



E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Ehtesham M. Suhail, P.E., P.S.		13. ROLE IN THIS CONTRACT Program Manager		14. YEARS EXPERIENCE	
				a. TOTAL 28	b. WITH CURRENT FIRM 21
15. FIRM NAME AND LOCATION (City and State) Suhail & Suhail – Chagrin Falls, Ohio					
					
16. EDUCATION (DEGREE AND SPECIALIZATION) Master of Science / Civil Engineering			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Civil Engineer – OH #58956 Professional Surveying – OH #7806		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Certifications: Bridge Backwater Analysis' Bridge Inspection; ROW Plan Development Course Awards: US Army Corps of Engineers Louisville District <u>Small Business of the Year Award – 2012</u> <i>Mr. Suhail has 24 years of engineering and managing experience with projects for military, private, and public sector clients. His dedication to Quality design products, knowledge of design criteria, and strong leadership skills enable him to orchestrate multiple projects simultaneously. In the past year Mr. Suhail has concurrently managed over 20 projects, seven of them for the DoD.</i>					
19. RELEVANT PROJECTS					
	(1) TITLE AND LOCATION (City and State) IDIQ Task Order: Project Definition Report Infantry Squad Battle Course // Ft Knox, KY Live Fire Shoot House Ft Campbell, KY // USACE Louisville District			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2011	CONSTRUCTION (If applicable) 2013
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Project Manager responsible for coordination of all disciplines & sub-consultants for production of programming documents, plans & specifications. Required direct client interaction, providing status reports, managing Charrettes, scheduling and QA/QC review. Scope included preparation of PDRs and 1391 cost validation for two ranges, an ISBC at Fort Knox and a LFSH at Fort Campbell. The ISBC included stationary and mobile infantry and armor target installations grouped into five objective areas. The Range Operations and Control Area (ROCA) included support structures for the range. These structures included a Range Control Tower, Operations/Storage Building, Classroom Building, Latrine, Covered Mess, Ammunition Breakdown Building and Bleacher Enclosure. The LFSH included eight training rooms and two corridors, blow panels, target controls and a catwalk overview area.			<input checked="" type="checkbox"/> Check if project performed with current firm	
Cost: \$12.4 million					
	(1) TITLE AND LOCATION (City and State) 80 Ton Bridge, Camp Ravenna Joint Military Training Center // Ravenna, Ohio // Ohio National Guard			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2011	CONSTRUCTION (If applicable) 2013 (est.)
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Project Manager responsible for client interaction, coordination of all disciplines & sub-consultants, QA/QC, and scheduling. Project consisted of design of a 67' single span concrete deck bridge under contract with the Ohio National Guard. Bridge designed for 80 ton tracked class and 92 ton wheeled vehicular live load. Design elements included bridge deck, abutments, approaches, hydraulic and hydrologic analysis of the waterway, and related items.			<input checked="" type="checkbox"/> Check if project performed with current firm	
Cost: \$1.3 million					
	(1) TITLE AND LOCATION (City and State) IDIQ Task Order: D/B RFP, ECIP Hydroturbine Project Rock Island Arsenal, IL // USACE Louisville District			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2011	CONSTRUCTION (If applicable) 2012
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Project Manager responsible for coordination of all disciplines & sub-consultants for production of the D/B RFP for replacement of a failing hydroturbine at Rock Island Arsenal in Illinois. Required direct client interaction, providing status reports, managing Charrettes, scheduling and QA/QC review. Project was completed on a fast-track basis in order to have ready to award status before the end of the fiscal year.			<input checked="" type="checkbox"/> Check if project performed with current firm	
Cost: \$3.6 million					
	(1) TITLE AND LOCATION (City and State) IDIQ Task Order: D/B RFP, SOF Landgraf Hangar Extension Ft Campbell, KY // USACE Louisville District			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable) 2014 (est.)
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Project Manager responsible for client interaction, coordination of all disciplines & sub-consultants for production of the D/B RFP for the extension of a Special Ops hangar for the 160 th SOAR at Fort Campbell, KY. Required direct client interaction, providing status reports, managing Charrettes, scheduling and QA/QC review. Building systems included fire detection and suppression, SIPRNet and NIPRNet communications networks with protected distribution system, intrusion detection, surveillance, electronic access control, and AT/FP.			<input checked="" type="checkbox"/> Check if project performed with current firm	
Cost: \$4.7 million					

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Frank J. LaVardera		13. ROLE IN THIS CONTRACT Project Manager		14. YEARS EXPERIENCE	
				a. TOTAL 34	b. WITH CURRENT FIRM 31
15. FIRM NAME AND LOCATION (City and State) CHA Consulting, Inc. – Albany, NY					
					
16. EDUCATION (DEGREE AND SPECIALIZATION) M.S. / Environmental Science B.S. / Land & Water Resources			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Mr. LaVardera has over 34 years of experience, and serves as Contract and Project Manager for several IDIQ contracts with state and federal agencies. Recently, Mr. LaVardera has served as the Contract Manager for CHA's contract with the NYSOPRHP for projects in the Palisades, Taconic and Saratoga regions. He also serves as the Contract Manager for CHA's contract with the US Navy's Morale, Welfare and Recreation Division for projects worldwide. Mr. LaVardera has also served as the Project Manager for numerous projects for the National Park Service throughout the Northeast					
19. RELEVANT PROJECTS					
(1) TITLE AND LOCATION (City and State) * Building Evaluation Report US Merchant Marine Academy // Kings Point, NY		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable) N/A		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
a.	Specific Role: Project Manager for an evaluation of the mechanical and electrical systems along with an assessment of potential hazardous materials in 48 buildings on the campus. The evaluation identified deficient conditions and estimated the cost for required repairs. The BER will be used by the USMMA in support of Repair and Alteration, Major Renovations and New Construction projects required to ensure short term operational continuity of the buildings. In addition, it will be used to plan for long term major capital reinvestments in the buildings for long term utilization. Cost: \$267,424				
(1) TITLE AND LOCATION (City and State) * NS Guantanamo Bay Cooper Field RFP Guantanamo Bay, Cuba		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2005	CONSTRUCTION (If applicable) 2007		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
b.	Specific Role: Project Manager responsible the preparation of an RFP including full design documents for renovations at the Cooper Field athletic complex at NS Guantanamo Bay, Cuba. As part of CHA's scope of services, several conceptual design meetings were conducted with CNIC, the Installation's MWR and Public Works staffs at the base to determine facility utilization and the proposed project goals. Based on these meetings, CHA prepared initial concept design plans and began the detailed design process that culminated with the issuance of the RFP including full construction documents. The construction documents included design of the following project components: Cost: \$7,200,000				
(1) TITLE AND LOCATION (City and State) * GSAB Hangar Addition at Fort Drum Watertown, NY		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2009	CONSTRUCTION (If applicable) 2010		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
c.	Specific Role: Project Manager responsible for providing programming, design and construction phase services for a new \$10.5 million hanger facility at the Wheeler Sack Army Airfield to support the Blackhawk and Chinook helicopter operations. CHA's design responsibilities included: Civil Engineering, Landscape Architecture, Mechanical, Electrical and Plumbing. The project was designed to achieve LEED Silver Certification and required extensive coordination team meetings be held with both the COE and the end users of the GSAB hangar to ensure that the project was completed within schedule and satisfied the delivery standards. Cost: \$10,500,000				

* Featured in IV, Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Mark R. Vilem, P.E., LEED® AP	13. ROLE IN THIS CONTRACT Construction Quality Assurance Manager	14. YEARS EXPERIENCE	
		a. TOTAL 26	b. WITH CURRENT FIRM 8

15. FIRM NAME AND LOCATION (City and State) CHA Consulting, Inc. – Cleveland, Ohio	
--	---

16. EDUCATION (DEGREE AND SPECIALIZATION) Master of Environmental Management / Ecotoxicology Bachelor of Arts / Biology	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Engineer - OH #67527
---	--


18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Certifications: LEED® Accredited Professional, U.S. Army Corps of Engineers Construction Quality Management for Contractors
Mr. Vilem has a solid background in management of multi-disciplined consulting teams involved in planning, design and construction projects. His experience includes 4 years as the Administrator of Engineering at Cleveland Hopkins International Airport. During this time, Mark was responsible for the implementation of an approximately \$400 million phase of the \$1.4 billion expansion program at Cleveland Hopkins International Airport which allowed him to be involved with all different stages of the project, from planning to construction. He was responsible for coordinating simultaneous projects ensuring all requirements were met, it required close coordinating with the consulting team and the contractor. In addition Mark has experience with Project and Construction Management on multiple DoD projects, his extensive knowledge of federal project delivery procedures and sustainable design criteria has allowed for a successful completion and delivery of our projects.

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Entry Control Facilities Marine Corps Facility Blount Island // Jacksonville, FL	2008	2009
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Specific Role: Project Manager / Construction QA services responsible for multi-discipline design team management and quality assurance review during the design phase of entrance/security gate improvements for Blount Island Command. During construction phase, performed construction quality assurance management services to ensure project was constructed to meet all design requirements and in accordance with DoD Unified Facilities Criteria including Anti-Terrorism/Force Prevention Standards, Naval Facilities Engineering Command (NAVFAC) and LEED® Certification requirements, review and approval of construction submittals, responded to RFIs, coordinated and attended site visits among other duties. Project included primary and rear entrance gates, new roadways, a pass and ID office, guard houses, over-watch towers, canopies for passenger and commercial vehicles, and an active and passive barrier system. <p align="right">Cost: \$7.5 million</p>		
New Presidential Helicopter Hangar & Airfield Improvements Marine Corps Base Quantico // Quantico, VA	2009	2011
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Specific Role: Project Manager / Construction QA services provided project delivery, multi-discipline design team management and quality assurance review insuring the project was design and constructed to meet UFC, AT/FP, NAVFAC and LEED criteria. Project provides clear-span hangar space, adjacent multi-story maintenance shops, as well as administrative, medical, dental, storage and support areas. The project also includes 540,000 sf of new airfield taxiway and apron pavement. The parking apron accommodates adequate space for eight HMX-1 aircraft and two transient aircraft. The project is designed to meet LEED® Silver certification through the USGBC. <p align="right">Cost: \$39 million</p>		
Littoral Warfare Systems Facility Naval Support Activity Panama City // Panama City Beach, FL	2008	2010
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Specific Role: Project Manager project Manager responsible for the project management, overseeing the design was performed in accordance with Department of Defense Unified Facilities Criteria, Naval Facilities Engineering Command (NAVFAC), and base requirements, and to meet the design requirements for LEED® Certification. Project for a 44,000 square foot Littoral Warfare Systems Facility and associated appurtenances includes a two story building with a high bay, secure communications and secure rooms. <p align="right">Cost: \$12.6 million</p>		

* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Joseph Nelson, RA, LEED® AP BD+C		13. ROLE IN THIS CONTRACT Task Order Manager		14. YEARS EXPERIENCE	
				a. TOTAL 26	b. WITH CURRENT FIRM 13
15. FIRM NAME AND LOCATION (City and State) RSP Architects, Ltd. – Minneapolis, Minnesota					
					
