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Header 1

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

Procurement Folder: 1016341

Procurement Type: Central Purchase Order

Vendor ID:

Legal Name: MICHAEL BAKER INTERNATIONAL INC

Alias/DBA:

Total Bid: \$0.00

Response Date:

Response Time:

Responded By User ID:

First Name:

Last Name:

Email:

Phone:

SO Doc Code: CEOI

SO Dept: 0603

SO Doc ID: ADJ2200000010

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Close Date: 3/30/22

Close Time: 13:30

Status: Closed

Solicitation Description:

Total of Header Attachments: 1

Total of All Attachments: 1



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

State of West Virginia
Solicitation Response

Proc Folder: 1016341
Solicitation Description: Williamstown AASF#1 Taxiway & Apron Repairs EOI
Proc Type: Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2022-03-30 13:30	SR 0603 ESR03292200000005956	1

VENDOR
000000160331
MICHAEL BAKER INTERNATIONAL INC

Solicitation Number: CEOI 0603 ADJ2200000010

Total Bid: 0 **Response Date:** 2022-03-30 **Response Time:** 12:57:49

Comments:

FOR INFORMATION CONTACT THE BUYER

David H Pauline
304-558-0067
david.h.pauline@wv.gov

Vendor		
Signature X	FEIN#	DATE

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Williamstown AASF#1 Taxiway & Apron Repairs EOI				0.00

Comm Code	Manufacturer	Specification	Model #
81101508			

Commodity Line Comments:

Extended Description:

Provide professional architectural and engineering design services per the attached documentation.

WILLIAMSTOWN AASF#1 TAXIWAY AND APRON REPAIRS EOI

SOLICITATION NUMBER CE01 0603 ADJ2200000010

The State of West Virginia
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

MARCH 30, 2022

RE: Expression of Interest, Solicitation No. CE01 0603 ADJ2200000010

Dear Selection Committee:

The National Guard plays a critical role in the security, safety, and resiliency of our Nation, for West Virginia, and for overseas missions. As such, Michael Baker International, Inc. (Michael Baker) understands your mission and your need for an airfield pavement repair expert who is well trained, committed, organized, and ready to mobilize to meet your goals and objectives as swiftly and thoroughly as you respond to our country when called upon.

Executing this project requires a consultant team with extensive experience and expertise with meticulous field investigations and airfield pavement designs, specifically Portland cement concrete (PCC). A clear understanding of local site conditions is also imperative, including site geology, material availability, opportunities for material recycling and reuse, and how to address impacted underlying utilities will all be required for the success of this project, along with the preparation of accurate construction cost estimates.



As shown in the Relevant Project Experience section, Michael Baker has **diverse DoD airfield design credentials and on-site airfield experience at Mid-Ohio Regional Valley Airport** in Williamstown, WV. With offices throughout the region, we also have vast knowledge of West Virginia's local geology, materials, permitting, and purchasing requirements—all of which align well with the objectives for this project.



Specific to your taxiway and apron site, Michael Baker recognizes that any construction project can impact base operations. This includes construction traffic and security within the site, aircraft access to the apron that is constrained by a single taxiway entry point, and impacts to overall operations in and around your facilities due to pavement closures. **We understand these critical factors and regularly employ strategies to mitigate base impacts** in all of our DoD airfield design projects.



In addition to our extensive knowledge of how to conduct project level evaluations and engineering designs for pavement repairs, **our deep bench of in-house Subject Matter Experts assigned for this project are well versed with all UFGS and Unified Facilities Criteria (UFC) requirements required for this project**, including their interpretation and application during design and quality assurance testing during construction.

This team, many of them within a short drive to your facility, has worked together efficiently over the past several years, executing dozens of DoD airfield design and construction projects for all branches of the U.S. Military and National Guard, maintaining base missions across the U.S. and around the globe. We function as a cohesive unit.

Michael Baker's commitment to excellence and service to our nation's military is driven by over 230 active and retired military in-house personnel that include nearly 50 Air/Army National Guard members. This culture of service resonates among the entire DoD airfield design team, who are committed to every client, every airfield project we perform, and the communities that we serve.

This Expression of Interest describes our relevant experience in the evaluation of PCC pavement distresses and design of airfield pavement repairs, which includes reconstruction of full depth PCC pavement, underlying layers, and subgrade. This experience includes our professional project qualifications, which detail our past performance and show how project goals were met, the qualifications of our team assigned to this project, and our proposed staffing plan.

Our experienced team stands ready to deliver effective, innovative, and efficient design and construction services, and we respectfully appreciate your consideration for this project.

Sincerely,

MICHAEL BAKER INTERNATIONAL, INC.

Matthew C. Ponce | Associate Vice President
412-607-1662 | matthew.ponce@mbakerintl.com

