilitated meetings (including holding several public meetings), secured funding, developed implementation processes and procedures, and conducted extensive public outreach including the development of outreach materials.

Ronald Stephens, PhD

Technical Advisor

General Qualifications

Dr. Ronald D. Stephens currently serves as Executive Director of the National School Safety Center. His past experience includes service as a teacher, assistant superintendent, and school board member. Administrative experience includes serving as a chief school business officer, with responsibilities over school safety and security, and as Vice President of Pepperdine University. His undergraduate and graduate degrees are in the field of business management. He received his doctorate from the University of Southern California. Dr. Stephens holds the California teaching credential, administrative credential, and the Certificate in School Business Management.

Years Experience: 26

Education

B.S., Business Management

PhD, University of Southern California

Licenses/Certifications

California Teaching Credential

Dr. Stephens has conducted more than 1000 school security and safety site assessments throughout the United States. He was described by the Denver Post as “the nation’s leading school crime prevention expert.” Dr. Stephens serves as consultant and frequent speaker for school districts, law enforcement agencies and professional organizations worldwide. He is the author of numerous articles on school safety as well as the author of *School Safety: A Handbook for Violence Prevention*.

Experience

Following is a sampling of Dr. Stephens consultation and technical assistance to school districts:

Denver Public Schools
New York City Public Schools
District of Columbia Public Schools, Washington, D.C.
Fulton County Public Schools, Atlanta, Georgia
Columbia Public Schools, Columbia, South Carolina
Tupelo Public Schools, Tupelo, Mississippi
Duncanville Independent School District, Duncanville, TX
Windsor Public Schools, Windsor, Connecticut
Fairbanks North Star Public Schools, Fairbanks, Alaska
Dallas Independent School District, Dallas, Texas
Milwaukee Public Schools, Milwaukee, Wisconsin
Fort Smith Arkansas Public Schools
Four J School District, Eugene, Oregon
Sunnyside School District, Sunnyside, Washington
Redding Public Schools, Redding, California
Fresno Unified School District, Fresno, California
Natrona County School District, Natrona, Wyoming
Millard Public Schools, Omaha, Nebraska
Russell Independent School District, Rowel, New Mexico
Adrian Public Schools, Adrian, Michigan
Waxahachie Independent School District, Waxahachie, Texas
Omaha Public Schools, Omaha, Nebraska

Following is a sampling of recent publications of Dr. Stephens.

“From the Courthouse to the Schoolhouse: Making Successful Transitions,” *Juvenile Justice Bulletin*, U.S. Department of Justice, Washington, D.C., February, 2000.

“School Safety Handbook,” *Jane’s Information Group*, Co-editor, Alexandria, Virginia, 2001.

Executive Editor of *School Safety* 1984-2002 (More than 86 special issues; over 4,800,00 copies disseminated)

“Promoting School Safety” in *Best Practices in Crisis Prevention and Intervention in the Schools*,” by The National Association of School Psychologists, Bethesda, MD, 2002

“Preparing for Safe Schools” & “Recommended Practices for Safe Schools” in *School Crime and Policing* by William Turk, Prentice-Hall, 2003

“Making Schools Safe for the 21st Century: An Interview with Ronald D. Stephens,” In *Kappa Delta Phi, International Honor Society in Education, The Educational Forum*, Volume 67, Number 2, Indianapolis, Indiana, Winter 2003.

“Creating Safe Learning Environments” in *Helping Students Graduate* by Jay Smink & Franklin Schargel, Eye On Education, Larchmont, New York, 2004.

“What If? Preparing Schools to Respond to Terrorism” for the US Department of Justice, Office of Community Oriented Policing, Washington, D.C., National School Safety Center, Westlake Village, California, 2005.

“Managing America’s Schools in an Age of Terrorism, War and Civil Unrest,” *International Journal of Emergency Mental Health*, Ronald D. Stephens & Ted Feinberg, New York, Volume 8, No 2, Spring 2006.

“Six Strategies for Keeping the Campus Safe,” *Southeast Educational Network*, 10150 Mallard Creek Rd, Suite 101, Charlotte, NC 28262, www.seenmagazine.us; Fall 2008.

Dr. Stephens has also provided public service and assistance to national and federal agencies.