16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science / Architecture			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Registered Architect – MN #22950		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Certifications: LEED® Accredited Professional; National Council of Architectural Registration Boards (NCARB) Certified; Continuing Education: Healthcare Construction Certificate - American Society of Healthcare Engineering; Bentley Tri-forma BIM Training; Affiliations: Member American Institute of Architects (AIA) <i>Mr. Nelson has led over 15 projects with RSP, serving as the Project Architect or Lead Architect. Experience includes RFP development, design of training facilities, maintenance shops, administration buildings and other support facilities for which he has also provided sustainable design expertise.</i>					
19. RELEVANT PROJECTS					
a.	(1) TITLE AND LOCATION (City and State) *Add/Alt to Kerry P. Hein Army Reserve Center / OMS / UHS Shoreham, NY		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2008	CONSTRUCTION (If applicable) 2012	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Project Architect led the design team for the addition (18,500-sf) and alteration (31,500-sf) of an USAR Training Center, 4,800-sf OMS building, and a 4,400-sf Unheated Storage building. Provided architectural design for a 400-member Training Center with administrative, educational, assembly, library, learning center, vault, weapons simulator, and physical fitness areas for seven US Army Reserve units. Provided architectural design for the maintenance shop that included work bays and maintenance administrative support. Cost: \$15 million		<input checked="" type="checkbox"/> Check if project performed with current firm		
b.	(1) TITLE AND LOCATION (City and State) 88th RSC Band Room Assessments and Renovations Five Locations, Midwest		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2014	CONSTRUCTION (If applicable) Ongoing	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Project Architect for five Band Room assessments and renovations for the Army Reserve 88th Regional Support Command. The assessment reports provided the results of the acoustical testing, recommendations for acoustical/sound isolation and other updating improvements and construction cost estimates. Based on the reports, scopes of work were developed for all five sites, and Joe led the development of the construction documents for the projects.		<input checked="" type="checkbox"/> Check if project performed with current firm		
c.	(1) TITLE AND LOCATION (City and State) Building 607 Directorate of Emergency Services (DES) Full Facility Revitalization (FFR) Fort Buchanan, Puerto Rico		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2014	CONSTRUCTION (If applicable) N/A	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Lead Architect for the D/B RFP documentation to combine the fire department, police department and local requirements that might affect design, construction, cost or schedule; investigation of utilities and transportation serving the site; coordination of boundary survey, utility survey, topographic survey, and a geotechnical investigation; preparation of cost estimates. Project was cancelled prior to construction. Cost: \$9.2 million		<input checked="" type="checkbox"/> Check if project performed with current firm		
d.	(1) TITLE AND LOCATION (City and State) Hangar/Training Building Addition Ft. Carson, Colorado		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2015	CONSTRUCTION (If applicable) Ongoing	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Lead Architect for the 15,000 SF D/B administrative space addition to an existing Army Reserve Training Building, and includes revisions to the site, parking, fencing and utilities. The addition includes offices, open office workstations, SIPRNet Café, toilets and showers, break room, network operations center, unit storage, and typical building support spaces: mechanical and electrical rooms, facility storage, circulation, etc. Cost: \$4.7 million		<input checked="" type="checkbox"/> Check if project performed with current firm		

* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Daniel P. Ford, P.E., LEED® AP	13. ROLE IN THIS CONTRACT Civil Engineer Senior Level	14. YEARS EXPERIENCE	
		a. TOTAL 13	b. WITH CURRENT FIRM 7

15. FIRM NAME AND LOCATION (City and State) CHA Consulting, Inc. – Cleveland, Ohio	
--	---

16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science / Civil Engineering	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Civil Engineer – FL #66453, OH #73396, MD #39407, SC #29821, and IN #PE10809971 NCEES #41831
---	--


18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Certifications: LEED® Accredited Professional
*Dan has outstanding experience in leading the site civil design and permitting for DOD and public projects. He routinely leads the civil site designs, which includes drainage systems, roadways, parking lots, site grading, site utilities and storm water management and treatment facilities. Dan is an expert in aspects of drainage requirements on airfields. Dan's capabilities include preparation of plans and specifications, developing cost estimates, construction administration, and system commissioning. Dan has specific experience in **Low Impact Design** and LEED design.*

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
*Continental Hangar #3 Renovation & Expansion Cleveland Hopkins International Airport // Cleveland, OH	2009	2010
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Specific Role: Lead Civil Engineer led the civil design for the project that including new storm sewer and utilities, the renovation of the parking area and airfield apron, the preparation of drainage calculations and the Stormwater Pollution Prevention Plan (SWPPP) and the permitting of the project with the local and state authorities. Project included partial demolition and widening of the existing B-737 hangar to accommodate larger aircraft, replacement and upgrade of all electrical, lighting, HVAC and fire suppression systems – including new Hi-Expansion foam with collection/discharge systems. Site elements included the renovation of the parking facilities and aircraft apron, new fire main and redundant pumps, gas, potable water, and electrical utilities, and new fence and gates to the airfield. <p align="right">Cost: \$6 million</p>		
*Runway 10-28 Safety Area Improvement Program Cleveland Hopkins International Airport // Cleveland, OH	2009	2012
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Specific Role: Civil Engineer led the design of storm water management and conveyance systems, water quality treatment system, lead the preparation of storm water management, quality and conveyance system calculations, lead the preparation of the project SWPPP and lead the permitting effort with the local and state authorities. Project included environmental assessment, project definition, final design engineering and construction services for runway and taxiway pavements, airfield lighting systems, replacement of the approach light system on Runway 28, relocation of the Runway 28 glide slope, major grading and drainage revisions, and the installation of EMAS off both ends of the runway. <p align="right">Cost: \$47 million</p>		
Design/Build: New Presidential Helicopter Hangar & Airfield Improvements Marine Corps Base // Quantico, VA	2009	2011
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Specific Role: Civil Engineer led the site civil design that including new utility services, an addition to the parking area and roadway, Low Impact Storm Water Design featuring a Bio-retention cell. Dan prepared the drainage calculations, the lift station calculations and the project SWPPP. He also led the permitting with local and state authorities. Responsible for permits included NPDES and Low Impact Design criteria implementation. Close coordination was required with NAVFAC Washington and MCB Quantico environmental personnel to assure compliance with applicable restrictions. Design provides clear-span hangar space, adjacent multi-story maintenance shops, as well as administrative, medical, dental, storage and support areas. The project also includes 540,000 sf of new airfield taxiway and apron pavement. The parking apron accommodates adequate space for eight HMX-1 aircraft and two transient aircraft. The project is designed to meet LEED® Silver Certification through the USGBC. <p align="right">Cost: \$39 million</p>		


* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Fred M. Loeffler, P.E.		13. ROLE IN THIS CONTRACT Civil Engineer Senior Level		14. YEARS EXPERIENCE	
				a. TOTAL 33	b. WITH CURRENT FIRM 32
15. FIRM NAME AND LOCATION (City and State) CHA Consulting, Inc. – Indianapolis, Indiana					
					
16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science / Civil Engineering			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Civil Engineer – AL #29248-E, AZ #42301, FL #55190, HI #13920, IL #058219, IN #880627, IA #16230, KS #16946, KY #18513, LA #E-27035, MI #6201044316, MS #15995, MO #19500, OH #E-58133, TN #00113211, WA #47222, WI #40175-006		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Affiliations: Society of American Military Engineers; American Society of Civil Engineers; National Society of Professional Engineers; Illuminating Engineering Society Certifications: U.S. Army Corps of Engineers Construction Quality Management for Contractors <i>Mr. Loeffler develops and oversees the successful completion of design projects for our Buildings Services group. His experience with vertical design projects covers a variety of structures including medical facilities, offices, residential, high rise and military support facilities CONUS and OCONUS. As the Principal and Client Manager for the group he is responsible for ensuring services are provided to the highest of standards and deliverables are meeting all required criteria. Fred's program management experience includes aviation programs and large residential/office development programs and uses his experience to work with our clients to develop project scopes based on client needs, client time frames, and funding availability. Fred also works with our design team to develop the most cost-efficient solutions for our client's programs. His background with civil design includes civil site design, drainage design, airfield geometric design, pavement design, airfield electrical design, construction safety and phasing plans, and NAVAIDS development projects.</i>					
19. RELEVANT PROJECTS					
(1) TITLE AND LOCATION (City and State) *Repair Aircraft Parking Aprons, Landing Plane, and Landing Field Areas // Chambers Field // Norfolk, VA		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2009	CONSTRUCTION (If applicable) 2010		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
a.	Specific Role: Project Principal responsible for the overall oversight of the project to ensure it was designed to meet the UFC and NAVFAC standards and requirements. The design accommodated fixed wing military and cargo aircraft, helicopter landing and parking positions, military passenger traffic, and aircraft movements for hangar operations. The project also included Installation of infiltration drainage system – to meet requirements of Low Impact Design (LID). Cost: \$6.9 million				
(1) TITLE AND LOCATION (City and State) Phase 1 Preliminary Study Al Bateen Airport // Abu Dhabi, United Arab Emirates		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2008	CONSTRUCTION (If applicable) n/a		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
b.	Specific Role: Program Manager & QA/QC Support assisted with pavement condition analysis, airfield ground lighting, building inventory, utilities and support systems evaluation for the conversion of the airport from military use to civilian use. Responsible for ensuring the requirements of the International Civil Aeronautics Organization (ICAO) and the Civil Aviation Regulations of the United Arab Emirates, as adopted by the General Aviation Authority (GCAA) were met. Cost: \$200,000				
(1) TITLE AND LOCATION (City and State) Phase 2 Detailed Investigation and Design Services Al Bateen Airport // Abu Dhabi, United Arab Emirates		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2009	CONSTRUCTION (If applicable) 2011		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
c.	Specific Role: Program Manager & QA/QC Support responsible for the overall oversight of the project, provided technical guidance and QA/QC support to the team. Project elements including: topographical survey; geotechnical investigation; drainage assessment; airfield structural casting assessment; 3D modeling of the runway approach obstructions; airfield pavement PCN calculations; building inventory and recommendations; utilities & infrastructure inventory and recommendations; new airfield pavement markings design to ICAO and GCAA standards; runway strip and runway end safety area cleanup and grading design; new airfield ground lighting and signage design; airfield pavement rehabilitation and reconstruction design; new military entrance design; and security fence improvements design Cost: \$30 million				


* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)


12. NAME Chad C. Ackley, P.E.		13. ROLE IN THIS CONTRACT Civil Engineer Senior Level		14. YEARS EXPERIENCE	
				a. TOTAL 14	b. WITH CURRENT FIRM 8
15. FIRM NAME AND LOCATION (City and State) CHA Consulting, Inc. – Chantilly, VA					
					