SECTION I: QUALIFICATIONS, EXPERIENCE, AND PAST PERFORMANCE

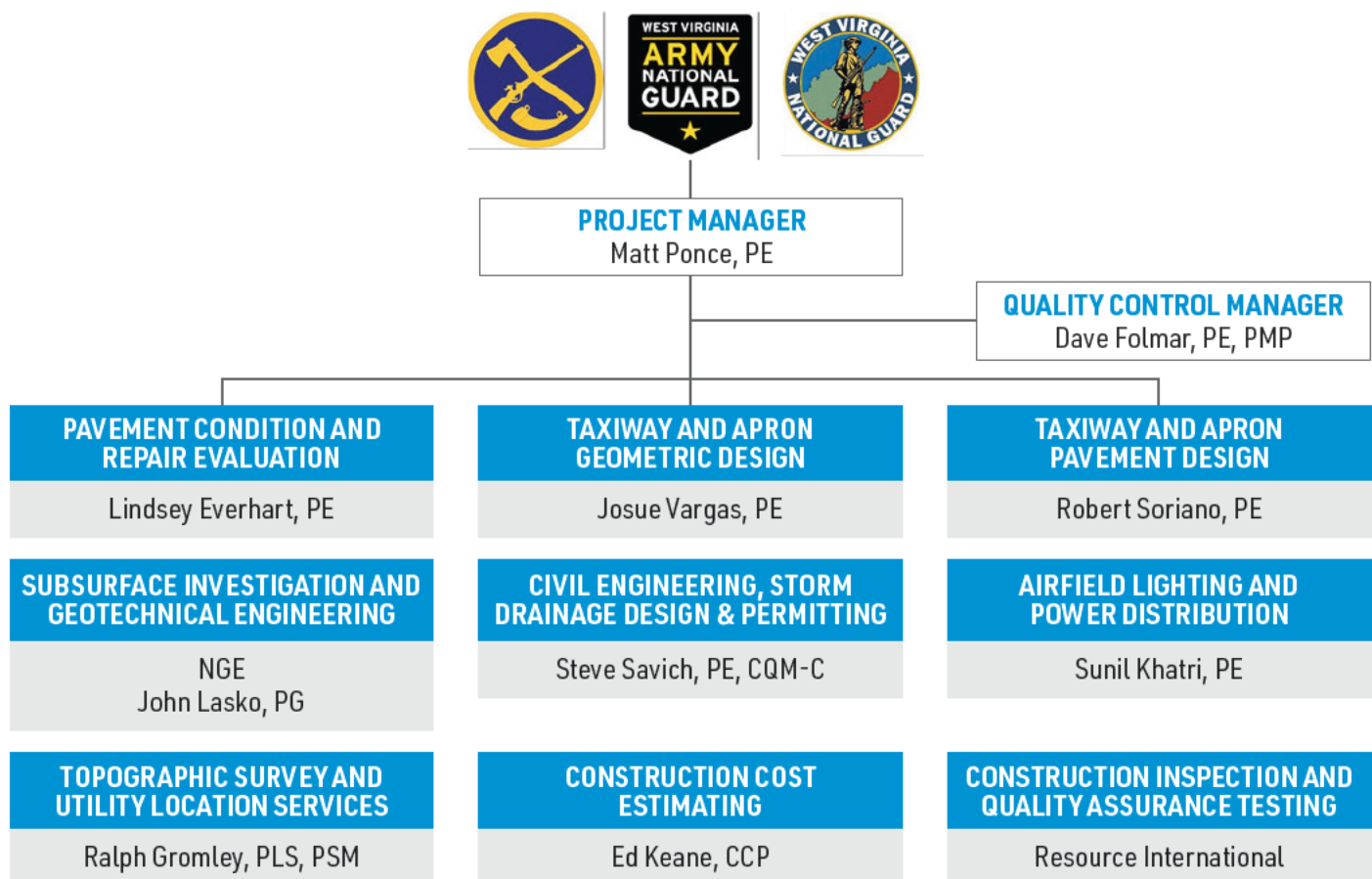
Michael Baker will staff this project with an experienced, focused, and responsive airfield design team supported by equally qualified civil/utility infrastructure design professionals. Each team member's breadth and depth of unique airfield pavement and land development design experiences and lessons learned will be brought to bear to provide an exceptional design that provides you with an optimal, cost effective, sustainable, and resilient design, that will be bid on time and within budget.

Our teaming plan not only provides you with all the licensed engineering professionals to execute, but also a staff who has a well-developed chemistry, communicates well, and regularly works together to ensure smooth project delivery. This team has prepared 100 percent issued for construction documents and/or has performed construction services on similar PCC airfield pavement repair projects described herein that directly align with this project's scope and scale. The roles identified in the proposed teaming plan set up each person and discipline for success.

KEY STAFF

The key to the success of this repair project is through accurate data collection and effective communication among the design team and stakeholders to achieve the right design solution that is cost-effective, resilient, and sustainable, all while preparing a construction plan that best maintains the WVARNG mission. This philosophy starts with your singular point of contact and our Project Manager, Matt Ponce and extends throughout our Michael Baker key team members.

Each staff member has successfully delivered projects in the roles they are assigned and have a wealth of experience with applicable UFCs for DoD airfield design projects, including quality management, geotechnical investigations and design, civil engineering, airfield geometry and pavement design, electrical lighting infrastructure, cost estimating, scheduling, environmental compliance, and sustainability. The team is presented in the staffing plan below and detailed in the bios that follow.



PERSONNEL BIOS



Matt Ponce, PE
PROJECT MANAGER

Professional Engineer: PA, 2004, [REDACTED]; NY, 2019 [REDACTED]; WV PE pending

Matt's 25-year engineering career has been dedicated to the development of comprehensive multi-discipline airfield design projects at military installations and civilian airports. His global airfield-related design experience includes serving in leadership roles on a diverse array of mission-critical projects that are rooted in civil engineering for the repair and reconstruction of apron, taxiway, and runway pavements. From design kick-off through construction, Matt is collaborative, transparent, and understands the importance of clear client communication while preserving the schedule along with good working relationships among stakeholders, the design team, and contractors. He has led teams in field inspections, pavement assessments, civil design, and construction services. Matt's recent projects have included Nationwide Pavement Management program for the U.S. Coast Guard; Runway 02-20 Pavement Repairs at Marine Corps Air Station (MCAS), Quantico, VA; and Taxiway D Repairs at Marine Corps Air Station, Quantico, VA.



Dave Folmar, PE, PMP
QUALITY CONTROL MANAGER

Professional Engineer: PA, 1983, [REDACTED]; Project Management Professional: 2004, [REDACTED]

Dave has 45 years of experience performing as a design quality control manager for DoD clients, delivering airfield pavement planning, design, and construction administration for projects at a wide range of military installations and civilian airports, including Design of Airfield Apron, Abdullah Al-Mubarak Airbase, Kuwait; Runway 02-20 Repairs, Marine Corps Air Station, Quantico, VA; Apron and Taxiway Repair at MCAS Miramar; and Runway 3-21 Pavement Repairs at Parkersburg, WV.



Lindsey Everhart, PE
PAVEMENT CONDITION AND REPAIR EVALUATION

Professional Engineer: WV, 2020, [REDACTED]; PA, 2020, [REDACTED]

Lindsey brings seven years of expertise in airfield pavement condition assessments and reporting, project level repair inspections, and airfield design at military and civilian airfields. These pavement condition and repair assessments have been an integral part of the pavement evaluation at U.S. Coast Guard (USCG) air stations, U.S. Air Force (USAF) bases, and locally at Pittsburgh International Airport. Lindsey's airfield design includes pavement repair projects at Marine Corps Association & Foundation Quantico, Piedmont Triad International Airport, Westchester County Airport, and Mid-Ohio Valley Regional Airport. Projects include a new design of an aircraft parking ramp at Al Mubarak Airbase, Kuwait; taxiway rehabilitation projects at various locations; and the design of a deicing pad facility. Lindsey currently serves on the technical panel for the National Concrete Pavement Technology Center, the FAA, and American Concrete Pavement Association for research on performance engineered pavement mix designs.