Education Task Force, American Legislative Exchange Council
National Board Member, National Center for Missing & Exploited Children (MCAP)
Los Angeles Task Force on Better Education-Appointed by Assemblywoman LaFollette
Council of the Great City Schools, National Urban Education Task Force
Education Task Force, American Society for Industrial Security
California Teacher Credentialing Commission, School Violence Advisory Panel
Northwest Regional Educational Laboratory, Advisory Board
Students Against Violence Everywhere, Board Member

2009

**WEST VIRGINIA
STATE TAX DEPARTMENT**

2011

BUSINESS REGISTRATION CERTIFICATE

ISSUED TO:
**MICHAEL BAKER JR INC
5088 WASHINGTON ST W
CHARLESTON, WV 25313-1577**

BUSINESS REGISTRATION ACCOUNT NUMBER: **1022-9866**

This certificate is issued for the registration period beginning: **July 1, 2009**

This certificate is valid until: **June 30, 2011**

*This business registration certificate is issued by
the West Virginia State Tax Commissioner
in accordance with Chapter 11, Article 12 of the West Virginia Code.*

*The person or organization identified on this certificate is registered
to conduct business in the State of West Virginia at the location above.*

This certificate is not transferrable and must be displayed at the location for which issued.

**ENGAGING IN BUSINESS WITHOUT CONSPICUOUSLY POSTING A WEST VIRGINIA BUSINESS
REGISTRATION CERTIFICATE IN THE PLACE OF BUSINESS IS A CRIME AND MAY SUBJECT YOU
TO FINES PER W. VA. CODE § 11-9.**

**TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them.
CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of
this certificate displayed at every job site within West Virginia.**

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L0376037632

State of West Virginia



Certificate

*I, Natalie E. Tennant, Secretary of State of the
State of West Virginia, hereby certify that*

MICHAEL BAKER, JR., INC.

was incorporated under the laws of West Virginia and a Certificate of Incorporation was issued by the West Virginia Secretary of State's Office on December 29, 1973.

I further certify that the corporation has not been revoked by the State of West Virginia nor has the West Virginia Secretary of State issued a Certificate of Dissolution to the corporation.

Accordingly, I hereby issue this

CERTIFICATE OF EXISTENCE



*Given under my hand and the
Great Seal of the State of
West Virginia on this day of
December 2, 2009*

Natalie E. Tennant

Secretary of State

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

MICHAEL BAKER JR INC
OFFICE MANAGER
5088 W WASHINGTON ST SECOND FL
CHARLESTON WV 25313

Vendor Number *709015418-02
FEIN 251228638
Expiration Date 12/01/2009

RECEIVED
001 02 2009

Vendor Registration Renewal Notice

MICHAEL BAKER
COOPERATIVE

Please return this notice, along with your check or money order in the amount of **\$125.00**, payable to the State of West Virginia, to the address above.

Changes to vendor registration information may be made by completing a new Vendor Registration and Disclosure Statement (Form WV-1), available on our website at:

<http://www.state.wv.us/admin/purchase/vrc/pforms.htm>

In an effort to update our files on small businesses, please complete the information below, if applicable:

By providing the following information, I represent that this enterprise is a small business as defined by the **Code of Federal Regulations**, Title 13, Part 121, as appended - which contains detailed industry definitions and related procedures - and/or the characteristics of the enterprise's control, operations and/or ownership are accurately reflected in the information provided. Check all that apply. This information is for data collection efforts only.

- | | |
|--|---|
| <input type="checkbox"/> Disabled Small Business Ownership (1) | <input type="checkbox"/> Veteran Small Business Ownership (4) |
| <input type="checkbox"/> Minority Small Business Ownership (2) | <input type="checkbox"/> Woman Small Business Ownership (5) |
| <input type="checkbox"/> Small Business Ownership (3) | |

Vendor Signature: _____ Date: _____

Purchasing Division Use Only

Check #: _____ Date Processed: _____

Memo #: _____ Entered By: _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS, That we, the undersigned, Michael Baker Jr., Inc.
of Moon Township, Pennsylvania, as Principal, and Federal Insurance Company
of Warren, New Jersey, a corporation organized and existing under the laws of the State of
Indiana with its principal office in the City of Indiana, as Surety, are held and firmly bound unto the State
of West Virginia, as Obligee, in the penal sum of Fifty Thousand and 00/100-- (\$50,000.00) for the payment of which,
well and truly to be made, we jointly and severally bind ourselves, our heirs, administrators, executors, successors and assigns

The Condition of the above obligation is such that whereas the Principal has submitted to the Purchasing Section of the
Department of Administration a certain bid or proposal, attached hereto and made a part hereof, to enter into a contract in writing for
West Virginia School Safety & Vulnerability Assessments

NOW THEREFORE,

(a) If said bid shall be rejected, or
(b) If said bid shall be accepted and the Principal shall enter into a contract in accordance with the bid or proposal attached
hereto and shall furnish any other bonds and insurance required by the bid or proposal, and shall in all other respects perform the
agreement created by the acceptance of said bid, then this obligation shall be null and void, otherwise this obligation shall remain in full
force and effect. It is expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event,
exceed the penal amount of this obligation as herein stated.

The Surety, for the value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no
way impaired or affected by any extension of the time within which the Obligee may accept such bid, and said Surety does hereby
waive notice of any such extension

IN WITNESS WHEREOF, Principal and Surety have hereunto set their hands and seals, and such of them as are corporations
have caused their corporate seals to be affixed hereunto and these presents to be signed by their proper officers, this
23rd day of June, 2010.