16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science / Civil Engineering			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Engineer - OH #67527, MD #34054, NC #39480, SC #29171, TN #115782, TX #105378, VA #42530, RI #11783		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) <i>Chad is a Senior Engineer in the Chantilly, Virginia office with 14 years of experience in engineering for airport projects. His duties at CHA include the design, coordination, and management of airside projects for the Aviation Team. Chad is knowledgeable in all areas involving planning, design, and construction of airfield projects. He has extensive experience in all facets of design and plan production. Chad also has a variety of on-site experience, as an extension of staff support for a major airport agency and as the design team representative during construction of a new runway. He has worked on small projects as the lone project engineer as well as large projects with several design firms.</i>					
19. RELEVANT PROJECTS					
	(1) TITLE AND LOCATION (City and State) *Runway 10-28 Safety Area Improvement Program Cleveland Hopkins International Airport // Cleveland, OH			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2009	CONSTRUCTION (If applicable) 2012
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Civil Engineer responsible for design of 330 ft relocation of Runway 10, including relocation of taxiways, airport perimeter road, grading and drainage, NAVAIDS relocation and critical area grading, and construction of support pavement for EMAS installation. Also responsible for plan production, grading and drainage design, PCC jointing plan, pavement marking, airfield lighting and signage, and coordination with sub-consultants. Cost: \$47 million			<input checked="" type="checkbox"/> Check if project performed with current firm	
	(1) TITLE AND LOCATION (City and State) New Presidential Helicopter Hangar & Airfield Improvements Marine Corps Base Quantico // Quantico, VA			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2009	CONSTRUCTION (If applicable) 2011
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Civil Engineer responsible for assisting the contractor and base engineer with revisions to the layout of the airfield pavement markings and lighting due to base mission change. Revised taxiway edge lighting spacing as well as locations of high mast overhead apron lighting due to C-17 maneuvering in parking area. Utilized Aero Turn and Path Planner software to accurately model aircraft movement, provided contractor with updated drawings and specifications as construction progressed. Cost: \$39 million			<input checked="" type="checkbox"/> Check if project performed with current firm	
	(1) TITLE AND LOCATION (City and State) Runway 15-33 Safety Area Study Addison Airport // Addison, Texas			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable) N/A
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Senior Civil Engineer tasked with the development of alternatives for improvement of deficient extended Runway Safety Area on Runway 33 end. Alternatives included: Declared Distances, relocated thresholds and runway ends, EMAS. Studied obstruction data to determine optimal threshold siting. Produced cost estimates for alternative comparison and cost benefit analysis. Cost: \$100,000			<input checked="" type="checkbox"/> Check if project performed with current firm	
	(1) TITLE AND LOCATION (City and State) Runway 23R RPZ Site Improvements McGhee Tyson Airport // Knoxville, Tennessee			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2015	CONSTRUCTION (If applicable) N/A
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Senior Civil Engineer leading the design team in the removal of abandoned car dealership parking lot and building foundations, site grading, and new airport perimeter fencing with access controlled gate for improvements to newly acquired land within the Runway 23R RPZ. Excavated material from the site to be transported to other areas of the airfield as fill material for future Runway 5R Glide Slope reflecting plane. Cost: \$90,000			<input checked="" type="checkbox"/> Check if project performed with current firm	

* Featured in IV. Section F


E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Samuel K. Bennett, P.E.		13. ROLE IN THIS CONTRACT Civil Engineer Senior Level		14. YEARS EXPERIENCE	
				a. TOTAL 15	b. WITH CURRENT FIRM 15
15. FIRM NAME AND LOCATION <i>(City and State)</i> CHA Consulting, Inc. – Albany, New York					
					
16. EDUCATION <i>(DEGREE AND SPECIALIZATION)</i> Bachelor of Science / Civil Engineering			17. CURRENT PROFESSIONAL REGISTRATION <i>(STATE AND DISCIPLINE)</i> Professional Civil Engineer – NY #084465-1		
18. OTHER PROFESSIONAL QUALIFICATIONS <i>(Publications, Organizations, Training, Awards, etc.)</i> Affiliations: American Society of Civil Engineers <i>Mr. Bennett has over 15 years' experience completing civil and site design work at wireless communications, military, educational, sports, commercial, and manufacturing facilities throughout the northeastern United States.</i>					
19. RELEVANT PROJECTS					
(1) TITLE AND LOCATION <i>(City and State)</i> Stewart Air National Guard), Building 102 Repair Fuel Cell Hangar Facility Newburgh, NY		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2010	CONSTRUCTION <i>(If applicable)</i> 2010		
a. (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Specific Role: Senior Civil Engineer Upgrades to the existing AFFF systems at the Main Hangar (Building 100) at the Stewart Air National Guard Base. As part of a Base-wide initiative, CHA was responsible for designing upgrades to convert all hangars to High Expansion Foam (HEF) systems. Special consideration for the HEF systems was to design a system such that a foam depth of 3-feet at the middle of each hangar floor is achieved within 3 minutes of system activation. Major system renovations consisted of the heating system that was to be converted to an infrared system to replace the existing forced air system which has been determined to be inefficient for this large hangar.		<input checked="" type="checkbox"/> Check if project performed with current firm			
(1) TITLE AND LOCATION <i>(City and State)</i> U.S. Army Corps of Engineers, Design Build Water System Expansion - Fort Drum Fort Drum, NY		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2012	CONSTRUCTION <i>(If applicable)</i> 2012		
b. (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Specific Role: Senior Civil Engineer Expansion and improvement of the public water system serving the Fort Drum military base. This project improves the water storage and distribution system serving drinking water to approximately 42,000 people on the base, in addition to providing a fire flow of 1,500 gpm across the base for fire protection.		<input checked="" type="checkbox"/> Check if project performed with current firm			
(1) TITLE AND LOCATION <i>(City and State)</i> Commander, Navy Installations, Commander Navy Installations - RV Storage Facility at MWS Seal Beach Seal Beach, CA		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2013	CONSTRUCTION <i>(If applicable)</i> 2013		
c. (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Specific Role: Senior Civil Engineer Design of a surface storage lot including design recommendations of the Unified Facilities Criteria - Low Impact Development.		<input checked="" type="checkbox"/> Check if project performed with current firm			
(1) TITLE AND LOCATION <i>(City and State)</i> Stratton Air National Guard Base, Base Roadway Projects Scotia, NY		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2012	CONSTRUCTION <i>(If applicable)</i> 2012		
d. (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Specific Role: Senior Civil Engineer Responsible for identifying pavement failures within roadways and parking lots on the Stratton ANG Base. Developed a repair methodology for different types of failures based on the site observation.		<input checked="" type="checkbox"/> Check if project performed with current firm			

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)


12. NAME Joseph P. Romano, P.E.		13. ROLE IN THIS CONTRACT Civil Engineer Senior Level		14. YEARS EXPERIENCE	
				a. TOTAL 17	b. WITH CURRENT FIRM 17
15. FIRM NAME AND LOCATION (City and State) CHA Consulting, Inc. – Albany, New York					
					
16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science / Civil Engineering			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Civil Engineer – NY #81993		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Certifications: Autocad Certified <i>Mr. Romano is responsible for layout grading, sanitary sewer design, water supply and distribution, stormwater management, erosion control, and construction administration. Joe brings with him over 16 years' experience in the design of commercial site developments and municipal facilities.</i>					
19. RELEVANT PROJECTS					
a.	(1) TITLE AND LOCATION (City and State) Commander, Navy Installations, Commander Navy Installations--RV Storage Facility at MWS Seal Beach Seal Beach, CA			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2013	CONSTRUCTION (If applicable) 2013
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE			<input checked="" type="checkbox"/> Check if project performed with current firm		
<p>Specific Role: Senior Civil Engineer Preparation of an RFP including full design documents for expansion of an existing RV lot at NWS Seal Beach. The existing RV Storage Lot No. 2 at Seal Beach was overcrowded its pavement surface was worn. In order to service the needs of its customers, the Installation's MWR Department desired a new larger lot with a variety different sized RV spaces. As part of CHA's scope of services, we conducted several conceptual designs and presented them to CNIC and the Installation's MWR Department. These concepts showed a variety of different sized space to meet their needs. In addition, in order to provide for storm water management in compliance with Low Impact Design guidelines, CHA met with Installation Environmental personnel to discuss the most appropriate way to manage storm water run-off.</p>					
b.	(1) TITLE AND LOCATION (City and State) Barnes Air National Guard Base, Snow Equipment Storage Facility Westfield, MA			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable) 2012
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE			<input checked="" type="checkbox"/> Check if project performed with current firm		
<p>Specific Role: Senior Civil Engineer Design services for new 9,120 SF snow equipment storage facility for the Barnes Air National Guard Base in Westfield, MA. CHA provided all of the design services as part of a contractor's design-build team. Our services included architectural, civil, survey, geotechnical, structural, mechanical, fire protection, plumbing, and electrical engineering.</p>					
c.	(1) TITLE AND LOCATION (City and State) NYS Office of Parks, Stabilization of the Bleachery Building at Peebles Island Waterford, NY			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2011	CONSTRUCTION (If applicable) 2012
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE			<input checked="" type="checkbox"/> Check if project performed with current firm		
<p>Specific Role: Senior Civil Engineer Preparation of Erosion and Sediment Control Plans and construction phasing/sequencing plans associated with the rehabilitation of the structure. The project also included utility relocations.</p>					
d.	(1) TITLE AND LOCATION (City and State) NYS Office of Parks, Vent and Weir Structures Repairs Dobbs Farm, NY			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES XX	CONSTRUCTION (If applicable) XX
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE			<input checked="" type="checkbox"/> Check if project performed with current firm		
<p>Specific Role: Senior Civil Engineer Rehabilitation of 18 stone vent structure along the Old Crouton Aqueduct. The project included a field evaluation of each of the structures to determine the required repairs.</p>					

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Nicholas J. Schwartz, RLA		13. ROLE IN THIS CONTRACT Landscape Architect Senior Level		14. YEARS EXPERIENCE	
				a. TOTAL 25	b. WITH CURRENT FIRM 21
15. FIRM NAME AND LOCATION (City and State) CHA Consulting, Inc. – Albany, NY					
					
16. EDUCATION (DEGREE AND SPECIALIZATION) B.S. / Landscape Architecture A.A.S. / Landscape Development			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) American Society of Landscape Architects: NY (1785) Council of Landscape Arch. Registration Boards LEED AP BD+C		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) <i>Mr. Schwartz has 21 years of experience in the landscape architecture field and has worked regularly over the course of the last 13 years on multiple DoD projects. Each of these projects have included landscape solutions that were functionally as well as aesthetically pleasing to be able to meet base or post guidelines and the ATFP standards that were required based on previous and current versions of UFC- 4-010-01, DoD Minimum Antiterrorism Standards Building.</i>					
19. RELEVANT PROJECTS					
(1) TITLE AND LOCATION (City and State) *Department of the Army GSAB Hangar Addition Ft. Drum, NY				(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable) 2013
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE				<input checked="" type="checkbox"/> Check if project performed with current firm	
a. Specific Role: Landscape Architect responsible for the landscaping design of the GSAB maintenance facility which included a two-story 19,940 square foot addition, a one-story 1,966 square foot Medivac addition, and a 213 square foot telecommunications addition and 84 car parking lot. Responsibilities on this project were to provide ATFP evaluations and compliance for the building additions as well as the POV parking areas. Cost: \$10,500,000					
(1) TITLE AND LOCATION (City and State) ARRA Repair and Modernize Reserve Facility Wilmington, DE				(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable) 2013
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE				<input checked="" type="checkbox"/> Check if project performed with current firm	
b. Specific Role: Landscape Architect responsible for the Civil/ATFP/Landscape/LEED Project Administrator for renovations of the existing 33,000 sf Marine Reserve Center as well as construction of a Vehicle Maintenance Facility and hardstand area in Wilmington, DE. The facility design included renovated parking areas, security fencing and controlled access, ATFP standoff evaluations and best practices to achieve ATFP requirements. This facility received a LEED® Silver rating under the USGBC LEED NC v.2.2 rating Cost: \$9,400,000					
(1) TITLE AND LOCATION (City and State) Repair of Dining Hall- Bldg 203 Stewart ANG Base, Newburgh, NY				(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2011	CONSTRUCTION (If applicable) 2013
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE				<input checked="" type="checkbox"/> Check if project performed with current firm	
c. Specific Role: Landscape Architect responsible for the design of exterior improvements to Building 203 –Dining Hall facility. This facility consisted of approximately 3,000 sf of space with Dining/cafeteria and administration space on the first floor and administrative space on the second floor. The work included determining the facilities compliance will all applicable and current ATFP criteria, providing guidance on how to meet current ATFP requirements as well as preliminary and final design documents and costing for the preferred ATFP improvements. Cost: \$450,000					
(1) TITLE AND LOCATION (City and State) Ft Eustis Tactical Equipment Maintenance Facility Ft. Eustis, VA				(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2009	CONSTRUCTION (If applicable) 2010
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE				<input checked="" type="checkbox"/> Check if project performed with current firm	
c. Specific Role: Landscape Architect responsible for the Civil Design/Landscape/ATFP/LEED Project Administration of a new 68,000 sf TEMF facility, a 15 ac hardstand and supporting hardstand and POV parking lots. The design included an evaluation and best practices to achieve ATFP requirements for new facility as well as future expansion of the hardstand and included all construction detailing to complete the improvements. This facility was designed and constructed to achieve a LEED® Silver sustainability rating. Cost: \$18,000,000					


* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Thomas S. Wang, PE, LEED® AP BD+C		13. ROLE IN THIS CONTRACT Mechanical Engineer Senior Level		14. YEARS EXPERIENCE	
				a. TOTAL 22	b. WITH CURRENT FIRM 4
15. FIRM NAME AND LOCATION (City and State) CHA Consulting, Inc. – Atlanta, GA					
					
16. EDUCATION (DEGREE AND SPECIALIZATION) Master of Science / Mechanical Engineering Master of Science / Materials Engineering Bachelor of Science / Metallurgical Engineering			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Engineer – GA #027258, KY #20197 LEED® Accredited Professional		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Affiliations: U.S. Green Building Council; American Society of Heating, Refrigeration & Air Conditioning Engineers <i>Mr. Wang's experience ranges through all aspects of building mechanical system design to industrial refrigeration system. His specific experience includes HVAC, plumbing, medical gas, fire protection, chiller and heating energy plants, and building HVAC automation and controls. Mr. Wang's expertise spans a variety of projects which include healthcare, commercial, industrial, public, educational, scientific, military, Bio-safety level 3 laboratories, Bio-safety level 4 laboratories, general laboratory facilities, and sustainability design.</i>					
19. RELEVANT PROJECTS					
	(1) TITLE AND LOCATION (City and State) U.S. Army Corps of Engineers, LEED Commissioning at Ft. Leavenworth // Ft. Leavenworth, KS			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES Ongoing	CONSTRUCTION (If applicable) 2012 (est.)
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Senior Mechanical Engineer responsible for LEED Fundamental Commissioning Services for the Renovation of mechanical and electrical systems at Gentry Behavioral Health Clinic. Existing failed systems were replaced with more energy efficient systems to achieve LEED energy credits, which included new high efficient condensing boilers and water heaters. Witnessed testing and balancing, systems start up and quality control testing for Mechanical Systems, documented results of system commissioning for LEED point justification. Cost: \$3.6M			<input checked="" type="checkbox"/> Check if project performed with current firm	
	(1) TITLE AND LOCATION (City and State) Department of the Navy MCRC, Building Renovations // Wilmington, DE			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES Ongoing	CONSTRUCTION (If applicable) 2012 (est.)
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Senior Mechanical Engineer led the mechanical design for the Renovation of an administration/training building and for construction of a Vehicle Maintenance Facility (VMF) consisting of two maintenance bays, tool room, office, restroom and storage. Mechanical Designs included new boiler plant, evaporative cooler, heat pumps, air distribution, dedicated outdoor air system, vehicle exhaust, gas fired infrared heater s and gas fired unit heaters. Cost: \$6.0M			<input checked="" type="checkbox"/> Check if project performed with current firm	
	(1) TITLE AND LOCATION (City and State) U.S. Army Engineer District, Ft. Eustis TEMF // Newport News, VA			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2011	CONSTRUCTION (If applicable) 2012
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Senior Mechanical Engineer led the mechanical design for the Tactical Equipment Maintenance Facility (TEMF) at Ft Eustis. The TEMF is a 57,000 sf structure on a 23 acre parcel which serves as a maintenance facility for specialized military vehicles and equipment. Mechanical Designs included boiler plant, air cooled chiller, office VAV system, warehouse ventilation, and in-slab radiant heat. Cost: \$13.5M			<input checked="" type="checkbox"/> Check if project performed with current firm	
	(1) TITLE AND LOCATION (City and State) U.S. Army Engineer District, Fort Huachuca AIT Barracks // Fort Huachuca, AZ			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2010	CONSTRUCTION (If applicable) 2011
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Mechanical Engineer responsible for the geothermal heat pump system design and energy modeling justifying optimization of energy for this LEED® Silver project. Project included construction of a new battalion headquarters at Fort Huachuca for which we provided design and commissioning for all mechanical related elements. Cost: \$2.4M			<input checked="" type="checkbox"/> Check if project performed with current firm	


* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)


12. NAME Joe J. Delabruere, P.E.		13. ROLE IN THIS CONTRACT Electrical Engineer Senior Level		14. YEARS EXPERIENCE	
				a. TOTAL 14	b. WITH CURRENT FIRM 14
15. FIRM NAME AND LOCATION (City and State) CHA Consulting Inc. – Albany, NY					
					
16. EDUCATION (DEGREE AND SPECIALIZATION) B.S./Electrical Engineering			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Engineer - NY #089569		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) <i>Mr. Delabruere provides electrical design services for various projects in the public and private sector. He brings expertise in power distribution, emergency/standby power, lighting, fire alarm, and security systems.</i>					
19. RELEVANT PROJECTS					
	(1) TITLE AND LOCATION (City and State) *Commander Navy Installations Command NS Norfolk & NAS Oceana Track & Field Design Norfolk and Virginia Beach, VA			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2011	CONSTRUCTION (If applicable) 2013
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Sr. Electrical Engineer responsible for design and construction documents for construction of synthetic fields at NS Norfolk and NAS Oceana. Designed new electrical connections to the proposed lighting systems, calculated lighting levels to ensure minimum lighting levels were met for the fields, and prepared technical specifications for the construction document. Cost: \$3,700,000			<input checked="" type="checkbox"/> Check if project performed with current firm	
	(1) TITLE AND LOCATION (City and State) Commander Navy Installations Command NWS Earle Athletic Field/RV Park Earle, NJ			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2008	CONSTRUCTION (If applicable) 2009
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Sr. Electrical Engineer responsible for the design of new electrical connections to new lighting system at two recreation fields. Calculated lighting levels to ensure new lighting met minimum requirements. Cost: \$180,000			<input checked="" type="checkbox"/> Check if project performed with current firm	
	(1) TITLE AND LOCATION (City and State) *Department of the Army GSAB Hangar Addition at Ft Drum Fort Drum, NY			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable) 2013
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Sr. Electrical Engineer responsible for providing programming, design and construction phase services for the design and construction a new \$10.5 million hangar facility at the Wheeler Sack Army Airfield to support the Blackhawk and Chinook helicopter operations. Cost: \$10,500,000			<input checked="" type="checkbox"/> Check if project performed with current firm	
	(1) TITLE AND LOCATION (City and State) Stewart Air National Guard Lighting Upgrades Newburgh, NY			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2013	CONSTRUCTION (If applicable) N/A
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Sr. Electrical Engineer responsible for the review of existing lighting in various locations base wide and designed new energy efficient fixtures. Evaluated the existing ramp mast lighting assemblies based on the maintenance issues with lowering the lighting assemblies. Cost: \$95,000			<input checked="" type="checkbox"/> Check if project performed with current firm	

* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Ryan P. Cyr, P.E.		13. ROLE IN THIS CONTRACT Structural Engineer Senior Level		14. YEARS EXPERIENCE	
				a. TOTAL 11	b. WITH CURRENT FIRM 8
15. FIRM NAME AND LOCATION (City and State) CHA Consulting, Inc. – Indianapolis, Indiana					
					
16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science / Civil Engineering Masters of Science / Structural Engineering			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Civil Engineer – NY #087728		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) <i>Mr. Cyr has over 11 years' experience in the structural design of educational, governmental, commercial, industrial and petrochemical facilities. His responsibilities have included programming, planning, calculations, contract documents, and construction administration.</i>					
19. RELEVANT PROJECTS					
(1) TITLE AND LOCATION (City and State) Stewart Air National Guard, Energy Conservation Measures - Various Buildings Newburgh, NY		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2012		CONSTRUCTION (If applicable) 2012	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
a. Specific Role: Senior Structural Engineer Design services for a \$4.1 million energy conservation project for 14 building associated with the 105th Airlift Wing. CHA reviewed energy conservation measures, analyzed potential savings, analyzed paybacks and recommended improvements which could be accomplished within the Owner's budget. Final designs were detailed for the selected measures and competitively bid.					
(1) TITLE AND LOCATION (City and State) U.S. Army Corps of Engineers New York, Design Build Water System Expansion - Fort Drum Fort Drum, NY		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2012		CONSTRUCTION (If applicable) 2012	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
b. Specific Role: Senior Structural Engineer Design/build project to expand and improve the public water system serving the Fort Drum military base by the New York District of the U.S. Army Corps of Engineers in April of 2010. This project improves the water storage and distribution system serving drinking water to approximately 42,000 people on the base, in addition to providing a fire flow of 1,500 gpm across the base for fire protection. Total water consumption on the average day is about 1.0 MGD, with the maximum day at about 2.5 MGD.					
(1) TITLE AND LOCATION (City and State) Niagara Falls Air National Guard, Medical Training Facility Niagara Falls, NY		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2016		CONSTRUCTION (If applicable) 2016	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
c. Specific Role: Senior Structural Engineer Design and construction administration services for the comprehensive renovation of the Niagara Falls Air National Guard's (ANG) Building 936 – Medical Training Facility which houses the Medical Group, Civil Engineering Readiness and Emergency Management for the Base. The facility is approximately 14,780 sf and originally constructed in 1989. The project scope includes upgrading the interior facility, including: finishes, lighting, digital controls for the electrical systems, new HVAC equipment, new fire protection system, and site improvements to meet current ANG Force Protection requirements.					
(1) TITLE AND LOCATION (City and State) U.S. Property & Fiscal Office for New York, Stratton ANG Building 1 Renovations Scotia, NY		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2014		CONSTRUCTION (If applicable) 2014	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
d. Specific Role: Senior Structural Engineer Comprehensive interior renovation design of approximately 33,000 square feet along with providing two 1,250 square foot additions which provided additional program space required by National Guard policy. The renovation included new interior facility finishes for offices and hallways, upgrades to the interior lighting, HVAC system modifications, and electrical system upgrades to support the building for years to come. Also, as part of this project digital controls/metering for electrical and mechanical systems were provided to better control the energy usage in the building. The installation of a completely new fire protection system was included to improve the safety of this building. Additionally, an open space design allowing for multiple configurations of the spaces was employed and LEED concepts were included were possible.					