Josue Vargas, PE
TAXIWAY AND APRON GEOMETRIC DESIGN

Professional Engineer: MS, 2012, [REDACTED]; TX, 2013, [REDACTED]

Josue has 15 years of experience performing airfield geometry and pavement engineering design for DoD clients, and has performed PCI inspections, PCASE pavement designs, and delivered design documents for runways, taxiways, and aprons. Additionally, his on-site airfield construction inspection and concrete/asphalt pavement installation lessons learned during construction allows for comprehensive planning and design. His recent relevant experience includes Repair/Replace Taxiway G/G1 at Joint Base San Antonio-Randolph; Repair Runway 06/24 at Joint Base McGuire-Dix-Lakehurst; and Repair Runway 01/19 at McConnell AFB, Wichita, KS.

PERSONNEL BIOS (CONTINUED)



Robert Soriano, PE
TAXIWAY AND APRON PAVEMENT DESIGN
Professional Engineer: CA, 2010, [REDACTED]

Robert is a Senior Airfield/Airport Civil Engineer with over 25 years of experience in the design and construction of DoD military airfields worldwide, including aircraft parking aprons, taxiways, runways, dangerous cargo aprons, and weapons loading areas. He specializes in complex airfield pavement designs and subgrade stabilization techniques to mitigate poor soil conditions. Robert develops pavement sections using materials that are cost effective and specific to the geography where each project is located. His designs are equally focused on UFC compliance and contractor constructability. His aviation experience and passion has allowed him to successfully lead airfield facility repairs and improvement projects, incorporating sound engineering practices while delivering exceptional workmanship and a quality end product. Recent projects include Taxiways H, L, and Q Repairs at MCAS Miramar, CA and Naval Air Weapons Station China Lake Combat Aircraft Loading Apron, China Lake, CA, along with airfield projects nationwide including in West Virginia.



John Lasko, PG
SUBSURFACE INVESTIGATION AND GEOTECHNICAL ENGINEERING
Professional Geologist: PA, 1995, [REDACTED]

John is Michael Baker's senior geologist with 35 years of expertise encompassing a variety of geotechnical projects including site investigation, test boring layout, drilling inspection, geotechnical interpretation of subsurface geology, construction inspection, and related project field work. John has extensive experience and expertise with West Virginia's geology involving subgrade, large embankments, rock toes, coal mining, construction coal, acid mine drainage, and slope stability. John has a holistic approach to geology and geotechnical engineering, and recognizes the importance of material sourcing and associated costs. He is working on or has completed a number of projects in West Virginia and the region including the Extension of Runway 36 at Morgantown Municipal Airport, WV; Statewide Corridor H Roadway with the WVDOT; I-79 Upgrades with the WVDOT; and On-Call geotechnical services at Pittsburgh International Airport.



Steve Savich, PE, CQM-C
CIVIL ENGINEERING, STORM DRAINAGE DESIGN, AND PERMITTING
Professional Engineer: PA, 2005, [REDACTED]; Construction Quality Management Certification, 2020, [REDACTED]

Steve has 26 years of experience in civil engineering and land development projects. Over the course of his career, he has managed and designed civil works projects ranging from simple site designs to large complex projects in support of military facilities including airfields, hangars, roadways, campus dorms, training facilities, small arms ranges, combat qualification courses, entry control facilities, and high security fencing. He has led civil land development projects for the design of stormwater collection networks, drainage studies, sewer collection and conveyance, and flood abatement designs. Steve is regularly involved in project planning, procurement, design, management, and construction document preparation and construction administration services. His most recent DoD airfield and land development design experience includes \$400M of construction for the Hurricane Florence Recovery MILCON Package 7 project at MCAS New River, Jacksonville, NC.



Sunil Khatri, PE
AIRFIELD LIGHTING AND POWER DISTRIBUTION
Professional Engineer: OH, 2020, [REDACTED]

With over 36 years of electrical engineering experience, Sunil has been involved with the design and planning of a variety of horizontal and vertical airfield-related projects. Horizontal projects have included Federal, commercial, and general aviation facilities. Sunil has designed runway, taxiway, and apron centerline and edge lighting systems for fixed wing and rotary wing aircraft for domestic and international military airports. Projects included new and renovation work, vault improvements, airfield signage, PAPI, REILS, BAK, and approach and area lighting systems. Renovation projects have included field survey to determine existing conditions and phasing plans to minimize disruption to operations. Sunil's recent airfield experience includes DoD electrical lighting system and power distribution designs for the WV Air National Guard at Martinsburg, WV; Runway and Taxiway Repair projects at MCAF Quantico, Quantico VA; and multiple air bases in support of the F-16 beddown design services for the Royal Bahraini Air Force in Bahrain.

PERSONNEL BIOS (CONTINUED)



Ed Keane, CCP
CONSTRUCTION COST ESTIMATING
Certified Cost Professional: MD; 2011; [REDACTED]

Ed has over 37 years of experience in providing cost estimating, value engineering, price verification, and change order consulting. He is responsible for the preparation of cost estimates, in various stages of design, from pre-concept to working drawings, and participates in value engineering studies. His construction projects include government, institutional, commercial, and residential facilities. Ed is a member of AACE International where he is recognized as a Certified Cost Professional. He holds an active Top Secret security clearance. Ed's recent construction cost estimating experience includes various projects at Kadena Air Base in Okinawa, Japan (including the repair of Runway 05L-23R); Marine Corps Base at Camp Pendleton, CA; and Naval Station Newport in Newport, RI.