Principal Corporate Seal

Michael Baker Jr., Inc.
(Name of Principal)
By: D. M. Mita
(Must be President or
Vice President)
Senior Vice President
(Title)

Surety Corporate Seal

Federal Insurance Company
(Name of Surety)
Colleen A. Locher
Attorney-in-Fact
Colleen A. Locher

**IMPORTANT – Surety executing bonds must be licensed in West Virginia to transact surety insurance. Raised corporate seals
must be affixed, a power of attorney must be attached.**



**Chubb
Surety**

**POWER
OF
ATTORNEY**

**Federal Insurance Company
Vigilant Insurance Company
Pacific Indemnity Company**

**Attn: Surety Department
15 Mountain View Road
Warren, NJ 07059**

Know All by These Presents, That FEDERAL INSURANCE COMPANY, an Indiana corporation, VIGILANT INSURANCE COMPANY, a New York corporation, and PACIFIC INDEMNITY COMPANY, a Wisconsin corporation, do each hereby constitute and appoint Neil H. Brown, Kathleen C. Dzon, Scott A. Isler and Colleen A. Locher and Barbara L. Rutter of Pittsburgh, Pennsylvania

each as their true and lawful Attorney- in- Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY have each executed and attested these presents and affixed their corporate seals on this **24th** day of **September, 2008**

Kenneth C. Wendel, Assistant Secretary

David B. Norris, Jr., Vice President

STATE OF NEW JERSEY

ss.

County of Somerset

On this **24th** day of **September, 2008**

before me, a Notary Public of New Jersey, personally came Kenneth C. Wendel,

to me

known to be Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY, the companies which executed the foregoing Power of Attorney, and the said Kenneth C. Wendel, being by me duly sworn, did depose and say that he is Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of the By- Laws of said Companies; and that he signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that he is acquainted with David B. Norris, Jr., and knows him to be Vice President of said Companies; and that the signature of David B. Norris, Jr., subscribed to said Power of Attorney is in the genuine handwriting of David B. Norris, Jr., and was thereto subscribed by authority of said By- Laws and in deponent's presence.

Notarial Seal



STEPHEN B. BRADT
Notary Public, State of New Jersey
No. 2321097
Commission Expires Oct. 25, 2009

Notary Public

CERTIFICATION

Extract from the By- Laws of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY:

"All powers of attorney for and on behalf of the Company may and shall be executed in the name and on behalf of the Company, either by the Chairman or the President or a Vice President or an Assistant Vice President, jointly with the Secretary or an Assistant Secretary, under their respective designations. The signature of such officers may be engraved, printed or lithographed. The signature of each of the following officers: Chairman, President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary and the seal of the Company may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Assistant Secretaries or Attorneys- in- Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such power of attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached."

I, Kenneth C. Wendel, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY

(the "Companies") do hereby certify that

- (i) the foregoing extract of the By- Laws of the Companies is true and correct,
- (ii) the Companies are duly licensed and authorized to transact surety business in all 50 of the United States of America and the District of Columbia and are authorized by the U.S. Treasury Department; further, Federal and Vigilant are licensed in Puerto Rico and the U.S. Virgin Islands, and Federal is licensed in American Samoa, Guam, and each of the Provinces of Canada except Prince Edward Island; and
- (iii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Warren, NJ this *23rd day of June 2010.*



Kenneth C. Wendel, Assistant Secretary

IN THE EVENT YOU WISH TO NOTIFY US OF A CLAIM, VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT ADDRESS LISTED ABOVE, OR BY Telephone (908) 903- 3493 Fax (908) 903- 3656

e-mail: surety@chubb.com

VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with West Virginia Code, §5A-3-37. (Does not apply to construction contracts). West Virginia Code, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the West Virginia Code. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable

1. Application is made for 2.5% resident vendor preference for the reason checked: Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or, Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or, Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or,

2. Application is made for 2.5% resident vendor preference for the reason checked: Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,

3. Application is made for 2.5% resident vendor preference for the reason checked: Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,

4. Application is made for 5% resident vendor preference for the reason checked: Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,

5. Application is made for 3.5% resident vendor preference who is a veteran for the reason checked: Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,

6. Application is made for 3.5% resident vendor preference who is a veteran for the reason checked: Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential

Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: Michael Baker Jr., Inc. Signed: [Signature] Title: Project Principal/Asst. VP Date: June 24, 2010

*Check any combination of preference consideration(s) indicated above, which you are entitled to receive

RFQ No. SBA-10033

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: 7/6/10

State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 6th day of July, 2010

My Commission expires April 14, 2013.

AFFIX SEAL HERE

NOTARY PUBLIC [Signature]