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Brian M. Dalton, P.E., SE		13. ROLE IN THIS CONTRACT Structural Engineer Senior Level		14. YEARS EXPERIENCE	
				a. TOTAL 15	b. WITH CURRENT FIRM 15
15. FIRM NAME AND LOCATION (City and State) VAA, LLC – Plymouth, Minnesota					
					
16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science / Civil Engineering Bachelor of Arts / Liberal Arts			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Engineer - MN #43915 NV # 020819		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) <i>Mr. Dalton has been a design structural engineer for US Army Reserve, US Army, and joint operations military projects for the past 10 years. He brings design experience for training centers, vehicle maintenance shops, storage facilities, administrative buildings and unique foundation systems. His understanding and use of UFC Design Criteria, specifically DoD Anti-Terrorism/Force-Protection standards ensure that building occupant safety is integrated into the design in an efficient and architecturally sensitive manner. Mr. Dalton's extensive design experience with military projects, seismic design and meticulous attention to design efficiency and completeness of bid documents brings great benefit to the Government by reducing potential for cost growth during construction.</i>					
19. RELEVANT PROJECTS					
a.	(1) TITLE AND LOCATION (City and State) *Additions and Alterations to CW2 Kerry P. Hein Army Reserve Center / OMS / UHS // Shoreham, NY			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2008	CONSTRUCTION (If applicable) Ongoing
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Lead Structural Engineer provided structural engineering services for a proposed two-structure facility. An 18,570 sf two-story training center addition to an existing center provides classroom, office, storage and utility/service areas. The first level has low floor-to-floor height requirements to match the existing structure, despite upgraded mechanical services. The roof structure incorporates moderately long spans and multiple levels. The existing structure had significant modifications, including a new mechanical mezzanine, removal of multiple interior walls, an addition to an arms vault and possible relocation of several existing columns. Existing window and door framing required upgrades for AT/FP resistance. The new 4,800 sf single story maintenance building has office space, controlled and hazardous waste storage and maintenance bays for vehicle service. Seismic coefficients are moderately high and wind is hurricane level. Cost: \$15 million			<input checked="" type="checkbox"/> Check if project performed with current firm	
b.	(1) TITLE AND LOCATION (City and State) *Concept Plan Development USARC / OMS / UHS // Joliet Local Training Area, IL			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES Ongoing	CONSTRUCTION (If applicable) N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Structural Engineering Designer directed and coordinated design efforts for a 53,900 SF Training Building, a 9,200 SF OMS building, and a 3,300 SF Unheated Storage Building with associated private and military equipment parking areas. The site is located in the Joliet Local Training Area (LTA). BIM incorporated. Designed two-story Training Center and Maintenance Bldg. The entry to the Training Center has a two-story atrium space finished with stone and translucent panels to reduce AT/FP design pressure requirements. Created specifications using Specsintact software. Cost: \$17 million			<input checked="" type="checkbox"/> Check if project performed with current firm	
c.	(1) TITLE AND LOCATION (City and State) USARC / OSM / AMSA / UHS // Greenville, NC			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2001	CONSTRUCTION (If applicable) 2004
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Structural Engineering Designer responsible for engineering for a two-story 78,000-SF Training Center, a 14,200-SF OMS/AMSA Building and 2,000-SF and 1,000-SF UHS building. The Training Center consisted of offices, multi-purpose and computer classrooms, library, learning center, physical fitness, locker/shower/toilets, assembly hall, arms vault, skills trainer, unit storage and utility areas. The OMS/AMSA building includes office, maintenance bays, tool and parts storage, flammable material storage, controlled waste storage, toilets/showers, break-room/classroom and utility areas. The design incorporated high lateral forces from hurricane prone wind speeds and new seismic design codes produced a Seismic Design Category D (high seismic). Design utilized the COEs' MDS software, metric units and AT/FP requirements. Cost: \$10 million			<input checked="" type="checkbox"/> Check if project performed with current firm	

* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Huma Suhail, P.E., S.I.T.	13. ROLE IN THIS CONTRACT Structural Engineer Senior	14. YEARS EXPERIENCE	
		a. TOTAL 21	b. WITH CURRENT FIRM 21

15. FIRM NAME AND LOCATION (City and State) Suhail & Suhail, Inc., Chagrin Falls, Ohio	
--	---

16. EDUCATION (DEGREE AND SPECIALIZATION) Master of Science / Civil Engineering	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Civil Engineer - OH #71402
---	--

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Certifications: Storm Water Management Seminars, Right-of-Way Plan Development Training
Awards: US Army Corps of Engineers Louisville District **Small Business of the Year Award – 2012**
Ms. Suhail has 17 years of civil engineering and quality control experience on projects for military, private, and public sector clients. She has utilized her skills and attention to detail to develop and implement a robust design & design review program, manage and delivery complete design packages meeting all the required criteria and to client's satisfaction.

19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
a.	IDIQ Task Order: Project Definition Report Infantry Squad Battle Course, Ft Knox, KY // Live Fire Shoot House // Ft Campbell, KY // USACE Louisville District	2011	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Specific Role: Deputy Project Manager responsible for Civil Engineering design evaluation for this Project Definition Report including study of preliminary 1391 documents, concept design, and recommendation for USACE MILCON project submission. Scope included preparation of PDRs and 1391 cost validation for two ranges, an ISBC at Fort Knox and a LFSH at Fort Campbell. The ISBC included stationary and mobile infantry and armor target installations grouped into five objective areas. The Range Operations and Control Area (ROCA) included support structures for the range. These structures included a Range Control Tower, Operations/Storage Building, Classroom Building, Latrine, Covered Mess, Ammunition Breakdown Building and Bleacher Enclosure. The LFSH included a new structure including eight training rooms and two corridors, blow panels, target controls and a catwalk overview area. The ROCA included an AAR Building, Operations/Storage Building, Ammunition Breakdown Building, and Latrine. Use of Dr. Checks, PACES and MCACES 2nd Gen. (MII). Cost: \$12.4 million (est)		
b.	80 Ton Bridge, Camp Ravenna Joint Military Training Center // Ravenna, Ohio // Ohio National Guard	2011 (est.)	2011 (est.)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Specific Role: Deputy Project Manager responsible for design oversight and compliance with USPFO requirements and guidelines. Additional responsibilities included check of superstructure and abutments. Project consists of the design of 67' single span Bulb Tee Beams w/ composite reinforced concrete deck and semi-integral abutments under contract with the Ohio National Guard. Bridge for 80 ton tracked class and 92 ton wheeled vehicular live load. Design elements included bridge deck, abutments, approaches, hydraulic and hydrologic analysis of the waterway, and related items. Cost: \$1.3 million		
d.	IDIQ Task Order: D/B RFP, SOF Landgraf Hangar Extension // Fort Campbell, KY // USACE Louisville District	2012	2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Specific Role: Deputy Project Manager responsible for sub-consultant coordination and quality control for overall project involving the production of a D/B RFP for the extension of a Special Ops hangar for the 160th SOAR at Fort Campbell, KY. Also responsible for design of the civil engineering and surveying portion of the scope. Proposed expansion is over an existing high pressure 16" deluge line which had to be accurately field located by vacuum excavation. Cost: \$4.7 million		

* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Charles Symmes, P.E.	13. ROLE IN THIS CONTRACT Geotech Engineer Senior Level	14. YEARS EXPERIENCE	
		a. TOTAL 16	b. WITH CURRENT FIRM 16

15. FIRM NAME AND LOCATION (City and State) CHA Consulting, Inc. – Albany, New York	
---	---

16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science / Civil Engineering	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Geotechnical Engineer – CT #31184, NY #083968, VA #31184
---	--


18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Affiliations: American Society of Civil Engineers; Association of State Dam Safety Officials
Mr. Symmes is a Geotechnical Engineer in CHA's Geotechnical Group. He graduated from Virginia Tech with a bachelor's degree in civil engineering. He has 15 years of experience working in the geotechnical engineering field on a variety of transportation and other civil engineering projects. Mr. Symmes has been involved in inspection of construction, inspecting and coordinating subsurface investigations, and preparing geotechnical reports and recommendations. His experience in the geotechnical engineering field includes settlement and bearing capacity analysis, slope stability modeling, dam inspection and analysis, and the design of deep foundations and earth retaining systems.

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
City of Albany, Delaware Avenue Reconstruction Albany, NY	2011	2011
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm a. Specific Role: Geotechnical Engineer Roadway rehabilitation construction of Delaware Avenue. Duties included observation of excavation for full-depth pavement reconstruction, subgrade inspection, inspection of proof-rolling operations, oversight of undercut and fill placement due to unsuitable subgrade conditions, and documentation of the work observed.		
National Park Service, Moors Road Reconstruction Provincetown, MA	2011	2011
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm b. Specific Role: Geotechnical Engineer Reconstruction of a 0.76 mile section of Moors Road. CHA's scope of services included a geotechnical investigation to assess existing conditions, provide recommendations for pavement design, perform test pits and percolation tests for stormwater management, and provide design recommendations for timber retaining walls.		
Stratton Air National Guard Base, Stratton ANG Base Roadway Projects Scotia, NY	2012	2012
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm c. Specific Role: Geotechnical Engineer Rehabilitation/reconstruction of two existing parking areas. Design of the rehabilitation/reconstruction of these facility included an on-site existing condition evaluation, field topographic survey, geotechnical investigation, stormwater collection system condition analysis and cost effective pavement design strategies to meet the project scope.		
Stratton VA Medical Center, Building 5 Renovation Albany, NY	2012	2012
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm c. Specific Role: Geotechnical Engineer Renovation of the Community Day Treatment Center (CDTC) on the Stratton VA Medical Center campus. The 16,000 sf building houses the hospital's outpatient program that provides a supportive learning environment where patients having repeated issues with community adjustment, interpersonal relations and vocational or educational problems may receive help. The renovation involved three social work offices; spaces for group, occupational, and social therapy; and multipurpose spaces.		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Douglas W. Fisher, P.E., LEED® AP BD+C	13. ROLE IN THIS CONTRACT Fire Protection Engineer Senior	14. YEARS EXPERIENCE	
		a. TOTAL 24	b. WITH CURRENT FIRM 8

15. FIRM NAME AND LOCATION (City and State) Fisher Engineering, Inc. (Johns Creek, GA)	
--	---

16. EDUCATION (DEGREE AND SPECIALIZATION) Masters of Science / Business Administration Bachelor of Science / Fire Protection Engineering	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Fire Protection Engineer – AL #25314, AZ #39346, CA #FP1382, FL #59133, GA #24337, MA #45295, NC #032976, ND #PE6440, NM #19051, NY #088051, OH #74065, PA #PE077724, SC #27674, TN #115548, TX #110464, VA #0402048313, WA #34023, WV #19125
--	--

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Affiliations: NFPA-Member, SFPE International-Member, NFPA 3 (FP Commissioning) Tech. Committee-Member, NFPA 22 (Water Tanks) Tech. Committee-Member, NFPA 232 (Record Protection) Tech. Committee-Member, Building Commissioning Assoc.-Member

Doug Fisher as the Principal Fire Protection Engineer he is responsible for managing projects related to fire protection services. He possesses extensive experience in fire suppression and detection systems. He routinely develops both fire protection and life safety plans for military projects for all DoD agencies and the private industry.