Ralph Gromley, PLS, PSM
TOPOGRAPHIC SURVEY AND UTILITY LOCATION SERVICES
Professional Land Surveyor: PA, 2011; [REDACTED]; *Professional Surveyor and Mapper: FL, 2007;* [REDACTED]

Ralph is an Air Force Veteran and has over 38 years of national and international experience, including topographical, bathymetric, boundary, PNC LiDAR Scanning, ALTA/ACSM, and 3D surveying for Federal, state, and municipal clients. Licensed in multiple states, he has supervised survey crews and worked on numerous aviation, land development, transportation, and oil and gas projects. His expertise includes boundary retracement, construction services, and knowledge of surveying laws. He is proficient with a range of surveying software packages and instruments, including AGIS, Trimble, Carlson Software, and Leica products. His relevant experience includes Runway 02-20 Repairs, Marine Corps Air Facility Quantico, VA; Architectural/Engineering Indefinite Delivery Indefinite Quantity Contract (IDIQ), Rickenbacker Air National Guard Base, Columbus, OH; and the Rehabilitation of Runway 13-31, Harrisburg International Airport (MDT), Middletown, PA.



Subconsultant: NGE
GEOTECHNICAL INVESTIGATION

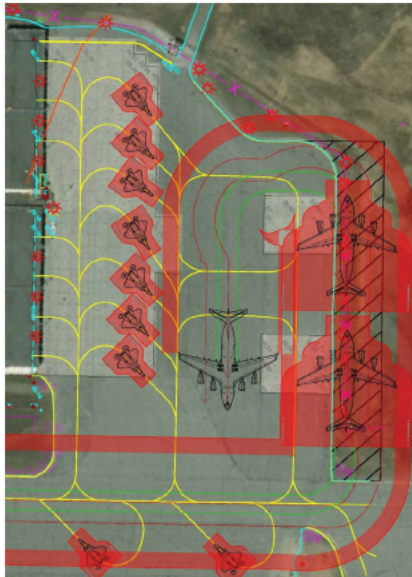
NGE is a recognized expert in the geotechnical engineering field and has extensive geotechnical field investigation experience in West Virginia. NGE's geotechnical practice combines senior geotechnical engineers with in-house drill rigs and drilling staff to streamline geotechnical designs and the NGE team is experienced in characterizing subsurface conditions. NGE's geotechnical drilling and exploration services possess all the equipment and personnel to handle and quickly mobilize to investigate almost any geotechnical drilling project. Michael Baker partnered with NGE for pavement coring, soil boring, and investigation services at Mid-Ohio Regional Valley Airport for the rehabilitation of Runway 3-21.



Subconsultant: RESOURCE INTERNATIONAL (Rii)
CONSTRUCTION INSPECTION AND QUALITY ASSURANCE TESTING

Resource International (Rii) has taken on airfield projects since the 1980s, gaining extensive expertise in the design and construction of apron, taxiway, and runway pavements. Rii has a niche in the aviation sector with nearly 40 airport clients and as worked extensively with Federal Aviation Administration (FAA) pertaining to pavement management, pavement evaluation and design, and construction quality control and quality assurance procedures. Rii has provided construction administration, supervision, inspection and materials testing services on numerous airfield projects including construction management, inspection, and quality assurance testing services. Michael Baker partnered with Rii at Mid-Ohio Regional Valley Airport in 2020 for the rehabilitation of Runway 3-21 and again in 2021 for airfield lighting and power distribution upgrades.

RELEVANT PROJECT EXPERIENCE



Repair Apron and Taxiway Pavements

King Salmon Air Force Station, King Salmon, AK

Completed: Design 2021; Construction est. 2023

CPARS Rating: Very Good/Satisfactory

Client: AFCEC

Value: \$945K Fee/\$30M Construction Cost

Contact: Wade Burkett, Project Manager | 512-740-6337 | wade.burket.2@us.af.mil

Michael Baker delivered 100% construction documents for the repair of 57,000 SF of pavements serving the front Divert Hangar, which included evaluation of pavement and subgrade, development of new PCC pavement sections, and aircraft pavement markings and tie-downs to accommodate F-22 Raptor fighter aircraft and heavy aircraft (C-17 Globemaster). The modernized apron required full-depth pavement demolition and replacement with new PCC pavement sections and associated drainage and electrical utility infrastructure, including a new perimeter drainage swale, stormwater culvert, airfield lighting, and fire protection utilities. This innovative design effectively integrated UFC 3-260-01, 3-260-02, UFC 3-270-01, and UFC 3-535-01 criteria. In advance of design, The Michael Baker team performed site surveys, geotechnical investigation, and facilitated a two-day design charrette to program the project's scope. Throughout the design process, regular attention was given to construction logistics, scheduling, and cost estimates due to the remote environment.



Repair Taxiways H, L, and Q

Marine Corps Air Station (MCAS) Miramar, San Diego, CA

Completed: Design 2021; Construction 2022

CPARS Rating: Exceptional/Very Good/Satisfactory

Client: NAVFAC Southwest

Value: \$992K Fee/\$13.2M Construction Cost

Contact: Deanna Chico, NAVFAC Design Manager | 805-212-0302 | deanna.g.chico.civ@us.navy.mil

Michael Baker provided comprehensive engineering and design services for the repair of taxiways H, L, and Q. Originally constructed in 1953, all taxiways were in substandard condition and planned for continued use. Work was performed in compliance with all applicable UFCs and NAVAIR standards. Additional services included performing a visual pavement condition survey and a topographic survey of the taxiways and associated intersections and tie-in points; a detailed construction cost estimate for each taxiway using MII and PACES; DD Form 1354 preparation; development of a subsurface and geotechnical investigation and evaluation report, erosion control plan, construction debris/fod mitigation plan, haul route plan, and a closure plan; add assistance in preparing all required environmental and construction permits.



Repair Taxiway Delta

Marine Corps Air Facility Quantico, Marine Corps Base Quantico, VA

Completed: Design 2022; Construction est. 2023

CPARS Rating: Pending

Client: NAVFAC Mid-Atlantic

Value: \$246K Fee/\$11.8M Construction Cost (est.)

Contacts: Scott Kosco, Project Manager | scott.kosco@usmc.mil

Michael L. St. John, MCAF Quantico Airfield Manager | 703-784-1449 | michael.l.stjohn@usmc.mil

Michael Baker is providing engineering services for the reconstruction of 900-foot-long-by-205-foot-wide Taxiway Delta. Home to the POTUS Marine Helicopter Squadron One (HMX-1), the taxiway primarily serves as an apron to park C-17s and to conduct training exercises for rotary wing aircraft. The existing taxiway is over 60 years old and is beyond repair, requiring full-depth demolition and reconstruction, including a new full depth PCC pavement section with 35-foot asphalt paved shoulders on both sides. The team is also designing new taxiway edge lights and circuit and apron flood lighting to illuminate C-17 aircraft when parked. The project included geotechnical exploration, topographical survey and subsurface utility investigation, off-pavement grading and drainage improvements, and coordination of construction phasing with base operations, development of pavement design alternatives, construction drawings, material specifications, and construction cost estimates. Construction administration services are also included upon contractor bid and NTP.



RELEVANT PROJECT EXPERIENCE (CONTINUED)



Naval Air Weapons Station China Lake Combat Aircraft Loading Apron (CALA)

China Lake, CA

Completed: Design 2021; Construction est. 2022 **CPARS Rating:** Pending

Client: NAVFAC Southwest

Value: \$1.3M Fee/\$29.3M Construction Cost

Contact: DM Ener Austria | 619-705-4536 | ener.g.austria.cil@us.navy.mil

The project consists of the construction of approximately 58,000 SY of new aircraft apron and taxiway that is used as an aircraft ordnance loading/unloading apron at NAWS China Lake. The CALA pavement improvements required the installation of new aircraft rated PCC pavement with asphalt shoulders, airfield pavement edge lighting, and a lighted vehicle parking area. The airfield edge lighting was connected onto the existing Taxiway Alpha edging lighting circuit, which required the circuit control regulator to be upgraded to accommodate the additional voltage demand. A stormwater management system capable of managing common desert flash flood events was designed to reroute existing open channels running through the project limits and accommodate the additional flows generated by the impervious surfaces. Furthermore, the area is known to have seasonal high groundwater and provisions to address the potential pumping of the subgrade during construction were addressed in the technical specifications and pavement section recommendations.



West Virginia Air National Guard Landing Zone Lighting

Eastern West Virginia Regional Airport (MRB), Martinsburg, WV

Completed: Design 2021; Construction est. 2022 **CPARS Rating:** N/A

Client: West Virginia Air National Guard, 167th Airlift Wing **Value:** \$37K Fee/Construction Cost N/A

Contact: Major Emerson C. Slack | 304-616-5233

Michael Baker designed lighting and associated electrical infrastructure in accordance with the AMP-3 LZ lighting plan per UFC 3-260-1, *Airfield and Heliport Planning and Design*, along with a simulated short runway "box" with in-pavement lights to allow the WVANG to practice nighttime combat landing/takeoff operations. Overall, Michael Baker prepared electrical load calculations to determine the capacity of the new Constant Current Regulators; developed a construction phasing plan that minimizes the impact to daily aircraft operations during construction; prepared specifications in accordance with applicable FAA Advisory Circulars and UFC guidance; and provided a detailed Engineer's Report, including cost estimate. Michael Baker is currently providing construction inspection oversight for the project.



Hurricane Florence Recovery MILCON Package 7, P378 CH-53K Maintenance Hangar and Associated Infrastructure

MCAS New River, Jacksonville, NC

Completed: Design/Build 2021-2023 (est)

CPARS Rating: PPQ Pending

Client: NAVFAC Atlantic

Value: \$7.1M Fee/Construction Cost N/A

Contact: Derrick Fettes | 910-939-9850

Michael Baker provided comprehensive A-E services for substantial PCC apron infrastructure and utilities for a new nine-bay Type II Aircraft Maintenance Hangar supporting CH-53K operations. Apron infrastructure included demolition of existing pavement, associated infrastructure, and installation of new PCC and asphalt pavement sections. The project required the integration of the new hangar with existing apron infrastructure and a new 74,000 SF PCC apron to accommodate 12 new rotary wing aircraft parking positions. The new apron pavement section was located within a large pavement in-fill area, where a new apron was created to accommodate the new parking positions that increased parking capacity and improved circulation throughout the facility. Existing apron edge lights were relocated and consolidated to the east edge of the adjacent taxiway to provide wayfinding during night operations. The project included a full topographic survey, site evaluation, mapping of underlying utilities, and geotechnical investigation.



SECTION 2: GOALS AND OBJECTIVES: ANTICIPATED CONCEPTS AND METHODS OF APPROACH

Michael Baker understands that the anticipated construction goal for this project is to rehabilitate and/or replace approximately 30,000 SY of taxiway and apron pavement either full-depth, partial slab, or through concrete surface repairs (repairs to joints, cracks, and spalls). Limits and scope of work will be coordinated directly with WVARNG.

PROJECT DEFINITION

To determine locations and extents of full-depth PCC replacement versus PCC that can be salvaged and repaired, a project level pavement evaluation will be performed. Existing geotechnical information, if available, along with geotechnical exploration proposed for this project, will be used to develop a full-depth pavement design section that suits WVARNG mission aircraft. The project will be designed in accordance with UFC 3-260-02, *Pavement Design for Airfields* and all applicable UFCs and local requirements.

At the project kick-off, Michael Baker will coordinate with WVARNG on goal specifics, including project limits, project phasing, and overall breadth of pavement reconstruction and repairs, including affected utilities, such as storm water structures and piping, airfield electrical lighting, and ancillary underlying utilities that will be subject to a utility location survey. The kick-off will also include discussion and development of a project schedule that best suits WVARNG's goals for execution, including contractor procurement, bidding, and anticipated construction season. The goal is to work backwards from a desired project completion date to commencement of field investigation to develop milestone schedules throughout design and into construction award.

FIELD INVESTIGATION MOBILIZATION

Once the project limits are generally set, Michael Baker will mobilize our team to perform:

- a topographical survey of the site
- utility location services to map underlying utilities that may be affected
- a project level pavement condition survey to evaluate existing PCC pavement distresses and failures
- a subsurface geotechnical exploration of soil conditions and coring the pavement to determine existing pavement composition

The survey and mapping that are created will be integrated into a singular CAD base file that the design team will use in the development of the site's horizontal and vertical geometry and evaluation of utility networks and potential effects of construction on them. Upon completion of the project level pavement evaluation, a preliminary report will be provided to WVARNG that provides an overview of the findings and recommendations based on visual observation of existing cracks, pavement faults, spalls, shattered slabs,



and joint seal failure. After completion of the subsurface geotechnical exploration and pavement cores, a report will be generated that summarizes the existing site conditions for the pavement design team to evaluate for the preliminary design development. Using this information, along with data acquired through the visual inspection of the pavement distresses, and projected aircraft operations, the pavement design team will develop a recommendation for repairs versus replacement and/or a combination thereof.