CODES: NFPA, ICC, SBCCI, BOCA, ICBO, FM, UL, UFC 3-600-01, UFC 3-600-10N, NAVFAC ITG FY05-01, ETL 98-8, ETL 02-15

SYSTEMS: Sprinkler, AFFF, HI-EX Fire Alarm & Detection, Halon 1301, Clean Agents, Life Safety, Fire Pumps, Water Tanks, Standpipe, HASS Computer Hydraulic Calculation program, FPETool & Fastlite Computer Modeling Software


ORGANIZATIONS: NFPA-Member, SFPE International-Member, NFPA 3 (FP Commissioning) Tech. Committee-Member, NFPA 22 (Water Tanks) Tech. Committee-Member, NFPA 232 (Record Protection) Tech. Committee-Member

19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
a.	*Continental Airlines Hangar No. 3 Expansion Cleveland Hopkins International Airport // Cleveland, OH	2006	2006
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Specific Role: Fire Protection Engineer of Record responsible for design of Fire Protection element for the renovation and expansion of an existing unoccupied hangar. Fire protection features included Low-Level High-Expansion Foam with overhead wet pipe fire sprinklers. FEI utilized a valving arrangement that allows occupants to stop the flow of foam after it has been started in the event of inadvertent discharge. Continental and United Airlines have deemed Hangar 3 as the flagship hangar for how they plan to utilize foam systems going forward. Cost: \$45 million		
b.	Marine Corps Reserve Center // Robins Air Force Base, GA	2010	2010
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Specific Role: Fire Protection Engineer of Record provided Fire Protection engineering for the renovation of three existing buildings and construction of a new helicopter hangar (92,000 sf). Fire protection systems for the hangar included low-level AFFF (trench nozzles) with overhead wet pipe sprinklers. Services consisted of development of fire protection and life safety design drawings, specification and hydraulic calculations, reviewing contractor shop submittals, installation site reviews and witnessing acceptance testing. Cost: \$20 million		
c.	Renovate Buildings 3020, 3053, 3055 and 3078 - FY10 Operations and Maintenance Facilities Project // Duke Field, FL	2012	2012
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Specific Role: Fire Protection Engineer QC provided fire protection engineering and code consulting services for commissioning of fire protection equipment for the renovation of an aircraft maintenance hangar, visitors' quarters, fitness/dining facility and administration building totaling 100,000 sf. Fire protection features included new automatic wet pipe sprinkler systems in each building, new fire pump systems for the aircraft maintenance hangar and visitors' quarters, supplemental low-level, high-expansion (Hi-Ex) foam system in the aircraft hangar bay, a new Hi-Ex foam releasing system in the hangar, and new fire alarm and mass notification systems for each building. Cost: \$7 million		

* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Mark Stousland, AIA		13. ROLE IN THIS CONTRACT Architect Senior Level		14. YEARS EXPERIENCE	
				a. TOTAL 37	b. WITH CURRENT FIRM 16
15. FIRM NAME AND LOCATION (City and State) RSP Architects, Ltd. – Minneapolis, Minnesota					
					
16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science / Architecture			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Registered Architect – MN #22688, ID #AR-1241, ND #971		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Affiliations: Member American Institute of Architects (AIA), National Council of Architectural Registration Boards (NCARB) Certified; Continuing Education: United Facilities Criteria, DoD Minimum Antiterrorism Standards for Buildings, 2003; USACE LEED Implementation Workshop, 2008 <i>Mark has been managing and coordinating planning, design, and investigative projects for our military clients for over 25 years. Mark is experienced in IDIQ contracts and managing multiple large projects concurrently, having completed more than 80 DoD projects. Mark's facility experience includes general building upgrades, road & utility improvements, TASS, TEMF, SOF, ARC, VMS, OMS, and UHS designs, and ATFP assessments</i>					
19. RELEVANT PROJECTS					
(1) TITLE AND LOCATION (City and State) Hot Water Plumbing Upgrades Camp Parks Reserve Forces Training Area // Dublin, CA		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2014	CONSTRUCTION (If applicable) 2015		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
a. Specific Role: Project Architect for facility investigation and design of plumbing system renovations for 17 buildings. Assessment and design for all the buildings occurred simultaneously. Designs and phasing had to accommodate some buildings being occupied during the construction. Primary work consisted of replacement of water heaters, water storage tanks, circulating pumps and supply and return hot water piping for toilets and shower rooms. Cost: \$1.18 million					
(1) TITLE AND LOCATION (City and State) Road & Utility Improvements Camp Parks RFTA, CA		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable) Ongoing		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
b. Specific Role: Project Architect for the construction of 6,662 square yards (SY) of new paved roads, the mill and overlay of 4,687 SY of existing paved roads along with the addition of aggregate road edge protection. Storm water improvements were designed along with the addition of a new 55-acre foot storm basin. The project was coordinated with the Parks RFTA Installation Design Guide. Cost: \$12 million					
(1) TITLE AND LOCATION (City and State) Building 350 Renovation – DES & DPTMS Camp Parks, CA		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2014	CONSTRUCTION (If applicable) 2016		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
c. Specific Role: Project Architect for the preparation of the D/B RFP solicitation for the renovation of Parks Building 350 which consisted of an existing single story 13,350 SF building with a 650 SF mechanical mezzanine. Scope of work included an assessment of the building systems. The renovation was designed to accommodate the Parks Directorate of Emergency Services (DES) and the Directorate of Plans, Training, Mobilization and Security (DPTMS). The D/B RFP required a spatial reorganization of the building with complete replacement of the interior electrical distribution system along with the replacement of the existing telecommunications system. Cost: \$3.6 million					
(1) TITLE AND LOCATION (City and State) UPH Barracks Fort Hunter Liggett, CA		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2011	CONSTRUCTION (If applicable) 2013		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
d. Specific Role: Project Architect for LEED® Silver certified full design of three townhouse-style barracks totaling 11,000 SF. The standard design was adapted to fit on the available site, and to incorporate installation design guidance. Working from the 1+1E standard barracks module, the team prepared conceptual site and building plans for review during a charrette with project stakeholders. Cost: \$4.4 million					

* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Megan Cupery, NCIDQ, CID	13. ROLE IN THIS CONTRACT Interior Designer	14. YEARS EXPERIENCE	
		a. TOTAL 8	b. WITH CURRENT FIRM 8

15. FIRM NAME AND LOCATION (City and State) RSP Architects, Ltd. – Minneapolis, Minnesota	
---	---

16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Arts / Interior Design	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) NCIDQ Qualified Designer - MN #27265
--	---


18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Awards: Outstanding Performance Award for Ft. Carson Wilderness Road Brigade-Battalion Headquarters (2011); Megan is an interior designer in RSP’s military design team. In this role, she brings a depth of experience for both space planning criteria and material requirements based on her real world experience and feedback from soldiers about their unique needs. She also brings a creative edge to providing versatile, functional, durable interior environments. Her close working relationship with many military clients translates into well planned, coordinated designs and complete, thorough submittals complexity.

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Add/Alt to Kerry P. Hein Army Reserve Center/OMS/UHS Shoreham, NY	2008	2012
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm a. Specific Role: Interior Designer for construction addition (18,500 SF) and alteration (31,500 SF) of an AR Training Center, 4,800 SF OMS building, and a 4,400 SF storage building. Project included a 400-member Training Center with administrative, educational, assembly, library, learning center, vault, weapons simulator, and physical fitness areas for seven Army Reserve units. The maintenance shop provides work bays and maintenance administrative support. <p align="right">Cost: \$15 million</p>		
Wilderness Road IBCT Brigade-Battalion Headquarters Fort Carson, CO	2011	2012
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm b. Specific Role: Interior Designer for this 138,000 SF design-build project. She prepared finish plan, furniture plan, signage plan, and room finish schedule. She also selected GSA furniture for the entire building; open office, private office, classrooms, conference rooms, break rooms and executive areas. Also created furniture cut sheets for each piece of furniture including a performance spec and two equal products by other manufactures so the furniture could be bid through Huntsville, the Army’s furniture headquarters. <p align="right">Cost: \$32.1 million</p>		
Total Army School System (TASS) Training Center Fort Hunter Liggett, CA	2012	2016
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm c. Specific Role: Interior Designer for this new 48,649 SF Training Building. Project consisted of two 1,400 SF Type XXI, Level 3 highly technical classrooms with full distance learning capability. Eleven other multipurpose and training classrooms also provided. Flexible vehicle repair bay with arms vault, armorer area, and organization storage area also provided. Building designed to ‘net-zero’ and GIB and ACES criteria incorporated LEED® Silver. <p align="right">Cost: \$15.6 million</p>		

* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME William H. Barley, P.E.		13. ROLE IN THIS CONTRACT Estimator Senior Level		14. YEARS EXPERIENCE	
				a. TOTAL 32	b. WITH CURRENT FIRM 14
15. FIRM NAME AND LOCATION (City and State) CHA Consulting, Inc. – Cleveland, Ohio					
					
16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science / Civil Engineering Graduate Coursework / Civil Engineering Planning and Management			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Civil Engineer - OH #62034, TN #109166, AL #30610-E, VA #0402-031286, WV #13038, PA #PE039034E, MI #62010-51915, KY #24375, SC #28938, and NY #082645 NCEES #29748		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Affiliations: Airports Council International – North America (ACI-NA) / American Association of Airport Executives (AAAE) / Airport Consultants Council (ACC) Certifications: U.S. Army Corps of Engineers Construction Quality Management for Contractors <i>Mr. Barley has over 28 years of experience in planning, design, and construction of public and private infrastructure projects. His technical specialty is airport planning, design, and construction management with over 26 years of experience working directly with airport clients. Bill has directed and managed, a diverse range of projects his experience includes design/planning for new airports, new runways and runway rehabilitations, among other airfield related projects, in addition to maintenance facilities. As the Principal on this contract Mr. Barley will provide technical guidance and oversight to our JV Mentor Protégé partner and the overall team.</i>					
19. RELEVANT PROJECTS					
a.	(1) TITLE AND LOCATION (City and State) *Runway 10-28 Safety Area Improvement Program Cleveland Hopkins International Airport // Cleveland, OH			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2009	CONSTRUCTION (If applicable) 2012
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE			<input checked="" type="checkbox"/> Check if project performed with current firm		
<p>Specific Role: Project Director responsible for the overall oversight of the project from the initial studies through final construction. Developed project management plans, led planning and design workshops and provided technical direction to the team. During the design, also performed design QC activities, schedule and budget analyses, and monitored client satisfaction. During the construction he provided guidance to the project manager and the lead inspector on construction questions, quality assurance testing, and change order analyses. Project included environmental assessment, project definition, final design engineering and construction services for runway and taxiway pavements, airfield lighting systems, replacement of the approach light system on Runway 28, relocation of the Runway 28 glide slope, major grading and drainage revisions, and the installation of EMAS off both ends of the runway. Completed on time and within the established budget.</p> <p align="right">Cost: \$47 million</p>					
b.	(1) TITLE AND LOCATION (City and State) *Repair Runway 14L-32R Naval Air Station Oceana // Virginia Beach, VA			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2006	CONSTRUCTION (If applicable) 2007
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE			<input checked="" type="checkbox"/> Check if project performed with current firm		
<p>Specific Role: Project Director providing technical guidance and oversight to the project team throughout the design and construction phases. In addition to providing management support reviewing and approving contract agreement, and client management. Project consisted of concrete pavement rehabilitation, repairs, and storm drain improvements for an 8,000' x 150' runway and 25,300 sq of hold apron pavement. Pavement repairs included full depth concrete slab replacement, full depth slab repairs, spall repairs, concrete joint resealing, asphalt milling and overlay, and full reconstruction of concrete blast pad and hold apron pavement.</p> <p align="right">Cost: \$11.3 million</p>					
c.	(1) TITLE AND LOCATION (City and State) *Continental Hangar #3 Renovation & Expansion Cleveland Hopkins International Airport // Cleveland, OH			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2009	CONSTRUCTION (If applicable) 2010
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE			<input checked="" type="checkbox"/> Check if project performed with current firm		
<p>Specific Role: Project Director providing technical guidance and oversight to the project team throughout the design and construction phases. During the initial programming stages of the project he worked with the project team to develop hangar renovation options that achieved the client's objectives. During the construction, he was the primary technical advisor to the project manager on the resolution of construction questions and change order management. Project included partial demolition and widening of the existing B-737 hangar to accommodate larger aircraft, replacement and upgrade of all electrical, lighting, HVAC and fire suppression systems – including new Hi-Expansion foam with collection/discharge systems. Site elements include parking facilities, new fire main and redundant pumps, gas, potable water, and electrical utilities, and new fence and gates to the airfield.</p> <p align="right">Cost: \$6 million</p>					

* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Erin McGuinness, P.E.	13. ROLE IN THIS CONTRACT Estimator Senior Level	14. YEARS EXPERIENCE	
		a. TOTAL 27	b. WITH CURRENT FIRM 12

15. FIRM NAME AND LOCATION (City and State)
McGuinness Unlimited, Inc. – Cleveland, Ohio



16. EDUCATION (DEGREE AND SPECIALIZATION) Master of Science / Civil Engineering Bachelor of Science / Civil Engineering	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Engineer, State of OH #62143 / Civil
---	--

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Affiliations: American Society Of Professional Estimators, Ohio Aviation Association, Cleveland Engineering Society
Mrs. McGuinness has a long standing history providing cost estimating and scheduling services for our projects. Prior to forming McGuinness Unlimited, Erin held positions as owner and owner's representative. Through her professional experience she knows what clients and owners value. Erin has the resources to monitor the current bidding environment and industry trends. Her group has performed services on 150 projects, including aviation related projects, totaling over \$1.5 billion in construction costs.


19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State) Gravity Thickening Improvement Project NEORSD, Southerly Plant	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable) 2013 (est.)
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm		
<p>Specific Role: Project Lead for Cost Estimating & Construction Scheduling</p> <p>a. Project includes renovation of six gravity thickening tanks and one distribution chamber. Scope of work includes lead paint abatement, mechanical equipment, grating, handrail, HVAC and electrical replacement. The construction schedule was prepared in Primavera P6, is cost and resource loaded, includes operational phasing and tied to the cost estimate. An updated cost estimate and construction schedule is provided with each design deliverable (30%, 60%, 90%, 100%).</p> <p align="right">Cost: \$9 million</p>		
(1) TITLE AND LOCATION (City and State) Greater Cleveland RTA Cedar University Station // Cleveland, OH	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2009-2011	CONSTRUCTION (If applicable) 2013 (est.)
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm		
<p>Specific Role: Project Lead for Cost Estimating & Construction Scheduling project is a new rapid transit station and bus transfer facility to include a platform extension, new bus transfer facility, underground connecting tunnel, and pedestrian plaza will be built. Alternate phasing options which included weekend only, night only and day only working hours were analyzed to determine cost and schedule impacts.</p> <p align="right">Cost: \$14 million</p>		
(1) TITLE AND LOCATION (City and State) *Runway 10-28 Safety Area Improvement Program Cleveland Hopkins International Airport // Cleveland, OH	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2009	CONSTRUCTION (If applicable) 2012
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm		
<p>Specific Role: Project Lead for Cost Estimating provided cost estimating services for a runway reconstruction project for CLE. Scope of work included estimates at schematic, 30%, 60%, 90% and 100% design deliverables which include taking off civil quantities and pricing all items of the project. Work items includes a partial reconstruction of the runway, new shoulders, new signs, new lighting, drainage, NAVAIDS, EMAS and a perimeter roadway relocation. Final estimate was within 10% of the low bids.</p> <p align="right">Cost: \$47 million</p>		
(1) TITLE AND LOCATION (City and State) *Continental Hangar #3 Renovation & Expansion Cleveland Hopkins International Airport // Cleveland, OH	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2009	CONSTRUCTION (If applicable) 2010
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm		
<p>Specific Role: Project Lead for Cost Estimating provided a phase 1 and phase 2 estimates to retrofit an existing hangar, included partial demolition and widening of the existing B-737 hangar to accommodate larger aircraft, replacement and upgrade of all electrical, lighting, HVAC and fire suppression This project had a select list of contractors bid on the project and the final estimate was within 3% of the negotiated amount.</p> <p align="right">Cost: \$5 million</p>		

* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Michael J. Crandall Jr	13. ROLE IN THIS CONTRACT CADD/GIS Operator Senior Level	14. YEARS EXPERIENCE	
		a. TOTAL 18	b. WITH CURRENT FIRM 8

15. FIRM NAME AND LOCATION (City and State) CHA Consulting, Inc. – Indianapolis, Indiana	
--	---

16. EDUCATION (DEGREE AND SPECIALIZATION) Associates Degree / Applied Science	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) xxx
---	--

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Affiliations: American Society of Civil Engineers
Certifications: Autodesk Certified Professional- Revit MEP 2015; Autodesk Certified Professional- Revit Architecture 2015
Mr. Crandall has over 18 years' experience in the drafting and design field, with the past 5 years focused on developing CHA's 3D capabilities utilizing Autodesk Revit as the design platform. Mike currently is involved in drafting/modeling HVAC, fire protection and plumbing design content. He is also the main point of Revit contact for all other disciplines within CHA that utilize the Revit software package. Mike has developed Revit models for a number of industrial and commercial applications..

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State) Stewart Air National Guard, Composite Maintenance Hangar Fire Suppression & Renovations Newburgh, NY	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2008	CONSTRUCTION (If applicable) 2008

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm

Specific Role: CADD Designer
 CHA designed upgrades to convert all hangars to High Expansion Foam (HEF) systems. The design was completed in accordance with ANG ETL 01-1-1 and AF ETL 02-15, which required release of a sufficient quantity of foam to cover 90% of the aircraft silhouette (projected onto the hangar floor) within 1 minute or less of system activation. Other design improvements included modifications to the hangar bay heating system to reduce energy consumption, implementation of DDC systems for HVAC, design of a fall protection system for changing rooftop beacons, and redesign of air handling systems for the paint bay. Boiler replacement, lighting upgrades, improvements to the exhaust systems in restroom and locker room areas, and reconfiguration of first floor support personnel offices were also performed.

(1) TITLE AND LOCATION (City and State) Department of the Navy MCRC (DE), Building Modification & VMF Construction Wilmington, DE	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2010	CONSTRUCTION (If applicable) 2010

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm


Specific Role: CADD Designer
 The project included two major components; renovation of an Administration/Training building and a Vehicle Maintenance Facility (VMF) for the US Navy. The renovations to the administration/training building included the interior building components including all mechanical and electrical systems, finishes, replacement of stairs, exterior doors, and windows. The VMF portion of the building includes two maintenance bays, tool room, bathroom, office, and storage space. The VMF is a one story pre-engineered metal building with concrete floor with an estimated area of 2,200 sf. CHA's services included civil, landscape architecture, architectural, interior design, structural, mechanical, electrical, plumbing, fire protection, and LEED documentation.

(1) TITLE AND LOCATION (City and State) U.S. Army Corps of Engineers New York, GSAB Hangar Addition at Fort Drum Fort Drum, NY	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2013	CONSTRUCTION (If applicable) 2013

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm

Specific Role: CADD Designer
 Programming, design and construction phase services for a new \$14.5 million dollar hangar facility at the Wheeler Sack Army Airfield to support the Blackhawk and Chinook helicopter operations. CHA's design responsibilities included: Civil Engineering, Landscape Architecture, Mechanical, Electrical and Plumbing. The development of the site design required the preparation of both an extensive storm water management study and erosion sediment control plans. Construction phase services included review/approval of all submittals, response to the contractor's request for information, site observation visits and preparation of final punch list.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Seth H. Fowler, CHMM		13. ROLE IN THIS CONTRACT Hazardous Waste Specialist Senior Level		14. YEARS EXPERIENCE	
				a. TOTAL 18	b. WITH CURRENT FIRM 12
15. FIRM NAME AND LOCATION (City and State) CHA Consulting Inc. – Albany, NY					
					
16. EDUCATION (DEGREE AND SPECIALIZATION) B.A. / Environmental Science – State University of New York at Plattsburgh NY			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Certified Hazardous Materials Manager: NY (12383) EPA Asbestos Project Designer: CT (000185), MA (AD072560), NH (223-ID), NY (9908548), PA (033068), SC (PD00111), VT (PD017815) EPA Asbestos Building Inspector: CT, MA, NH, NY, PA, SC, VT		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) <i>Mr. Fowler has experience with hazardous materials management projects, ranging from phase I environmental site assessments to hazardous materials abatement. He has worked with clients from the public and private sectors to manage hazardous materials with public health in mind. He specializes in asbestos and lead investigations and abatement. He has performed numerous subsurface investigations, carried out groundwater monitoring and investigations, and completed IAQ investigations.</i>					
19. RELEVANT PROJECTS					
	(1) TITLE AND LOCATION (City and State) *The Campus of United States Merchant Marine Academy Building Evaluation Report Kings Point, NY			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2013	CONSTRUCTION (If applicable) N/A
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Senior Environmental Scientist for the preparation of a Building Evaluation Report (BER) for the USMMA. CHA conducted an evaluation of the mechanical and electrical systems along with an assessment of potential hazardous materials in 48 buildings on the campus. The evaluation identified deficient conditions and estimated the cost for required repairs. The BER will be used by the USMMA in support of repair and alteration, major renovations and new construction projects required to ensure short term operational continuity of the buildings. In addition, it will be used to plan for long term major capital reinvestments in the buildings for long term utilization. Cost: \$278,000			<input checked="" type="checkbox"/> Check if project performed with current firm	
	(1) TITLE AND LOCATION (City and State) Stratton VA Medical Center Prosthetics Lab Renovation Albany, NY			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable) N/A
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Senior Environmental Scientist for the renovation of 3,000 sf of existing office space on the 3rd floor of the Stratton VA Medical Center into a state-of-the art Prosthetics/Orthotics Laboratory. The design effort included developing an architectural layout for the Prosthetics/Orthotics suite as well as designing the supporting mechanical, electrical, and plumbing systems. The new Prosthetics/Orthotics suite was designed to include a waiting/reception area, practitioner and administrative offices, fitting/exam rooms, a prosthetics/Orthotics lab, a prosthetics/orthotics clean storage, and a computer equipment room. Cost: \$900,000			<input checked="" type="checkbox"/> Check if project performed with current firm	
	(1) TITLE AND LOCATION (City and State) Stratton VA Medical Center, Hazardous Materials Abatement Albany, NY			(2) YEAR COMPLETED	
				PROFESSIONAL SERVICES XX	CONSTRUCTION (If applicable) XX
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Specific Role: Senior Environmental Scientist for the design of demolition plan for four buildings, a buried steam tunnel, and removal of associated buried site utilities on the campus of the Stratton VA Medical Center. The project included an initial assessment of each of the four buildings for the presence of hazardous materials that would require removal prior to building demolition. The design services included hazardous materials (asbestos) removal, building and subgrade utility tunnel demolition, site grading and restoration, as well as a large electrical design component. Cost: \$650,000			<input checked="" type="checkbox"/> Check if project performed with current firm	

* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Paul O. McDonnell, AICP	13. ROLE IN THIS CONTRACT Urban Regional Planner Senior Level – Aviation	14. YEARS EXPERIENCE	
		a. TOTAL 27	b. WITH CURRENT FIRM 19

15. FIRM NAME AND LOCATION (City and State) CHA Consulting, Inc. – Albany, NY	
---	---

16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science / Geography Master of Arts / Planning	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) American Institute of Certified Planners - #074921 Profession Planner – NJ #33LI00557700
---	---

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Mr. McDonnell has 27 years' experience in the management of airport planning, design, and construction projects, environmental assessments, and phasing studies, including projects at more than 50 airports. His experience includes airfield projects of all types, master plans, airfield obstruction, terminal area, environmental, and site selection airport studies, state aviation system plans, as well as heliport projects. As a commercial pilot, Paul is familiar with airport operations, air traffic control procedures and noise abatement techniques.