ROM CONSTRUCTION COST ESTIMATE

One of the most significant aspects of this evaluation will be the development of a preliminary construction cost estimate that will provide WVARNG with a rough order of magnitude (ROM) estimate of probable construction costs. This will allow WVARNG and the design team to determine how the estimate aligns with the budget programmed for this project at an early stage and will be instrumental in developing the project goals, expectations, and construction scope moving forward.

PERMITTING

In the early stages of the project, Michael Baker will evaluate and follow the WV/NPDES Storm Water Program requirements as administered by the West Virginia Department of Environmental Protection (WVDEP), which requires operators of construction sites that disturb one acre or greater, including smaller sites that are part of a larger common plan of development, to obtain authorization to discharge stormwater under a WV/NPDES Construction Stormwater General Permit.

As the project is more defined and limits and impacts are refined, Michael Baker will prepare the permit application for coverage under said general permit and submit on behalf of the WVARNG through the WVDEP Electronic Submittal System. The schedules for permitting will be

worked into the overall project schedule so that milestones are achieved, including opportunities for meeting with appropriate authorities, as well as delivery, review periods, and comment resolution. When the construction activities are completed and all disturbed areas are stabilized, Michael Baker will prepare a Notice of Termination to end coverage under the permit.

DESIGN COORDINATION, PROGRESS, AND MILESTONE DELIVERABLES

Upon determining the full project scope, formal Submittals for client review will be provided at 35 percent schematic design, 65 percent Design Development, 95 percent Preliminary Construction Documents and 100 percent "Bid Ready" Construction Documents, including any preliminary or interim deliverables as determined to be advantageous in the progression of the project, as directed by the WVARNG. For each of the design submittal, a separate estimate of probable construction costs will be provided for review and in order to keep the project within budget.

With each deliverable (35-65-95 percent submittals), Michael Baker welcomes a comment review period for WVARNG to evaluate the contents of the construction plans, details, and specifications. Upon review of each submission and delivery of comments to Michael Baker, we will review and address each comment line for line. Starting with the 35 percent design, Michael Baker will host a comment review meeting to afford all parties to formally discuss the proposed responses and/or to engage in additional discussion to clarify comments and options to resolve that stem from the comments.

Upon conclusion of the comment review period and comment review meeting, Michael Baker will formally transmit comment responses and resolutions and engage in the development of the 65 percent design phase.

Upon approval of the 65 percent Design Development submittal and resolution of comments, Michael Baker will begin to finalize the Construction Documents as part of the 95 percent "Preliminary" design phase. The goals of the 95 percent Preliminary deliverable is to achieve 100 percent completion. At this phase, it is only expected that minor comments will be required to be resolved, but essentially, this deliverable set will be of sufficient detail to bid and construct all elements of the work.

The 100 percent deliverable will include a complete set of signed, sealed, and biddable construction drawings and specifications. The construction drawings will also be accompanied by all the "front end" general and special contracting provisions as required by the State of West Virginia. This 100 percent package will be delivered and advertised for procurement per State of West Virginia requirements.

CONSTRUCTION SEQUENCING AND SAFETY PHASING

With the assumption that the taxiway/apron will need to remain operational in some form, as part of the 65 percent

design, preliminary construction phasing plans will be developed. Depending on required operations and their critical nature, the development of the project's phasing and sequencing necessitate the specification of shift work and/or high strength PCC mix/repair designs and/or early set concrete materials. The project phasing plan provided will include the preservation and protection of existing elements and identify construction haul routes and the safe and secure separation of contractors and base operations. A comprehensive phasing plan will help ensure that disruptions to operations and personnel working at the facility and on the flight line are mitigated. The phasing plan will show the limitations and requirements for the demolition and removal of the existing apron and taxiway, including locations of potentially affected utilities and how to maintain and mitigate impacts to utility service during construction.

CONSTRUCTION SERVICES

Once the construction contract is awarded, Michael Baker will support WVARNG for the duration of construction. This support will be through (1) construction inspection oversight, (2) on-site Quality Assurance and laboratory testing, and (3) review and approval of contractor submittals and responding to contractor RFIs.

Michael Baker will provide a full time inspector to oversee construction and this inspector will serve as the Point of Contact during construction and bridge between WVARNG, the design team, and the contractor. The inspector will be responsible for ensuring the progression of construction, communicating field activities, and hosting regular progress meetings as the construction progresses.

On-site QA testing will be coordinated with respect to the UFC specification requirements coinciding with the contractor deliveries and material/equipment installations. QA testing shall be under the direction of the site inspector.

Michael Baker will review and approve shop drawings, material certifications, and all construction submittals provided by the Contractor to ensure that they meet all UFC specifications and applicable code requirements and drawing details, and are appropriate for the project. The design team members that prepared the project documentation will be the same team providing reviews and approvals. This same team will also address construction RFIs and will be made available to provide on-site inspections during construction to resolve unforeseen conditions. With the majority of our design team within the region and close to the project site, this allows for quick turn resolutions to maintain contractor progress. We will also provide review for progress payment applications, work directive changes, and change order requests.

At Substantial Completion of the construction, Michael Baker will perform a final inspection and develop a corrective measure "punch list." Once all outstanding items have been addressed to the satisfaction of Michael Baker, WVARNG, and the Division of State Purchasing, Michael Baker will recommend release of the contract retainage and certify the beginning of the warranty period.

SECTION 3: PROPOSED PROJECT MANAGEMENT, QUALITY & COST CONTROL PLANS

PROJECT MANAGEMENT APPROACH

Michael Baker incorporates seamless processes for managing and delivering projects of consistent high quality and successful outcomes through meticulous execution and oversight, ongoing client communication, and full implementation of quality controls.

PROJECT MANAGEMENT PLAN

Michael Baker employs a standardized project management procedure for all projects that starts with the preparation of a Project Management Plan (PMP). The purpose of the PMP is to outline processes for communication, document control, file sharing technologies, and to identify key team members and their roles within the outlined framework. The PMP also outlines the agreed to scope of services along with any QC measures to be carried out for the life of the project. The PMP is intended to be a living document that is periodically updated by the Project Manager and Quality Control Manager to reflect contractual changes, scope items, updates to QC policy and procedures, and staff responsibility. Overall, the PMP is the project team's guide to successfully accomplish the work and enables all members in our organization and project team to know where to find information and to quickly access it and every team member is responsible for the adherence to the schedule, quality, and document control it contains.