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State) Runway 19 Extension & Safety Area Improvements Albany County Airport Authority // Albany, NY	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2007	CONSTRUCTION (If applicable) N/A
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm		
<p>a. Specific Role: Senior Project Planner for the design of Runway 19 and preliminary obstruction analysis. Responsibilities included project phasing, runway approach analysis, and the review of proposed FAA surfaces, including runway safety areas and runway approach. Project includes 1300' Runway Extension of Runway 19 Including Holding Bay, Perimeter Security Road, Safety Area Improvements, NAVAIDS, and Wetland Mitigation.</p> <p align="right">Cost: \$2.5 million</p>		


(1) TITLE AND LOCATION (City and State) Obstruction Removal & Runway Safety Improvements Schroon Lake Airport // Schroon, NY	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2010	CONSTRUCTION (If applicable) N/A
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm		
<p>b. Specific Role: Senior Project Planner for design the Obstruction Removal Plan for Schroon Lake Airport as well as improvement the Runway Safety Area (RSA) while being sensitive to the Airport's location within the Adirondack State Park. The project included ground survey, updated threatened and endangered species consultation, Adirondack Park Agency permitting, preliminary and final design drawings and phase bidding services. The project also includes extending the RSA to the south of Runway 34 and grading at various locations. The tree obstructions were removed in 2010.</p> <p align="right">Cost: \$83,000</p>		

(1) TITLE AND LOCATION (City and State) Rehabilitation of Runway 10-28, Taxiways and Air Cargo Apron Albany County Airport Authority // Albany, NY	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable) N/A
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm		
<p>c. Specific Role: Senior Project Planner directing the efforts which includes survey, geotechnical analysis, pavement design, plans and technical specifications, and a detailed construction phasing plan to avoid any closing of the airport at any time. To complete the paving activities at key runway/taxiway intersections, the plan includes some night construction. Currently (March 2011), the project has reached the 50% design phase, with activities progressing quickly to enable summer 2011 construction (pending AIP Program B funding). CHA was also selected to conduct the construction administration and inspection services.</p> <p align="right">Cost: \$194,900</p>		

(1) TITLE AND LOCATION (City and State) Airport Layout/Master Plan Update Waterbury-Oxford Airport // Oxford, CT	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2011	CONSTRUCTION (If applicable) N/A
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm		
<p>d. Specific Role: Senior Project Planner for a comprehensive Airport Master Plan Update (AMPU). Mr. McDonnell coordinated an extensive public coordination program, consisting of the formation of a Study Advisory Committee, several public information meetings, a project website, and project newsletters. He also managed the following FAR Part 150 Noise and Land Use Study, and associated Environmental Assessment for the Voluntary Residential Acquisition Program.</p> <p align="right">Cost: \$421,300</p>		


* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Tim Grundtner, AIA, LEED AP BD+C		13. ROLE IN THIS CONTRACT Urban Regional Planner Senior Level		14. YEARS EXPERIENCE	
				a. TOTAL 16	b. WITH CURRENT FIRM 8
15. FIRM NAME AND LOCATION (City and State) RSP Architects, Ltd. – Minneapolis, Minnesota					
					
16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Architecture / Environmental Design			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Licensed Architect: MN #45523		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Affiliations: LEED Accredited Professional, Member American Institute of Architects (AIA); Continuing Education: LEED Documentation and Recordkeeping, 2011 and Essential MicroStation V8, 2009. <i>Tim brings a high level of masterplanning and collaboration to every project. He provides the big picture goals & relates the project to various goals and guidelines, such as ordinances or design review, in order to achieve a final project that meets the needs of the client. His planning experience includes new construction, renovations, FFA's, reserve centers, TEMFs, storage, and training and administrative centers for multiple military clients including the Corps of Engineers, Air National Guard, and the US Forest Service. Tim is currently working with the Corps of Engineers on multiple projects at a military installation. As part of the planning process, the project designs are integrated with the Installation Design Guide (masterplan), & when conflicts arise, Tim leads the design team to propose design solutions which meet both the project needs & the long term goals of the client.</i>					
19. RELEVANT PROJECTS					
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED			
Full Facility Assessments (FFA) for Army Reserve Training Centers, Milan, Ohio; Independence, Missouri; and Council Bluffs Iowa		PROFESSIONAL SERVICES 2014	CONSTRUCTION (If applicable) Ongoing		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
a.	Specific Role: Senior Planner led and supported the team to ensure the highest quality of planning and reporting activities. The team provided on-site condition assessments and reports, renovation recommendations, and cost estimating. Areas included site work and pavement areas, structural remediation, accessibility upgrades, mechanical, electrical, fire protection, and IT upgrades necessary to bring the facilities into compliance with current Army Reserve program and functionality criteria, including ATFP, EPACT, LEED, and LID requirements. These efforts led to project funding requests, which are currently being pursued by the Army Reserve.				
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED			
Total Army School System (TASS) Training Center Fort Hunter Liggett, CA		PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable) 2016		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
b.	Specific Role: Senior Planner leading the team's master site planning and design of the building foot print to accentuate a future vehicular and pedestrian round-about. Planning for the building included incorporating Level 3 highly technical classrooms and training rooms. The building is designed to achieve the Army Reserve energy reduction requirements along with 'net-zero' ready features in order to accommodate future roof mounted photovoltaic panels and connection to a future 'grey' water sanitary sewer line. Cost: \$15.6 million				
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED			
UPH Barracks Fort Hunter Liggett, CA		PROFESSIONAL SERVICES 2011	CONSTRUCTION (If applicable) 2013		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
c.	Specific Role: Senior Planner responsible for master planning of the site which included adapting the standard design to a 3-story solution to accommodate the facility on the available site. He lead the planning for the LEED Silver certified full design of three townhouse-style barracks totaling 11,000 SF, including incorporating the installation design guidance. Working from the 1+1E standard barracks module, the team prepared conceptual site and building plans for review during a charrette with project stakeholders. Cost: \$4.4 million				
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED			
Parks Reserve Forces Training Area (RFTA) Medium TEMF (Tactical Equipment Maintenance Facility) Camp Parks, Dublin, California		PROFESSIONAL SERVICES 2014	CONSTRUCTION (If applicable) 2016		
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm			
d.	Specific Role: Senior Planner for the new, LEED Silver 33,000SF TEMF facility. During conceptual design stage, it was found that the site had seismic fault trace lines, which directly affected the relationship of the project design to the masterplan. Tim worked with the Installation DPW to plan a resolution as to the arrangement of the facility and site design in a way which worked for the project, and also ensured a long term feasibility of the projects planned for adjacent sites. Cost: \$14.5 million				

* Featured in IV. Section F

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME John A. Kilgallon		13. ROLE IN THIS CONTRACT Construction Inspector		14. YEARS EXPERIENCE	
				a. TOTAL 45	b. WITH CURRENT FIRM 15
15. FIRM NAME AND LOCATION <i>(City and State)</i> CHA Consulting, Inc. – Albany, New York					
					
16. EDUCATION <i>(DEGREE AND SPECIALIZATION)</i> Associates Degree / Business			17. CURRENT PROFESSIONAL REGISTRATION <i>(STATE AND DISCIPLINE)</i>		
18. OTHER PROFESSIONAL QUALIFICATIONS <i>(Publications, Organizations, Training, Awards, etc.)</i> Affiliations: American Railway Engineering & Maintenance-of-Way Association <i>Mr. Kilgallon has over 45 years' experience in rail design, construction, maintenance and operations. For 20 years, Jack oversaw Conrail's Chicago Line, Hudson Line, Selkirk Branch and Selkirk Yard. His resume includes the successful completion of several major track rehabilitation and construction projects.</i>					
19. RELEVANT PROJECTS					
(1) TITLE AND LOCATION <i>(City and State)</i> City of Watervliet, 19th Street Reconstruction Watervliet, NY		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2010	CONSTRUCTION <i>(If applicable)</i> 2011		
a.	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Specific Role: Construction Inspector Panning and final design of the grade crossing improvements to the Delaware & Hudson Railway crossing on 19th Street. The railroad crossing upgrade was part of a major streetscape / enhancement corridor project. Extensive railroad, ADA and utility coordination was required. <input checked="" type="checkbox"/> Check if project performed with current firm				
(1) TITLE AND LOCATION <i>(City and State)</i> Southern Tier Extension Railroad Authority, Railroad Engineering Services for Capital Improvement Projects, NY		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2007	CONSTRUCTION <i>(If applicable)</i> 2007		
b.	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Specific Role: Construction Inspector Rehabilitation of 40 miles of the former Adirondak Branch of the Delaware & Hudson railroad from North Creek to Corinth, New York. The scope of the improvements included track, bridge, grade crossing, station and yard rehabilitations. <input checked="" type="checkbox"/> Check if project performed with current firm				
(1) TITLE AND LOCATION <i>(City and State)</i> Norfolk Southern Corp., Lucknow Intermodal Facility Harrisburg, PA		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2015	CONSTRUCTION <i>(If applicable)</i> 2015		
c.	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Specific Role: Construction Inspector Design and permitting services for the expansion of the Lucknow Intermodal Facility. This intermodal facility was part of the Crescent Corridor initiative to upgrade Norfolk Southern Railway's rail network between the Gulf Coast and Northeastern ports. We assisted with the comprehensive planning, engineering design and environmental screening process to identify, assess and mitigate potential impacts associated with the proposed facility. The project also required extensive coordination with PennDOT, FHWA, and PADEP. <input checked="" type="checkbox"/> Check if project performed with current firm				
(1) TITLE AND LOCATION <i>(City and State)</i> New York State Dept. of Transportation, Tier 1 EIS for the Empire Corridor High Speed Rail Program Albany, NY		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2016	CONSTRUCTION <i>(If applicable)</i> 2016		
d.	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Specific Role: Construction Inspector Preparation of a Tier 1 Environmental Impact Statement (EIS) for the development of High Speed Rail (HSR) in the Empire Corridor from New York City to Niagara Falls, NY. He is assisting NYSDOT and HNTB with the public scoping, transportation corridor operations planning, field data collection, railroad engineering and cost estimating. <input checked="" type="checkbox"/> Check if project performed with current firm				