PROJECT SPECIFIC QUALITY MANAGEMENT PLAN

While the framework of the PMP is standardized generally within Michael Baker, we understand that each project and client require specific approaches to project management. With that, every PMP is refined and tailored to each project and to each client, based on the team assigned, scope of work, and client preferences. The unique criteria specific to each client is why Michael Baker prepares its own Project Specific Quality Management Plan (PSQMP) at the beginning of every project. The graphic on the following page demonstrates our plan's general approach and assigned responsibility.

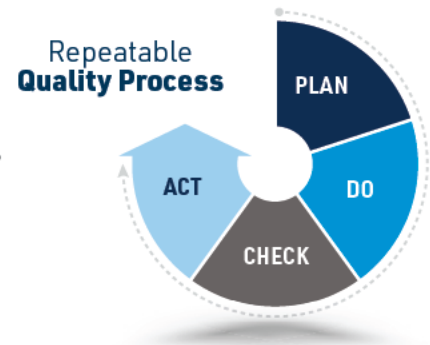
As Quality Control Manager, Dave Folmar will review and approve the PMP and PSQMP for the project prior to execution and inception.

QUALITY CONTROL & QUALITY ASSURANCE

Quality begins with open communication, expansive collaboration, and detail-oriented coordination. Quality Control Manager Dave Folmar will work closely with Project Manager Matt Ponce to implement and oversee quality control review plans, guaranteeing exceptional work that exceeds your expectations. We have extensive experience

in providing peer reviews and cross discipline coordination within our internal designs as part of our QA/QC process.

In our process, the most important steps are the "Plan" and "Do" phases. This is where Quality Assurance work happens and where the quality process has the greatest impact on project success.



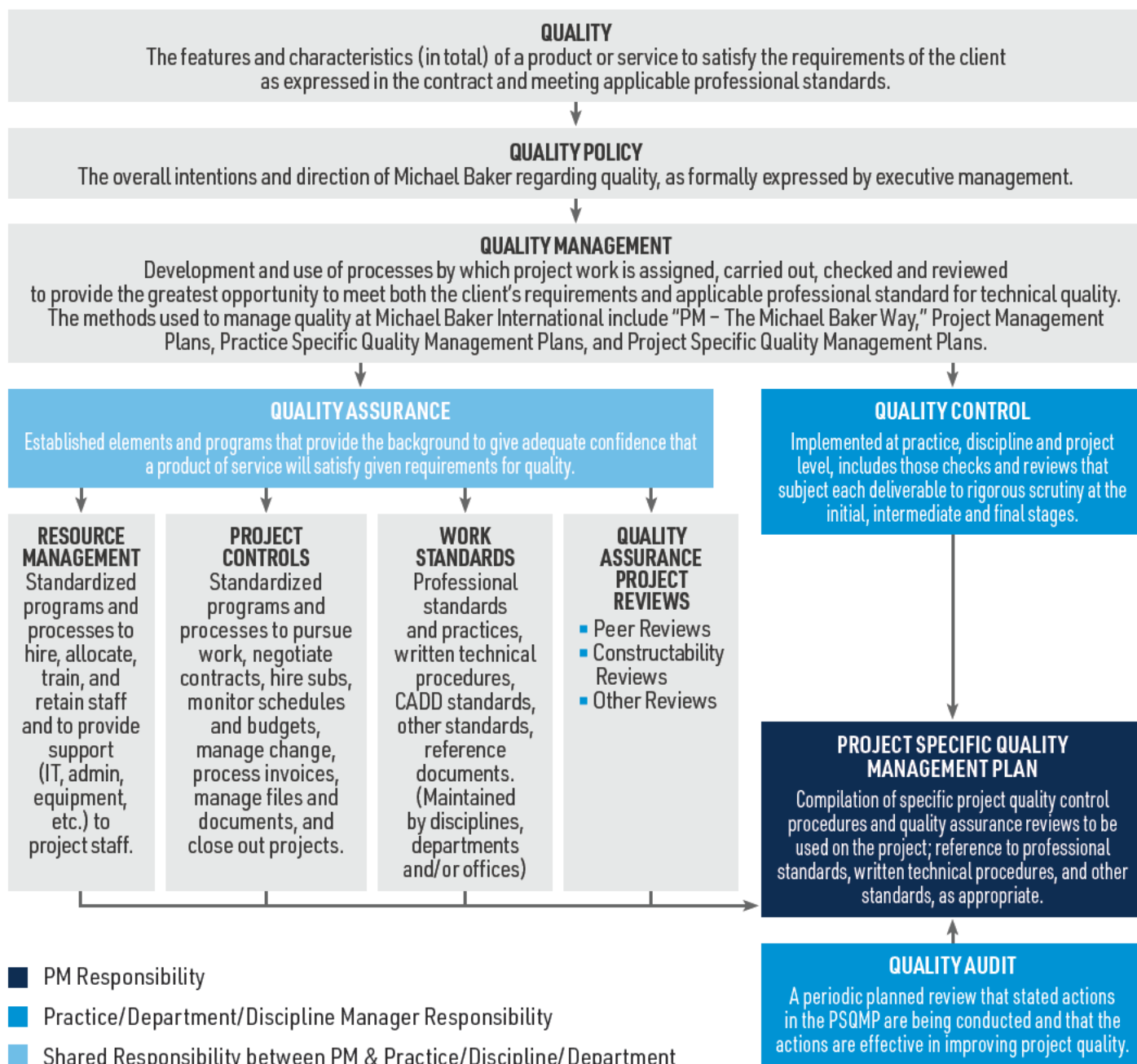
Our team understands the importance of the design decision-making process and a well prepared Design Analysis. As part of the designer's "Plan" phase, their task is to document in the Design Analysis how the solutions presented in the submission meet the project requirements as well as other client inputs received during the design process, or the "Do" phase. These inputs include field investigation meetings, RFIs, design reviews, and other information sources.

However, "Plan" and "Do" process would not be complete without the "Check" and "Act" steps.

During the "Check" phase, we have Independent Technical Reviewers perform an ITR to validate the design team's deliverable, prior to delivery. The PSQMP provides the ITR team a set of tools to evaluate the deliverables that includes an outline of the standards, review checklists for each discipline and for each phase of project development, and a quality management sign off form that is completed for each review. The last step is the "Act" phase, where the design team confirms and implements any required changes that are back-checked, which effectively close the comments. At that point, all parties (Designer, Reviewer, Task Leads, and PM) sign off formally, which signifies documents are ready to be delivered.

QUALITY ASSURANCE PROJECT REVIEWS

Periodic Quality Assurance reviews consist of peer reviews, presentation reviews, cross discipline reviews, constructability reviews, and other reviews that are performed throughout the project covering calculations, drawings, specifications, and all other project deliverables. The review team is responsible for informing the project manager and other project staff of deficiencies identified and providing documentation to describe those deficiencies. Project Manager Matt Ponce will verify that the review findings are addressed and changes appropriately documented.



COST CONTROL

Our team's proven cost control measures have been successfully used as the foundation for cost conscience delivery on many of our DoD contracts. Michael Baker knows that by balancing our clients' budget, schedule, and programming demands, we help them find sustainable construction solutions that best meet their needs. We save our clients' money and reduce their risk. We help our clients identify, control, and avoid costs totaling billions of dollars annually, and we employ full-time personnel who provide cost engineering services for projects worldwide.

With respect to cost estimating, accurate cost estimates are the foundation of effective cost management. Our

nationally certified cost estimators routinely develop independent estimates for ROM, parametric, conceptual, schematic, design development, and construction document submissions. We utilize a variety of programs including Excel, TIMBERLINE, CostWorks, PACES, MII, and SUCCESS to generate cost estimates that are consistently within four percent of project bids.

Furthermore, our regional experience that includes current and recent projects in West Virginia allow us to have the best pulse on contractor capacity, resources, and competing projects that are instrumental in preparing documents for bid.

EXCEPTIONS & CLARIFICATIONS

Michael Baker acknowledges that the Solicitation contains the specifications that shall form the basis of a contractual agreement, and offers no exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation.

ADDENDUM ACKNOWLEDGEMENT

Michael Baker acknowledges that no addendum were issued by the Purchasing Division.



- **EXPERIENCE.** *Our team will leverage our diverse on-site experience and DoD airfield and pavement design credentials to ensure this project is executed correctly and efficiently within the programmed construction budget.*
- **LOCAL KNOWLEDGE.** *Through our extensive design, permitting, and construction experience at Mid-Ohio Regional Valley Airport and on projects throughout West Virginia, we recognize critical factors and know how to develop strategies to maintain your schedule.*
- **DEEP BENCH OF EXPERTS.** *Our team consists of Subject Matter Experts that are well versed in all UFGS and UFC airfield, civil, and electrical engineering requirements for this project. You can rely on our team to execute comprehensive field investigations, deliver a high-quality engineering design, and to perform construction services that ensure compliant and resilient installations that will last for years to come.*



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

State of West Virginia
Centralized Expression of Interest

Proc Folder: 1016341			Reason for Modification:
Doc Description: Williamstown AASF#1 Taxiway & Apron Repairs EOI			
Proc Type: Central Purchase Order			
Date Issued	Solicitation Closes	Solicitation No	Version
2022-03-11	2022-03-30 13:30	CEOI 0603 ADJ2200000010	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code: 000000160331
Vendor Name : Michael Baker International, Inc.
Address : 100
Street : Airside Drive
City : Moon Township
State : Pennsylvania **Country :** United States **Zip :** 15108
Principal Contact : Matthew Ponce, PE
Vendor Contact Phone: 412-375-3832 **Extension:**

FOR INFORMATION CONTACT THE BUYER

David H Pauline
304-558-0067
david.h.pauline@wv.gov

Vendor
Signature X

FEIN# 25-1228638

DATE 3/30/2022

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

The West Virginia Purchasing Division, for the agency, the West Virginia Army National Guard, Construction and Facilities Management Office, is soliciting Expressions of Interest from qualified firms to provide professional architectural and engineering design services to develop construction documents to provide concrete apron & taxiway repairs at the Williamstown AASF#1 flight facility in Williamstown, WV, per the attached documentation.

INVOICE TO		SHIP TO	
ADJUTANT GENERALS OFFICE 1707 COONSKIN DR		WILLIAMSTOWN AASF1 387 AVIATION DR	
CHARLESTON	WV 25311	WILLIAMSTOWN	WV 26187
US		US	

Line	Comm Ln Desc	Qty	Unit Issue
1	Williamstown AASF#1 Taxiway & Apron Repairs EOI		

Comm Code	Manufacturer	Specification	Model #
81101508			

Extended Description:

Provide professional architectural and engineering design services per the attached documentation.

SCHEDULE OF EVENTS

<u>Line</u>	<u>Event</u>	<u>Event Date</u>
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	Document Phase	Document Description	Page 3
ADJ2200000010	Final	Williamstown AASF#1 Taxiway & Apron Repairs EOI	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.



 (Name, Title)

Matthew Ponce, PE, Associate Vice President, Aviation Department Manager

(Printed Name and Title)

100 Airside Drive, Moon Township, PA 15108

(Address)

412-375-3832

(Phone Number) / (Fax Number)

matthew.ponce@mbakerintl.com

(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

Michael Baker International, Inc.

(Company)



 (Authorized Signature) (Representative Name, Title)

Matthew Ponce, PE, Associate Vice President, Aviation Department Manager

(Printed Name and Title of Authorized Representative)

3/30/2022

(Date)

412-375-3832

(Phone Number) (Fax Number)

Revised 02/08/2022

STATE OF WEST VIRGINIA
Purchasing Division**PURCHASING AFFIDAVIT**

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, 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: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. 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.

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.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:Vendor's Name: MICHAEL BAKER INTERNATIONAL, INC.Authorized Signature: [Signature] Date: MARCH 30, 2022State of PennsylvaniaCounty of Allegheny, to-wit:Taken, subscribed, and sworn to before me this 30th day of March, 2022My Commission expires September 18, 2024

AFFIX SEAL HERE

Commonwealth of Pennsylvania - Notary Seal
Cheryl L. Noss, Notary Public
Allegheny County
My commission expires September 18, 2024
Commission number 1377231
Member, Pennsylvania Association of Notaries

NOTARY PUBLIC

[Signature]
Purchasing Affidavit (Revised 01/19/2018)